

Monday, February 22, 2010

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REQUEST NUMBER: 10-1983

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8326	R	2/17/2010	
	SW-846:6020	1	RE15-10-8316	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	
		1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8326	R	2/17/2010	
	SW-846:6850	1	RE15-10-8330	W	2/17/2010	
		1	RE15-10-8316	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	
		1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	
	SW-846:7470A	1	RE15-10-8326	R	2/17/2010	
		1	RE15-10-8330	W	2/17/2010	
		1	RE15-10-8316	W	2/17/2010	
		1	RE15-10-8330	W	2/17/2010	
		1	RE15-10-8316	W	2/17/2010	
	SW-846:7471A	1	RE15-10-8316	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	
		1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8326	R	2/17/2010	
	SW-846:9012A	1	RE15-10-8316	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	
		1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8326	R	2/17/2010	
	SW-846:9045C	1	RE15-10-8330	W	2/17/2010	
		1	RE15-10-8316	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	
		1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	

Monday, February 22, 2010

REQUEST NUMBER: 10-1983

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PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:9045C		1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8326	R	2/17/2010	

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Monday, February 22, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1983

LOS ALAMOS

REQUEST NUMBER: 10-1983

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/24/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8330	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8330	1	POLY	NO3NO2	Sulfuric Acid (Hydrogen Sulfate)	W
RE15-10-8330	1	POLY	SW-846:6850	Ice	W
RE15-10-8330	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8317	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8317	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8319	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8319	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8316	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8316	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8326	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8326	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8318	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8318	1	POLY	Perchlorate+CN+N03+pH	Ice	R

Relinquished By:

Date Time

Received By:

Date Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date Time

Remarks:

Printed Name

Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2506

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(b) - Threemile Canyon

SAMPLE ID: RE15-10-8316

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/17/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		14:17		SUB-MEDIA:	TUFF 1		OK
PRS ID:	15-009(b)	OK		SAMPLE TECH CODE:	HA		CBS
LOCATION ID:	15-610837	OK		FIELD QC TYPE:	NA		OK
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	NA		
TOP DEPTH:	0	47.5 ft		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	50.0 ft		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	OK		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES (NO) NA
BOREHOLE:	YES/NO/NA			BOREHOLE DECLINATION:	-90°		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+ N03+PH	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Light brownish gray, slightly indurated nonwelded, dy, devitrified
ash flow tuff

SAMPLE COMMENTS: NA

LOCATION DESC: below R-14 tank inlet 2/15/10

96-5

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 10 dpm
Beta/Gamma = 2010 dpm

PID Ambient Reading = ppm

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. MARIN

R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/18/10	(Printed Name) J. MARIN	2/18/10
(Signature) J. R. Marin	9:30	(Signature) J. MARIN	9:35
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2506

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(b) - Threemile Canyon

SAMPLE ID: RE15-10-8317

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/17/2010		MEDIA:		OBT3	
TIME COLLECTED (HH:MM)		14:35		SUB-MEDIA:		TUFF 1	
PRS ID:	15-009(b)	OK		SAMPLE TECH CODE:		HA	
LOCATION ID:	15-610837	OK		FIELD QC TYPE:		NA	
LOCATION TYPE:	GENERIC	OK		FIELD PREP:		NA	
TOP DEPTH:	0	58.5 ft		SAMPLE USAGE:		INV	
BOTTOM DEPTH:	0	60.0 ft		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	OK		EXCAVATED: YES/NO/NA		NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: -90°		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

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

SAMPLE COMMENTS: NA

LOCATION DESC: 96-5

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \pm 25 dpm
Beta/Gamma \pm 2000 dpm

PID $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$
JRM 2/17/10

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT)

J. MARIN

RELINQUISHED BY (Printed Name) JON MARIN (Signature) Jon R. Marin	Date/Time 2/18/10 9:30	RECEIVED BY (Printed Name) J. Marin (Signature) J. Marin	Date/Time 2/18/10 9:35
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2506

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(b) - Threemile Canyon

SAMPLE ID: RE15-10-8318

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/17/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		14:51		SUB-MEDIA:		TUFF 1	
PRS ID:	15-009(b)	OK		SAMPLE TECH CODE:		HA	
LOCATION ID:	15-610837			FIELD QC TYPE:		NA	
LOCATION TYPE:	GENERIC			FIELD PREP:		NA	
TOP DEPTH:	0	68.5 ft		SAMPLE USAGE:		INV	
BOTTOM DEPTH:	0	70.0 ft		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	OK		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NO	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: -90°		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	2082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Light brownish gray NON indurated, non welded, dehydrified, dry
 2/18/10 ash flow tuff

SAMPLE COMMENTS:

NA

LOCATION DESC: 96-5

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 20 dpm
 Beta/Gamma = 1912 dpm

PID ^{Ambient} Reading = ppm

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY

(Printed Name) JON MARIN
 (Signature) Jon R. Marin

Date/Time

2/18/10

9:30

RECEIVED BY

(Printed Name) Jeyul
 (Signature) Jeyul

Date/Time

2/18/10

9:35

RELINQUISHED BY

Date/Time

RECEIVED BY

Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2506

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(b) - Threemile Canyon

SAMPLE ID: RE15-10-8319

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/17/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		15:08		SUB-MEDIA:		TUFF 1	
PRS ID:	15-009(b)	OK		SAMPLE TECH CODE:		HA	
LOCATION ID:	15-610837	1		FIELD QC TYPE:		NA	
LOCATION TYPE:	GENERIC	1		FIELD PREP:		NA	
TOP DEPTH:	Q	78.5 ft		SAMPLE USAGE:		INV	
BOTTOM DEPTH:	Q	80.0 ft		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	OK		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: -90°		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+ N03+pH	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Light brownish gray, nonindurated, nonwelded, devitrified, dry ash flow tuff.

SAMPLE COMMENTS:

NA

LOCATION DESC:

96-5

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 36 dpm
Beta/Gamma = 1983 dpm

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

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT)

J. MARY

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARY	2/18/10	(Printed Name) J. Mary	2/18/10
(Signature) Jon R. Mary	9:30	(Signature)	9:38
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2506

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(b) - Threemile Canyon

SAMPLE ID: RE15-10-8326

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/17/2010		MEDIA:		OBT3	
TIME COLLECTED (HH:MM)		14:17		SUB-MEDIA:		TUFF 1	
PRS ID:	15-009(b)	OK		SAMPLE TECH CODE:		HA	
LOCATION ID:	UNK	15-610837		FIELD QC TYPE:		FD	
LOCATION TYPE:	GENERIC	OK		FIELD PREP:		NA	
TOP DEPTH:	0	47.5 ft		SAMPLE USAGE:		QC	
BOTTOM DEPTH:	0	50.0 ft		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	OK		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:		NA		COMPOSITE TIME INTERVAL:		NA	
BOREHOLE: YES/NO/NA				WATER FLOWING: YES/NO/NA		YES/NO/NA	
BOREHOLE DECLINATION:		-90°		BOREHOLE DIRECTION:		NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+ N03+pH	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC: QC Sample of RE15-10-8316

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

SAMPLE COMMENTS: NA

LOCATION DESC: 96-5

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 10 dpm
Beta/Gamma = 2010 dpmPID $\frac{\text{Ambient}}{\text{Reading}}$ = ppm

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

R. Saunders

JON MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/18/10	(Printed Name) [Signature]	2/18/10
(Signature) Jon R. Marin	2:30	(Signature) [Signature]	8:25
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2506

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(b) - Threemile Canyon

SAMPLE ID: RE15-10-8330

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/17/2010		MEDIA:	NA		OK
TIME COLLECTED (HH:MM)		15:25		SUB-MEDIA:	OTHER		
PRS ID:	15-009(b)	OK		SAMPLE TECH CODE:	DC		
LOCATION ID:	UNK	15-610837		FIELD QC TYPE:	FR		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	UF		
TOP DEPTH:	0	0		SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0	0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	W	OK		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE:	YES/NO/NA			BOREHOLE DECLINATION:	-90°		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	METALS+U-GEL	1 LITER POLY	Nitric Acid	Y	
1		NO3NO2	250 ML POLY	Sulfuric Acid (Hydrogen Sulfate)	N	
1	Normal	SW-846:6850	250 ML POLY	Ice	Y	
1	Normal	TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE15-10-8319

SAMPLE COMMENTS: NA

LOCATION DESC: 96-5

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT)

J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/18/10	(Printed Name)	2/18/10
(Signature) Jon R. Marin	9:30	(Signature)	9:30
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2506

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(b) - Threemile Canyon

SAMPLE ID: RE15-10-8335

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/17/2010		MEDIA:	NA		OK
TIME COLLECTED (HH:MM)		12:30		SUB-MEDIA:	OTHER		
PRS ID:	15-009(b)	OK		SAMPLE TECH CODE:	DC		
LOCATION ID:	UNK	15-610837		FIELD QC TYPE:	ETB		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	NA		
TOP DEPTH:	0	0		SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0	0		SCREEN/PORT DESC:			
FIELD MATRIX:	S	OK		EXCAVATED: YES/NO/NA			NA
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	-90°		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1 st	Normal	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE15-10-8316

SAMPLE COMMENTS: NA

LOCATION DESC: 96-5

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. MARIN

R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/18/10	(Printed Name)	2/18/10
(Signature) Jon R. Marin	9:30	(Signature)	435
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	



2609 North River Road, Port Allen, Louisiana 70767
 1 (800) 401-4277 FAX (225) 381-2996

AERS Sample Delivery Group: AERS-10-00300

Analysis Description: Gross Alpha/Beta in (Soil, Sludge, Waste, Sediment (SO))

Analysis Test Method: GPC-A-003

Request or PO Number: N/A

Date Received: 2/19/2010

Report Date: 02/19/10 18:26

AERS Sample ID	Client Sample ID	Isotope	Analysis Results	Analysis Error +/- 2s	MDC	D/C	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracker/Client Recovery	Sample Matrix	Collection Date
AERS-10-00300-001	RE15-10-8316	GROSS ALPHA	12.624	6.050	14.476	4.464	U	PC/g	2/19/2010	CR	N/A	SO	
AERS-10-00300-001	RE15-10-8316	GROSS BETA	39.246	6.541	8.157	3.539		PC/g	2/19/2010	CR	N/A	SO	
AERS-10-00300-002	RE15-10-8317	GROSS ALPHA	19.261	7.686	16.572	5.314		PC/g	2/19/2010	CR	N/A	SO	
AERS-10-00300-002	RE15-10-8317	GROSS BETA	39.859	6.798	9.279	4.081		PC/g	2/19/2010	CR	N/A	SO	
AERS-10-00300-003	RE15-10-8318	GROSS ALPHA	9.637	5.628	15.661	5.050	U	PC/g	2/19/2010	CR	N/A	SO	
AERS-10-00300-003	RE15-10-8318	GROSS BETA	35.290	6.053	7.870	3.391		PC/g	2/19/2010	CR	N/A	SO	
AERS-10-00300-004	RE15-10-8319	GROSS ALPHA	9.938	5.709	15.732	5.045	U	PC/g	2/19/2010	CR	N/A	SO	
AERS-10-00300-004	RE15-10-8319	GROSS BETA	41.845	6.850	8.084	3.491		PC/g	2/19/2010	CR	N/A	SO	
AERS-10-00300-005	RE15-10-8326	GROSS ALPHA	2.866	4.141	15.430	5.028	U	PC/g	2/19/2010	CR	N/A	SO	
AERS-10-00300-005	RE15-10-8326	GROSS BETA	41.148	6.649	7.536	3.237		PC/g	2/19/2010	CR	N/A	SO	
AERS-10-00300-006	RE15-10-8387	GROSS ALPHA	8.149	5.279	15.319	4.839	U	PC/g	2/19/2010	CR	N/A	SO	
AERS-10-00300-006	RE15-10-8387	GROSS BETA	36.744	6.233	8.022	3.465		PC/g	2/19/2010	CR	N/A	SO	
AERS-10-00300-007	RE15-10-8386	GROSS ALPHA	4.752	4.702	16.405	5.435	U	PC/g	2/19/2010	CR	N/A	SO	
AERS-10-00300-007	RE15-10-8386	GROSS BETA	28.418	5.208	7.815	3.373		PC/g	2/19/2010	CR	N/A	SO	
AERS-10-00300-008	WST15-10-1162	GROSS ALPHA	3.243	3.902	14.353	4.616	U	PC/g	2/19/2010	CR	N/A	SO	
AERS-10-00300-008	WST15-10-1162	GROSS BETA	30.291	5.410	7.745	3.338		PC/g	2/19/2010	CR	N/A	SO	

NOTES:

Project Manager Review

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5121-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1983 VALIDATION DATE: 04/27/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Joanne Compton ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check

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

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

- The aqueous and soil MS/MSD %R calculations were performed incorrectly. The parent sample result was < the MDL and, thus, a result of 0 ug/L or 0 ug/kg should have been used to calculate the %Rs. The laboratory subtracted the parent sample concentration. The aqueous MS %R and the soil MS/MSD %Rs were within the acceptance limit when calculated correctly. The aqueous MSD %R was > the laboratory UAL. The associated sample result was an ND and, thus, was not qualified. The aqueous and soil MS/MSDs were performed on samples from other LANL RNs and the raw data for the parent samples were not present in the data package. No sample results were qualified as a result.

Reviewed by: ETM Level: 1 Date: 4/27/10


VALIDATOR'S SIGNATURE:

A handwritten signature in cursive script that reads "Joanne Compton".


DATE: 04/27/10

Form 5121-1, Revision 0.0


 LOS ALAMOS
 Environmental Restoration Project

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

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

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

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
5121-2	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"/>	27. The MS/MSD relative percent difference was >20%.	UJ, PERC12g	J, PERC12g
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	28. The affected analytes are considered suspect because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, PERC15	N/A
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	29. The sample was diluted because target analytes were > the initial verification calibration.	UJ, PERC15a	J, PERC15a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	30. The Contract Required Detection Limit check standard (CRI) sample did not pass method-acceptance limits.	UJ, R, PERC16	J, PERC16
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	31. The Interference Check Sample was not within $\pm 20\%$ of the known value.	UJ, PERC16a	J, PERC16a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	32. The required CRI sample information is missing. Contact the SMO or external laboratory for information.	R, PERC16c	R, PERC16c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	33. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, PERC19	J, R, PERC19
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	34. Duplicate, dilution, or reanalysis.	UJ, PERC88	J, PERC88

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 957436

Extraction Type: Filter/DAI

Client Sample No.

RE15-10-8330

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1983

GEL Sample ID: 247793001

Date Filtered: 25-FEB-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	02-MAR-10 05:30	per0301118a
	Perchlorate Isotope Ratio						1	02-MAR-10 05:30	per0301118a
14797-73-0	Perchlorate-101	.05	2	0.050	ug/L	U	1	02-MAR-10 05:30	per0301118a
	Perchlorate-O(18)			0.500	ug/L		1	02-MAR-10 05:30	per0301118a

[^] 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

JCC
04/27/10

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: 957940

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8317

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1983-1

GEL Sample ID: 247794001

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 93.7

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	534	2.14	0.534	ug/kg	U	1	14-MAR-10 19:59	per0314033a
	Perchlorate Isotope Ratio						1	14-MAR-10 19:59	per0314033a
14797-73-0	Perchlorate-101	534	2.14	0.534	ug/kg	U	1	14-MAR-10 19:59	per0314033a
	Perchlorate-O(18)			5.10	ug/kg		1	14-MAR-10 19:59	per0314033a

[^] 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

JCC
04/27/10

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: 957940
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8319
 Date Received: 23-FEB-10
 GEL Job No (SDG): 10-1983-1
 GEL Sample ID: 247794002
 Date Filtered: 06-MAR-10
 Injection Volume (uL): 20
 %Solids: 96.7

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.517	2.07	0.517	ug/kg	U	1	14-MAR-10 20:07	per0314034a
	Perchlorate Isotope Ratio						1	14-MAR-10 20:07	per0314034a
14797-73-0	Perchlorate-101	.517	2.07	0.517	ug/kg	U	1	14-MAR-10 20:07	per0314034a
	Perchlorate-O(18)			5.00	ug/kg		1	14-MAR-10 20:07	per0314034a

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

JCC
04/27/10

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: 257940

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8316

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1983-1

GEL Sample ID: 247794003

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 26

CAS No.	Analyte [^]	MDL	RL	Conc [*]	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.521	2.08	0.521	ug/kg	U	1	14-MAR-10 20:40	per0314038a
	Perchlorate Isotope Ratio						1	14-MAR-10 20:40	per0314038a
14797-73-0	Perchlorate-101	.521	2.08	0.521	ug/kg	U	1	14-MAR-10 20:40	per0314038a
	Perchlorate-O(18)			4.92	ug/kg		1	14-MAR-10 20:40	per0314038a

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

JCC
04/27/10

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: 957940

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8326

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1983-1

GEL Sample ID: 247794004

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 96

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	521	2.08	0.521	ug/kg	U	1	14-MAR-10 20:48	per0314039a
	Perchlorate Isotope Ratio						1	14-MAR-10 20:48	per0314039a
14797-73-0	Perchlorate-101	521	2.08	0.521	ug/kg	U	1	14-MAR-10 20:48	per0314039a
	Perchlorate-O(18)			4.74	ug/kg		1	14-MAR-10 20:48	per0314039a

[^] 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

JCC

04/27/10

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: 957940

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8318

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1983-1

GEL Sample ID: 247794005

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

% Solids: 95.5

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.524	2.1	0.524	ug/kg	U	1	14-MAR-10 20:56	per0314040a
	Perchlorate Isotope Ratio						1	14-MAR-10 20:56	per0314040a
14797-73-0	Perchlorate-101	.524	2.1	0.524	ug/kg	U	1	14-MAR-10 20:56	per0314040a
	Perchlorate-O(18)			4.78	ug/kg		1	14-MAR-10 20:56	per0314040a

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

JCC
04/27/10

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1983 VALIDATION DATE: 04/27/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Joanne Compton ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check

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


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


1. In the aqueous MB, Cr was detected. In the soil MB, Sb was detected. The associated sample results were NDs and, thus, were not qualified.
2. In the FR blank, sample RE15-10-8330, associated with all samples, K and Na were detected. The associated sample results were all detects >5X the FR blank concentrations and, thus, were not qualified.
3. The soil LCS %R for Sb was < the laboratory LAL but $\geq 10\%$. The associated sample results were NDs and, thus, were qualified UJ,I12a.
4. The soil MS %Rs for Ca and Mg were > the laboratory UAL. The associated sample results were detects and, thus, were qualified J+,I6b. The soil MS %R for Ni was < the laboratory LAL but $\geq 10\%$. The associated sample results were detects and, thus, were qualified J-,I6a. The soil MS %Rs for Al and Fe, as well as the aqueous MS %Rs for Ca, Mn, and Fe were > the laboratory UAL. However, the associated parent sample results were detects >4X the spike amounts and, thus, no sample results were qualified, based on professional judgment.
It should be noted that the matrix QC for the aqueous ICP-AES, ICP-MS, and Hg analyses, as well as the soil ICP-AES and ICP-MS analyses were performed on samples from other LANL RNs and that the parent sample raw data were not included in the data package. No sample data were qualified as a result.
5. The soil duplicate RPD was >35% and the parent and duplicate sample results were $\geq 5X$ the PQL for U. The associated sample results were detects and, thus, were qualified J,I10a.

Reviewed by: ETM


Level: 1

Date: 4/27/10


DATA VALIDATION COVER SHEET	
5118-1	Records Use only
Data Validation Cover Sheet	
VALIDATOR'S SIGNATURE: <u><i>Jeanne Compton</i></u> DATE: <u>04/27/10</u>	
Form 5118-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2	Records Use only
<div style="display: flex; justify-content: space-between; align-items: center;"> <div>Metals Analytical Data Validation Checklist</div> <div>  </div> </div>	


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	Records Use only	
Metals Analytical Data Validation Checklist		

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

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

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
<input 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 

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

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1983

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247793001

BASIS: As Received

DATE COLLECTED 17-FEB-10

CLIENT ID: RE15-10-8330

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: WATER

%SOLIDS: 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	SKJ	04/20/10 13:20	100420-3	957494
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	SKJ	04/20/10 13:20	100420-3	957494
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	SKJ	04/20/10 16:08	100420-5	957494
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	03/19/10 13:50	031910-1	957492
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	03/19/10 13:50	031910-1	957492
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	SKJ	04/20/10 16:08	100420-5	957494
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	03/19/10 13:50	031910-1	957492
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	SKJ	04/20/10 13:20	100420-3	957494
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	03/03/10 11:22	030310W2-6	958777
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-09-7	Potassium	329	ug/L		50	150	150	1	P	HSC	03/19/10 13:50	031910-1	957492
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-23-5	Sodium	202	ug/L	J	100	300	300	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	SKJ	04/20/10 13:20	100420-3	957494
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	04/20/10 15:10	100420-2	957494
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	03/19/10 13:50	031910-1	957492

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957492	957491	SW846 3005A	50	mL	50	mL	03/01/10	BXA1
957494	957493	SW846 3005A	50	mL	50	mL	03/02/10	FGA
958777	958775	SW846 7470A Prep	20	mL	20	mL	03/02/10	TXB3

JCC
04/27/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1983-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247794001

BASIS: Dry Weight

DATE COLLECTED 17-FEB-10

CLIENT ID: RE15-10-8317

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 93.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1310000	ug/Kg		7230	21300	21300	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-36-0	Antimony UJ,112a	1060	ug/Kg	U	351	1060	1060	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-38-2	Arsenic	0.648	mg/kg	J	0.21	1.05	1.05	2	MS	PRB	04/20/10 14:40	100420-2	957498
7440-39-3	Barium	13200	ug/Kg		106	532	532	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-41-7	Beryllium	0.907	mg/kg		0.021	0.105	0.105	2	MS	PRB	04/20/10 14:40	100420-2	957498
7440-43-9	Cadmium	532	ug/Kg	U	106	532	532	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-70-2	Calcium J+,16b	334000	ug/Kg		8510	26600	26600	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-47-3	Chromium	2370	ug/Kg		160	532	532	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-48-4	Cobalt	387	ug/Kg	J	160	532	532	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-50-8	Copper	1200	ug/Kg		319	1060	1060	1	P	HSC	03/19/10 16:38	031910-1	957496
7439-89-6	Iron	7680000	ug/Kg		8510	26600	26600	1	P	HSC	03/19/10 16:38	031910-1	957496
7439-92-1	Lead	5180	ug/Kg		266	1060	1060	1	P	HSC	03/19/10 16:38	031910-1	957496
7439-95-4	Magnesium J+,16b	239000	ug/Kg		9040	31900	31900	1	P	HSC	03/19/10 16:38	031910-1	957496
7439-96-5	Manganese	266000	ug/Kg		213	1060	1060	1	P	HSC	03/19/10 16:38	031910-1	957496
7439-97-6	Mercury	10.9	ug/kg	U	3.69	10.9	10.9	1	AV	JXL1	03/08/10 11:08	030810S1-5	958710
7440-02-0	Nickel J-,16a	1.94	mg/kg		0.105	0.42	0.42	2	MS	PRB	04/20/10 14:40	100420-2	957498
7440-09-7	Potassium	639000	ug/Kg		6810	26600	26600	1	P	HSC	03/19/10 16:38	031910-1	957496
7782-49-2	Selenium	1.05	mg/kg	U	0.525	1.05	1.05	2	MS	PRB	04/20/10 14:40	100420-2	957498
7440-22-4	Silver	124	ug/Kg	J	106	532	532	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-23-5	Sodium	475000	ug/Kg		7440	26600	26600	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-28-0	Thallium	0.078	mg/kg	J	0.0631	0.21	0.21	2	MS	PRB	04/20/10 14:40	100420-2	957498
7440-61-1	Uranium J,110a	0.687	mg/kg		0.0139	0.042	0.042	2	MS	PRB	04/20/10 14:40	100420-2	957498
7440-62-2	Vanadium	3340	ug/Kg		106	532	532	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-66-6	Zinc	51500	ug/Kg		351	1060	1060	1	P	HSC	03/19/10 16:38	031910-1	957496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957496	957495	SW846 3050B	0.502	g	50	mL	02/26/10	AXG2
957498	957497	SW846 3050B	0.508	g	50	mL	02/26/10	AXG2
958710	958704	SW846 7471A Prep	0.59	g	30	mL	03/06/10	TXB3

JCC
04/27/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1983-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247794002

BASIS: Dry Weight

DATE COLLECTED 17-FEB-10

CLIENT ID: RE15-10-8319

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 96.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	605000	ug/Kg		6790	20000	20000	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-36-0	Antimony UJ,112a	998	ug/Kg	U	329	998	998	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-38-2	Arsenic	0.209	mg/kg	J	0.197	0.985	0.985	2	MS	PRB	04/20/10 14:43	100420-2	957498
7440-39-3	Barium	5190	ug/Kg		99.8	499	499	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-41-7	Beryllium	0.216	mg/kg		0.0197	0.0985	0.0985	2	MS	PRB	04/20/10 14:43	100420-2	957498
7440-43-9	Cadmium	499	ug/Kg	U	99.8	499	499	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-70-2	Calcium J+,16b	186000	ug/Kg		7980	25000	25000	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-47-3	Chromium	1780	ug/Kg		150	499	499	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-48-4	Cobalt	271	ug/Kg	J	150	499	499	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-50-8	Copper	932	ug/Kg	J	299	998	998	1	P	HSC	03/19/10 16:45	031910-1	957496
7439-89-6	Iron	6080000	ug/Kg		7980	25000	25000	1	P	HSC	03/19/10 16:45	031910-1	957496
7439-92-1	Lead	2620	ug/Kg		250	998	998	1	P	HSC	03/19/10 16:45	031910-1	957496
7439-95-4	Magnesium J+,16b	114000	ug/Kg		8480	29900	29900	1	P	HSC	03/19/10 16:45	031910-1	957496
7439-96-5	Manganese	177000	ug/Kg		200	998	998	1	P	HSC	03/19/10 16:45	031910-1	957496
7439-97-6	Mercury	10.6	ug/kg	U	3.61	10.6	10.6	1	AV	JXL1	03/08/10 11:17	030810S1-5	958710
7440-02-0	Nickel J-,16a	0.360	mg/kg	J	0.0985	0.394	0.394	2	MS	PRB	04/20/10 14:43	100420-2	957498
7440-09-7	Potassium	347000	ug/Kg		6390	25000	25000	1	P	HSC	03/19/10 16:45	031910-1	957496
7782-49-2	Selenium	0.985	mg/kg	U	0.492	0.985	0.985	2	MS	PRB	04/20/10 14:43	100420-2	957498
7440-22-4	Silver	499	ug/Kg	U	99.8	499	499	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-23-5	Sodium	223000	ug/Kg		6990	25000	25000	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-28-0	Thallium	0.197	mg/kg	U	0.0591	0.197	0.197	2	MS	PRB	04/20/10 14:43	100420-2	957498
7440-61-1	Uranium J,110a	0.424	mg/kg		0.013	0.0394	0.0394	2	MS	PRB	04/20/10 14:43	100420-2	957498
7440-62-2	Vanadium	1750	ug/Kg		99.8	499	499	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-66-6	Zinc	41000	ug/Kg		329	998	998	1	P	HSC	03/19/10 16:45	031910-1	957496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957496	957495	SW846 3050B	0.518	g	50	mL	02/26/10	AXG2
957498	957497	SW846 3050B	0.525	g	50	mL	02/26/10	AXG2
958710	958704	SW846 7471A Prep	0.585	g	30	mL	03/06/10	TXB3

JCC
04/27/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1983-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247794003

BASIS: Dry Weight

DATE COLLECTED 17-FEB-10

CLIENT ID: RE15-10-8316

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 96

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1040000	ug/Kg		6860	20200	20200	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-36-0	Antimony UJ,112a	1010	ug/Kg	U	333	1010	1010	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-38-2	Arsenic	0.258	mg/kg	J	0.201	1	1	2	MS	PRB	04/20/10 14:47	100420-2	957498
7440-39-3	Barium	10400	ug/Kg		101	505	505	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-41-7	Beryllium	0.228	mg/kg		0.0201	0.1	0.1	2	MS	PRB	04/20/10 14:47	100420-2	957498
7440-43-9	Cadmium	505	ug/Kg	U	101	505	505	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-70-2	Calcium J+,16b	265000	ug/Kg		8080	25200	25200	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-47-3	Chromium	2140	ug/Kg		151	505	505	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-48-4	Cobalt	258	ug/Kg	J	151	505	505	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-50-8	Copper	867	ug/Kg	J	303	1010	1010	1	P	HSC	03/19/10 16:52	031910-1	957496
7439-89-6	Iron	6070000	ug/Kg		8080	25200	25200	1	P	HSC	03/19/10 16:52	031910-1	957496
7439-92-1	Lead	2840	ug/Kg		252	1010	1010	1	P	HSC	03/19/10 16:52	031910-1	957496
7439-95-4	Magnesium J+,16b	119000	ug/Kg		8580	30300	30300	1	P	HSC	03/19/10 16:52	031910-1	957496
7439-96-5	Manganese	206000	ug/Kg		202	1010	1010	1	P	HSC	03/19/10 16:52	031910-1	957496
7439-97-6	Mercury	11.3	ug/kg	U	3.84	11.3	11.3	1	AV	JXL1	03/08/10 11:18	030810S1-5	958710
7440-02-0	Nickel J-,16a	0.350	mg/kg	J	0.1	0.401	0.401	2	MS	PRB	04/20/10 14:47	100420-2	957498
7440-09-7	Potassium	519000	ug/Kg		6460	25200	25200	1	P	HSC	03/19/10 16:52	031910-1	957496
7782-49-2	Selenium	1	mg/kg	U	0.502	1	1	2	MS	PRB	04/20/10 14:47	100420-2	957498
7440-22-4	Silver	118	ug/Kg	J	101	505	505	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-23-5	Sodium	402000	ug/Kg		7070	25200	25200	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-28-0	Thallium	0.201	mg/kg	U	0.0602	0.201	0.201	2	MS	PRB	04/20/10 14:47	100420-2	957498
7440-61-1	Uranium J,110a	0.358	mg/kg		0.0132	0.0401	0.0401	2	MS	PRB	04/20/10 14:47	100420-2	957498
7440-62-2	Vanadium	2040	ug/Kg		101	505	505	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-66-6	Zinc	34200	ug/Kg		333	1010	1010	1	P	HSC	03/19/10 16:52	031910-1	957496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957496	957495	SW846 3050B	0.516	g	50	mL	02/26/10	AXG2
957498	957497	SW846 3050B	0.519	g	50	mL	02/26/10	AXG2
958710	958704	SW846 7471A Prep	0.553	g	30	mL	03/06/10	TXB3

JCC
04/27/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1983-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247794004

BASIS: Dry Weight

DATE COLLECTED 17-FEB-10

CLIENT ID: RE15-10-8326

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 96

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1140000	ug/Kg		7060	20800	20800	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-36-0	Antimony UJ,112a	1040	ug/Kg	U	342	1040	1040	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-38-2	Arsenic	0.352	mg/kg	J	0.2	1	1	2	MS	PRB	04/20/10 14:50	100420-2	957498
7440-39-3	Barium	12000	ug/Kg		104	519	519	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-41-7	Beryllium	0.273	mg/kg		0.02	0.1	0.1	2	MS	PRB	04/20/10 14:50	100420-2	957498
7440-43-9	Cadmium	519	ug/Kg	U	104	519	519	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-70-2	Calcium J+,16b	284000	ug/Kg		8300	25900	25900	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-47-3	Chromium	3820	ug/Kg		156	519	519	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-48-4	Cobalt	299	ug/Kg	J	156	519	519	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-50-8	Copper	861	ug/Kg	J	311	1040	1040	1	P	HSC	03/19/10 16:59	031910-1	957496
7439-89-6	Iron	7120000	ug/Kg		8300	25900	25900	1	P	HSC	03/19/10 16:59	031910-1	957496
7439-92-1	Lead	3330	ug/Kg		259	1040	1040	1	P	HSC	03/19/10 16:59	031910-1	957496
7439-95-4	Magnesium J+,16b	146000	ug/Kg		8820	31100	31100	1	P	HSC	03/19/10 16:59	031910-1	957496
7439-96-5	Manganese	245000	ug/Kg		208	1040	1040	1	P	HSC	03/19/10 16:59	031910-1	957496
7439-97-6	Mercury	12.4	ug/kg	U	4.23	12.4	12.4	1	AV	JXL1	03/08/10 11:20	030810S1-5	958710
7440-02-0	Nickel J-,16a	0.495	mg/kg		0.1	0.401	0.401	2	MS	PRB	04/20/10 14:50	100420-2	957498
7440-09-7	Potassium	569000	ug/Kg		6640	25900	25900	1	P	HSC	03/19/10 16:59	031910-1	957496
7782-49-2	Selenium	1	mg/kg	U	0.501	1	1	2	MS	PRB	04/20/10 14:50	100420-2	957498
7440-22-4	Silver	164	ug/Kg	J	104	519	519	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-23-5	Sodium	438000	ug/Kg		7260	25900	25900	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-28-0	Thallium	0.20	mg/kg	U	0.0601	0.2	0.2	2	MS	PRB	04/20/10 14:50	100420-2	957498
7440-61-1	Uranium J,110a	0.40	mg/kg		0.0132	0.0401	0.0401	2	MS	PRB	04/20/10 14:50	100420-2	957498
7440-62-2	Vanadium	2210	ug/Kg		104	519	519	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-66-6	Zinc	40100	ug/Kg		342	1040	1040	1	P	HSC	03/19/10 16:59	031910-1	957496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957496	957495	SW846 3050B	0.502	g	50	mL	02/26/10	AXG2
957498	957497	SW846 3050B	0.52	g	50	mL	02/26/10	AXG2
958710	958704	SW846 7471A Prep	0.503	g	30	mL	03/06/10	TXB3

JCC
04/27/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1983-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247794005

BASIS: Dry Weight

DATE COLLECTED 17-FEB-10

CLIENT ID: RE15-10-8318

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 95.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	742000	ug/Kg		6900	20300	20300	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-36-0	Antimony UJ,112a	1020	ug/Kg	U	335	1020	1020	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-38-2	Arsenic	1.02	mg/kg	U	0.203	1.02	1.02	2	MS	PRB	04/20/10 14:54	100420-2	957498
7440-39-3	Barium	6350	ug/Kg		102	508	508	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-41-7	Beryllium	0.281	mg/kg		0.0203	0.102	0.102	2	MS	PRB	04/20/10 14:54	100420-2	957498
7440-43-9	Cadmium	508	ug/Kg	U	102	508	508	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-70-2	Calcium J+,16b	265000	ug/Kg		8120	25400	25400	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-47-3	Chromium	1710	ug/Kg		152	508	508	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-48-4	Cobalt	285	ug/Kg	J	152	508	508	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-50-8	Copper	1060	ug/Kg		305	1020	1020	1	P	HSC	03/19/10 17:06	031910-1	957496
7439-89-6	Iron	6470000	ug/Kg		8120	25400	25400	1	P	HSC	03/19/10 17:06	031910-1	957496
7439-92-1	Lead	3840	ug/Kg		254	1020	1020	1	P	HSC	03/19/10 17:06	031910-1	957496
7439-95-4	Magnesium J+,16b	138000	ug/Kg		8630	30500	30500	1	P	HSC	03/19/10 17:06	031910-1	957496
7439-96-5	Manganese	203000	ug/Kg		203	1020	1020	1	P	HSC	03/19/10 17:06	031910-1	957496
7439-97-6	Mercury	12.2	ug/kg	U	4.14	12.2	12.2	1	AV	JXL1	03/08/10 11:22	030810S1-5	958710
7440-02-0	Nickel J-,16a	0.471	mg/kg		0.102	0.407	0.407	2	MS	PRB	04/20/10 14:54	100420-2	957498
7440-09-7	Potassium	404000	ug/Kg		6500	25400	25400	1	P	HSC	03/19/10 17:06	031910-1	957496
7782-49-2	Selenium	1.02	mg/kg	U	0.509	1.02	1.02	2	MS	PRB	04/20/10 14:54	100420-2	957498
7440-22-4	Silver	149	ug/Kg	J	102	508	508	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-23-5	Sodium	277000	ug/Kg		7110	25400	25400	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-28-0	Thallium	0.203	mg/kg	U	0.061	0.203	0.203	2	MS	PRB	04/20/10 14:54	100420-2	957498
7440-61-1	Uranium J,110a	0.441	mg/kg		0.0134	0.0407	0.0407	2	MS	PRB	04/20/10 14:54	100420-2	957498
7440-62-2	Vanadium	1940	ug/Kg		102	508	508	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-66-6	Zinc	39700	ug/Kg		335	1020	1020	1	P	HSC	03/19/10 17:06	031910-1	957496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957496	957495	SW846 3050B	0.516	g	50	mL	02/26/10	AXG2
957498	957497	SW846 3050B	0.515	g	50	mL	02/26/10	AXG2
958710	958704	SW846 7471A Prep	0.516	g	30	mL	03/06/10	TXB3

JCC
04/27/10

DATA VALIDATION COVER SHEET

5120-1

Records Use only

Data Validation Cover Sheet



Section I.

REQUEST NUMBER: 10-1983 VALIDATION DATE: 04/27/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Joanne Compton ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

☐ 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. In the aqueous MB, nitrate/nitrite was detected. The associated sample result was an ND and, thus, was not qualified.
2. In the ICB/CCB, associated with the aqueous analysis, nitrate/nitrite was detected. The associated sample result was an ND and, thus, was not qualified.
3. It should be noted that the matrix QC for all analyses except for the aqueous nitrate/nitrite analysis were performed on samples from other LANL RNs. It should also be noted that the matrix QC for the aqueous nitrite/nitrate analysis was performed on the FR blank RE15-10-8330. No sample data were qualified as a result.

Reviewed by: ETM


Level: 1

Date: 4/27/10


VALIDATOR'S SIGNATURE:

A handwritten signature in cursive script that reads "Joanne Compton".


DATE: 04/27/10

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

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

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

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

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

Yes No N/A				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: March 15, 2010

Client SDG: 10-1983

Client Sample ID: RE15-10-8330
Sample ID: 247793001
Matrix: W
Collect Date: 17-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	03/02/10	1549	956940	1
Nutrient Analysis											
<i>EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"</i>											
Nitrogen, Nitrate/Nitrite	U	ND	0.100	0.500	mg/L	10	AXH3	03/03/10	1132	958150	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1321	956939

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	
2	EPA 353.2	

JCC
04/27/10

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: March 17, 2010

Client SDG: 10-1983-1

Client Sample ID: RE15-10-8317
Sample ID: 247794001
Matrix: R
Collect Date: 17-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 6.34%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.8C	H	7.59	0.010	0.100	SU	1	TXT1	02/24/10	1518	956998	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	69.8	257	ug/kg	1	AXC2	03/02/10	1704	957569	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.320	1.07	mg/kg	1	MAR103/10/10	1822	957881		3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	MARI	03/10/10	1030	957878
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1528	957568

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

JCC
04/27/10

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: March 17, 2010

Client SDG: 10-1983-1

Client Sample ID: RE15-10-8319
Sample ID: 247794002
Matrix: R
Collect Date: 17-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 3.28%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.4C	H	7.96	0.010	0.100	SU	1	TXT1	02/24/10	1527	956998	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	68.9	253	ug/kg	1	AXC2	03/02/10	1705	957569	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.310	1.03	mg/kg	1	MAR1	03/10/10	1851	957881	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	MAR1	03/10/10	1030	957878
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1528	957568

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

JCC
04/27/10

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: March 17, 2010

Client SDG: 10-1983-1

Client Sample ID: RE15-10-8316
Sample ID: 247794003
Matrix: R
Collect Date: 17-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 4.02%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.5C	H	7.41	0.010	0.100	SU	1	TXT1	02/24/10	1528	956998	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	63.3	233	ug/kg	1	AXC2	03/02/10	1706	957569	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.313	1.04	mg/kg	1	MAR1	03/10/10	1920	957881	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	MAR1	03/10/10	1030	957878
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1528	957568

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

JCC
04/27/10

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: March 17, 2010

Client SDG: 10-1983-1

Client Sample ID: RE15-10-8326
Sample ID: 247794004
Matrix: R
Collect Date: 17-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 4.01%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.4C	H	7.71	0.010	0.100	SU	1	TXT1	02/24/10	1536	956998	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	64.4	237	ug/kg	1	AXC2	03/02/10	1707	957569	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.313	1.04	mg/kg	1	MAR1	03/10/10	1949	957881	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	MAR1	03/10/10	1030	957878
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1528	957568

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

JCC
04/27/10

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: March 17, 2010

Client SDG: 10-1983-1

Client Sample ID: RE15-10-8318
Sample ID: 247794005
Matrix: R
Collect Date: 17-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 4.55%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.3C	H	7.90	0.010	0.100	SU	1	TXT1	02/24/10	1541	956998	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	62.5	230	ug/kg	1	AXC2	03/02/10	1707	957569	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.314	1.05	mg/kg	1	MAR1	03/10/10	2018	957881	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	MAR1	03/10/10	1030	957878
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1528	957568

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

JCC
04/27/10

Monday, February 22, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1983

LOS ALAMOS

REQUEST NUMBER: 10-1983

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/24/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

247793, 247794

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8330	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8330	1	POLY	NO3NO2	Sulfuric Acid (Hydrogen W Sulfate)	W
RE15-10-8330	1	POLY	SW-846.8850	Ice	W
RE15-10-8330	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8317	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8317	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8319	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8319	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8316	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8316	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8326	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8326	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8318	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8318	1	POLY	Perchlorate+CN+N03+pH	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

2/22/10 1400

Printed Name

Signature

Patricia Dover-Dent P. U. Dent 2/23/10 08:50

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

LOS ALAMOS
NATIONAL LABORATORY

Charleston, SC 29407

Protect Cost Code: MFR3A05529E08

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 2/22/2010

TURNAROUND/REPORT DUE: 3/24/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA300.0	1	RE15-10-8316	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	
		1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8326	R	2/17/2010	
	EPA353.2	1	RE15-10-8330	W	2/17/2010	
	SW-846-50108	1	RE15-10-8316	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	
		1	RE15-10-8318	R	2/17/2010	

Monday, February 22, 2010 Page 2 of 3
 REQUEST NUMBER: 10-1983

PRIORITY	METHOD CODE	CNTR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-6010B	1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8326	R	2/17/2010	
	SW-846-6020	1	RE15-10-8316	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	
		1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8328	R	2/17/2010	
		1	RE15-10-8330	W	2/17/2010	
	SW-846-6850	1	RE15-10-8316	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	
		1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8326	R	2/17/2010	
		1	RE15-10-8330	W	2/17/2010	
	SW-846-7470A	1	RE15-10-8330	W	2/17/2010	
	SW-846-7471A	1	RE15-10-8316	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	
		1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8326	R	2/17/2010	
	SW-846-9012A	1	RE15-10-8316	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	
		1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8326	R	2/17/2010	
		1	RE15-10-8330	W	2/17/2010	
	SW-846-9045C	1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	

REQUEST NUMBER: 10-1983

Monday, February 22, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-9045C	1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8328	R	2/17/2010	

Final Page of REQUEST NUMBER 10-1983



March 01, 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: 247793 247794
SDG: 10-1983

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 23, 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: 10-1983
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 247793 and 247794
SDG: 10-1983

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Cyanide, Total	878
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Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 247793 and 247794
SDG #: 10-1983**

March 01, 2010

Laboratory Identification:

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

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on February 23, 2010 for analysis. The sample was prepared/analyzed within the required holding time. Shipping container temperature was checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The lab did not receive a NO3NO2 container for sample RE15-10-8330. An aliquot was taken from the perchlorate container and preserved prior to analysis. 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>
247793001	RE15-10-8330
247794001	RE15-10-8317
247794002	RE15-10-8319
247794003	RE15-10-8316
247794004	RE15-10-8326
247794005	RE15-10-8318

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 01 March 2010

State	Certification
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California - NELAP	01151CA
Colorado	GEL
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA Region 5	WG-15J
Florida - NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois - NELAP	200029
Indiana	C-SC-01
Kansas - NELAP	E-10332
Kentucky	90129
Louisiana - NELAP	03046
Maryland	270
Massachusetts	M-SC012
Nevada	SC00012
New Jersey - NELAP	SC002
New Mexico	FL NELAP E87156
New York - NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania - NELAP	68-00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas - NELAP	T104704235-07B-TX
U.S. Dept. of Agriculture	S-52597
Utah - NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Monday, February 22, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1983

LOS ALAMOS

REQUEST NUMBER: 10-1983

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/24/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

247793, 247794

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8330	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8330	1	POLY	NO3NO2	Sulfuric Acid (Hydrogen Sulfate)	W
RE15-10-8330	1	POLY	SW-846:6850	Ice	W
RE15-10-8330	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8317	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8317	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8319	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8319	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8316	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8316	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8326	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8326	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8318	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8318	1	POLY	Perchlorate+CN+N03+pH	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Monday, February 22, 2010

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/22/2010

TURNAROUND/REPORT DUE: 3/24/2010

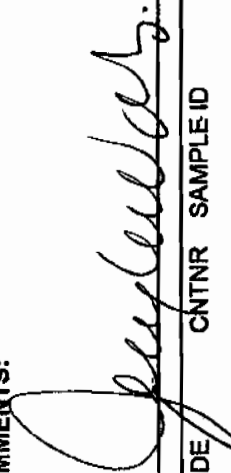
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



Page 1 of 3

REQUEST NUMBER: 10-1983

These Samples are on:

LANL Request Number: 10-1983

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE15-10-8316	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	
		1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8328	R	2/17/2010	
	EPA:353.2	1	RE15-10-8330	W	2/17/2010	
	SW-846:6010B	1	RE15-10-8316	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	
		1	RE15-10-8318	R	2/17/2010	

Monday, February 22, 2010

Page 2 of 3

REQUEST NUMBER: 10-1983

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8326	R	2/17/2010	
	SW-846:6029	1	RE15-10-8316	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	
		1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8326	R	2/17/2010	
		1	RE15-10-8330	W	2/17/2010	
	SW-846:6850	1	RE15-10-8316	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	
		1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8326	R	2/17/2010	
		1	RE15-10-8330	W	2/17/2010	
	SW-846:7470A	1	RE15-10-8330	W	2/17/2010	
	SW-846:7471A	1	RE15-10-8316	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	
		1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8326	R	2/17/2010	
	SW-846:9012A	1	RE15-10-8316	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	
		1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8326	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	
		1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8326	R	2/17/2010	
		1	RE15-10-8330	W	2/17/2010	
	SW-846:9045C	1	RE15-10-8316	R	2/17/2010	
		1	RE15-10-8317	R	2/17/2010	

REQUEST NUMBER: 10-1983

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
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	SW-846:9045C	1	RE15-10-8318	R	2/17/2010	
		1	RE15-10-8319	R	2/17/2010	
		1	RE15-10-8326	R	2/17/2010	

Final Page of REQUEST NUMBER 10-1983

SAMPLE RECEIPT & REVIEW FORM

Client: LANL		SDG/ARCOC/Work Order: 10-1983	
Received By: Patricia Dover-Dent		Date Received: February 23, 2009	
Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: 60 CPM
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2 Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags blue ice dry ice none other (describe) 0,2-4 7,11,&12C
3 Chain of custody documents included with shipment?	X			
4 Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5 Samples requiring chemical preservation at proper pH?	X		X	Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6 VOA vials free of headspace (defined as < 6mm bubble)?	X			Sample ID's and containers affected:
7 Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8 Samples received within holding time?	X			ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?			X	Sample ID's affected: time written on containers, not on COC
11 Number of containers received match number indicated on COC?			X	Sample ID's affected: RE15-10-8330 250ml poly for NO3NO2, not received.
12 COC form is properly signed in relinquished/received sections?	X			

Comments: FEDEX#S

7209 7850 1530 0C
 7209 7850 1595 2C
 7209 7850 1632 2C
 7209 7850 1529 2C
 7209 7850 1610 2C
 7209 7850 1518 3C
 7209 7850 1562 3C
 7209 7850 1573 3C
 7209 7850 1584 3C
 7209 7850 1621 4C
 7209 7850 1600 7C
 7209 7850 1507 11C
 7209 7850 1492-12C
 7209 7850 1492-12C

PM (or PMA) review: Initials

18

Date

2/24/10

Subject: Sample Receipt for 2/23/10

From: Dionne Francis <Dionne.Francis@gel.com>

Date: Wed, 24 Feb 2010 12:32:34 -0500

To: "Keith R. Greene" <kgreene@lanl.gov>, Joylene Valdez <joylencv@lanl.gov>, Valerie Davis <vsd@gel.com>

Good Morning Keith,

RN 10-1993: the Metals container for sample WST41-10-13490 was preserved prior to analysis.

RN 10-2001 and 2006: the Gross A/B containers were preserved prior to analysis.

RN 10-1983: the lab did not receive a NO3NO2 container for sample RE15-10-8330. Please advise.

RN 10-2007: the lab rec'd (1) 40ml vial 8260B container for sample GW29-10-1378 instead of (2) as indicated on the COC.

Thanks,
Dionne

--

Dionne Francis
Project Manager Assistant
GEL Laboratories, LLC
2040 Savage Road
Charleston, SC (USA) 29407
Direct: 843.769.7376 Ext. 4432
Main: 843.556.8171
Fax: 843.766.1178
E-mail: daf@gel.com
Web: www.gel.com

Let the Bible fill the memory, rule the heart, and guide the feet.

ORIGIN ID: SAFA (505) 666-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22FEB10
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER:

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR1A015AGWMO

0011 1100140-1545 JN011 V3 US-04



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0011 1100140-1545 JN011 V3 US-04

2 of 2
MPS# 7209 7850 1530
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TUE - 23FEB A1
PRIORITY OVERNIGHT

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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22FEB10
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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GENERAL ENGINEERING LAB
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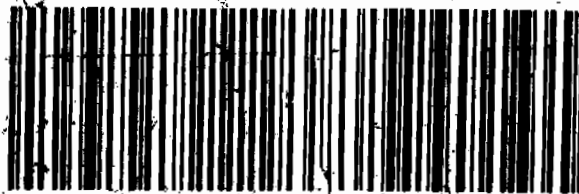
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0263
Matr# 7209 7850 1584 0201

TUE - 23FEB A1
PRIORITY OVERNIGHT

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ORIGIN ID: SAFA (505) 666-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22FEB10
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2450

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GENERAL ENGINEERING LAB
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0201

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1 of 2
TRK# 7209 7850 1529
0201
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TUE - 23FEB A1
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IGIN TO: SAFA (505) 665-9960
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
80 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22FEB10
ACTWGT: 52.0 LB MAN
CPO: 0014176/CAFE2450

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ORIGIN ID: SAFA (505) 665-9960
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
80 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22FEB10
ACTWGT: 52.0 LB MAN
CPO: 0014176/CAFE2450

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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
80 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 52.0 LB MAN
CPO: 0014176/CAFE2450

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PRIORITY OVERNIGHT

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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
80 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 52.0 LB MAN
CPO: 0014176/CAFE2450

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

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TUE - 23FEB A1
PRIORITY OVERNIGHT

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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGO BLDG 1237 DPU 83

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22FEB10
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2450

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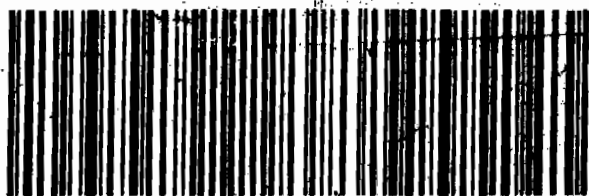


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0 BLDG 1237 DPU 83

CAD: 0014176/CAFE2450

ALAMOS, NM 87545
UNITED STATES US

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ORIGIN ID: SAFA (505) 665-9968

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGO BLDG 1237 DPU 83

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22FEB10
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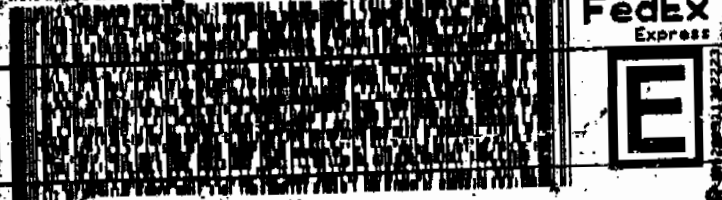
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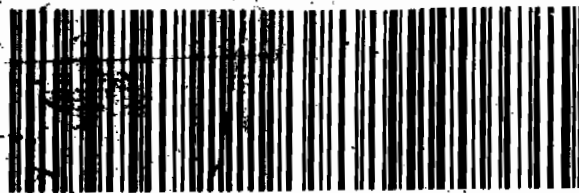


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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGO BLDG 1237 DPU 83

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 00.0 LB MAN
CAD: 0014176/CAFE2450

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TRKH 7209 7850 1507
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PRIORITY OVERNIGHT

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ORIGIN ID: SAFA (505) 666-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

SHIP DATE: 22FEB10
ACTWGT: 55.8 LB MAN
CAD: 0014176/CAFE2450

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

TO **VALERIE DAVIS**
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(645) 856-8171
REF: 6B010AAREN0130DM00



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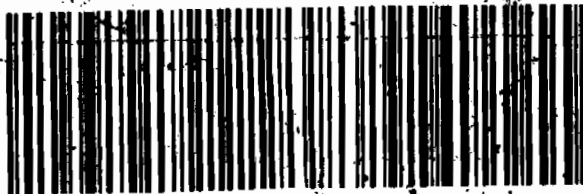
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2 of 2
MPS# 7209 7850 1492
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TUE - 23FEB - A1
PRIORITY OVERNIGHT

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001 158148-034 NRAT V3 09-09

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 10-1983**

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: 957439

Prep Batch Number: 957436

Sample Analysis

Sample ID	Client ID
247793001	RE15-10-8330
1202052909	Interference Check Sample (ICS)
1202052905	Method Blank (MB)
1202052906	Laboratory Control Sample (LCS)
1202052907	247807001(RE46-10-13371) Matrix Spike (MS)
1202052908	247807001(RE46-10-13371) Matrix Spike Duplicate (MSD)

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

Preparation/Analytical Method Verification

SOP Reference

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

Calibration Information

Initial Calibration

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

CCV Requirements

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

CCB Requirements

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

10-1983-PERLCMS

Page 1 of 4

CCV Requirements

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

Low Level Standard (CRI) Requirements

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

Quality Control (QC) Information**Method Blank (MB) Statement**

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

Interference Check Sample (ICS)

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Client sample 247807001 (RE46-10-13371) from SDG 10-1991-1 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recovered Perchlorate at 130% and the acceptance range is 75-125%. The high recovery may be the result of sample matrix, since similar recovery was observed in the MS. Please see data exception report 797970.

MS/MSD Relative Percent Difference (RPD) Statement

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

Retention Time Standard Area Acceptance

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

Retention Time

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

Technical Information**Holding Time Specifications**

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

10-1983-PERLCMS

Page 2 of 4

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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

Miscellaneous Information**Data Exception (DER) Documentation**

Data exception report 797970 was generated for this SDG.

The MSD recovered Perchlorate at 130% and the acceptance range is 75-125%. The high recovery may be the result of sample matrix, since similar recovery was observed in the MS.

Manual Integrations

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

Method Comments

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

Additional Comments

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

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

Perchlorate Isotope Ratio

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

System Configuration

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

Chromatographic Columns

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

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

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

Review Validation:

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

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

Reviewer: *Heather M. Moore* Date: *03/06/10*

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: 957436
 Extraction Type: Filter/DAI
 Sample Volume/Weight: 10.0 mL
 Concentrated Extract Volume: 10.0
 Client Sample No. RE15-10-8330
 Date Received: 23-FEB-10
 GEL Job No (SDG): 10-1983
 GEL Sample ID: 247793001
 Date Filtered: 25-FEB-10
 Injection Volume (uL): 20
 %Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	02-MAR-10 05:30	per0301118a
	Perchlorate Isotope Ratio						1	02-MAR-10 05:30	per0301118a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	02-MAR-10 05:30	per0301118a
	Perchlorate-O(18)			0.500	ug/L		1	02-MAR-10 05:30	per0301118a

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

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

QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG):

10-1983

Extract Batch Code: 957436

Date Filtered:

25-FEB-10

Matrix:

WATER

Sample ID:

1202052906

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.219	ug/L	109		85 - 115
Perchlorate Isotope Ratio		3.02				-
Perchlorate-101	0.200	.217	ug/L	109		85 - 115
Perchlorate-O(18)		.464	ug/L			-

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

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL GEL Job No. (SDG): 10-1983

Extract Batch Code: 957436 Date Filtered: 25-FEB-10

Matrix: WATER Sample ID: 1202052909

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.207	ug/L	103		70 - 130
Perchlorate Isotope Ratio		3.29				
Perchlorate-101	0.200	.189	ug/L	94.3		70 - 130
Perchlorate-O(18)		.455	ug/L			

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301101a

Date: 02-Mar-2010

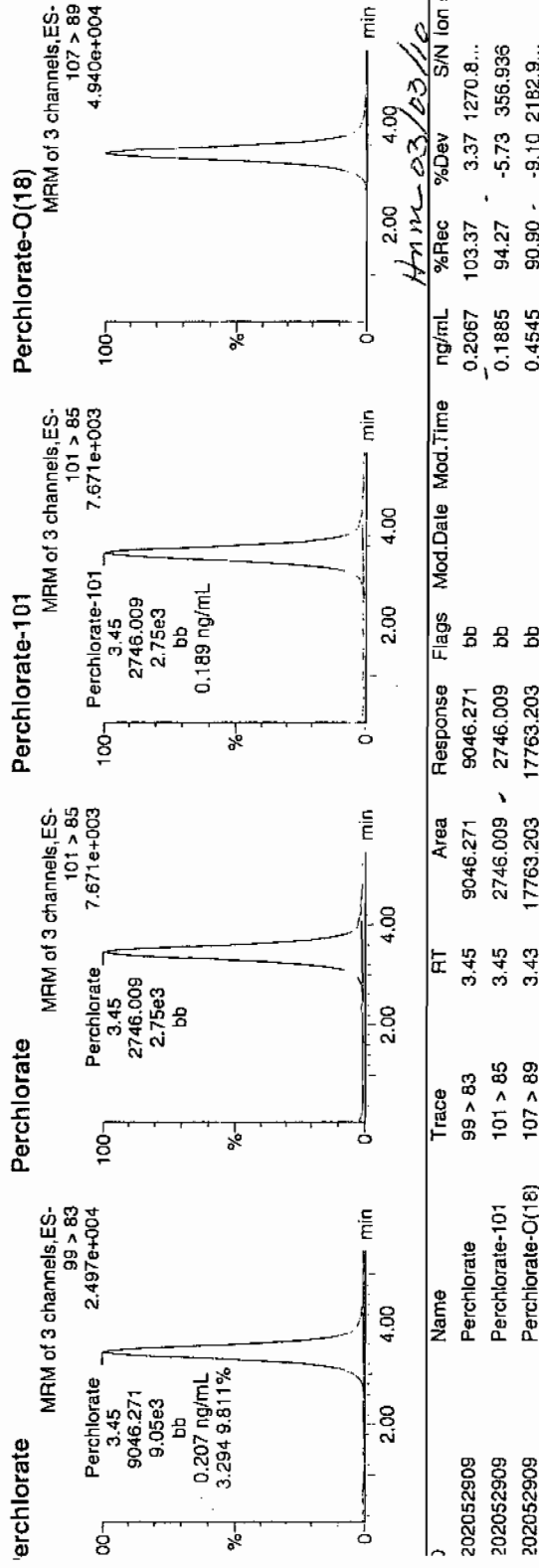
Time: 03:05:14

ID: 1202052909

Label: 3:1,C

03-02-10

LANC | 957437 | 22 | 25 | 1 |



Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

Extract Batch Code: 957436

GEL MS/PS ID: 1202052907

GEL MSD/PSD ID: 1202052908

GEL Job No (SDG): 10-1983

Date Extracted: 25-FEB-10

Client ID: RE46-10-13371

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	0.00257	ug/L	0.249	123	.263	130 *	5.6	30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.17		3.36		0		-
Perchlorate-101	0.200	0.00208	ug/L	0.236	117	.235	117	.352	30	75 - 125
Perchlorate-O(18)	0	0.504	ug/L	0.504		.527		4.53		-

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

Comments:

Form 4

Perchlorate Initial Calibration Blank

GEL Job No.(SDG): 10-1983

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	01-MAR-10	per0301001a	IPB001
Perchlorate-101	0.00	0	NA	01-MAR-10	per0301001a	IPB001
Perchlorate	0.00	0	NA	01-MAR-10	per0301002a	IPB001
Perchlorate-101	0.00	0	NA	01-MAR-10	per0301002a	IPB001

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charfers W. Wilson

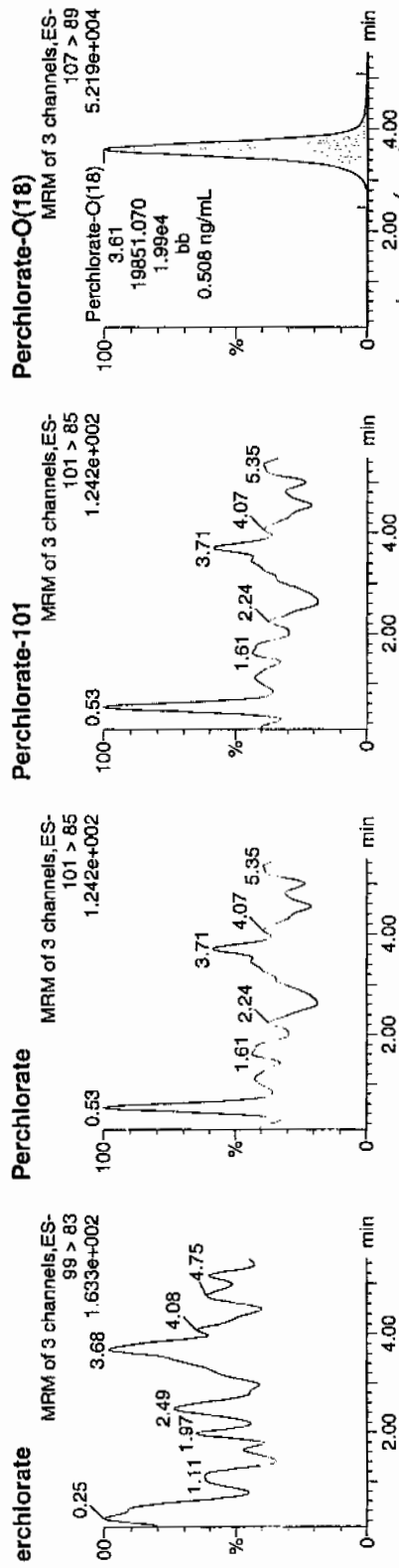
Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030110a.mdb 02 Mar 2010 08:52:20
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030110a.cdb 02 Mar 2010 08:52:38

Sample Name: per0301001a
Date: 01-Mar-2010
Time: 12:47:16
ID: IPB001
Lot: 1:1,A

03-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B001	Perchlorate	99 > 83										0.00
B001	Perchlorate-101	101 > 85										
B001	Perchlorate-O(18)	107 > 89	3.61	19851.070	bb			0.5079	101.59	✓	1.59	3254.6...

Quantify Sample Report MassLynx 4.0 SP4

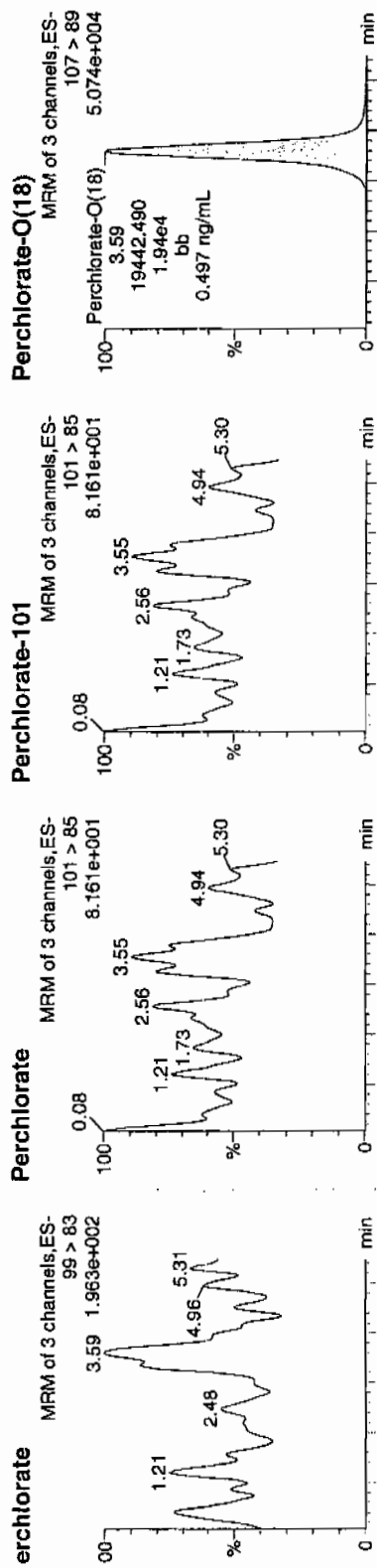
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301002a
Date: 01-Mar-2010
Time: 12:55:59
ID: IPB001
Label: 1:1,A

03-01-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B001 Perchlorate	99 > 83											0.00
B001 Perchlorate-101	101 > 85											
B001 Perchlorate-O(18)	107 > 89	3.59	19442.490	19442.490	bb			0.4975	99.50	-0.50	1858.7...	

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1983

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	01-MAR-10	per0301008a	IPB002
Perchlorate-101	0.00	0	NA	01-MAR-10	per0301008a	IPB002
Perchlorate	0.00	0	NA	01-MAR-10	per0301010a	IPB003
Perchlorate-101	0.00	0	NA	01-MAR-10	per0301010a	IPB003
Perchlorate	0.00	0	NA	01-MAR-10	per0301020a	IPB004
Perchlorate-101	0.00	0	NA	01-MAR-10	per0301020a	IPB004
Perchlorate	0.00	0	NA	01-MAR-10	per0301030a	IPB005
Perchlorate-101	0.00	0	NA	01-MAR-10	per0301030a	IPB005
Perchlorate	0.00	0	NA	01-MAR-10	per0301035a	IPB006
Perchlorate-101	0.00	0	NA	01-MAR-10	per0301035a	IPB006
Perchlorate	0.00	0	NA	01-MAR-10	per0301042a	IPB007
Perchlorate-101	0.00	0	NA	01-MAR-10	per0301042a	IPB007
Perchlorate	0.00	0	NA	01-MAR-10	per0301055a	IPB008

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1983

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-101	0.00	0	NA	01-MAR-10	per0301055a	IPB008
Perchlorate	0.00	0	NA	01-MAR-10	per0301068a	IPB009
Perchlorate-101	0.00	0	NA	01-MAR-10	per0301068a	IPB009
Perchlorate	0.00	0	NA	02-MAR-10	per0301081a	IPB010
Perchlorate-101	0.00	0	NA	02-MAR-10	per0301081a	IPB010
Perchlorate	0.00	0	NA	02-MAR-10	per0301094a	IPB011
Perchlorate-101	0.00	0	NA	02-MAR-10	per0301094a	IPB011
Perchlorate	0.00	0	NA	02-MAR-10	per0301098a	IPB012
Perchlorate-101	0.00	0	NA	02-MAR-10	per0301098a	IPB012
Perchlorate	0.00	0	NA	02-MAR-10	per0301107a	IPB013
Perchlorate-101	0.00	0	NA	02-MAR-10	per0301107a	IPB013
Perchlorate	0.00	0	NA	02-MAR-10	per0301120a	IPB014
Perchlorate-101	0.00	0	NA	02-MAR-10	per0301120a	IPB014

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

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Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301008a

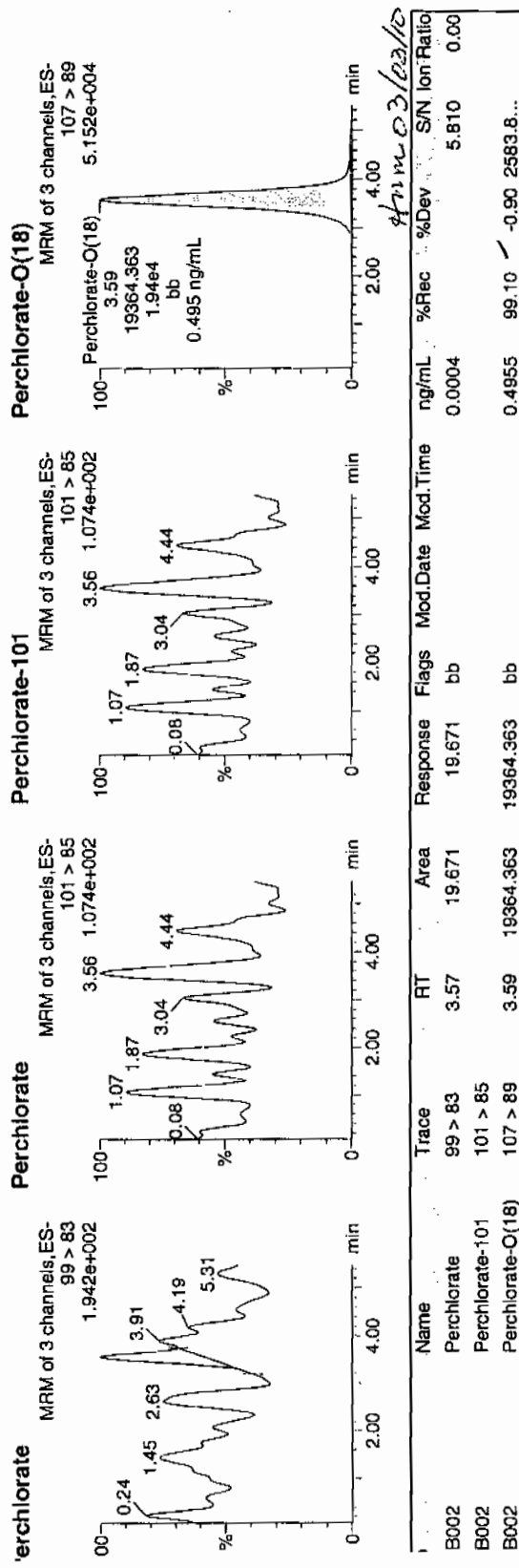
Date: 01-Mar-2010

Time: 13:47:06

Operator: IPB002

Label: 1:1,A

03-07-10

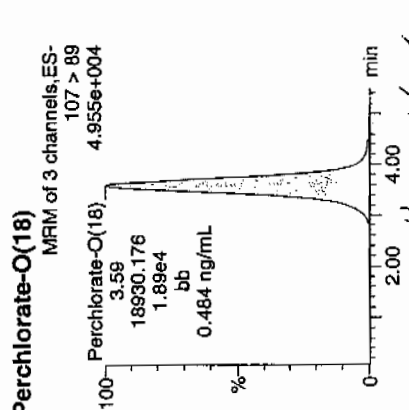
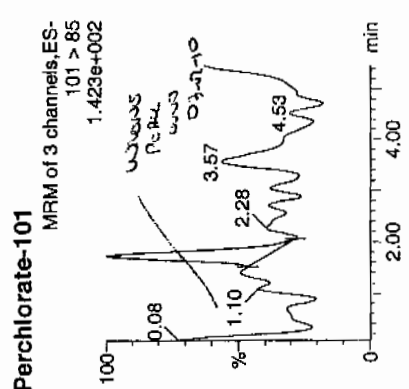
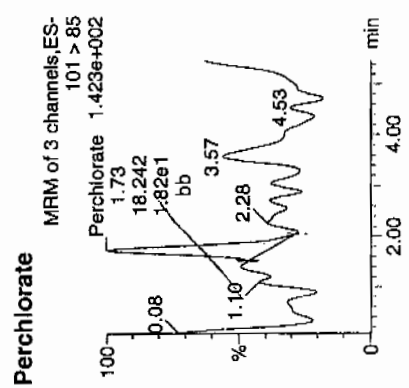
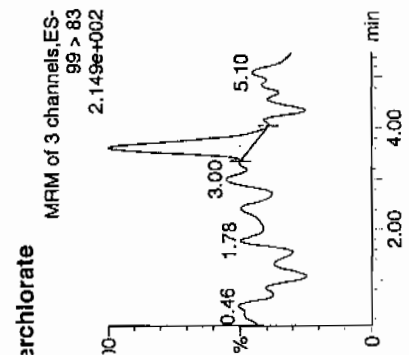


uantify Sample Report MassLynx 4.0 SP4
 1e GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

ist Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
 inted: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

ame: per0301010a
 ate: 01-Mar-2010
 me: 14:04:26
 i: IPB003
 al: 1:1,A



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	3.63	32.539	32.539	bb			0.0007			9.481	1.78
Perchlorate-101	101 > 85	1.73	18.242	18.242	bb			0.0013			11.792	
Perchlorate-O(18)	107 > 89	3.59	18930.176	18930.176	bb			0.4844	96.88	-3.12	730.850	

674 ML-0310310
 6.94
 2.0500

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

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
 Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301020a

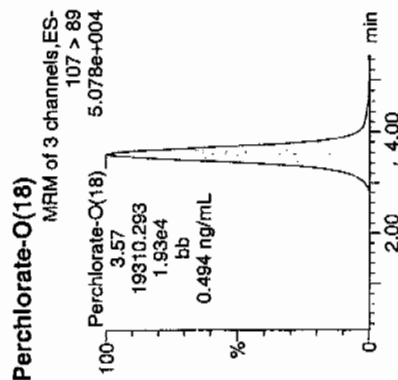
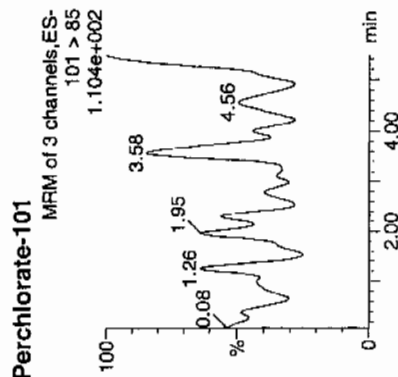
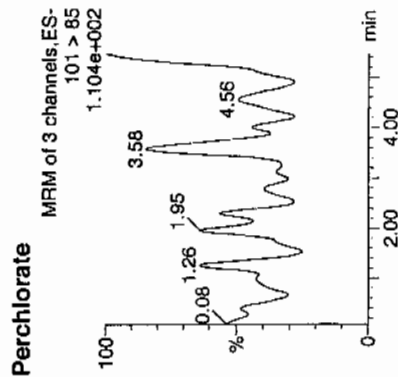
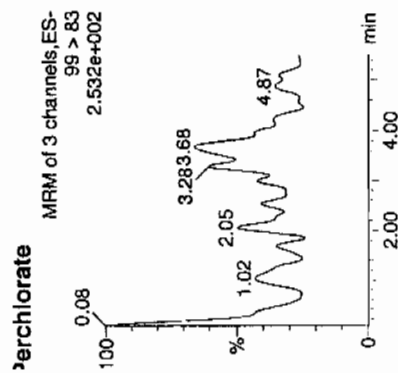
Date: 01-Mar-2010

Time: 15:29:50

D: IPB004

/lal: 1:1,A

0.00
0.007-10



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B004	Perchlorate	99 > 83											0.00
B004	Perchlorate-101	101 > 85											
B004	Perchlorate-O(18)	107 > 89	3.57	19310.293	19310.293	bb			0.4941	98.82	-1.18	2690.7...	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301030a

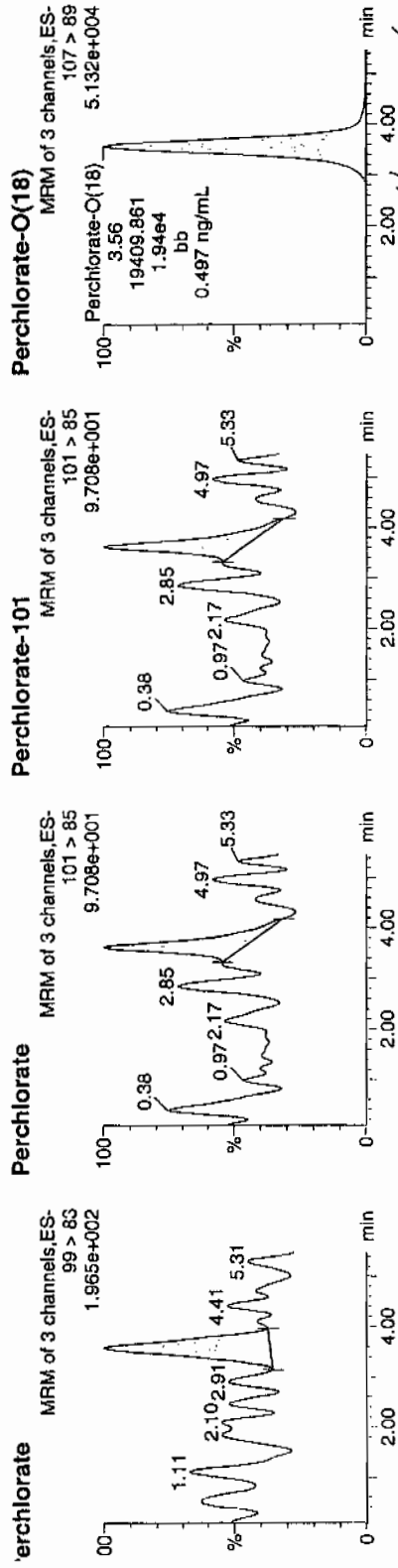
Date: 01-Mar-2010

Time: 16:55:24

Sample ID: IPB005

Sample Label: 1:1,A

03-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B005	Perchlorate	99 > 83	3.58	45,758	bb			0.0010			3,450	2.96
B005	Perchlorate-101	101 > 85	3.62	15,458	bb			0.0011			10,719	
B005	Perchlorate-O(18)	107 > 89	3.56	19409.861	bb			0.4967	99.33	-0.67	1242.5...	

03-02-10

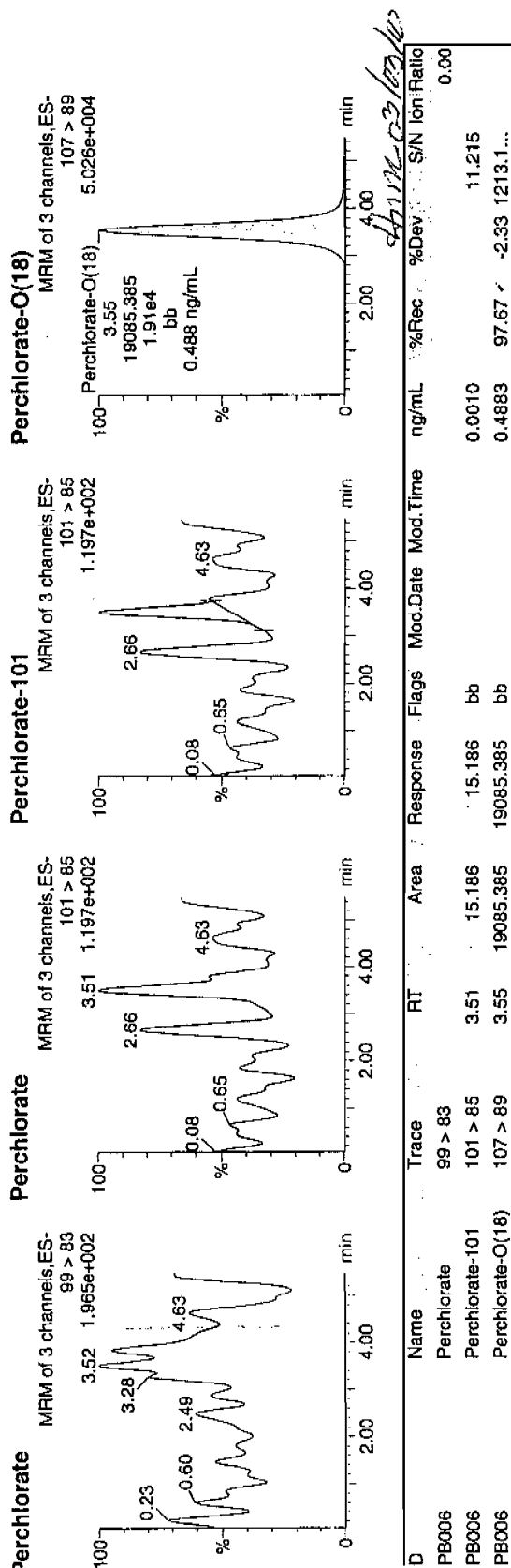
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301035a
Date: 01-Mar-2010
Time: 17:38:34
D: IPB006
Vial: 1:1,A

03-07-10



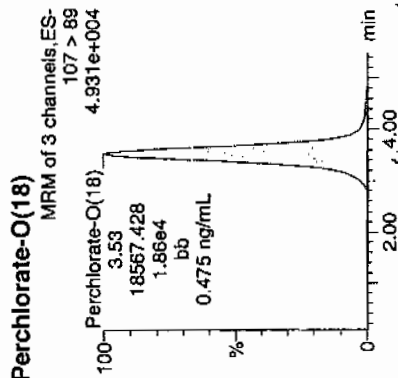
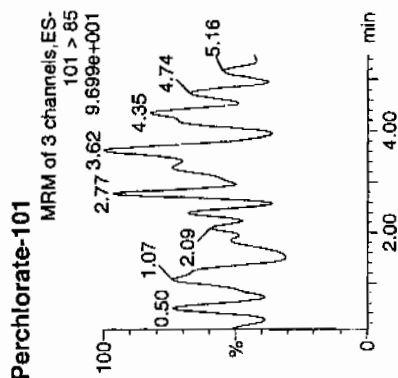
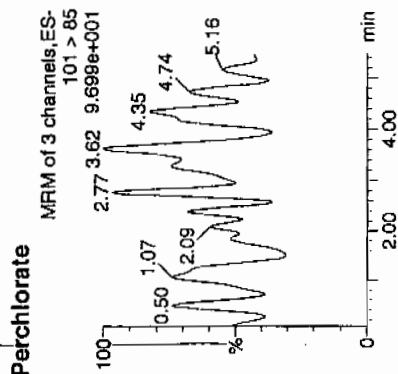
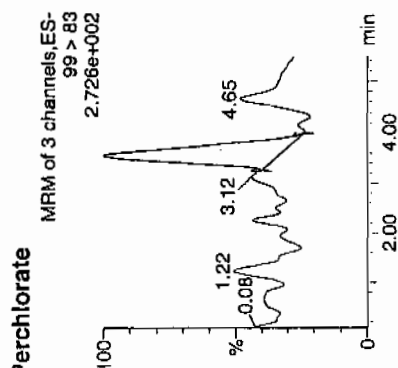
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301042a
Date: 01-Mar-2010
Time: 18:38:50
Dilution: 1:1, A

03-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	3.56	64.215	64.215	bb			0.0015			13.175	0.00
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	3.53	18567.428	18567.428	bb			0.4751	95.02	-4.98	4258.7...	

4/11/2010

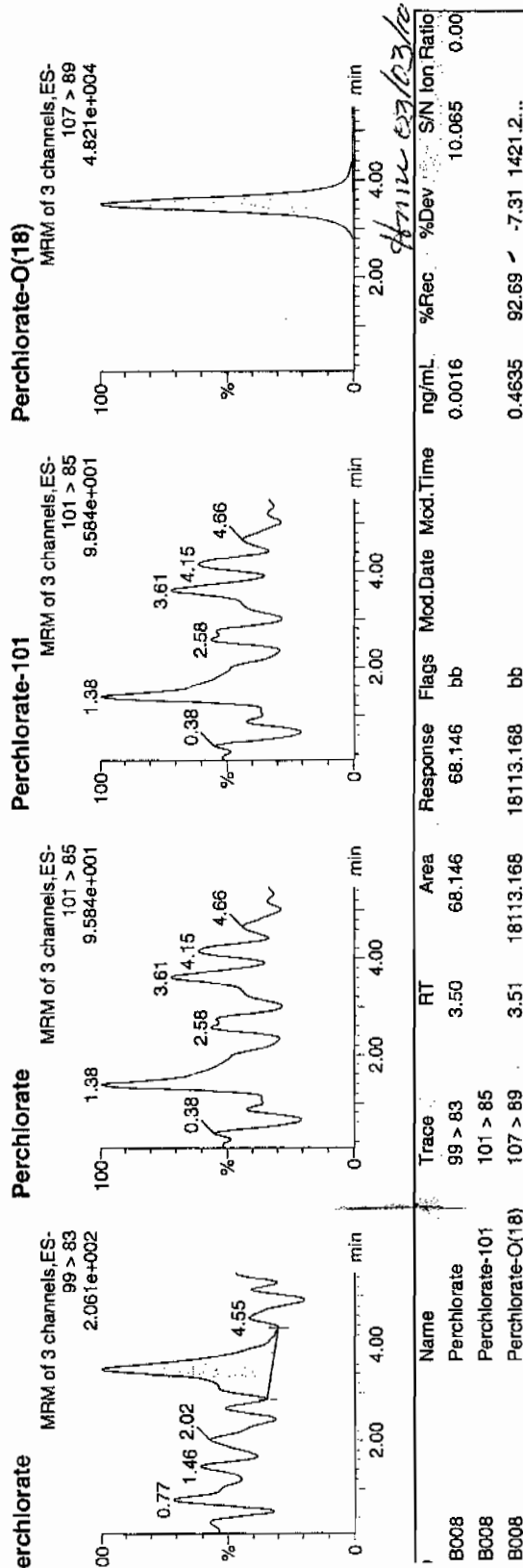
Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
 Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample: per0301055a
 Date: 01-Mar-2010
 Time: 20:30:13
 ID: IPB008
 File: 1:1.A



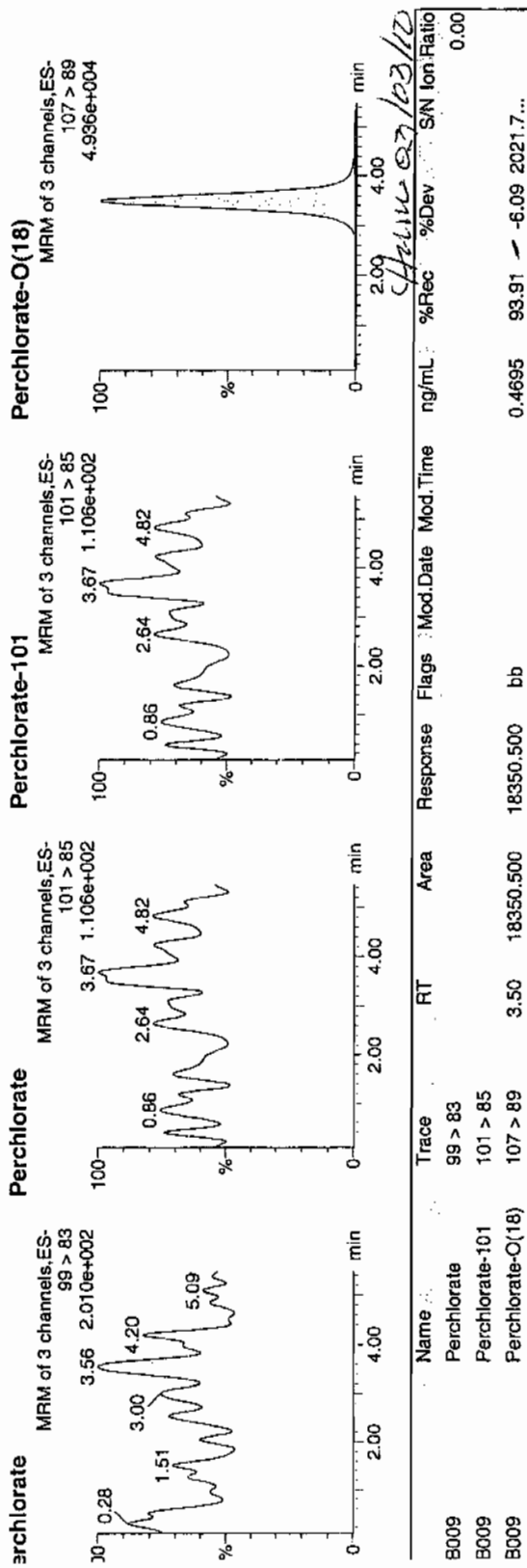
uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charfers W. Wilson

atset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

st Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
rinted: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

ame: per0301068a
ate: 01-Mar-2010
me: 22:21:37
i: IPB009
ial: 1:1,A

03-01-10



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

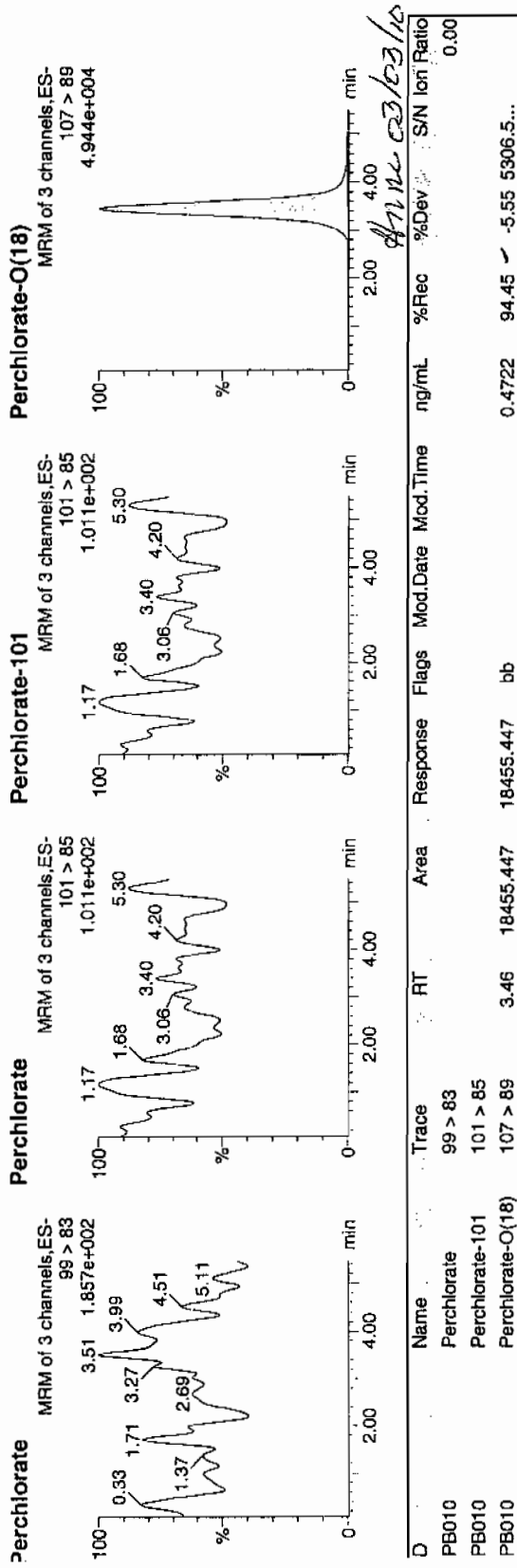
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

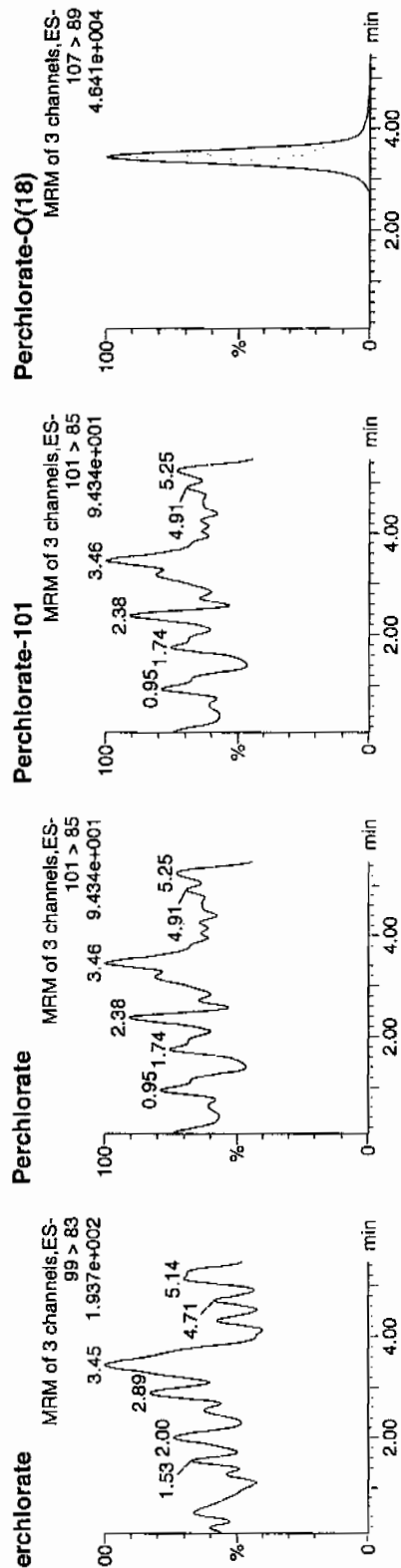
Name: per0301081a
Date: 02-Mar-2010
Time: 00:13:07
ID: IPB010
Vial: 1:1,A

*Copy
03-02-10*



iEL SOP GL-OA-E-067, Method 6850-Modified / MIM = Manual Modification

CWS
 03-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B011	Perchlorate	99 > 83										0.00
B011	Perchlorate-101	101 > 85										
B011	Perchlorate-O(18)	107 > 89	3.43	17432.324	17432.324	bb		0.4461	89.21	✓	10.79	2108.5...

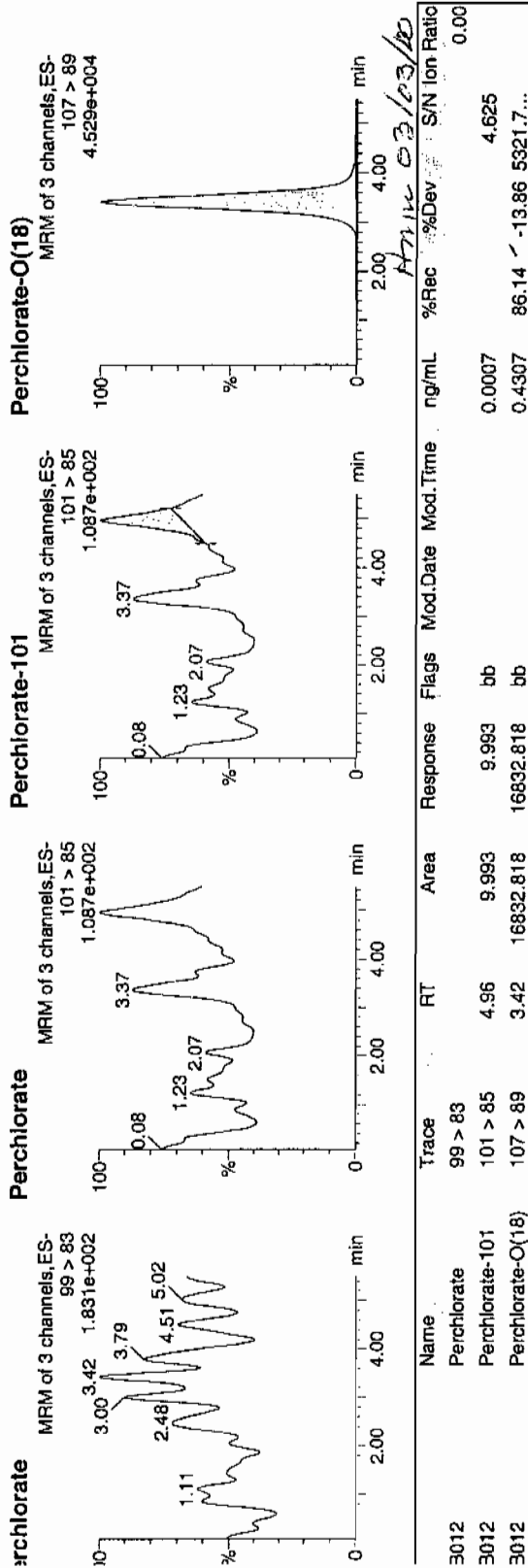
Identify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Acquired: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
 Ingested: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

File: per0301098a
 Date: 02-Mar-2010
 Time: 02:39:12
 File: IPB012
 Label: 1:1,A

03-02-10



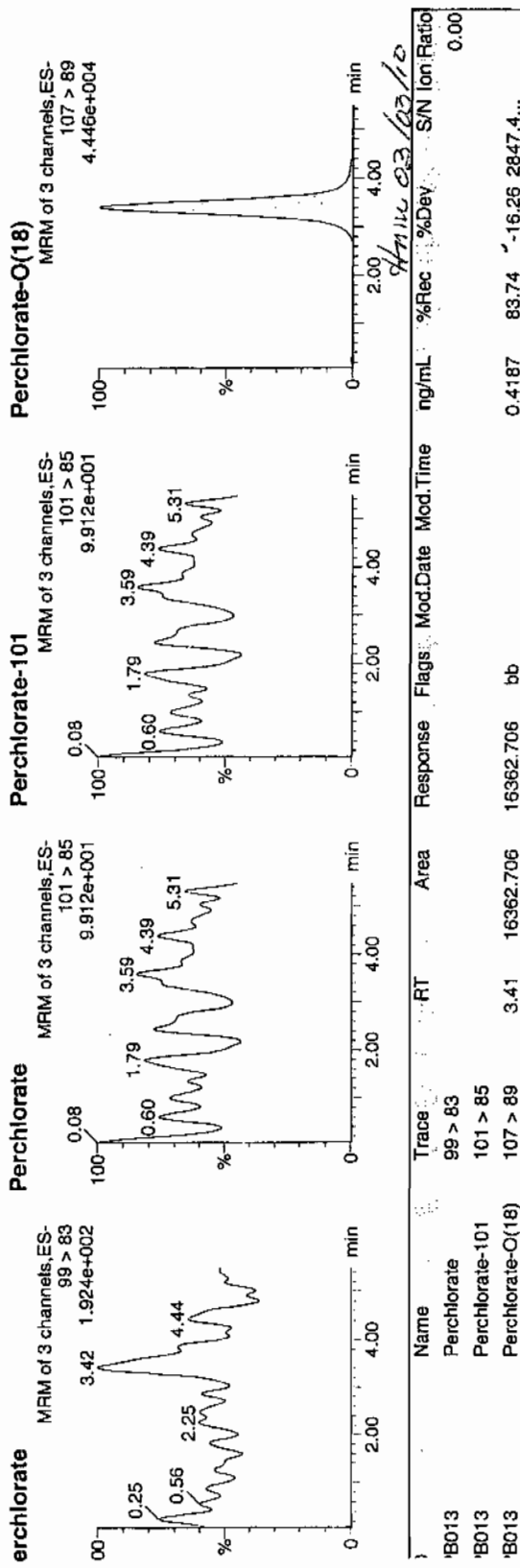
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301107a
Date: 02-Mar-2010
Time: 03:56:35
Job: IPB013
Label: 1:1,A

02-03-10



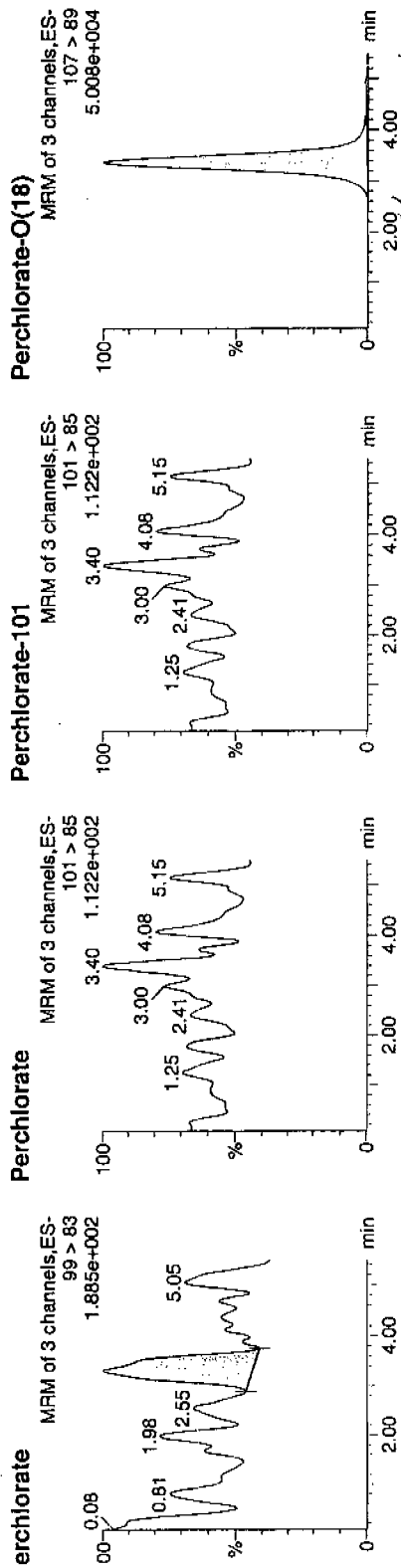
Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83											0.00
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	3.41	16362.706	16362.706	bb			0.4187	83.74	-16.26	2847.4...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Sample Name: per0301120a
Date: 02-Mar-2010
Time: 05:47:52
Operator: IPB014
Label: 1:1,A

030510



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	3.31	50.954	50.954	bb			0.0012			20.049	0.00
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	3.37	18308.578	18308.578	bb			0.4685	93.69	-6.31	2645.0...	

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

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

QUARTO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

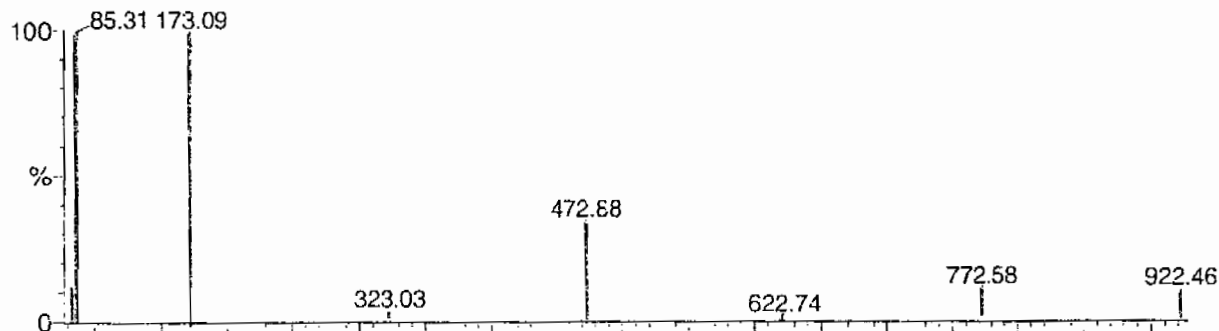
Page 1 of 1

Printed: Tue Jan 03 12:19:12 2008

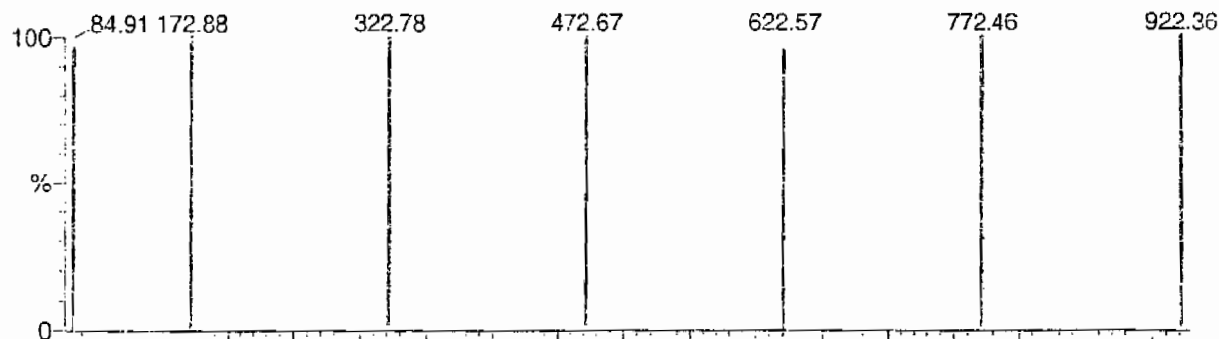
PEAKS HIGHLIGHTED BY CURV 01-07-03

Data file: STATMS1 - Uncalibrated

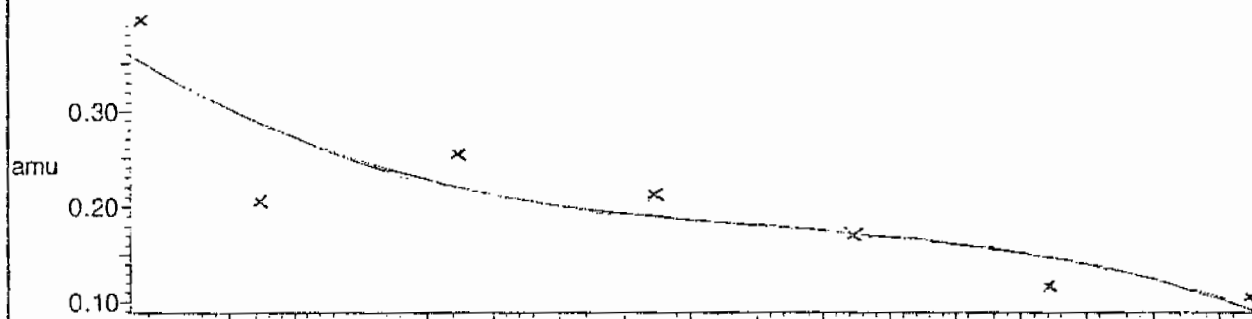
7 matches of 7 tested references



Reference file: Nairb

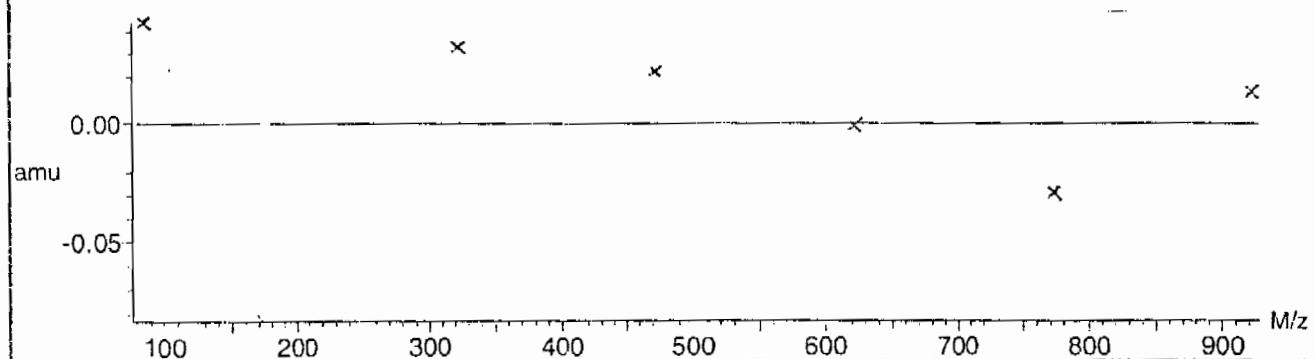


Mass difference (Raw - Ref mass)



Residuals

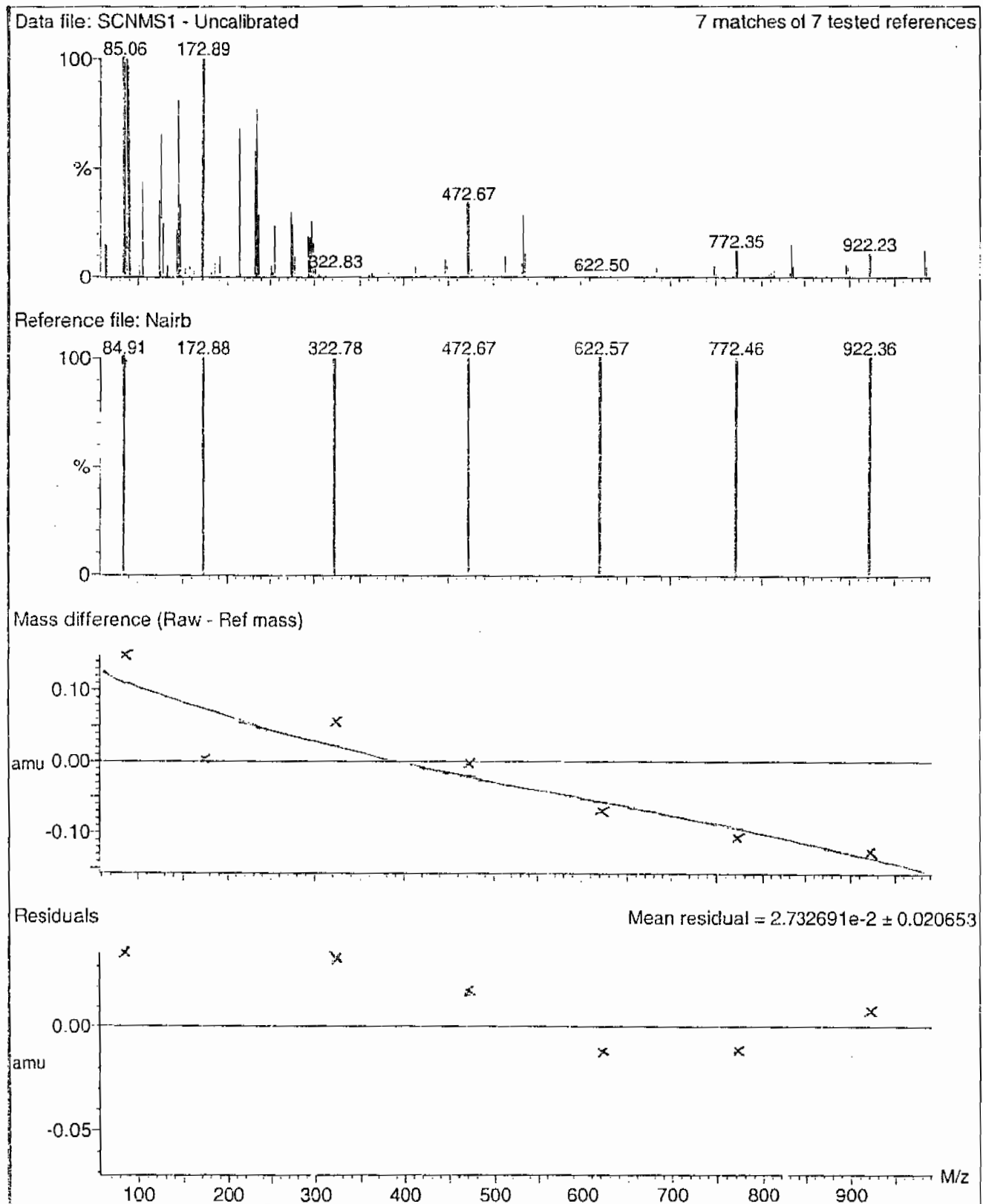
Mean residual = $3.2120129 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

Printed: Tue Jan 08 12:20:09 2008



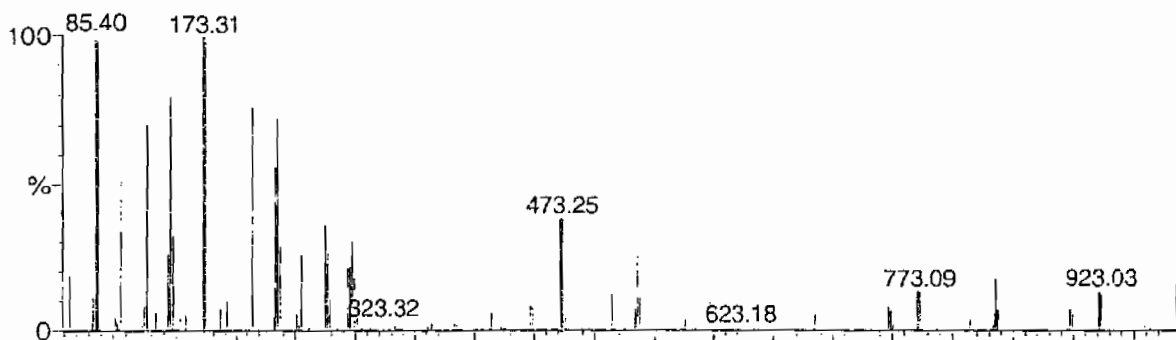
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

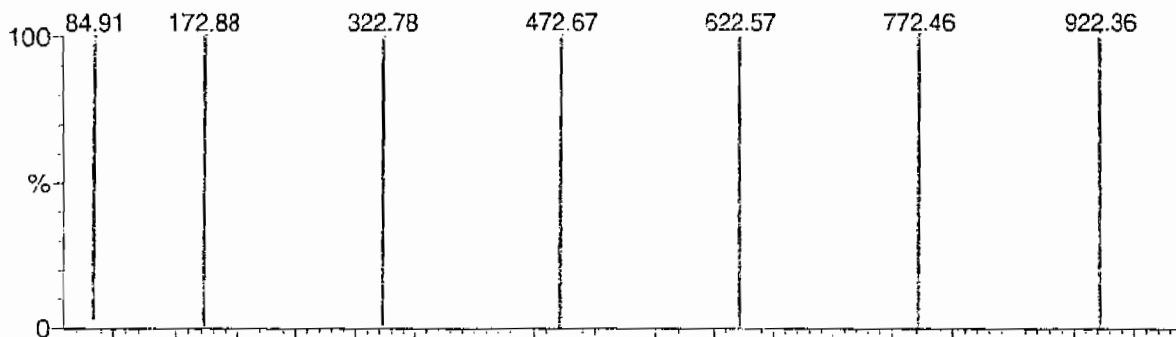
Printed: Tue Jan 08 12:21:04 2008

Data file: FASTMS1 - Uncalibrated

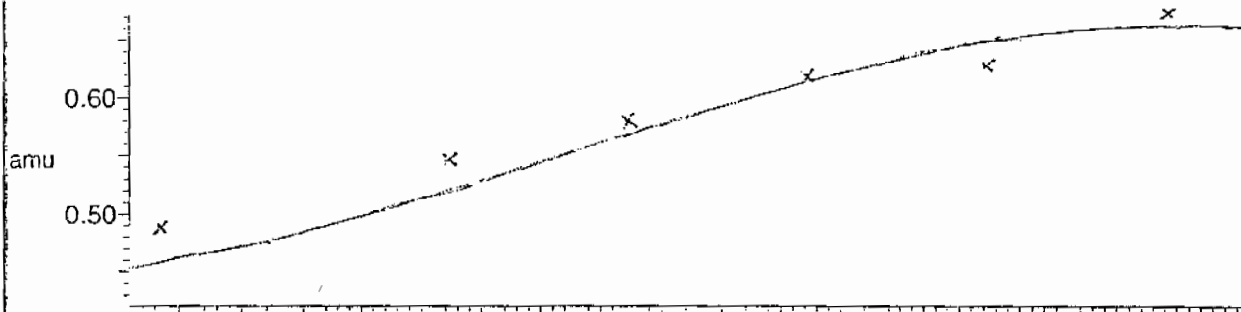
7 matches of 7 tested references



Reference file: Nairb

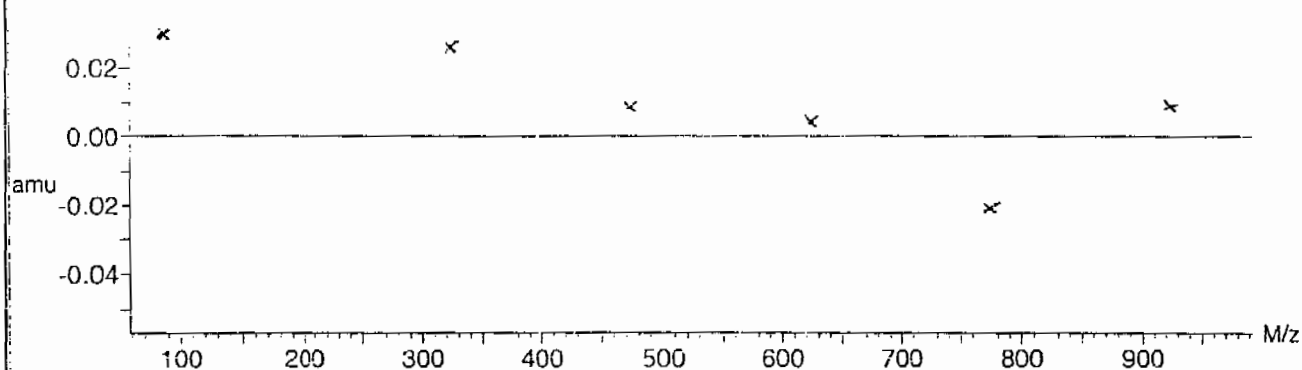


Mass difference (Raw - Ref mass)



Residuals

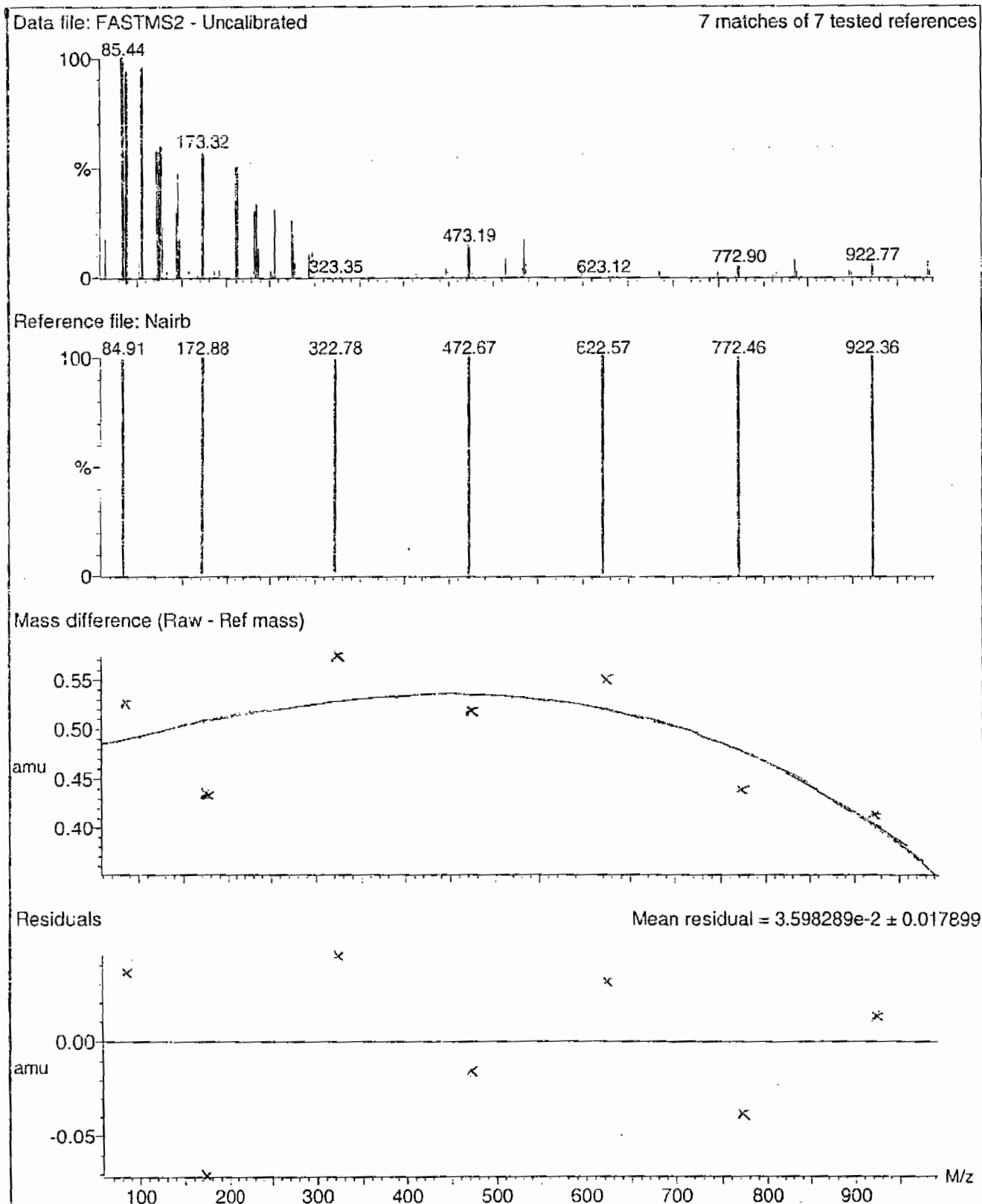
Mean residual = $2.224580 \times 10^{-2} \pm 0.016544$



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:23:51 2008



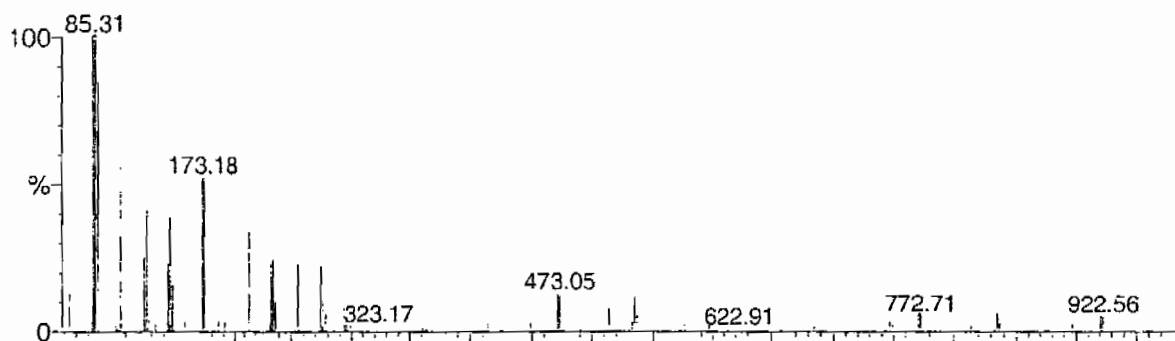
Calibration Report - MS2 Scanning

Page 1 of 1

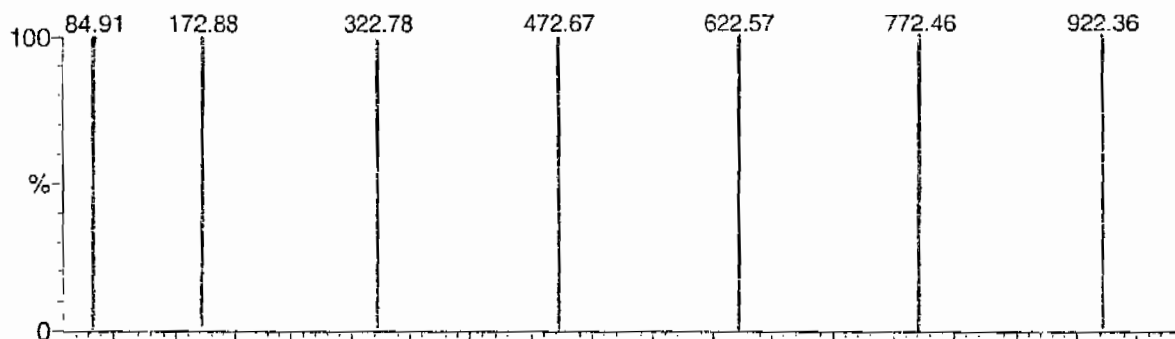
Printed: Tue Jan 08 12:22:56 2008

Data file: SCNMS2 - Uncalibrated

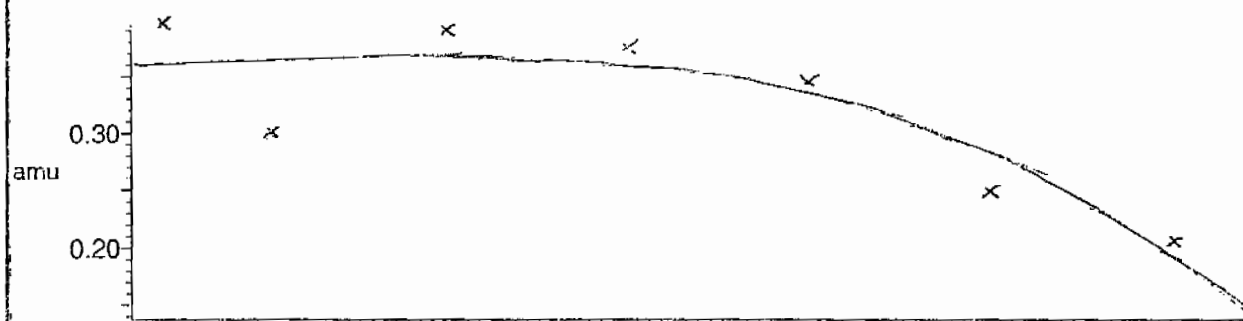
7 matches of 7 tested references



Reference file: Nairb

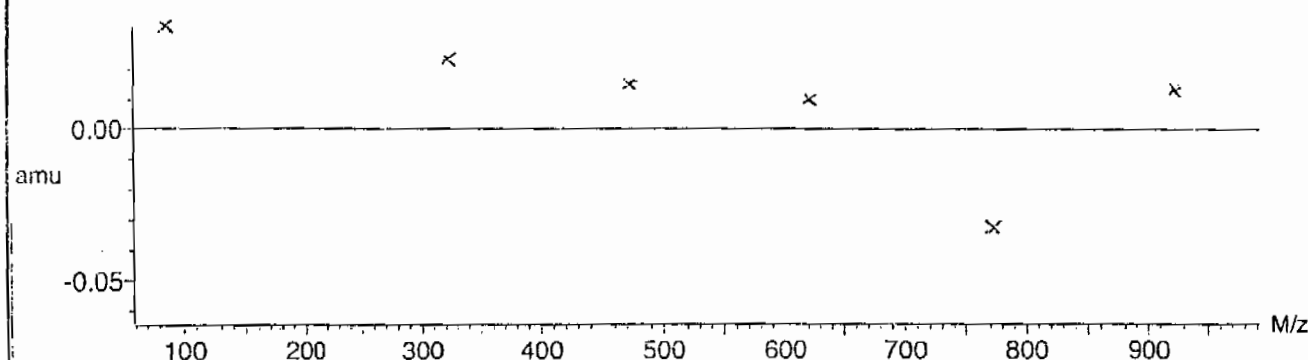


Mass difference (Raw - Ref mass)



Residuals

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



Calibration Report - MS2 Static

Page 1 of 1

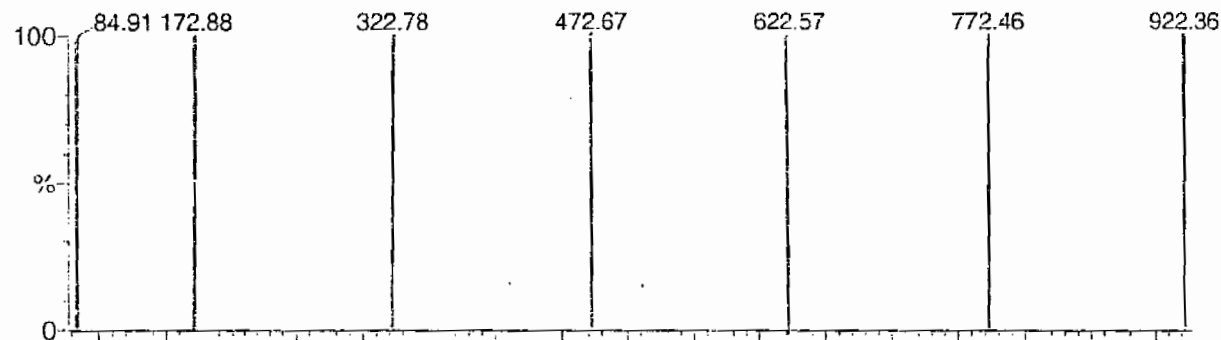
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

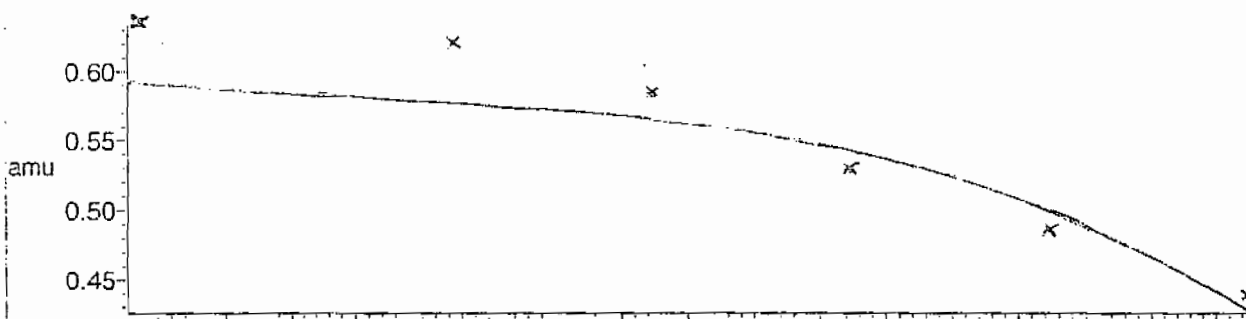
7 matches of 7 tested references



Reference file: Nairb

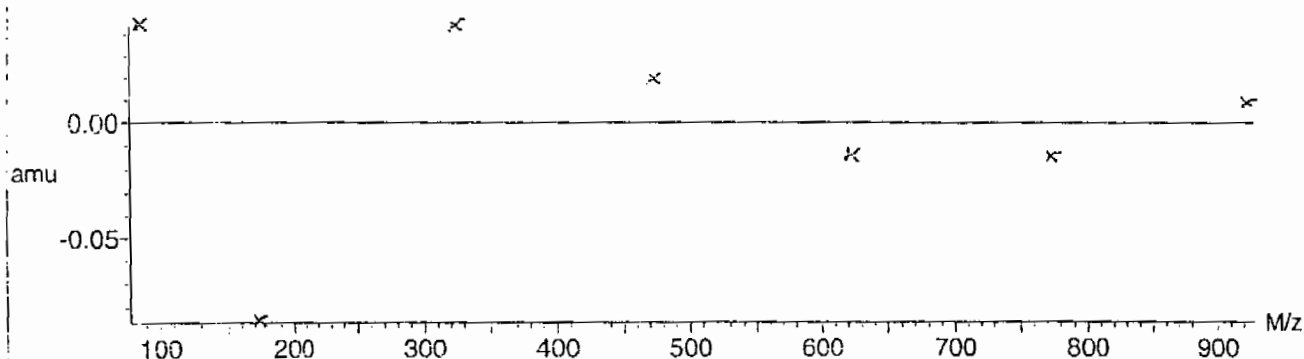


Mass difference (Raw - Ref mass)



Residuals

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



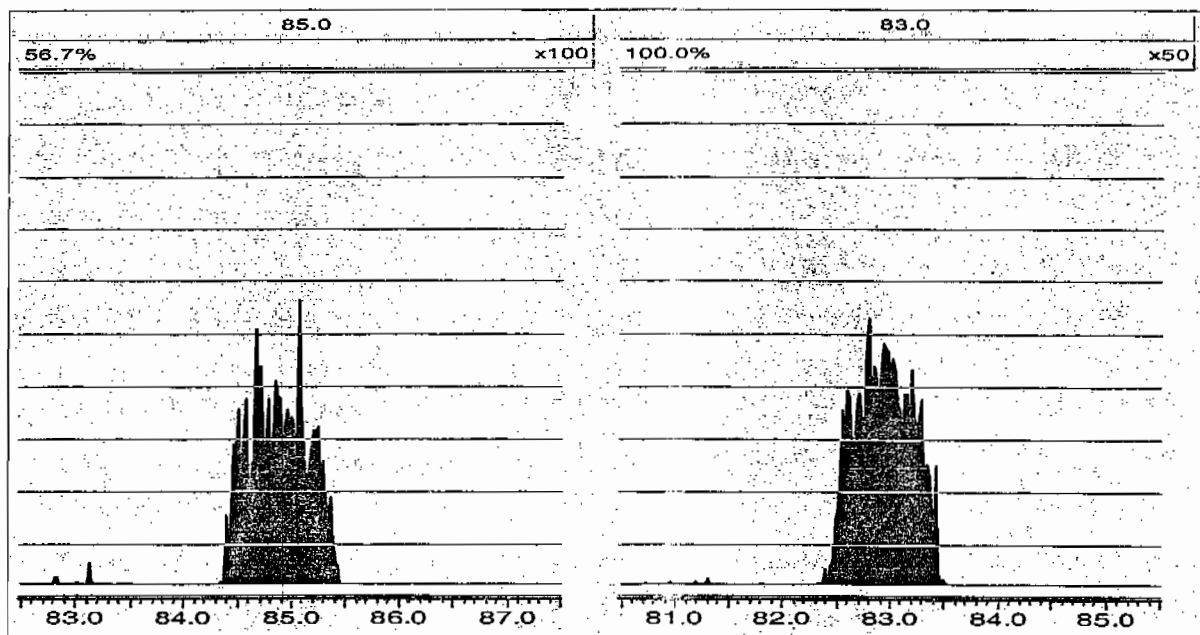
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Monday, March 01, 2010 09:44:20 Eastern Standard Time



Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1983

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	per0301006a	01-MAR-10	19759.7				
Lower Area Limit			9879.85				
Upper Area Limit			39519.4				
1202052905	per0301099a	02-MAR-10 02:47	17957.8	3.42	3.4334	1.004	
1202052906	per0301100a	02-MAR-10 02:56	18150.8	3.43	3.44552	1.005	
1202052909	per0301101a	02-MAR-10 03:05	17763.2	3.43	3.44555	1.005	
247793001	per0301118a	02-MAR-10 05:30	19554	3.38	3.39597	1.005	

SAMPLE DATA

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 957436

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8330

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1983

GEL Sample ID: 247793001

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	02-MAR-10 05:30	per0301118a
	Perchlorate Isotope Ratio						1	02-MAR-10 05:30	per0301118a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	02-MAR-10 05:30	per0301118a
	Perchlorate-O(18)			0.500	ug/L		1	02-MAR-10 05:30	per0301118a

[^] 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
 ie GEL Group, LLC Analyst: Charlers W. Wilson

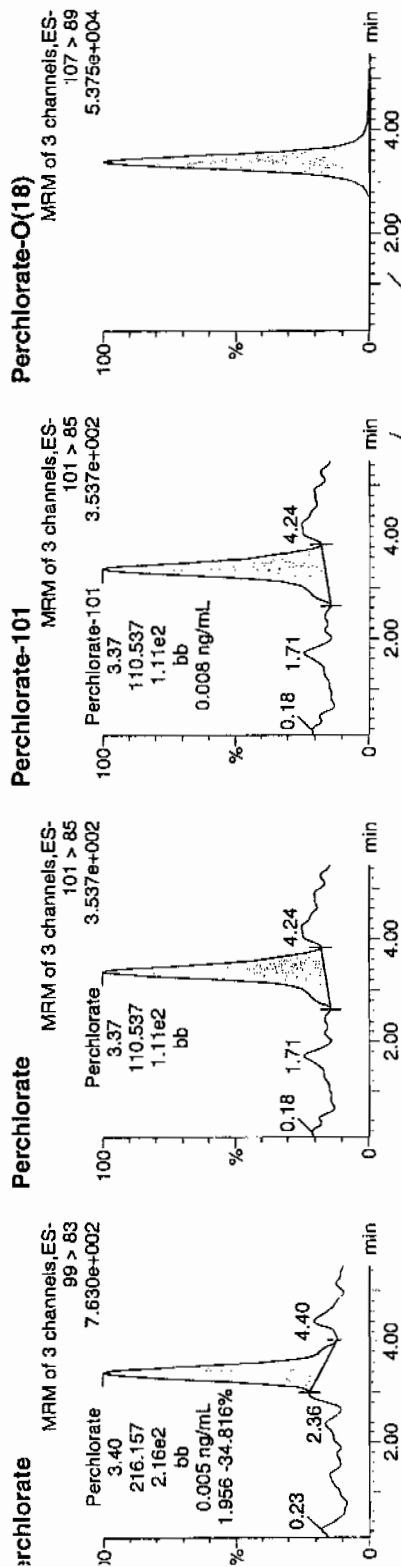
Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Sample Name: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
 Sample ID: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301118a
 Sample ID: 02-Mar-2010
 Sample Name: 05:30:36
 Sample ID: 247793001
 Sample Name: al: 3.3.E

03-02-10

127793001 957434 1272 111



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
7793001	Perchlorate	99 > 83	3.40	216.157	bb			0.0049			17.620	1.96
7793001	Perchlorate-101	101 > 85	3.37	110.537	bb			0.0076			33.084	
7793001	Perchlorate-O(18)	107 > 89	3.36	19553.971	bb			0.5003	100.07	0.07	4376.3...	

4/11/10 03:10

0.0049
0.0076
0.5003

STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 01-MAR-10

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

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

Perchlorate

Coefficient of Determination:

Calibration Curve: 43756.34

Response Type: External Standard

Curve Type: RE

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1983

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 01-MAR-10

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

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

Paramname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 14564.22

Response Type: External Standard

Curve Type: RF

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Just Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
 Altered: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

ethod: C:\MassLynx\Perchlorate.PROMethDB\per030110a.mdb 02 Mar 2010 08:52:20
alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030110a.cdb 02 Mar 2010 08:52:38

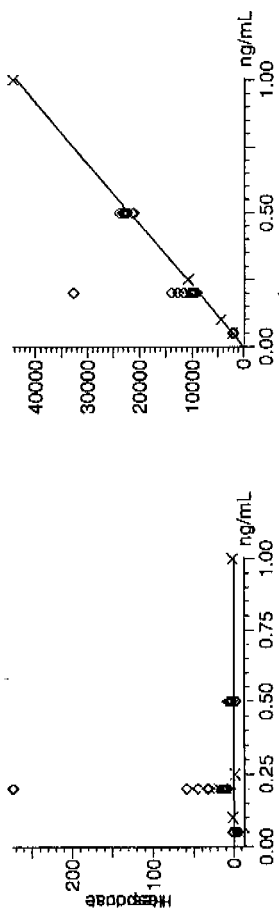
Compound name: Perchlorate

Response Factor: 43756.3

RF SD: 769.757, % Relative SD: 1.75919

response type: External Std, Area

Inve type: RF -



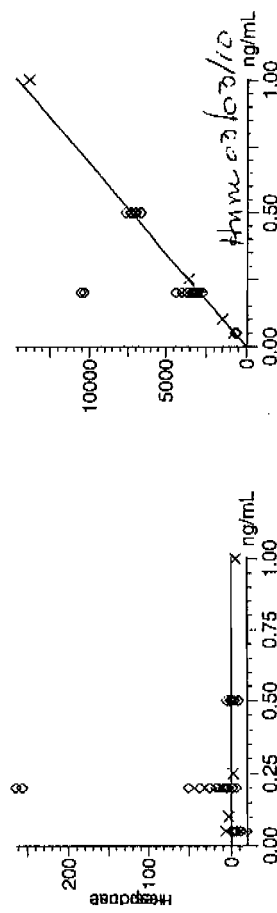
Compound name: Perchlorate-101

Response Factor: 14564.2

3F SD: 704.149, % Relative SD: 4.83479

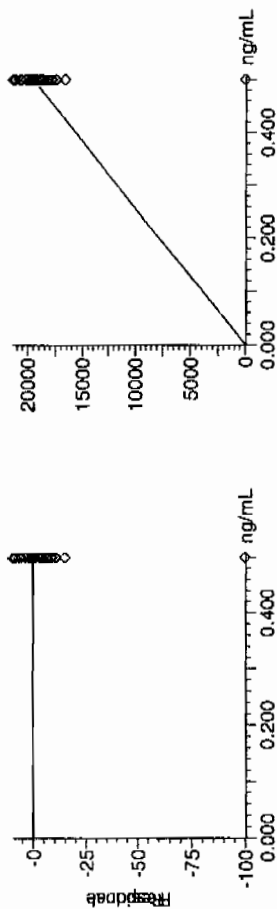
response type: External Std, Area

ive type: RF



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

omponent name: Perchlorate-O(18)
 esponse Factor: 39081.4
 RF SD: 496.592, % Relative SD: 1.27066
 esponse type: External Std, Area
 urve type: RF



Perchlorate Initial Calibration Verification

GEL Job No.(SDG): 10-1983

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.53	105.35	01-MAR-10 13:55	per0301009a
Perchlorate Isotope Ratio		3.12		01-MAR-10 13:55	per0301009a
Perchlorate-101	.5	.51	101.51	01-MAR-10 13:55	per0301009a

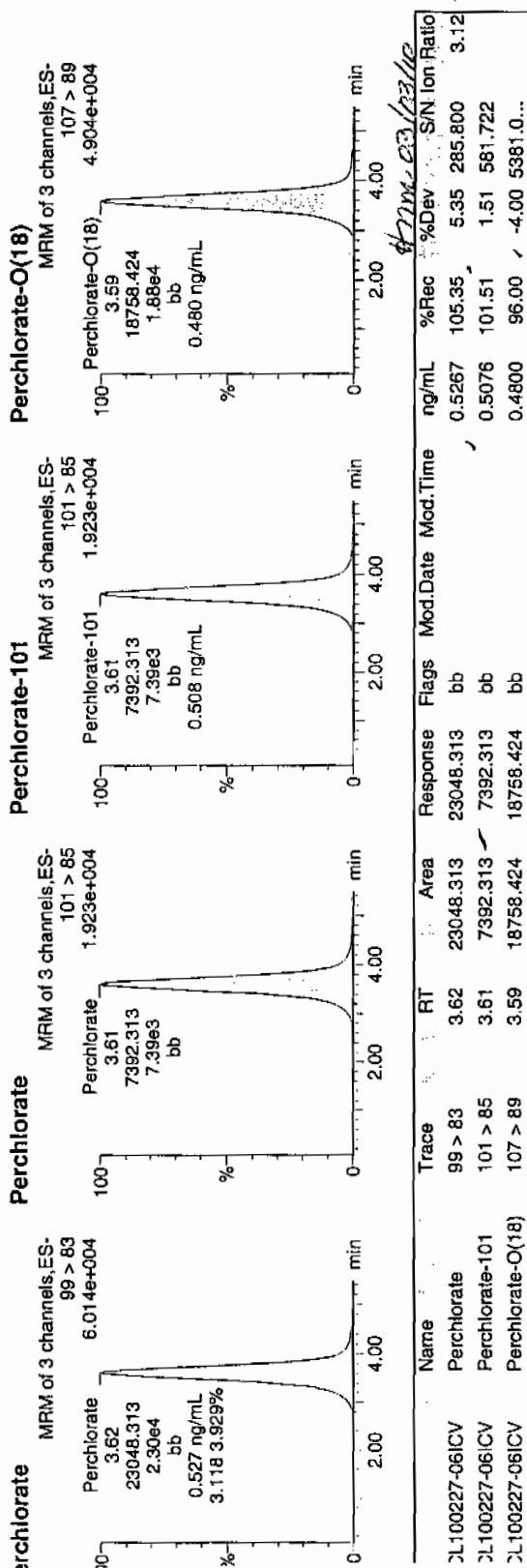
uantify Sample Report MassLynx 4.0 SP4
re GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

st Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
nted: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

ame: per0301009a
ate: 01-Mar-2010
me: 13:55:47
: WCL100227-06ICV
al: 1:2,A

Purp
03-01-10



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

Perchlorate Continuing Calibration Verification

GEL Job No.(SDG): 10-1983

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.54	108.86	01-MAR-10 15:21	per0301019a
Perchlorate Isotope Ratio		3.34		01-MAR-10 15:21	per0301019a
Perchlorate-101	.5	.49	97.78	01-MAR-10 15:21	per0301019a
Perchlorate	.5	.53	106.46	01-MAR-10 16:46	per0301029a
Perchlorate Isotope Ratio		3.05		01-MAR-10 16:46	per0301029a
Perchlorate-101	.5	.52	104.92	01-MAR-10 16:46	per0301029a
Perchlorate	.5	.53	105.15	01-MAR-10 18:30	per0301041a
Perchlorate Isotope Ratio		3.26		01-MAR-10 18:30	per0301041a
Perchlorate-101	.5	.49	97.01	01-MAR-10 18:30	per0301041a
Perchlorate	.5	.51	101.35	01-MAR-10 20:21	per0301054a
Perchlorate Isotope Ratio		3.19		01-MAR-10 20:21	per0301054a
Perchlorate-101	.5	.48	95.6	01-MAR-10 20:21	per0301054a
Perchlorate	.5	.51	102.4	01-MAR-10 22:12	per0301067a

Perchlorate Continuing Calibration Verification

GEL Job No.(SDG): 10-1983

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.18		01-MAR-10 22:12	per0301067a
Perchlorate-101	.5	.48	96.82	01-MAR-10 22:12	per0301067a
Perchlorate	.5	.52	103.19	02-MAR-10 00:04	per0301080a
Perchlorate Isotope Ratio		3.11		02-MAR-10 00:04	per0301080a
Perchlorate-101	.5	.5	99.79	02-MAR-10 00:04	per0301080a
Perchlorate	.5	.49	98.22	02-MAR-10 01:56	per0301093a
Perchlorate Isotope Ratio		3.21		02-MAR-10 01:56	per0301093a
Perchlorate-101	.5	.46	92.02	02-MAR-10 01:56	per0301093a
Perchlorate	.5	.48	96.44	02-MAR-10 03:47	per0301106a
Perchlorate Isotope Ratio		3.17		02-MAR-10 03:47	per0301106a
Perchlorate-101	.5	.46	91.32	02-MAR-10 03:47	per0301106a
Perchlorate	.5	.52	104.38	02-MAR-10 05:39	per0301119a
Perchlorate Isotope Ratio		3.12		02-MAR-10 05:39	per0301119a

Form 3

Perchlorate Continuing Calibration Verification

GEL Job No.(SDG): 10-1983

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.5	.5	100.4	02-MAR-10 05:39	per0301119a
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Quantify Sample Report MassLynx 4.0 SP4

the GEL Group, LLC Analyst: Charlers W. Wilson

atset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

ast Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
rinted: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

ame: per0301019a

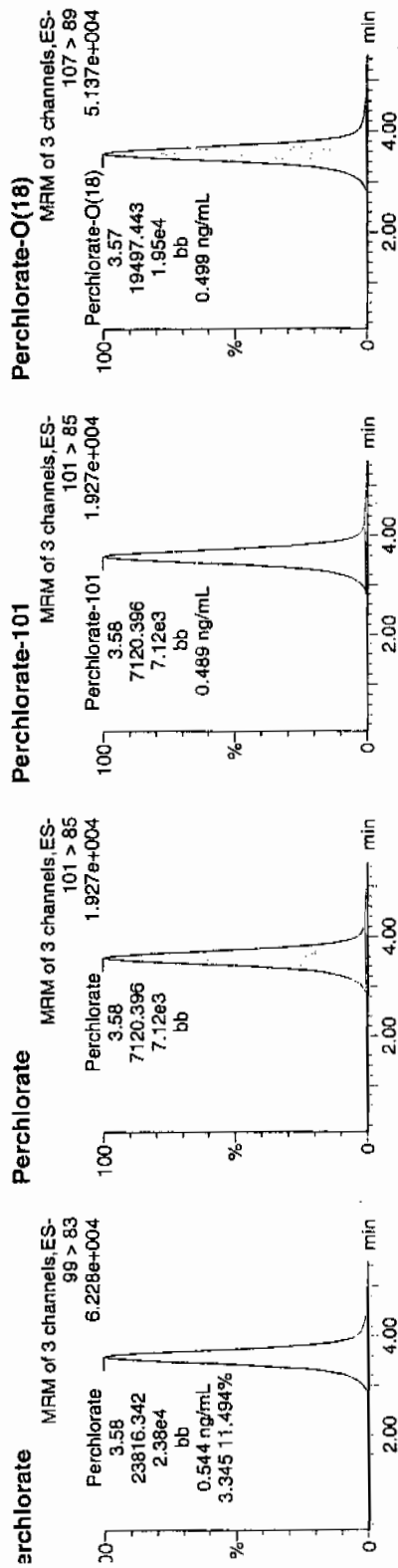
ate: 01-Mar-2010

ime: 15:21:16

IP: WCL100227-06CCV

ial: 1:2,A

*Run
03-02-10*



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
CL100227-06CCV	Perchlorate	99 > 83	3.58	23816.342	23816.342	bb		0.5443	108.86	8.86	722.740	3.34
CL100227-06CCV	Perchlorate-101	101 > 85	3.58	7120.396	7120.396	bb		0.4889	97.78	-2.22	2935.5...	
CL100227-06CCV	Perchlorate-O(18)	107 > 89	3.57	19497.443	19497.443	bb		0.4989	99.78	-0.22	3503.2...	

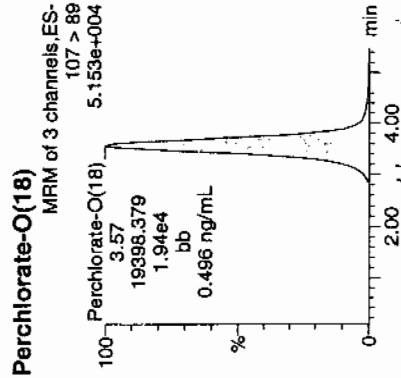
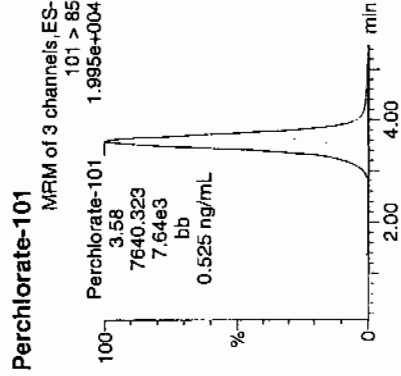
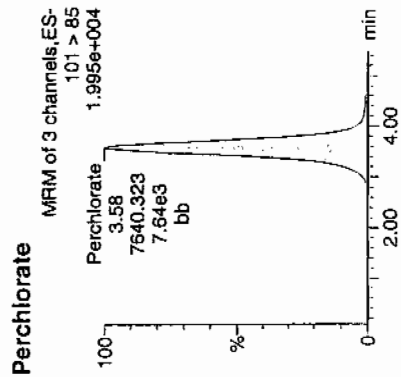
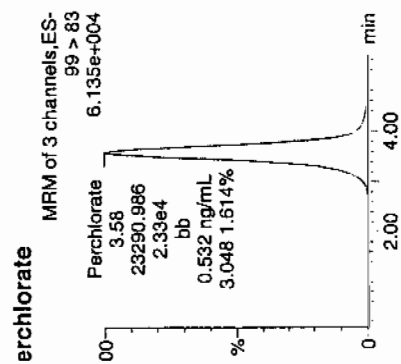
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301029a
Date: 01-Mar-2010
Time: 16:46:52
File: WCL100227-06CCV
Label: 1:2,A

Per
and
03-03-10



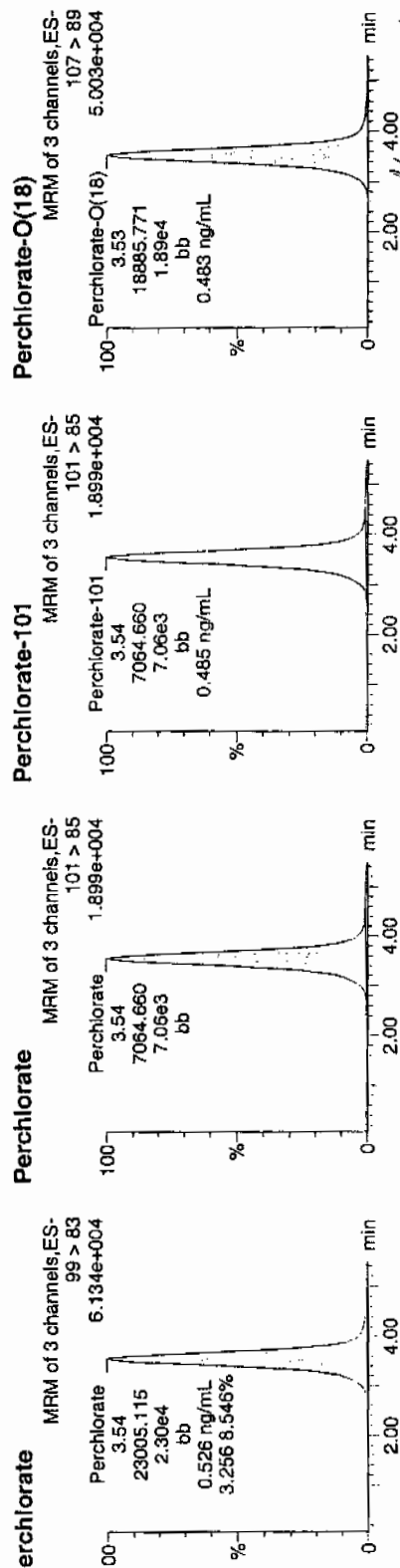
Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100227-06CCV	Perchlorate	3.58	23290.986	23290.986	bb			0.5323	106.46	6.46	2562.1...	3.05
CL100227-06CCV	Perchlorate-101	3.58	7640.323	7640.323	bb			0.5246	104.92	4.92	927.645	
CL100227-06CCV	Perchlorate-O(18)	3.57	19398.379	19398.379	bb			0.4964	99.27	-0.73	10118....	

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301041a
Date: 01-Mar-2010
Time: 18:30:04
ID: WCL100227-06CCV
Label: 1:2,A

Pure
WCL100227-1D



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100227-06CCV	99 > 83	3.54	23005.115	23005.115	bb			0.5258	105.15	5.15	1878.6..	3.26
CL100227-06CCV	101 > 85	3.54	7064.660	7064.660	bb			0.4851	97.01	-2.99	1637.0..	
CL100227-06CCV	107 > 89	3.53	18885.771	18885.771	bb			0.4832	96.65	-3.35	1409.8..	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301054a

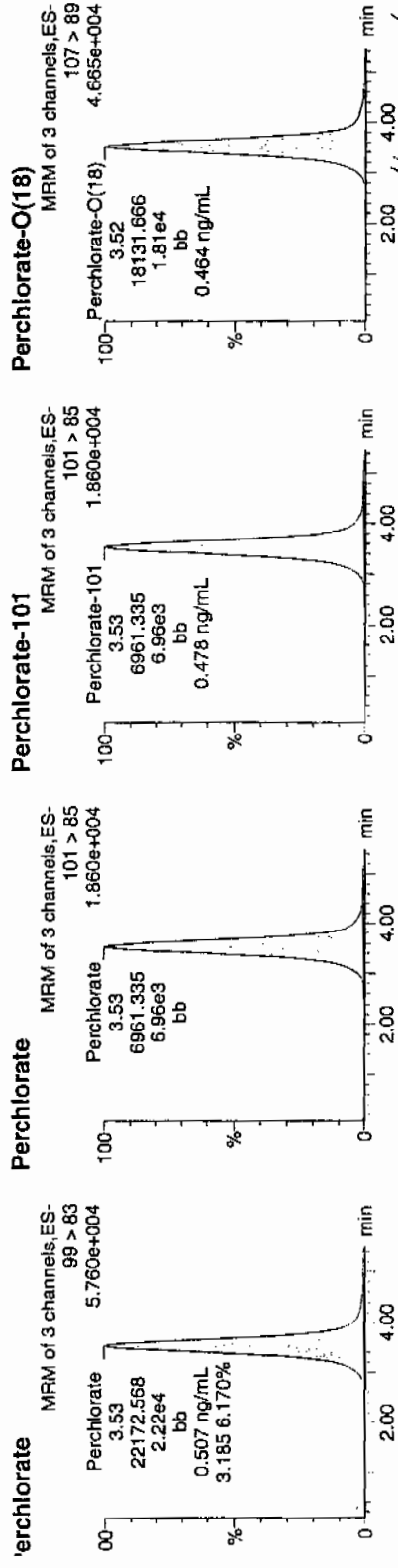
Date: 01-Mar-2010

Time: 20:21:26

Job: WCL100227-06CCV

Ratio: 1:2,A

*Per
and
03-02-10*



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100227-06CCV	Perchlorate	3.53	22172.568	22172.568	bb			0.5067	101.35	1.35	2947.5...	3.19
CL100227-06CCV	Perchlorate-101	3.53	6961.335	6961.335	bb			0.4780	95.60	-4.40	322.708	
CL100227-06CCV	Perchlorate-O(18)	3.52	18131.666	18131.666	bb			0.4639	92.79	-7.21	4136.6...	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time

Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301067a

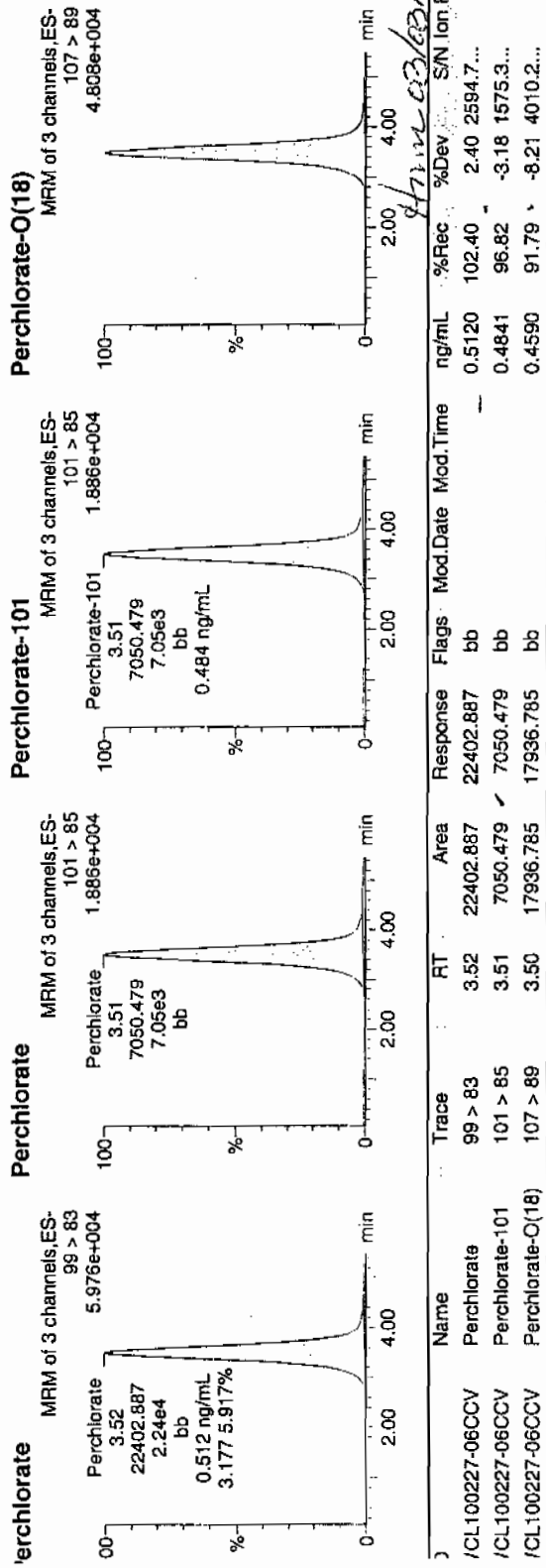
Date: 01-Mar-2010

Time: 22:12:51

Job: WCL100227-06CCCV

File: 1:2,A

*Per
and
03-03-10*



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

Page 80 of 134

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Sample Name: per0301080a
Date: 02-Mar-2010
Time: 00:04:20
File: WCL100227-06CCV
Scan: 1:2,A

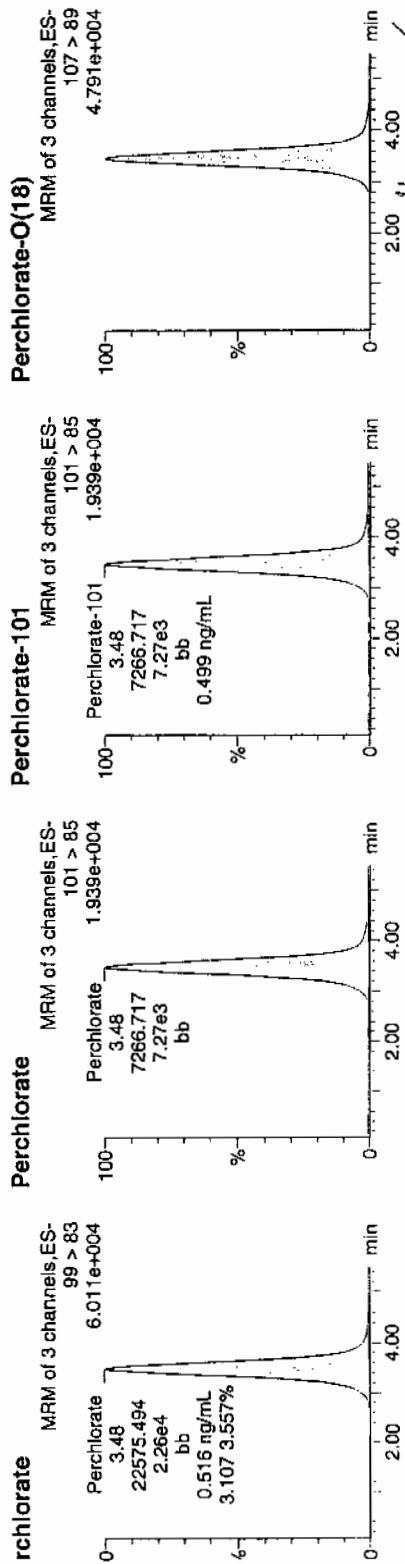
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Date: 02-Mar-2010

Time: 00:04:20

File: WCL100227-06CCV

Scan: 1:2,A



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
L100227-06CCV	Perchlorate	99 > 83	3.48	22575.494	bb			0.5159	103.19	3.19	2204.0...	3.11
L100227-06CCV	Perchlorate-101	101 > 85	3.48	7266.717	bb			0.4989	99.79	-0.21	2719.0...	
L100227-06CCV	Perchlorate-O(18)	107 > 89	3.47	17896.398	bb			0.4579	91.59	-8.41	1927.6...	

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

Quantify Sample Report MassLynx 4.0 SP4

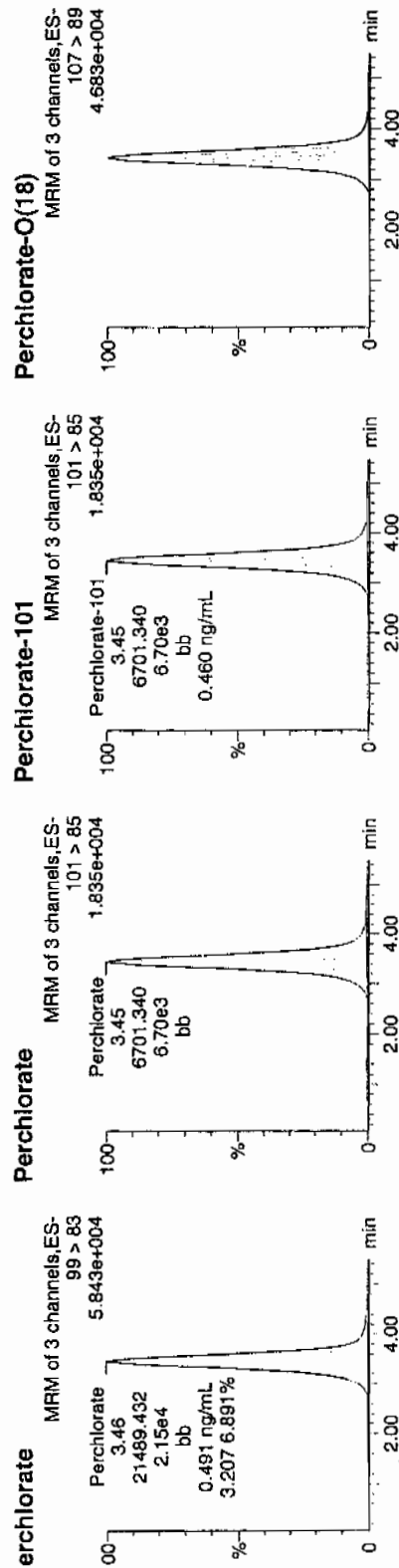
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qid

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301093a
Date: 02-Mar-2010
Time: 01:56:03
Job: WCL100227-06CCV
Vial: 1:2,A

*Per
and
03-02-10*



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100227-06CCV	Perchlorate	99 > 83	3.46	21489.432	bb			0.4911	98.22	-1.78	1165.7...	3.21
CL100227-06CCV	Perchlorate-101	101 > 85	3.45	6701.340	bb			0.4601	92.02	-7.98	2131.2...	
CL100227-06CCV	Perchlorate-O(18)	107 > 89	3.43	17389.604	bb			0.4450	88.99	-11.01	2294.8...	

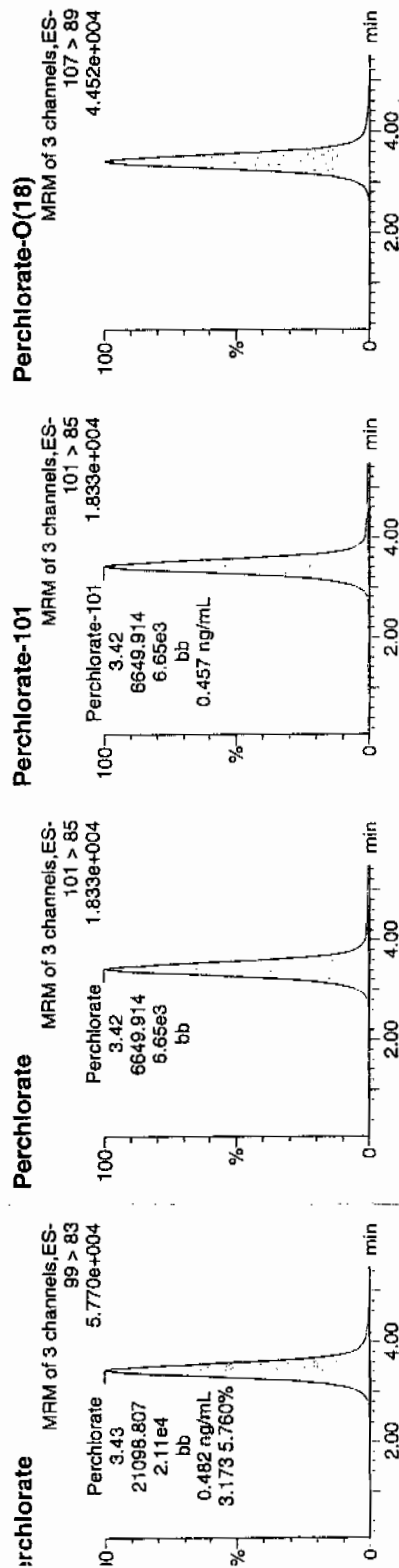
Identify Sample Report MassLynx 4.0 SP4
GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Sample Name: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Sample Date: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

File Name: per0301106a
File Date: 02-Mar-2010
File Time: 03:47:50
File Path: WCL100227-06CCV
File Size: 1:2,A

Run and 03-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100227-06CCV	Perchlorate	3.43	21098.807	21098.807	bb			0.4822	96.44	-3.56	982.579	3.17
CL100227-06CCV	Perchlorate-101	3.42	6649.914	6649.914	bb			0.4566	91.32	-8.68	370.292	
CL100227-06CCV	Perchlorate-O(18)	3.41	16618.670	16618.670	bb			0.4252	85.05	-14.95	820.393	

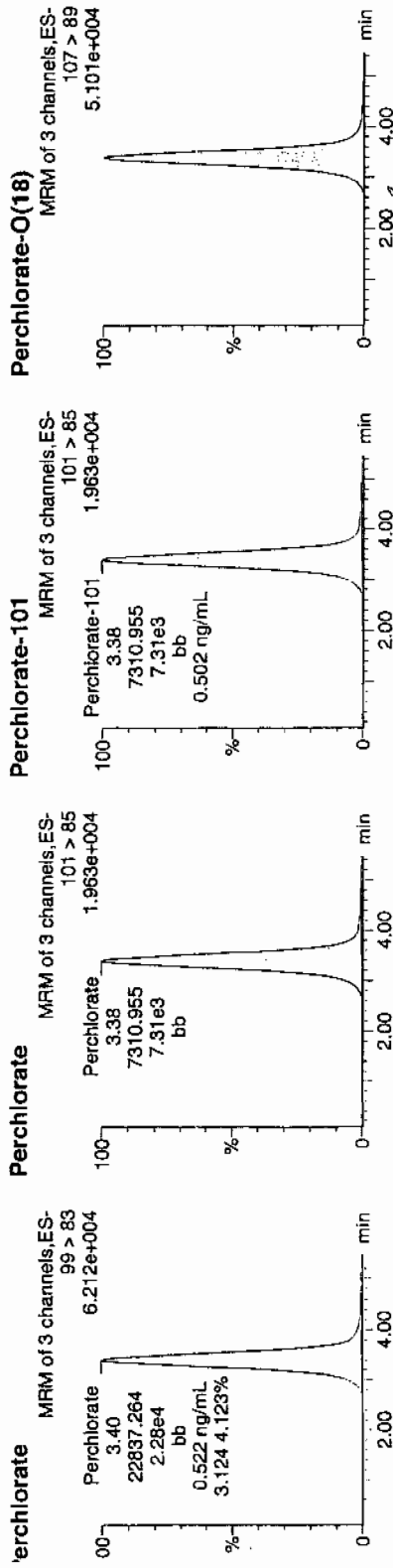
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301119a
Date: 02-Mar-2010
Time: 05:39:07
Job: WCL100227-06CCV
File: 1:2,A

Pers
03-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	3.40	22837.264	22837.264	bb			0.5219	104.38	4.38	2399.8...	3.12
Perchlorate-101	101 > 85	3.38	7310.955	7310.955	bb			0.5020	100.40	0.40	1114.9...	
Perchlorate-O(18)	107 > 89	3.37	18701.783	18701.783	bb			0.4785	95.71	-4.29	721.836	

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1983

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	99.46	01-MAR-10 14:12	per0301011a
Perchlorate Isotope Ratio		3.01		01-MAR-10 14:12	per0301011a
Perchlorate-101	.05	.05	99.12	01-MAR-10 14:12	per0301011a
Perchlorate	.05	.05	99.36	01-MAR-10 15:38	per0301021a
Perchlorate Isotope Ratio		3.21		01-MAR-10 15:38	per0301021a
Perchlorate-101	.05	.05	92.98	01-MAR-10 15:38	per0301021a
Perchlorate	.05	.05	101.16	01-MAR-10 17:04	per0301031a
Perchlorate Isotope Ratio		3.17		01-MAR-10 17:04	per0301031a
Perchlorate-101	.05	.05	95.99	01-MAR-10 17:04	per0301031a
Perchlorate	.05	.05	96.24	01-MAR-10 18:47	per0301043a
Perchlorate Isotope Ratio		3.26		01-MAR-10 18:47	per0301043a

Pernchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1983

Lab Code: GEL

Reporting Units: ug/L

Pernchlorate-101	.05	.04	88.6	01-MAR-10 18:47	per0301043a
Pernchlorate	.05	.05	96.12	01-MAR-10 20:38	per0301056a
Pernchlorate Isotope Ratio		3.2		01-MAR-10 20:38	per0301056a
Pernchlorate-101	.05	.05	90.1	01-MAR-10 20:38	per0301056a
Pernchlorate	.05	.05	94.34	01-MAR-10 22:30	per0301069a
Pernchlorate Isotope Ratio		2.9		01-MAR-10 22:30	per0301069a
Pernchlorate-101	.05	.05	97.68	01-MAR-10 22:30	per0301069a
Pernchlorate	.05	.05	102.56	02-MAR-10 00:21	per0301082a
Pernchlorate Isotope Ratio		3.11		02-MAR-10 00:21	per0301082a
Pernchlorate-101	.05	.05	98.97	02-MAR-10 00:21	per0301082a
Pernchlorate	.05	.05	93.81	02-MAR-10 02:13	per0301095a

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1983

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3			02-MAR-10 02:13	per0301095a
Perchlorate-101	.05	.05	94.03		02-MAR-10 02:13	per0301095a
Perchlorate	.05	.04	87.45		02-MAR-10 04:05	per0301108a
Perchlorate Isotope Ratio		3.21			02-MAR-10 04:05	per0301108a
Perchlorate-101	.05	.04	81.87		02-MAR-10 04:05	per0301108a
Perchlorate	.05	.05	102.25		02-MAR-10 05:56	per0301121a
Perchlorate Isotope Ratio		3.23			02-MAR-10 05:56	per0301121a
Perchlorate-101	.05	.05	95.21		02-MAR-10 05:56	per0301121a

Quantity Sample Report MassLynx 4.0 SP4

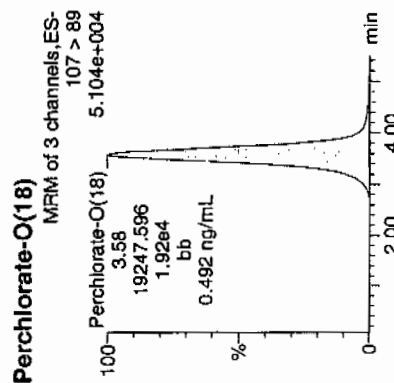
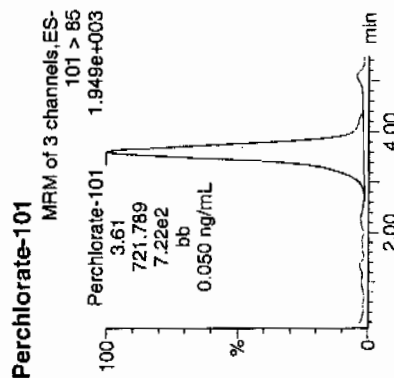
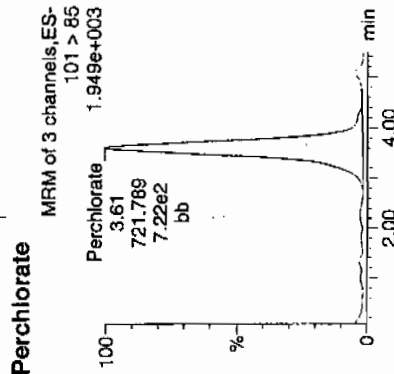
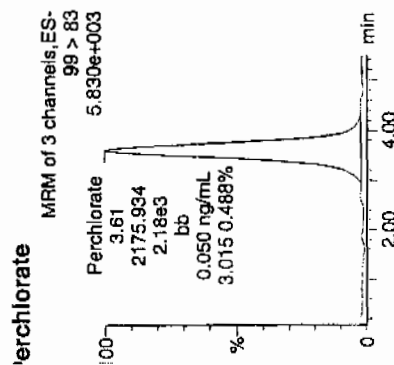
the GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301011a
Date: 01-Mar-2010
Time: 14:12:58
ID: WCL100227-07CRI
File: 1:2,B

Run
03-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
VCL100227-07CRI	Perchlorate	99 > 83	3.61	2175.934	bb			0.0497	99.46	-0.54	242.908	3.01
VCL100227-07CRI	Perchlorate-101	101 > 85	3.61	721.789	bb			0.0496	99.12	-0.88	145.259	
VCL100227-07CRI	Perchlorate-O(18)	107 > 89	3.58	19247.596	bb			0.4925	98.50	-1.50	5397.8...	

Identify Sample Report MassLynx 4.0 SP4

ie GEL Group, LLC Analyst: Charlers W. Wilson

itaset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

st Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
inted: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

ime: per0301021a

ite: 01-Mar-2010

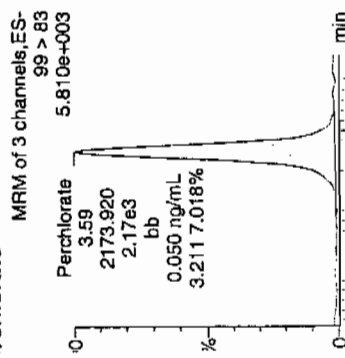
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: WCL100227-07CRI

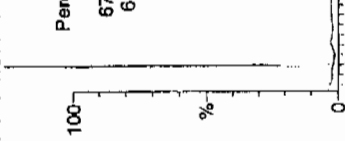
al: 1:2,B

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and
03-01-10

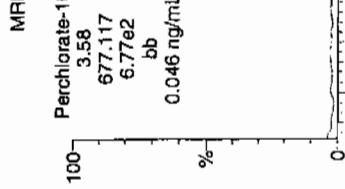
Perchlorate



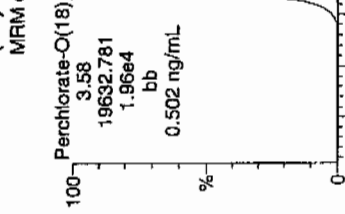
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion.Ratio
2L100227-07CRI	99 > 83	3.59	2173.920	2173.920	bb			0.0497	99.36	-0.64	116.476	3.21
2L100227-07CRI	101 > 85	3.58	677.117	677.117	bb			0.0465	92.98	-7.02	220.722	
2L100227-07CRI	107 > 89	3.58	19632.781	19632.781	bb			0.5024	100.47	0.47	622.376	

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

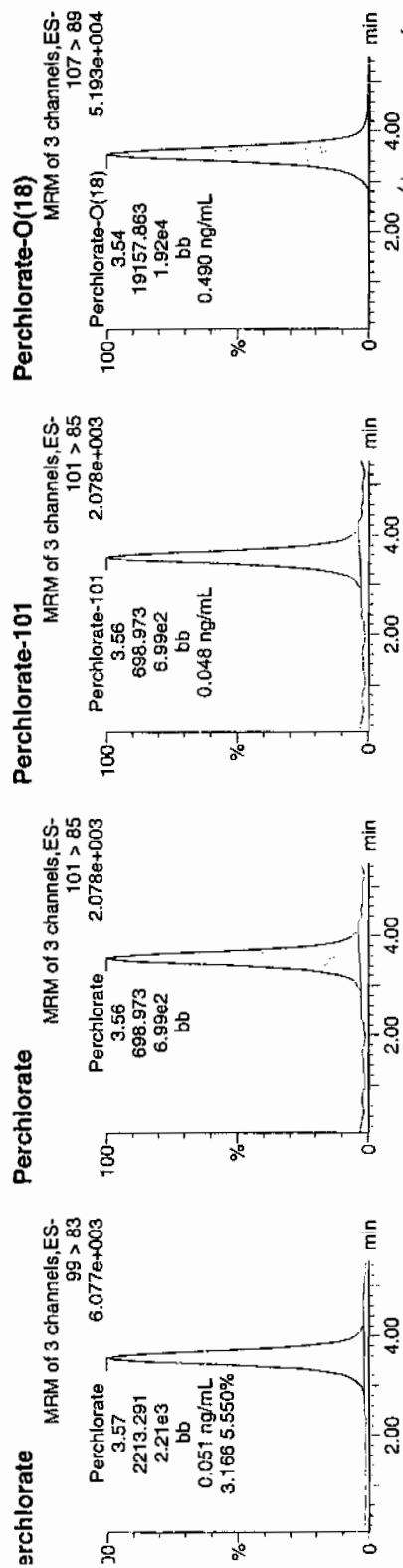
Identify Sample Report MassLynx 4.0 SP4
 the GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
 Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301031a
 Date: 01-Mar-2010
 Time: 17:04:11
 File: WCL100227-07CRI
 Label: 1:2,B

Pur
600 03-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100227-07CRI	Perchlorate	3.57	2213.291	2213.291	bb			0.0506	101.16	1.16	529.756	3.17
CL100227-07CRI	Perchlorate-101	3.56	698.973	698.973	bb			0.0480	95.99	-4.01	73.196	
CL100227-07CRI	Perchlorate-O(18)	3.54	19157.863	19157.863	bb			0.4902	98.04	-1.96	906.899	

Quantify Sample Report MassLynx 4.0 SP4

he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

ast Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
rinted: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

ame: per0301043a

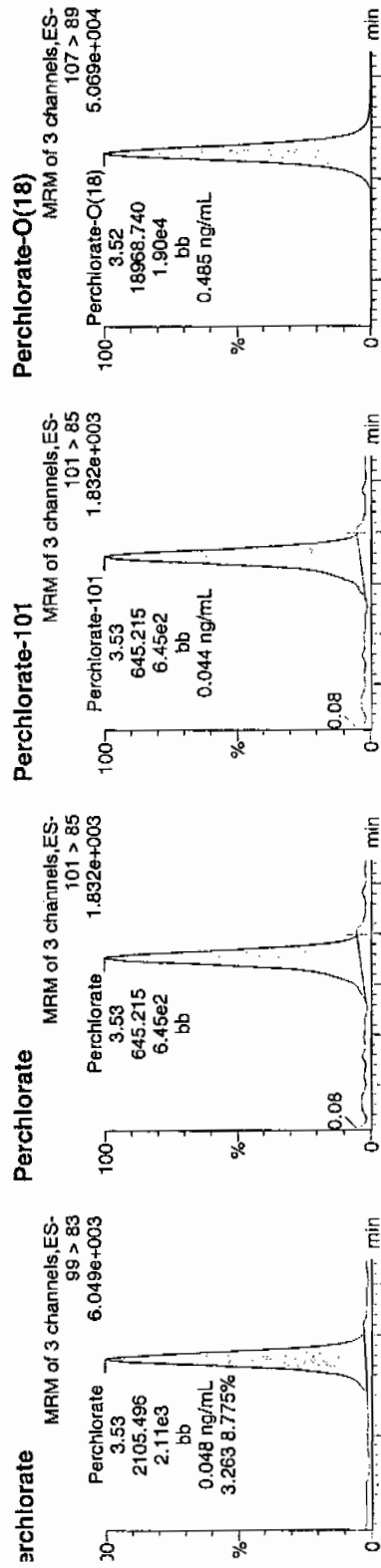
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ime: 18:47:22

i: WCL100227-07CRI

ial: 1:2,B

Run
03-02-10



03-02-10

Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100227-07CRI	Perchlorate	99 > 83	3.53	2105.496	2105.496	bb		0.0481	96.24	-3.76	827.986	3.26
CL100227-07CRI	Perchlorate-101	101 > 85	3.53	645.215	645.215	bb		0.0443	88.60	-11.40	257.268	
CL100227-07CRI	Perchlorate-O(18)	107 > 89	3.52	18968.740	18968.740	bb		0.4854	97.07	-2.93	1758.6...	

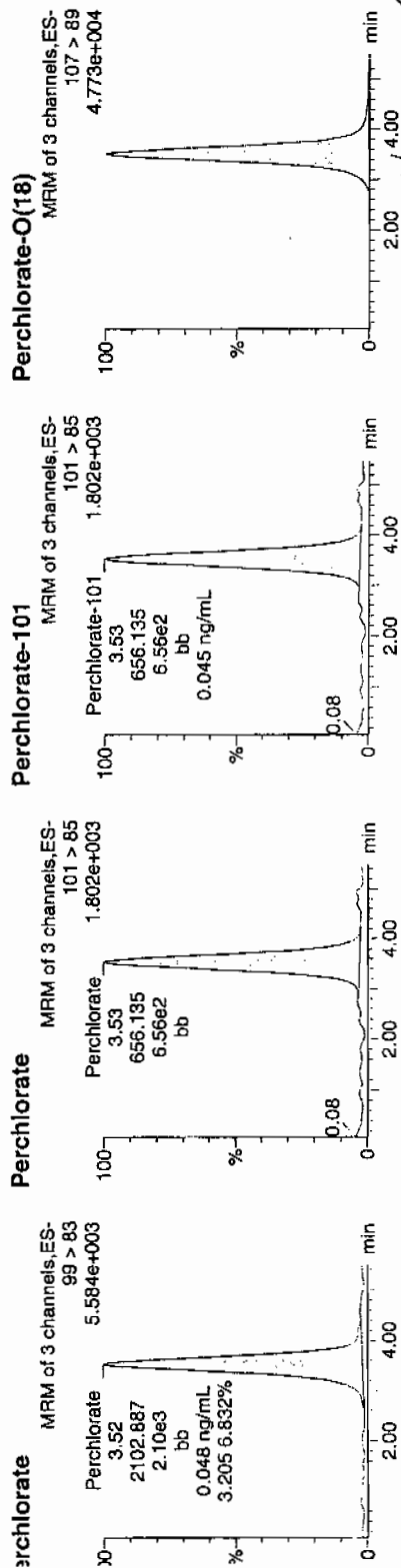
Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

First Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
 Initiated: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301056a
 Date: 01-Mar-2010
 Time: 20:38:45
 File: WCL100227-07CRI
 Ali: 1:2,B



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100227-07CRI	Perchlorate	3.52	2102.887	2102.887	bb			0.0481	96.12	-3.88	278.094	3.20
CL100227-07CRI	Perchlorate-101	3.53	656.135	656.135	bb			0.0451	90.10	-9.90	39.658	
CL100227-07CRI	Perchlorate-O(18)	3.51	18146.938	18146.938	bb			0.4643	92.87	-7.13	545.028	

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

Quantify Sample Report MassLynx 4.0 SP4

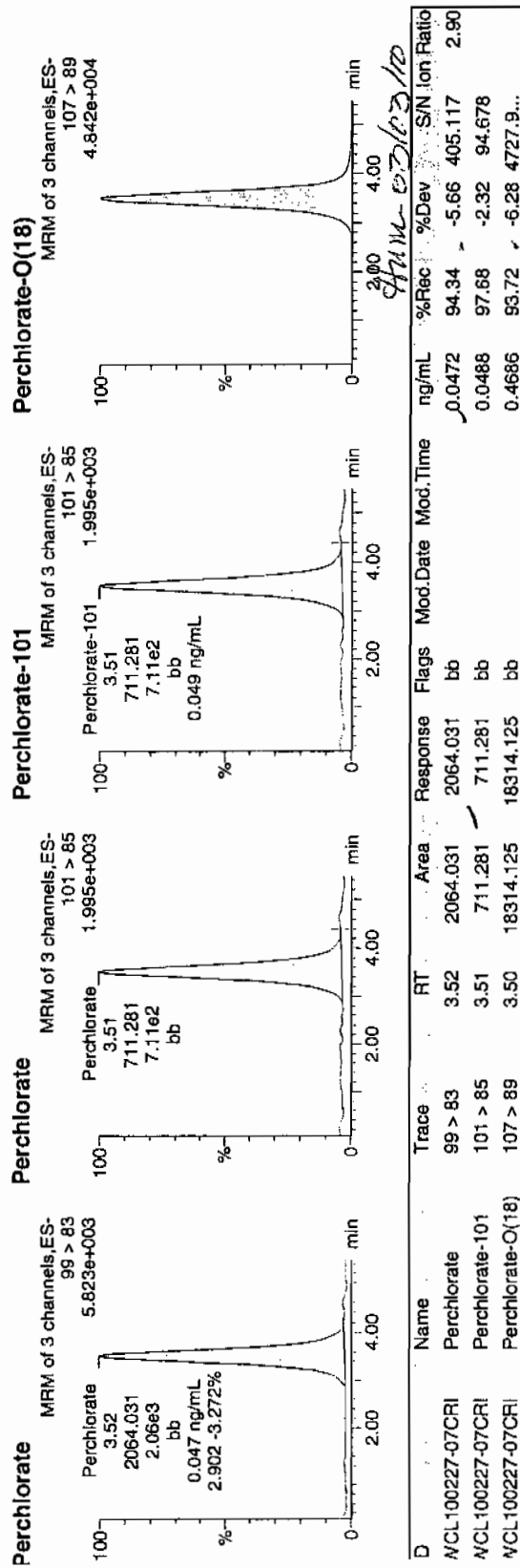
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

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 Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301069a
 Date: 01-Mar-2010
 Time: 22:30:09
 ID: WCL100227-07CRI
 Vial: 1:2,B

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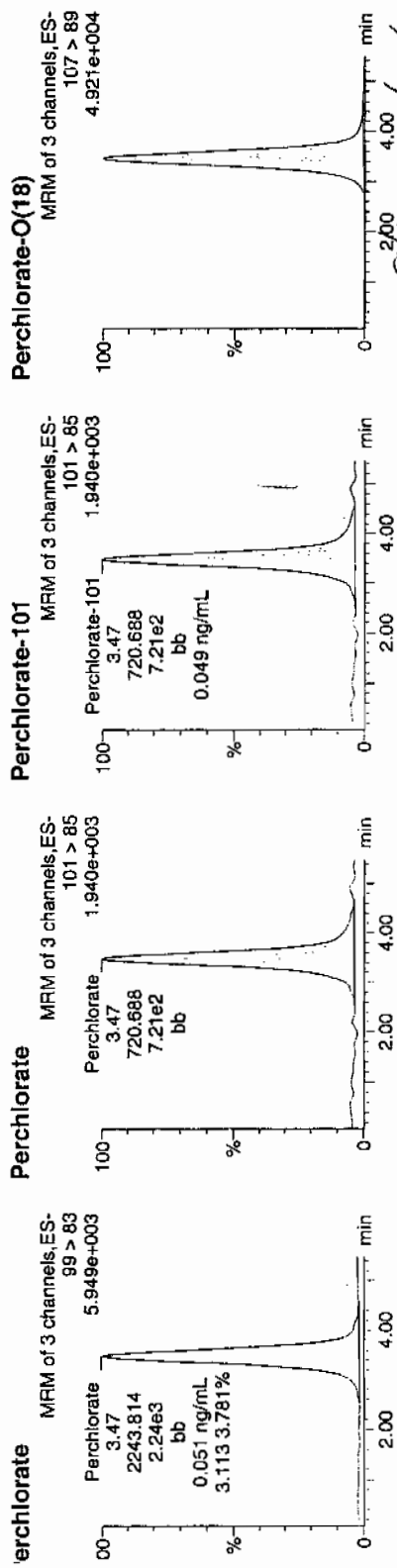
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301082a
Date: 02-Mar-2010
Time: 00:21:39
Job: WCL100227-07CRI
File: 1:2,B

Perchlorate



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100227-07CRI	Perchlorate	3.47	2243.814	2243.814	bb			0.0513	102.56	2.56	229.350	3.11
CL100227-07CRI	Perchlorate-101	3.47	720.688	720.688	bb			0.0495	98.97	-1.03	20.062	
CL100227-07CRI	Perchlorate-O(18)	3.46	18354.885	18354.885	bb			0.4697	93.93	-6.07	3600.4...	

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

Quantify Sample Report MassLynx 4.0 SP4

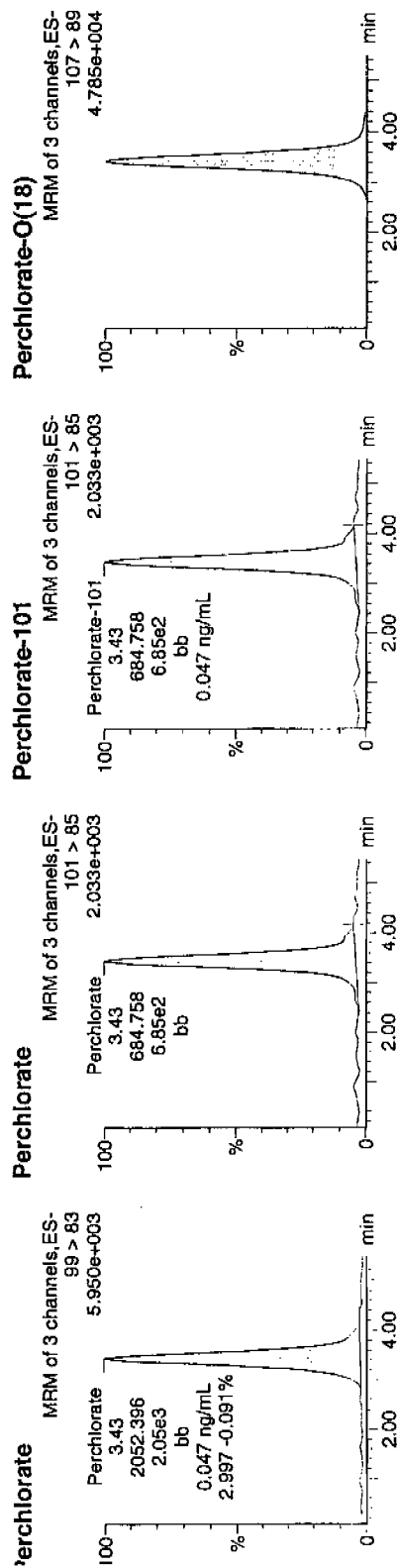
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

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Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301095a
Date: 02-Mar-2010
Time: 02:13:22
D: WCL100227-07CRI
Vial: 1:2,B

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03-02-10



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

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

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Sample Date: 02-Mar-2010

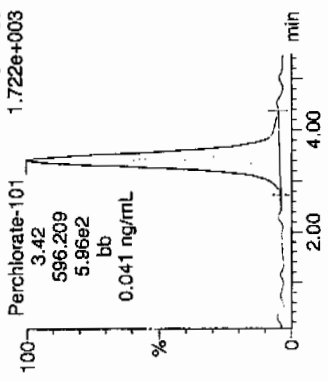
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Sample ID: WCL100227-07CRI

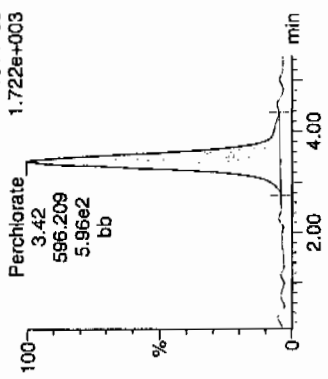
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03-02-10*

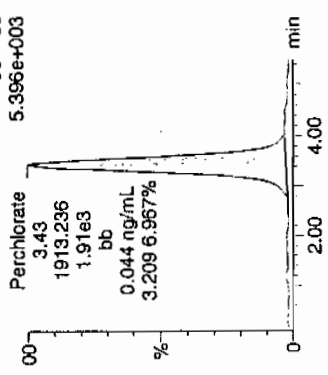
Perchlorate-101
MRM of 3 channels, ES-
101 > 85



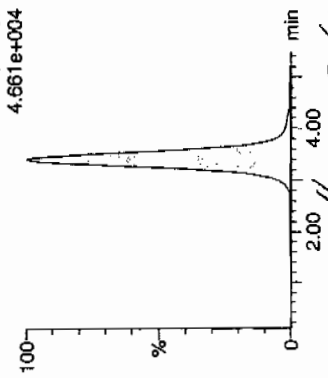
Perchlorate
MRM of 3 channels, ES-
101 > 85



Perchlorate
MRM of 3 channels, ES-
101 > 85



Perchlorate-O(18)
MRM of 3 channels, ES-
107 > 89



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100227-07CRI	Perchlorate	99 > 83	3.43	1913.236	bb			0.0437	87.45	-12.55	518.963	3.21
CL100227-07CRI	Perchlorate-101	101 > 85	3.42	596.209	bb			0.0409	81.87	-18.13	160.700	
CL100227-07CRI	Perchlorate-O(18)	107 > 89	3.41	17387.477	bb			0.4449	88.98	-11.02	3405.9...	

Time 03/03/10

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

atset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

ast Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
 rinted: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

ame: per0301121a

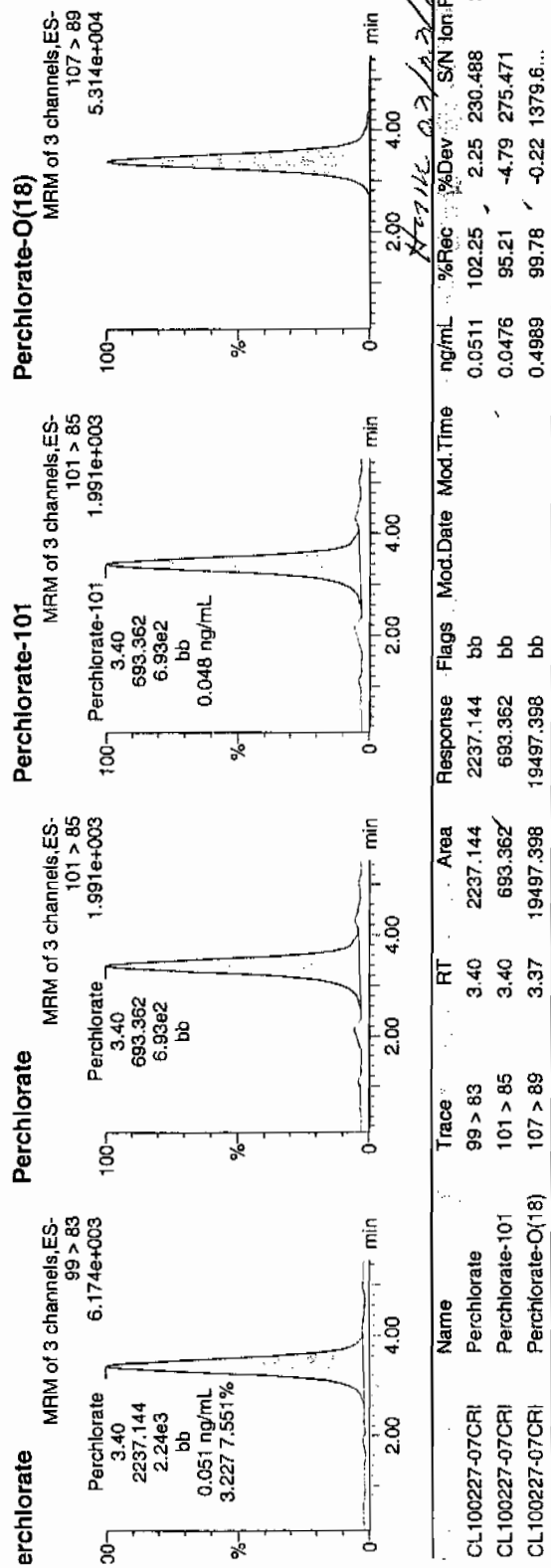
ate: 02-Mar-2010

ime: 05:56:24

): WCL100227-07CRI

ial: 1:2,B

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and
03-02-10*



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100227-07CRI	Perchlorate	99 > 83	3.40	2237.144	bb			0.0511	102.25	2.25	230.488	3.23
CL100227-07CRI	Perchlorate-101	101 > 85	3.40	693.362	bb			0.0476	95.21	-4.79	275.471	
CL100227-07CRI	Perchlorate-O(18)	107 > 89	3.37	19497.398	bb			0.4989	99.78	-0.22	1379.6...	

QUALITY CONTROL

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: EPA 6850 Modified
 Matrix: WATER
 Extraction Batch ID: 257436
 Extraction Type: Filter/DAI
 Sample Volume/Weight: 10.0 mL
 Concentrated Extract Volume: 10.0
 Client Sample No. MB
 Date Received: 25-FEB-10
 GEL Job No (SDG): 10-1983
 GEL Sample ID: 1202052905
 Date Filtered: 25-FEB-10
 Injection Volume (uL): 20
 %Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	02-MAR-10 02:47	per0301099a
	Perchlorate Isotope Ratio						1	02-MAR-10 02:47	per0301099a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	02-MAR-10 02:47	per0301099a
	Perchlorate-O(18)			0.459	ug/L		1	02-MAR-10 02:47	per0301099a

^ 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\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301099a

Date: 02-Mar-2010

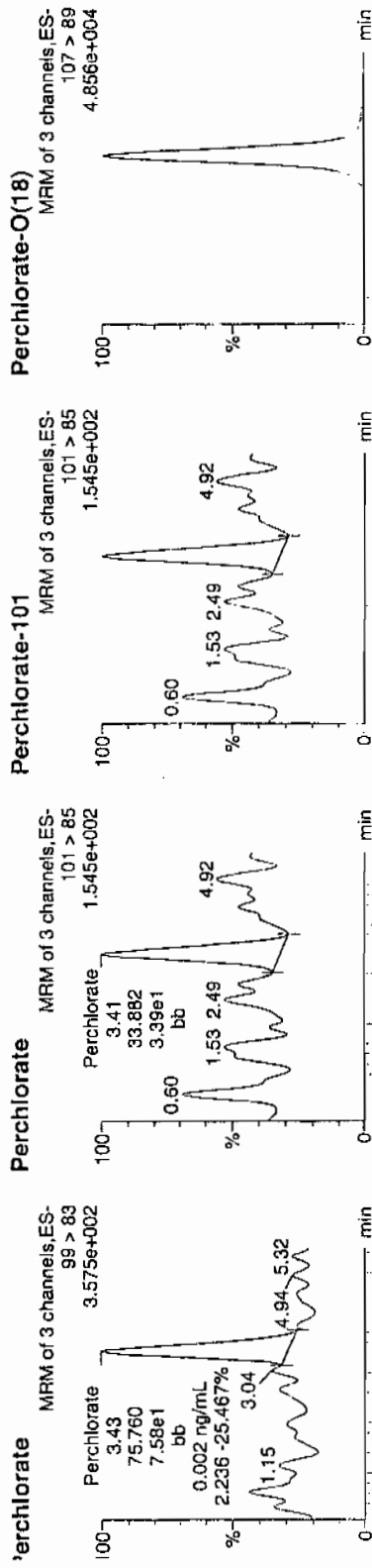
Time: 02:47:58

D: 1202052905

Vial: 3:1,A

1957434 / 1202 / 103 / 11

03-02-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202052905	Perchlorate	3.43	75.760	75.760	bb			0.0017	17.194	2.24	1034	20.0500
202052905	Perchlorate-101	3.41	33.882	33.882	bb			0.0023	18.276			
202052905	Perchlorate-O(18)	3.42	17957.791	17957.791	bb			0.4595	91.90	-8.10	2507.1...	

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: 957436
 Extraction Type: Filter/DAI
 Client Sample No. LCS
 Date Received: 25-FEB-10
 GEL Job No (SDG): 10-1983
 GEL Sample ID: 1202052906
 Date Filtered: 25-FEB-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	0.219	ug/L		1	02-MAR-10 02:56	per0301100a
	Perchlorate Isotope Ratio			3.02			1	02-MAR-10 02:56	per0301100a
14797-73-0	Perchlorate-101	.05	.2	0.217	ug/L		1	02-MAR-10 02:56	per0301100a
	Perchlorate-O(18)			0.464	ug/L		1	02-MAR-10 02:56	per0301100a

[^] 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

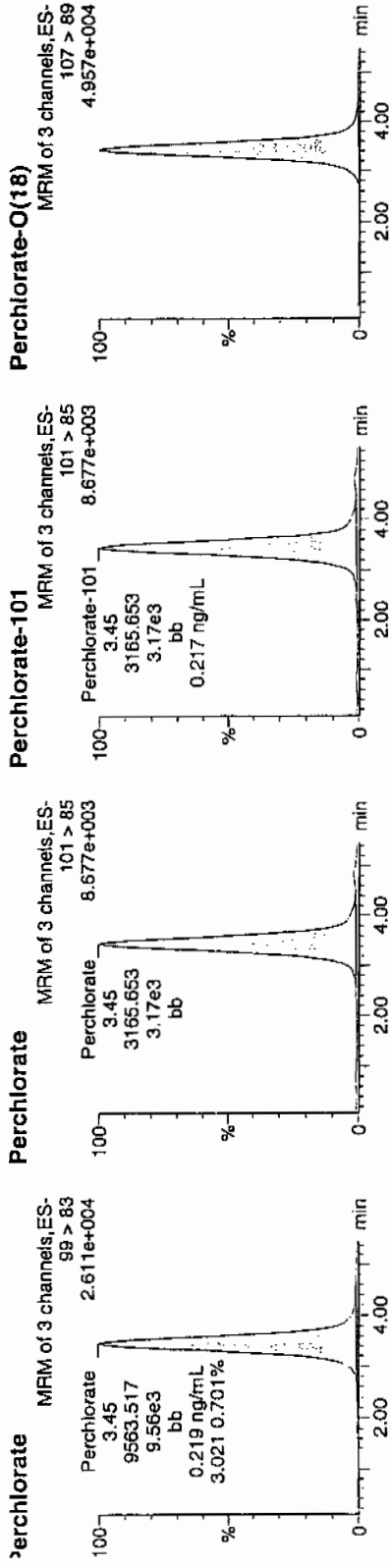
Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301100a
Date: 02-Mar-2010
Time: 02:56:42
D: 1202052906
File: 3:1,B

03-02-10

LANC 1957439 | 20125 | 11



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202052906	Perchlorate	99 > 83	3.45	9563.517	9563.517	bb			-0.2186	109.28	9.28	1109.7...	3.02
202052906	Perchlorate-101	101 > 85	3.45	3165.653	3165.653	bb			0.2174	108.68	8.68	1019.8...	
202052906	Perchlorate-Q(18)	107 > 89	3.43	18150.789	18150.789	bb			0.4644	92.89	-7.11	2961.5...	

9563.517
43756.3
0.2186

4/10/10

MISCELLANEOUS DATA

Prep Logbook

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

Batch ID: 957436 Verified by: _____
 Analyst: Charles Wilson
 Method: SW846 6850 Modified
 Lab SOP: GL-OA-E-067 REV# 6
 Instrument: MicroMass Quattro Ultima

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1202052905 MB	25-FEB-2010 11:13:00	10	10	1
1202052906 LCS	25-FEB-2010 11:13:00	10	10	1
247434001	25-FEB-2010 11:13:00	10	10	1
247437006	25-FEB-2010 11:13:00	10	10	1
247438001	25-FEB-2010 11:13:00	10	10	1
247441001	25-FEB-2010 11:13:00	10	10	1
247443004	25-FEB-2010 11:13:00	10	10	1
247449001	25-FEB-2010 11:13:00	10	10	1
247548001	25-FEB-2010 11:13:00	10	10	1
247548002	25-FEB-2010 11:13:00	10	10	1
247559001	25-FEB-2010 11:13:00	10	10	1
247560001	25-FEB-2010 11:13:00	10	10	1
247567001	25-FEB-2010 11:13:00	10	10	1
247771001	25-FEB-2010 11:13:00	10	10	1
247780001	25-FEB-2010 11:13:00	10	10	1
247793001	25-FEB-2010 11:13:00	10	10	1
247807001	25-FEB-2010 11:13:00	10	10	1
1202052907 MS (247807001)	25-FEB-2010 11:13:00	10	10	1
1202052908 MSD (247807001)	25-FEB-2010 11:13:00	10	10	1
247807002	25-FEB-2010 11:13:00	10	10	1
247807003	25-FEB-2010 11:13:00	10	10	1
247807004	25-FEB-2010 11:13:00	10	10	1
1202052909 ICS	25-FEB-2010 11:13:00	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments
ICS	1202052909	10 ug/L ICV/CCV Second Source	UCL100210-02.1	.2	mL	Desalting cartridges used: BJ0003K0402 (IC-Ba) & BJ0005J0812
LCS	1202052906	10 ug/L ICV/CCV Second Source	UCL100210-02.1	.2	mL	
MS	1202052907	10 ug/L ICV/CCV Second Source	UCL100210-02.1	.2	mL	
MSD	1202052908	10 ug/L ICV/CCV Second Source	UCL100210-02.1	.2	mL	
RGNT	All	O2SI HPLC Grade Water	1261217	10	mL	
RGNT	All	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1262643	10	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCM SMS#2

Date: 03/01/10
Extr. Injection Volume: 20uL
Sequence Number: per030110a
Initial Calibration Date: 03/01/10

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

Reviewed BY: *H111C*
Date: *03/23/10*
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100227-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0301001a	IPB001	CWW	3/1/2010 12:47			1		USE	B
per0301002a	IPB001	CWW	3/1/2010 12:55			1		USE	B
per0301003a	WCLICAL-01	CWW	3/1/2010 13:04			1		USE	I
per0301004a	WCLICAL-02	CWW	3/1/2010 13:13			1		USE	I
per0301005a	WCLICAL-03	CWW	3/1/2010 13:21			1		USE	I
per0301006a	WCLICAL-04	CWW	3/1/2010 13:30			1		USE	I
per0301007a	WCLICAL-05	CWW	3/1/2010 13:38			1		USE	I
per0301008a	IPB002	CWW	3/1/2010 13:47			1		USE	B
per0301009a	WCLICV	CWW	3/1/2010 13:55			1		USE	C
per0301010a	IPB003	CWW	3/1/2010 14:04			1		USE	B
per0301011a	WCLCRI	CWW	3/1/2010 14:12			1		USE	C
per0301012a	1202057198	CWW	3/1/2010 14:21	959224	IDOC-KW-L	1	QCQA	USE	S
per0301013a	1202057199	CWW	3/1/2010 14:30	959224	IDOC-KW-L	1	QCQA	USE	S
per0301014a	1202057200	CWW	3/1/2010 14:38	959224	IDOC-KW-L	1	QCQA	USE	S
per0301015a	1202057201	CWW	3/1/2010 14:47	959224	IDOC-KW-L	1	QCQA	USE	S
per0301016a	1202057202	CWW	3/1/2010 14:55	959224	IDOC-KW-L	1	QCQA	USE	S
per0301017a	1202057203	CWW	3/1/2010 15:04	959224	IDOC-KW-L	1	QCQA	USE	S
per0301018a	248193001	CWW	3/1/2010 15:12	959224	IDOC-KW-L	1	QCQA	USE	S
per0301019a	WCLCCV	CWW	3/1/2010 15:21			1		USE	C
per0301020a	IPB004	CWW	3/1/2010 15:29			1		USE	B
per0301021a	WCLCRI	CWW	3/1/2010 15:38			1		USE	C
per0301022a	1202057204	CWW	3/1/2010 15:47	959227	IDOC-KW-S	1	QCQA	USE	S
per0301023a	1202057326	CWW	3/1/2010 15:55	959227	IDOC-KW-S	1	QCQA	USE	S
per0301024a	1202057327	CWW	3/1/2010 16:04	959227	IDOC-KW-S	1	QCQA	USE	S
per0301025a	1202057328	CWW	3/1/2010 16:12	959227	IDOC-KW-S	1	QCQA	USE	S
per0301026a	1202057329	CWW	3/1/2010 16:21	959227	IDOC-KW-S	1	QCQA	USE	S
per0301027a	1202057330	CWW	3/1/2010 16:29	959227	IDOC-KW-S	1	QCQA	USE	S
per0301028a	248195001	CWW	3/1/2010 16:38	959227	IDOC-KW-S	1	QCQA	USE	S
per0301029a	WCLCCV	CWW	3/1/2010 16:46			1	QCQA	USE	C

per0301030a	IPB005	CWW	3/1/2010 16:55				1	USE	B
per0301031a	WCLCRI	CWW	3/1/2010 17:04				1	USE	C
per0301032a	246336007	CWW	3/1/2010 17:12	952425	10-1568-1	LANL	1	USE	S
per0301033a	246336008	CWW	3/1/2010 17:21	952425	10-1568-1	LANL	1	USE	S
per0301034a	246336009	CWW	3/1/2010 17:30	952425	10-1568-1	LANL	1	USE	S
per0301035a	IPB006	CWW	3/1/2010 17:38				1	USE	B
per0301036a	1202042706	CWW	3/1/2010 17:47	953012	VARIOUS	LANL	1	DUSE-RE	S
per0301037a	1202042707	CWW	3/1/2010 17:55	953012	VARIOUS	LANL	1	DUSE-RE	S
per0301038a	1202042712	CWW	3/1/2010 18:04	953012	VARIOUS	LANL	1	DUSE-RE	S
per0301039a	246574002	CWW	3/1/2010 18:13	953012	10-1679	LANL	1	DUSE-RE	S
per0301040a	246598002	CWW	3/1/2010 18:21	953012	10-1696	LANL	1	DUSE-RE	S
per0301041a	WCLCCV	CWW	3/1/2010 18:30				1	USE	C
per0301042a	IPB007	CWW	3/1/2010 18:38				1	USE	B
per0301043a	WCLCRI	CWW	3/1/2010 18:47				1	USE	C
per0301044a	246690002	CWW	3/1/2010 18:55	953012	10-1722	LANL	1	DUSE-RE	S
per0301045a	1202042708	CWW	3/1/2010 19:04	953012	10-1722	LANL	1	DUSE-RE	S
per0301046a	1202042709	CWW	3/1/2010 19:13	953012	10-1722	LANL	1	DUSE-RE	S
per0301047a	246690003	CWW	3/1/2010 19:21	953012	10-1722	LANL	1	DUSE-RE	S
per0301048a	246853001	CWW	3/1/2010 19:30	953012	10-1753	LANL	1	DUSE-RE	S
per0301049a	246860001	CWW	3/1/2010 19:38	953012	10-1756	LANL	1	DUSE-RE	S
per0301050a	246862001	CWW	3/1/2010 19:47	953012	10-1780	LANL	1	DUSE-RE	S
per0301051a	246871001	CWW	3/1/2010 19:55	953012	10-1759	LANL	1	DUSE-RE	S
per0301052a	246877001	CWW	3/1/2010 20:04	953012	10-1774	LANL	1	DUSE-RE	S
per0301053a	246877004	CWW	3/1/2010 20:12	953012	10-1774	LANL	1	DUSE-RE	S
per0301054a	WCLCCV	CWW	3/1/2010 20:21				1	USE	C
per0301055a	IPB008	CWW	3/1/2010 20:30				1	USE	B
per0301056a	WCLCRI	CWW	3/1/2010 20:38				1	USE	C
per0301057a	246882001	CWW	3/1/2010 20:47	953012	10-1770	LANL	1	DUSE-RE	S
per0301058a	246882002	CWW	3/1/2010 20:56	953012	10-1770	LANL	1	DUSE-RE	S
per0301059a	246883001	CWW	3/1/2010 21:04	953012	10-1767-1	LANL	1	DUSE-RE	S
per0301060a	1202042710	CWW	3/1/2010 21:13	953012	10-1767-1	LANL	1	DUSE-RE	S
per0301061a	1202042711	CWW	3/1/2010 21:21	953012	10-1767-1	LANL	1	DUSE-RE	S
per0301062a	246883002	CWW	3/1/2010 21:30	953012	10-1767-1	LANL	1	DUSE-RE	S
per0301063a	246883003	CWW	3/1/2010 21:38	953012	10-1767-1	LANL	1	DUSE-RE	S
per0301064a	246883004	CWW	3/1/2010 21:47	953012	10-1767-1	LANL	1	DUSE-RE	S
per0301065a	246886002	CWW	3/1/2010 21:55	953012	10-1777	LANL	1	DUSE-RE	S
per0301066a	246886004	CWW	3/1/2010 22:04	953012	10-1777	LANL	1	DUSE-RE	S

per0301067a	WCLCCV	CWW	3/1/2010 22:12				1			USE	C
per0301068a	IPB009	CWW	3/1/2010 22:21				1			USE	B
per0301069a	WCLCRI	CWW	3/1/2010 22:30				1			USE	C
per0301070a	1202042696	CWW	3/1/2010 22:38		VARIOUS	953005	1	LANL		USE	S
per0301071a	1202042697	CWW	3/1/2010 22:47		VARIOUS	953005	1	LANL		USE	S
per0301072a	1202042700	CWW	3/1/2010 22:55		VARIOUS	953005	1	LANL		USE	S
per0301073a	246861001	CWW	3/1/2010 23:04		10-1756-1	953005	1	LANL		USE	S
per0301074a	246861002	CWW	3/1/2010 23:13		10-1756-1	953005	1	LANL		USE	S
per0301075a	1202042698	CWW	3/1/2010 23:21		10-1756-1	953005	1	LANL		USE	S
per0301076a	1202042699	CWW	3/1/2010 23:30		10-1756-1	953005	1	LANL		USE	S
per0301077a	246861003	CWW	3/1/2010 23:38		10-1756-1	953005	1	LANL		USE	S
per0301078a	246861004	CWW	3/1/2010 23:47		10-1756-1	953005	1	LANL		USE	S
per0301079a	246861005	CWW	3/1/2010 23:55		10-1756-1	953005	1	LANL		USE	S
per0301080a	WCLCCV	CWW	3/2/2010 0:04				1			USE	C
per0301081a	IPB010	CWW	3/2/2010 0:13				1			USE	B
per0301082a	WCLCRI	CWW	3/2/2010 0:21				1			USE	C
per0301083a	246861006	CWW	3/2/2010 0:30		10-1756-1	953005	1	LANL		USE	S
per0301084a	246861007	CWW	3/2/2010 0:38		10-1756-1	953005	1	LANL		USE	S
per0301085a	246861008	CWW	3/2/2010 0:47		10-1756-1	953005	1	LANL		USE	S
per0301086a	246861009	CWW	3/2/2010 0:56		10-1756-1	953005	1	LANL		USE	S
per0301087a	246872001	CWW	3/2/2010 1:04		10-1759-1	953005	1	LANL		USE	S
per0301088a	246872002	CWW	3/2/2010 1:13		10-1759-1	953005	1	LANL		USE	S
per0301089a	246872003	CWW	3/2/2010 1:21		10-1759-1	953005	1	LANL		USE	S
per0301090a	246872004	CWW	3/2/2010 1:30		10-1759-1	953005	1	LANL		USE	S
per0301091a	246872005	CWW	3/2/2010 1:38		10-1759-1	953005	1	LANL		USE	S
per0301092a	246872006	CWW	3/2/2010 1:47		10-1759-1	953005	1	LANL		USE	S
per0301093a	WCLCCV	CWW	3/2/2010 1:56				1			USE	C
per0301094a	IPB011	CWW	3/2/2010 2:04				1			USE	B
per0301095a	WCLCRI	CWW	3/2/2010 2:13				1			USE	C
per0301096a	246872007	CWW	3/2/2010 2:21		10-1759-1	953005	1	LANL		USE	S
per0301097a	246872008	CWW	3/2/2010 2:30		10-1759-1	953005	1	LANL		USE	S
per0301098a	IPB012	CWW	3/2/2010 2:39				1			USE	B
per0301099a	1202052905	CWW	3/2/2010 2:47		VARIOUS	957439	1	LANL		USE	S
per0301100a	1202052906	CWW	3/2/2010 2:56		VARIOUS	957439	1	LANL		USE	S
per0301101a	1202052909	CWW	3/2/2010 3:05		VARIOUS	957439	1	LANL		USE	S
per0301102a	247434001	CWW	3/2/2010 3:13		10-1929	957439	1	LANL		USE	S
per0301103a	247437006	CWW	3/2/2010 3:22		10-1931	957439	1	LANL		USE	S

per0301104a	247438001	CWW	3/2/2010 3:30	957439	10-1932	1	LANL	USE	S
per0301105a	247441001	CWW	3/2/2010 3:39	957439	10-1934	1	LANL	USE	S
per0301106a	WCLCCV	CWW	3/2/2010 3:47			1		USE	C
per0301107a	IPB013	CWW	3/2/2010 3:56			1		USE	B
per0301108a	WCLCRI	CWW	3/2/2010 4:05			1		USE	C
per0301109a	247443004	CWW	3/2/2010 4:13	957439	10-1935	1	LANL	USE	S
per0301110a	247449001	CWW	3/2/2010 4:22	957439	10-1936	1	LANL	USE	S
per0301111a	247548001	CWW	3/2/2010 4:30	957439	10-1965-1	1	LANL	USE	S
per0301112a	247548002	CWW	3/2/2010 4:39	957439	10-1965-1	1	LANL	USE	S
per0301113a	247559001	CWW	3/2/2010 4:47	957439	10-1954-1	1	LANL	USE	S
per0301114a	247560001	CWW	3/2/2010 4:56	957439	10-1951	1	LANL	USE	S
per0301115a	247567001	CWW	3/2/2010 5:05	957439	10-1957-1	1	LANL	USE	S
per0301116a	247771001	CWW	3/2/2010 5:13	957439	10-1973-1	1	LANL	USE	S
per0301117a	247780001	CWW	3/2/2010 5:22	957439	10-1976	1	LANL	USE	S
per0301118a	247793001	CWW	3/2/2010 5:30	957439	10-1983	1	LANL	USE	S
per0301119a	WCLCCV	CWW	3/2/2010 5:39			1		USE	C
per0301120a	IPB014	CWW	3/2/2010 5:47			1		USE	B
per0301121a	WCLCRI	CWW	3/2/2010 5:56			1		USE	C
per0301122a	247807001	CWW	3/2/2010 6:04	957439	10-1991-1	1	LANL	USE	S
per0301123a	1202052907	CWW	3/2/2010 6:13	957439	10-1991-1	1	LANL	USE	S
per0301124a	1202052908	CWW	3/2/2010 6:22	957439	10-1991-1	1	LANL	USE	S
per0301125a	247807002	CWW	3/2/2010 6:30	957439	10-1991-1	1	LANL	USE	S
per0301126a	247807003	CWW	3/2/2010 6:39	957439	10-1991-1	1	LANL	USE	S
per0301127a	247807004	CWW	3/2/2010 6:47	957439	10-1991-1	1	LANL	USE	S
per0301128a	IPB015	CWW	3/2/2010 6:56			1		USE	B
per0301129a	1202042707	CWW	3/2/2010 7:07	953012	VARIOUS	1	LANL	DUSE	S
per0301130a	246598002	CWW	3/2/2010 7:16	953012	10-1696	2	LANL	USE	S
per0301131a	UCL100226-01.1	CWW	3/2/2010 7:24	Screen		1	GEL	USE	S
per0301132a	WCLCCV	CWW	3/2/2010 7:33			1		USE	C
per0301133a	IPB016	CWW	3/2/2010 7:42			1		USE	B
per0301134a	WCLCRI	CWW	3/2/2010 7:50			1		USE	C

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301123a

Date: 02-Mar-2010

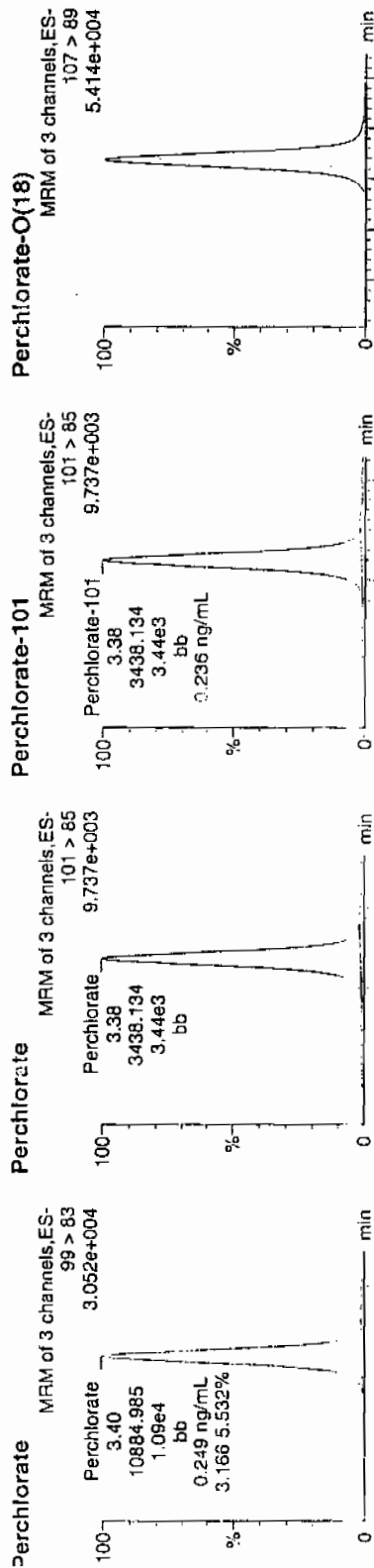
Time: 06:13:41

ID: 1202052907

Vial: 3:4,A

02-02-10

157434 | 1202052907



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202052907	Perchlorate	3.40	10884.985	10884.985	bb			0.2488	124.38	24.38	1969.2...	3.17
202052907	Perchlorate-101	3.38	3438.134	3438.134	bb			0.2361	118.03	18.03	506.070	
202052907	Perchlorate-O(18)	3.37	19680.219	19680.219	bb			0.5036	100.71	0.71	592.448	

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

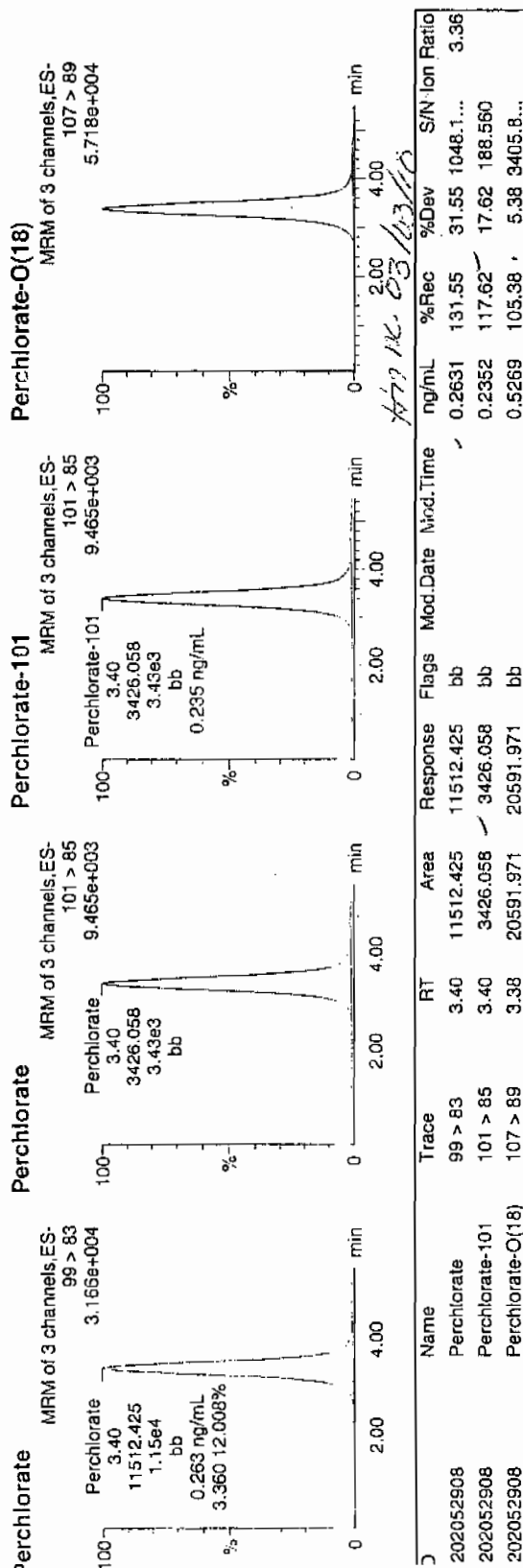
Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301124a
Date: 02-Mar-2010
Time: 06:22:14
ID: 1202052908
Vial: 3:4,B

LAUW-195743-1 LZU MS10 11

0000
000000



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

GEL Laboratories LLC
Form GEL-DER

DER Report No.: 797970

Revision No.: 1

DATA EXCEPTION REPORT

Mo. Day Yr. 02-MAR-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: LC-MS/MS	Test / Method: SW846 6850 Modified	Matrix Type: Liquid	Client Code: LANL
Batch ID: 957439	Sample Numbers: See Below		
<p>Potentially affected work order(s)(SDG): 247434(10-1929),247437(10-1931),247438(10-1932),247441(10-1934),247443(10-1935),247449(10-1936),247548(10-1965-1),247559(10-1954-1),247560(10-1951),247567(10-1957-1),247771(10-1973-1),247780(10-1976),247793(10-1983),247807(10-1991-1)</p> <p>Application Issues:</p> <p>Failed Recovery for MSD/PSD</p>			
Specification and Requirements Exception Description:		DER Disposition:	
<p>1. High recovery for Perchlorate was observed in 1202052908 (MSD). The recovery was 130% and the acceptance range is 75-125%.</p>		<p>1. The high recovery may be the result of sample matrix. Similar recoveries were observed in 1202052907 (MS).</p>	

Originator's Name:

Charles Wilson 02-MAR-10

Data Validator/Group Leader:

Herbert Maier 03-MAR-10

Isotope Ratio Criteria

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

2.31-3.85

Tune Criteria

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

LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1983-1**

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: 957943

Prep Batch Number: 957940

Sample Analysis

Sample ID	Client ID
247794001	RE15-10-8317
247794002	RE15-10-8319
247794003	RE15-10-8316
247794004	RE15-10-8326
247794005	RE15-10-8318
1202054226	Interference Check Sample (ICS)
1202054222	Method Blank (MB)
1202054223	Laboratory Control Sample (LCS)
1202054224	247539002(CAPU-10-12549) Matrix Spike (MS)
1202054225	247539002(CAPU-10-12549) 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.

10-1983-1-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 247539002 (CAPU-10-12549) from SDG 10-1960 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.

10-1983-1-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

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. Mace Date: 03/17/10

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: 957940

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8317

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1983-1

GEL Sample ID: 247794001

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 93.7

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	.534	2.14	0.534	ug/kg	U	1	14-MAR-10 19:59	per0314033a
	Perchlorate Isotope Ratio						1	14-MAR-10 19:59	per0314033a
14797-73-0	Perchlorate-101	.534	2.14	0.534	ug/kg	U	1	14-MAR-10 19:59	per0314033a
	Perchlorate-O(18)			5.10	ug/kg		1	14-MAR-10 19:59	per0314033a

[^] 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: 957940
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8319
 Date Received: 23-FEB-10
 GEL Job No (SDG): 10-1983-1
 GEL Sample ID: 247794002
 Date Filtered: 06-MAR-10
 Injection Volume (uL): 20
 %Solids: 96.1

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.517	2.07	0.517	ug/kg	U	1	14-MAR-10 20:07	per0314034a
	Perchlorate Isotope Ratio						1	14-MAR-10 20:07	per0314034a
14797-73-0	Perchlorate-101	.517	2.07	0.517	ug/kg	U	1	14-MAR-10 20:07	per0314034a
	Perchlorate-O(18)			5.00	ug/kg		1	14-MAR-10 20:07	per0314034a

^ 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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957940

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8316

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1983-1

GEL Sample ID: 247794003

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 96

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.521	2.08	0.521	ug/kg	U	1	14-MAR-10 20:40	per0314038a
	Perchlorate Isotope Ratio						1	14-MAR-10 20:40	per0314038a
14797-73-0	Perchlorate-101	.521	2.08	0.521	ug/kg	U	1	14-MAR-10 20:40	per0314038a
	Perchlorate-O(18)			4.92	ug/kg		1	14-MAR-10 20:40	per0314038a

[^] 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: 957940

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8326

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1983-1

GEL Sample ID: 247794004

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 96

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.521	2.08	0.521	ug/kg	U	1	14-MAR-10 20:48	per0314039a
	Perchlorate Isotope Ratio						1	14-MAR-10 20:48	per0314039a
14797-73-0	Perchlorate-101	.521	2.08	0.521	ug/kg	U	1	14-MAR-10 20:48	per0314039a
	Perchlorate-O(18)			4.74	ug/kg		1	14-MAR-10 20:48	per0314039a

[^] 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: 957940

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8318

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1983-1

GEL Sample ID: 247794005

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 95.5

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
B4797-73-0	Perchlorate	.524	2.1	0.524	ug/kg	U	1	14-MAR-10 20:56	per0314040a
	Perchlorate Isotope Ratio						1	14-MAR-10 20:56	per0314040a
B4797-73-0	Perchlorate-101	.524	2.1	0.524	ug/kg	U	1	14-MAR-10 20:56	per0314040a
	Perchlorate-O(18)			4.78	ug/kg		1	14-MAR-10 20:56	per0314040a

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

*Concentration =

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

QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL GEL Job No. (SDG): 10-1983-1

Extract Batch Code: 957940 Date Filtered: 06-MAR-10

Matrix: SOIL Sample ID: 1202054223

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.02	ug/kg	101		70 - 130
Perchlorate Isotope Ratio		3.11				-
Perchlorate-101	2.00	2.01	ug/kg	100		70 - 130
Perchlorate-O(18)		4.69	ug/kg			-

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

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL GEL Job No. (SDG): 10-1983-1

Extract Batch Code: 957940 Date Filtered: 06-MAR-10

Matrix: SOIL Sample ID: 1202054226

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.26	ug/kg	113		70 - 130
Perchlorate Isotope Ratio		3.11				
Perchlorate-101	2.00	2.24	ug/kg	112		70 - 130
Perchlorate-O(18)		5.18	ug/kg			

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

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314014a

Date: 14-Mar-2010

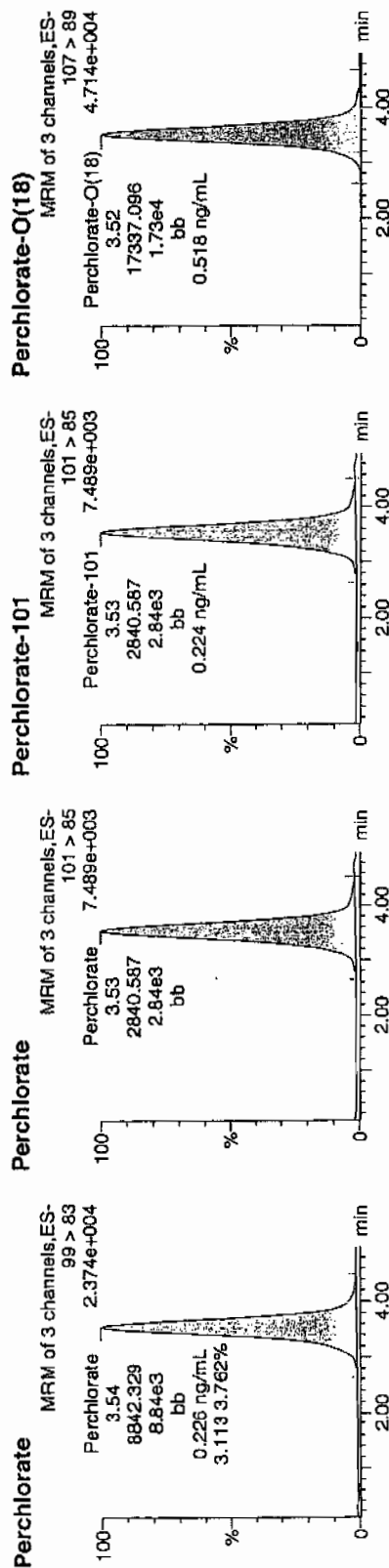
Time: 17:25:53

ID: 1202054226

Vial: 1:3,C

03-15-10

1424 | 957943 | 3020 | 7.15 | 1



ID	Name	Trace	RT	Area	Response	Flags	Mod	Date	Time	ng/mL	%Rec	%Dev	S/N	Ratio
1202054226	Perchlorate	99 > 83	3.54	8842.329	8842.329	bb				0.2258	112.92	12.92	539.433	3.11
1202054226	Perchlorate-101	101 > 85	3.53	2840.587	2840.587	bb				0.2240	112.02	12.02	408.061	
1202054226	Perchlorate-O(18)	107 > 89	3.52	17337.096	17337.096	bb				0.5181	103.62	3.62	699.798	

$$\frac{8842.329}{2840.587} \approx 3.1126$$

107
3.1126

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

Extract Batch Code: 957940

GEL Job No (SDG): 10-1983-1

Date Extracted: 06-MAR-10

GEL MS/PS ID: 1202054224

Client ID: CAPU-10-12549

GEL MSD/PSD ID: 1202054225

QC Type: MS

Compound [^]	Spike Added	Sample Conc	Units	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Recovery Limit
Perchlorate	2.18	0.0844	ug/kg	2.27	100		2.37	105		4.61		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.18			3.19			0			-
Perchlorate-101	2.18	0.0595	ug/kg	2.21	98.6		2.3	103		4.26		30	75 - 125
Perchlorate-O(18)	0	5.01	ug/kg	5.24			5.3			1.16			-

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

Comments:

Form 4

Perchlorate Initial Calibration Blank

GEL Job No.(SDG): 10-1983-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

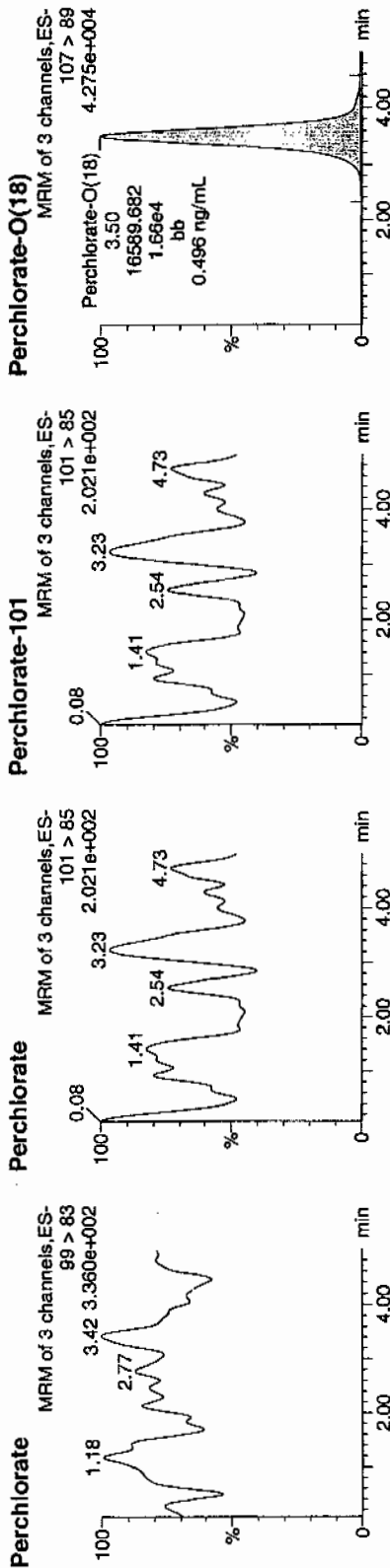
Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	14-MAR-10	per0314001a	IPB001
Perchlorate-101	0.00	0	NA	14-MAR-10	per0314001a	IPB001
Perchlorate	0.00	0	NA	14-MAR-10	per0314002a	IPB001
Perchlorate-101	0.00	0	NA	14-MAR-10	per0314002a	IPB001

Quantify Sample Report MassLynx 4.0 SP4
 The GEL Group, LLC Analyst: Charliers W. Wilson
 Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld
 Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
 Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per031410a.mdb 15 Mar 2010 08:54:46
 Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per031410a.cdb 15 Mar 2010 08:56:54

Name: per0314001a
 Date: 14-Mar-2010
 Time: 15:41:14
 ID: IPB001
 Vial: 1:1,A

03-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	3.50	16589.682	16589.682	bb			0.4958	99.15	-0.85	1780.0...	0.00

Not
3/16/10

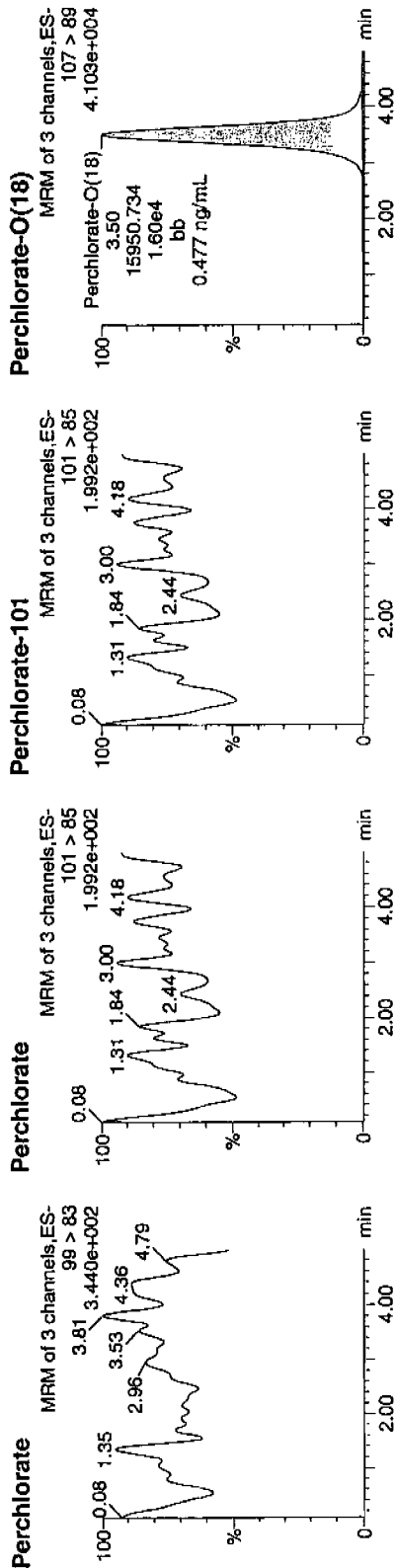
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314002a
Date: 14-Mar-2010
Time: 15:49:17
ID: IPB001
Vial: 1:1,A

03-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85	3.50	15950.734	15950.734	bb			0.4767	95.34	-4.68	1555.8...	
IPB001	Perchlorate-O(18)	107 > 89											

1477
3/16/10

Form 4

P perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1983-1

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	14-MAR-10	per0314008a	IPB002
Perchlorate-101	0.00	0	NA	14-MAR-10	per0314008a	IPB002
Perchlorate	0.00	0	NA	14-MAR-10	per0314010a	IPB003
Perchlorate-101	0.00	0	NA	14-MAR-10	per0314010a	IPB003
Perchlorate	0.00	0	NA	14-MAR-10	per0314023a	IPB004
Perchlorate-101	0.00	0	NA	14-MAR-10	per0314023a	IPB004
Perchlorate	0.00	0	NA	14-MAR-10	per0314036a	IPB005
Perchlorate-101	0.00	0	NA	14-MAR-10	per0314036a	IPB005
Perchlorate	0.00	0	NA	14-MAR-10	per0314041a	IPB006
Perchlorate-101	0.00	0	NA	14-MAR-10	per0314041a	IPB006
Perchlorate	0.00	0	NA	14-MAR-10	per0314049a	IPB007
Perchlorate-101	0.00	0	NA	14-MAR-10	per0314049a	IPB007

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time

Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314008a

Date: 14-Mar-2010

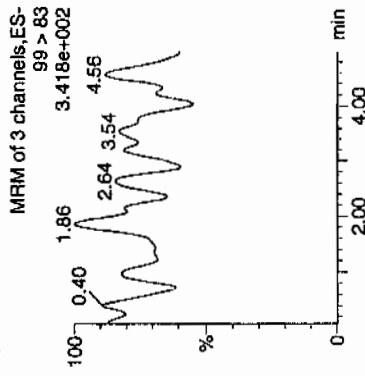
Time: 16:37:25

ID: IPB002

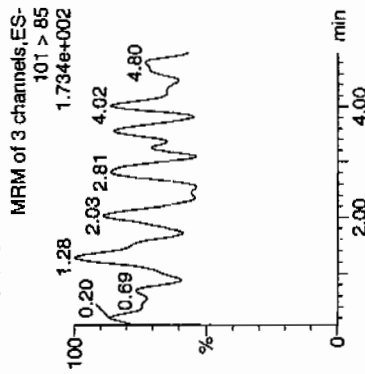
Vial: 1:1,A

03-15-10

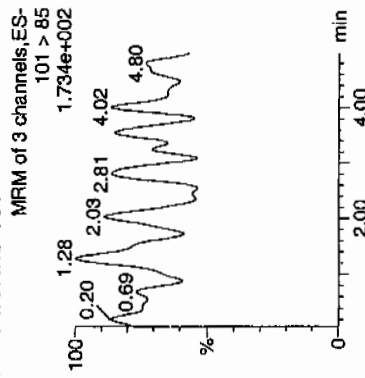
Perchlorate



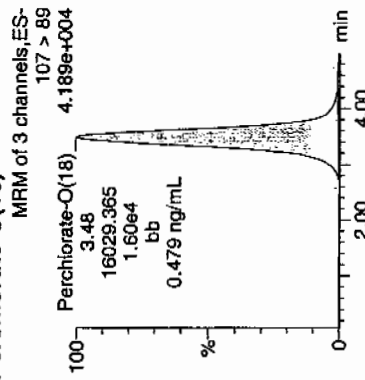
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB002	Perchlorate	99 > 83											0.00
IPB002	Perchlorate-101	101 > 85											
IPB002	Perchlorate-O(18)	107 > 89	3.48	16029.365	16029.365	bb			0.4790	95.81	-4.19	1104.5...	

not
3/14/10

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314010a

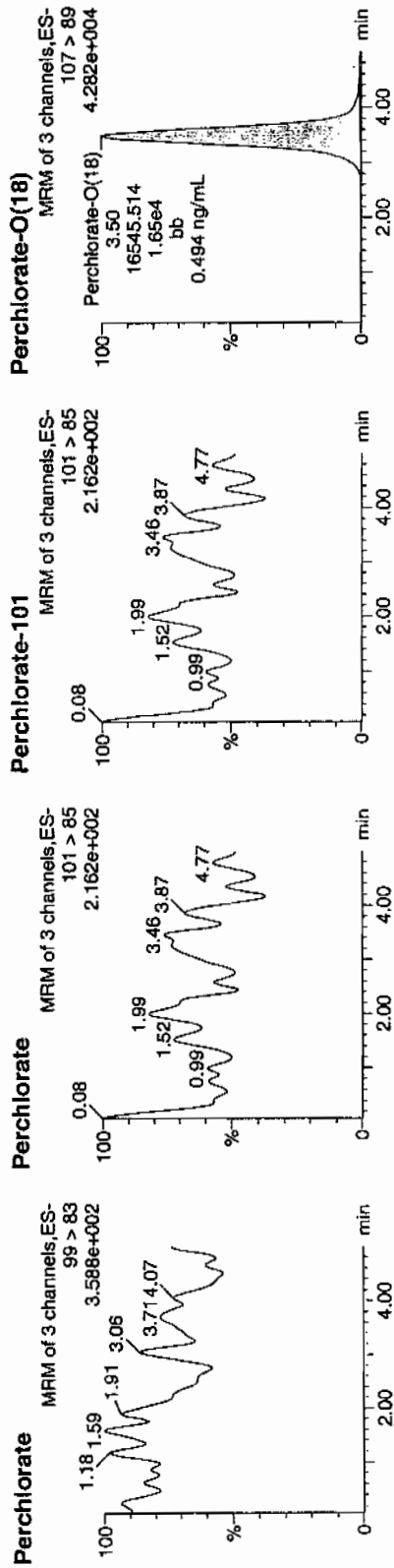
Date: 14-Mar-2010

Time: 16:53:41

ID: IPB003

Vial: 1:1,A

03-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB003	Perchlorate	99 > 83											0.00
IPB003	Perchlorate-101	101 > 85											
IPB003	Perchlorate-O(18)	107 > 89	3.50	16545.514	16545.514	bb			0.4945	98.89	-1.11	1258.9...	

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3/16/10

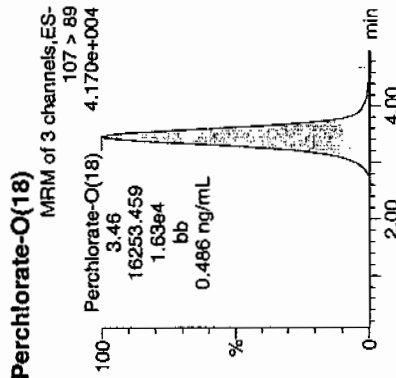
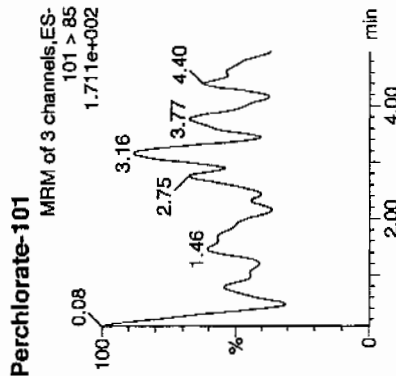
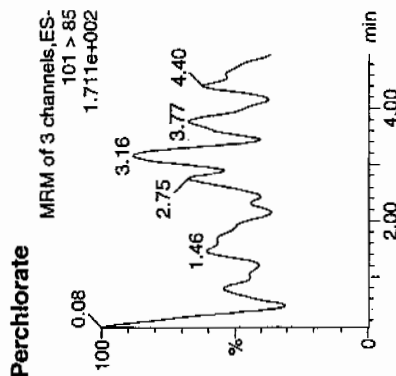
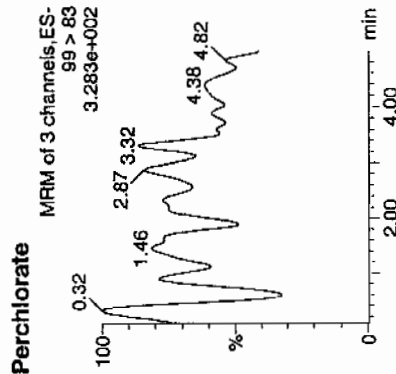
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Filename: per0314023a
Date: 14-Mar-2010
Time: 18:38:13
ID: IPB004
Vial: 1:1,A

03-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB004	Perchlorate	99 > 83											
IPB004	Perchlorate-101	101 > 85											
IPB004	Perchlorate-O(18)	107 > 89	3.46	16253.459	16253.459	bb			0.4857	97.14	-2.86	1623.8...	0.00

not
3/16/10

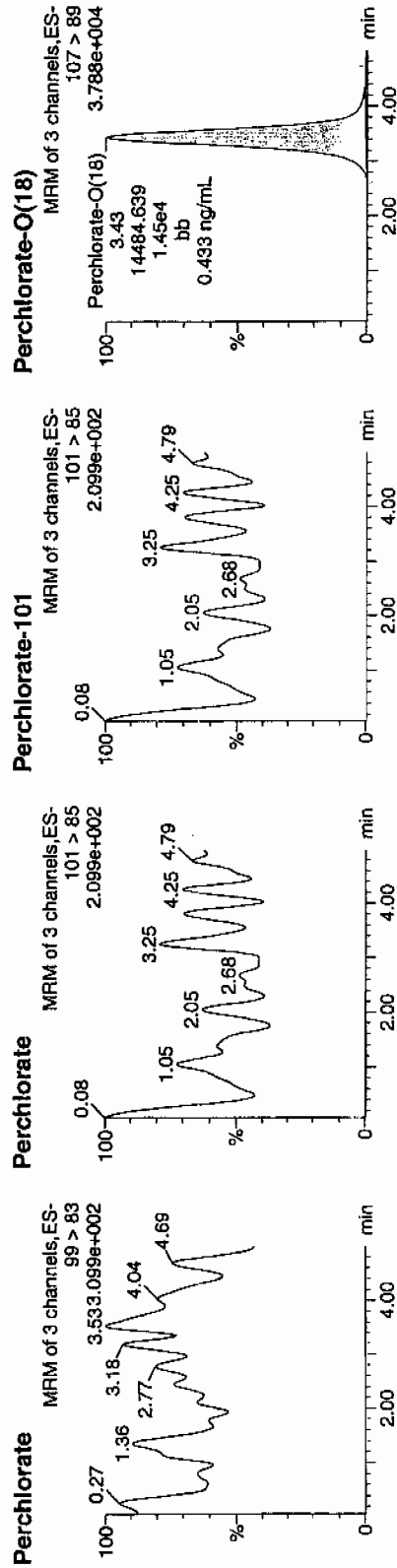
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qtd

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314036a
Date: 14-Mar-2010
Time: 20:23:35
ID: IPB005
Vial: 1:1.A

03-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB005	Perchlorate	99 > 83											0.00
IPB005	Perchlorate-101	101 > 85											
IPB005	Perchlorate-O(18)	107 > 89	3.43	14484.639	14484.639	bb			0.4329	86.57	-13.43	330.725	

MAF
3/16/10

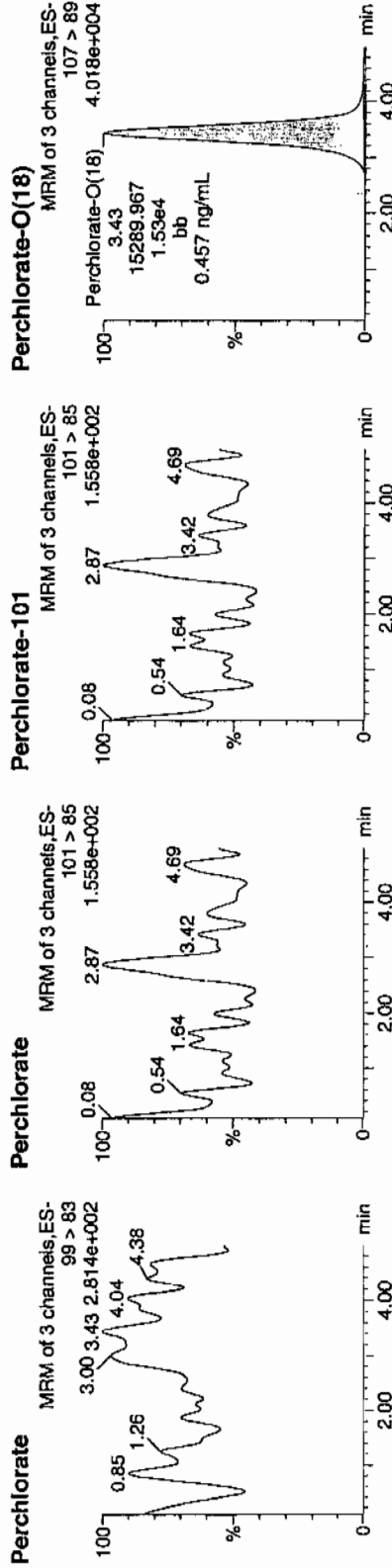
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314041a
Date: 14-Mar-2010
Time: 21:04:20
ID: IPB006
Vial: 1:1,A

03-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
IPB006	Perchlorate	99 > 83											0.00
IPB006	Perchlorate-101	101 > 85											
IPB006	Perchlorate-O(18)	107 > 89	3.43	15289.967	15289.967	bb			0.4569	91.39	-8.61	4719.0...	

15289.967
3/16/10

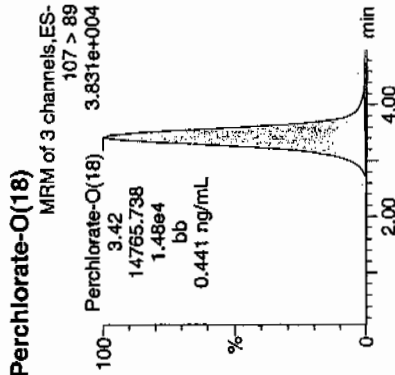
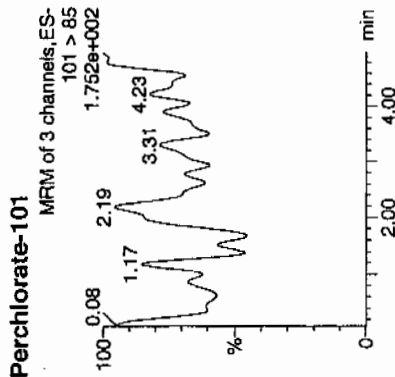
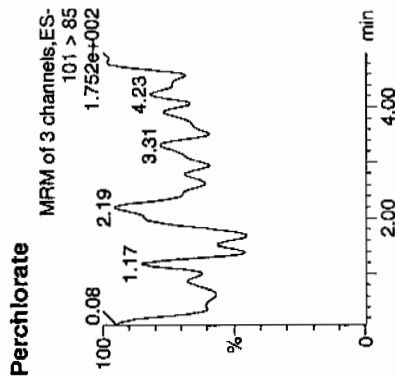
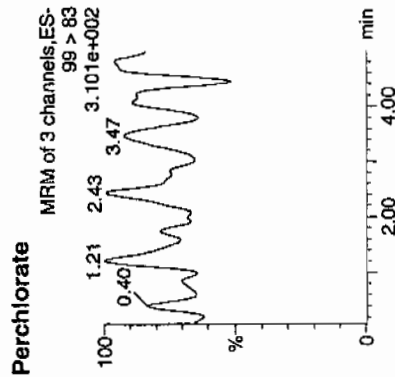
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314049a
Date: 14-Mar-2010
Time: 22:09:28
ID: IPB007
Vial: 1:1,A

03-15-10



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	3.42	14765.738	14765.738	bb			0.4413	88.25	-11.75	2275.0...	

1477
3/15/10

Nairb.ref

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

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

QUANTO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

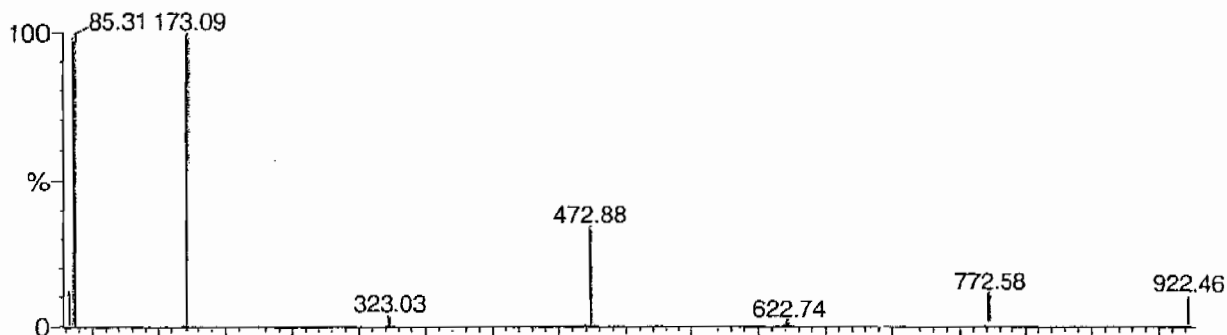
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

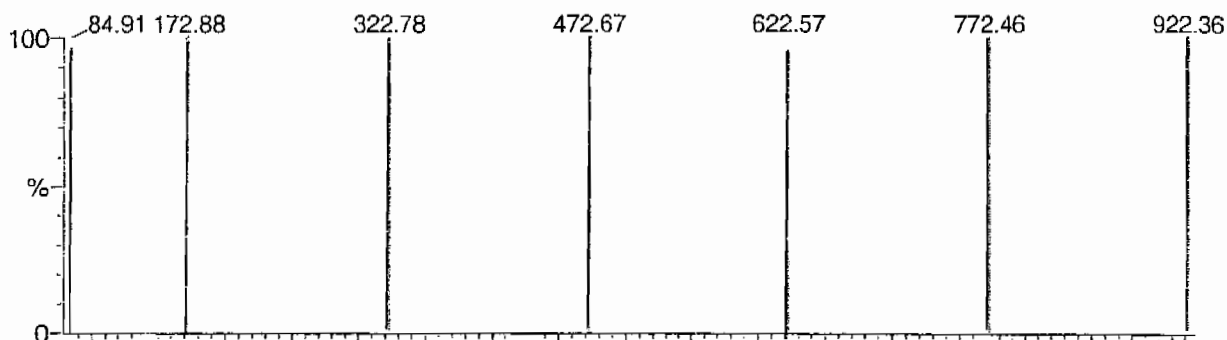
POINTS HIGHLIGHTED BY CURV 01-01-08

Data file: STATMS1 - Uncalibrated

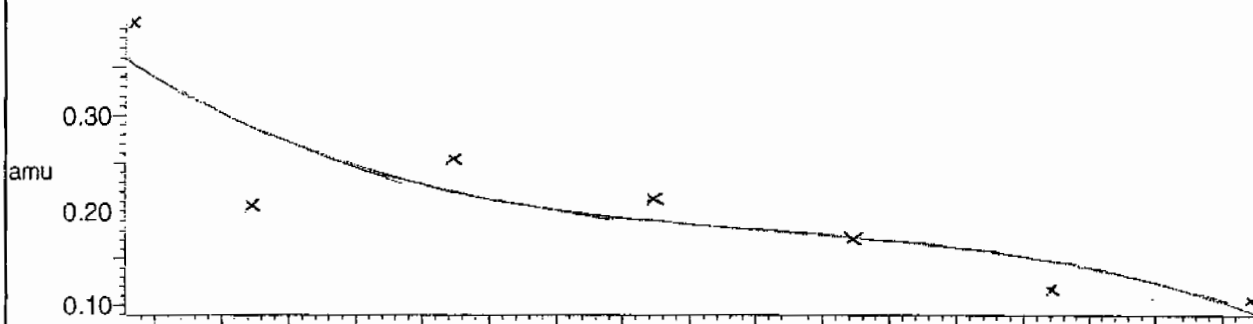
7 matches of 7 tested references



Reference file: Nairb

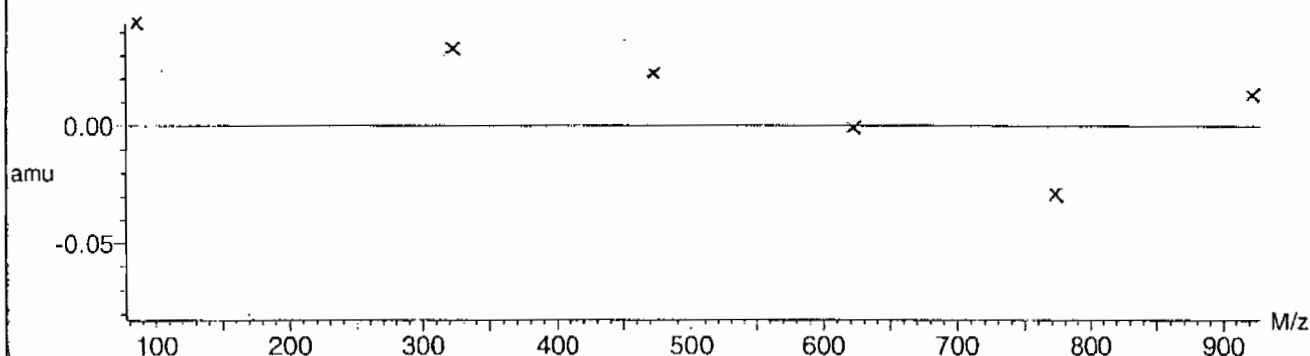


Mass difference (Raw - Ref mass)



Residuals

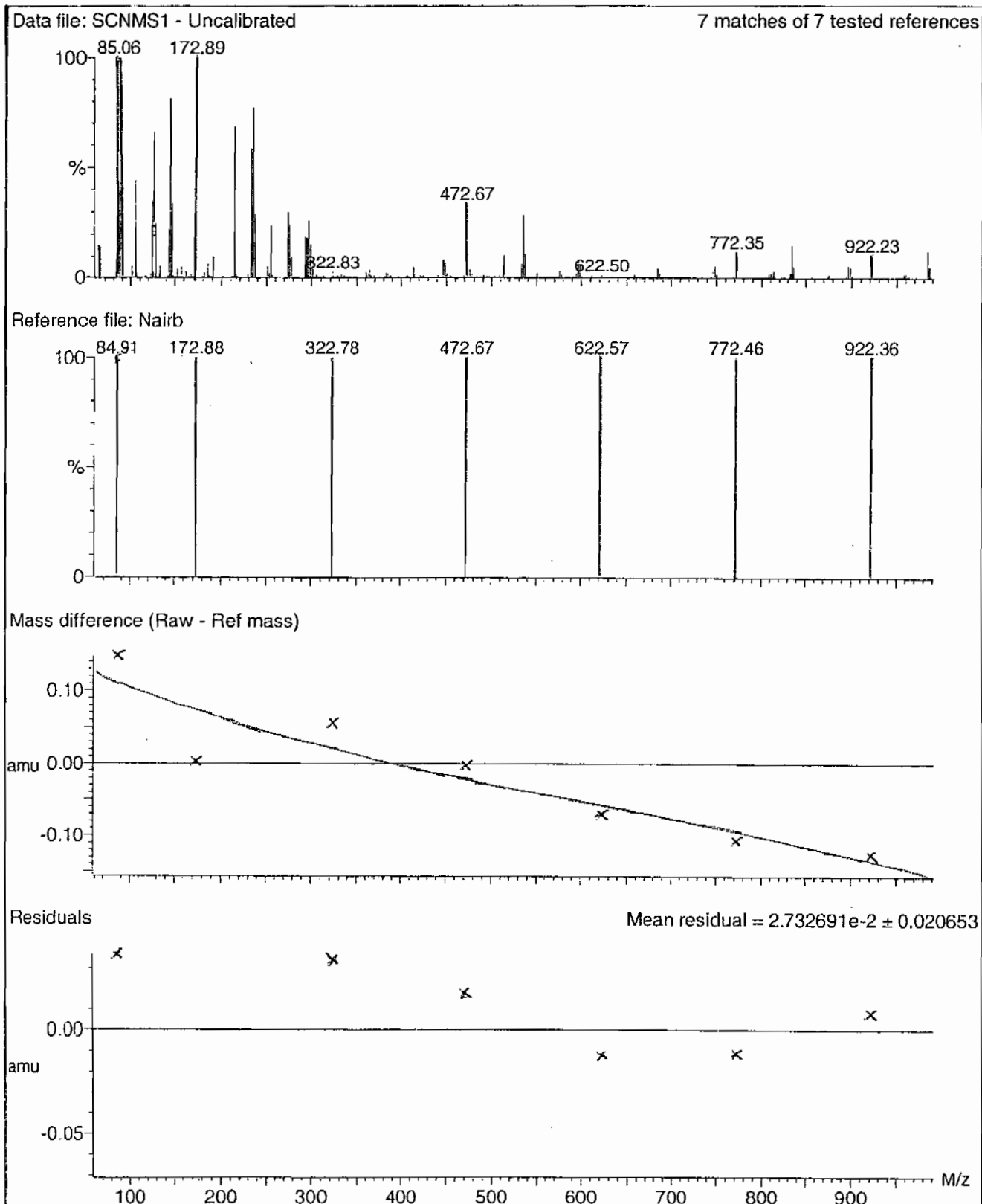
Mean residual = $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

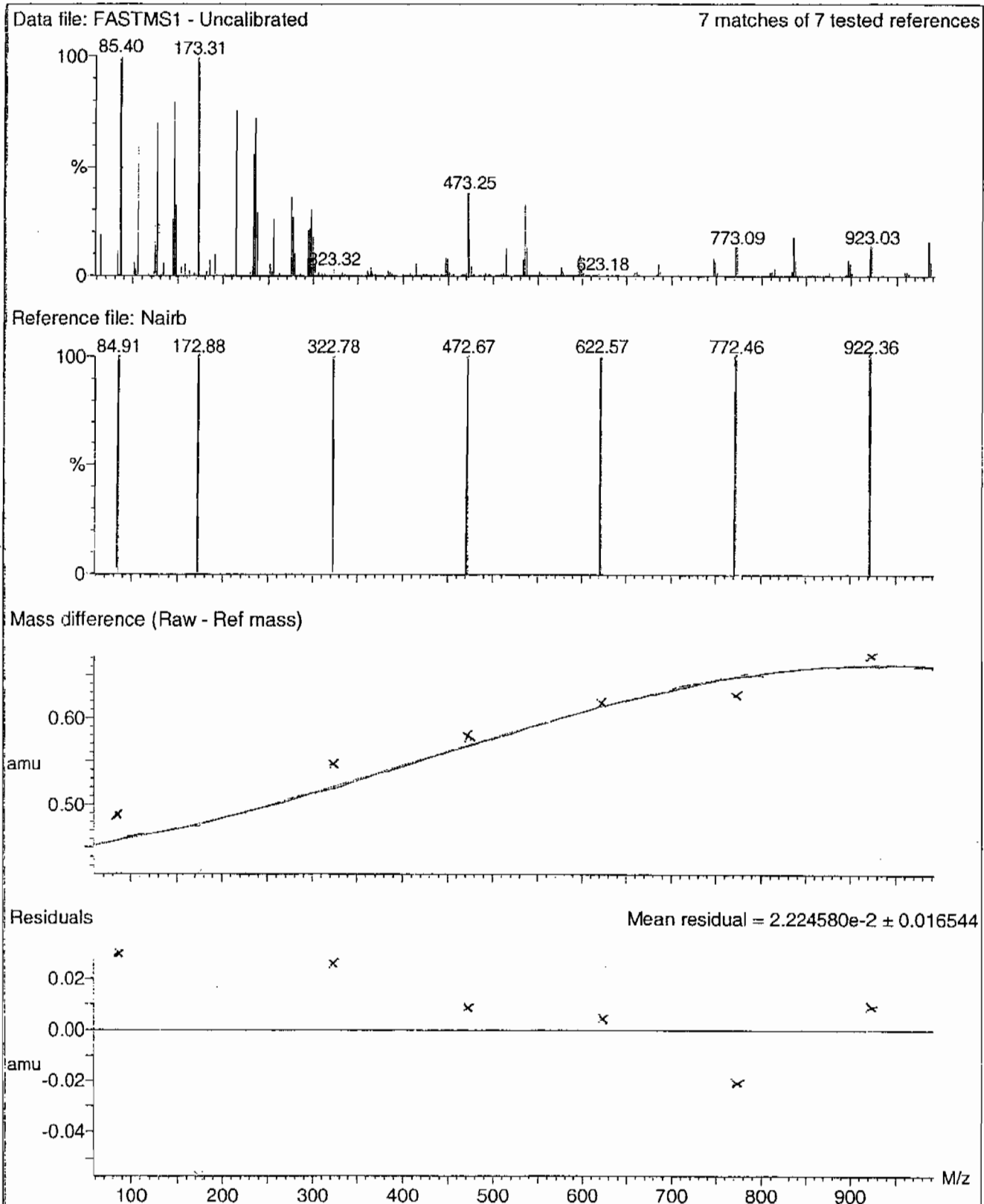
Printed: Tue Jan 08 12:20:09 2008



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

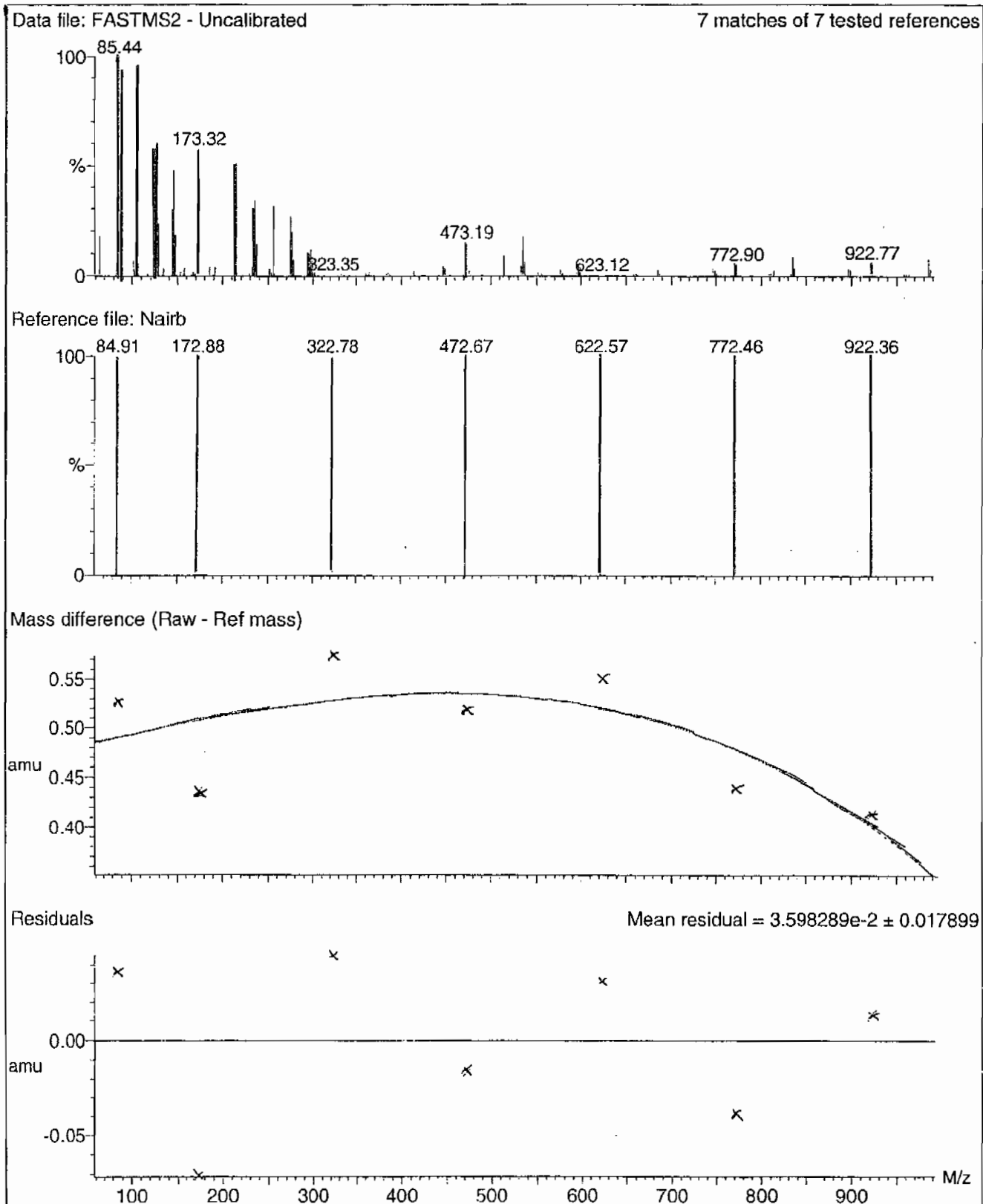
Printed: Tue Jan 08 12:21:04 2008



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:23:51 2008



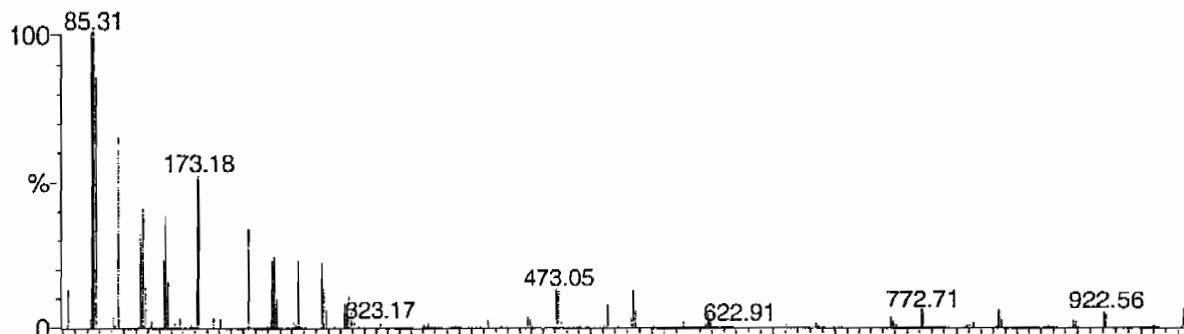
Calibration Report - MS2 Scanning

Page 1 of 1

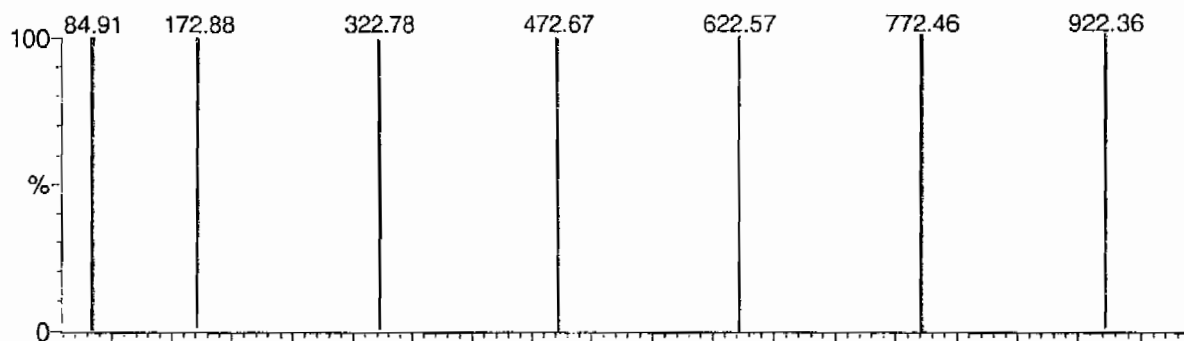
Printed: Tue Jan 08 12:22:56 2008

Data file: SCNMS2 - Uncalibrated

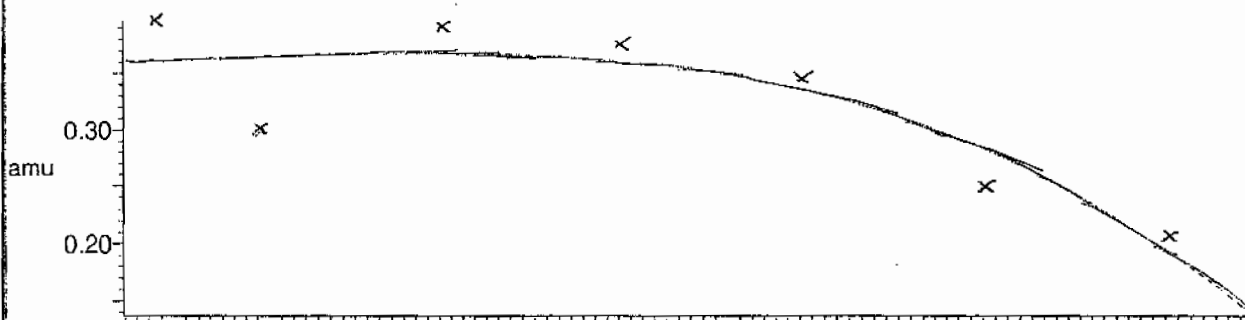
7 matches of 7 tested references



Reference file: Nairb

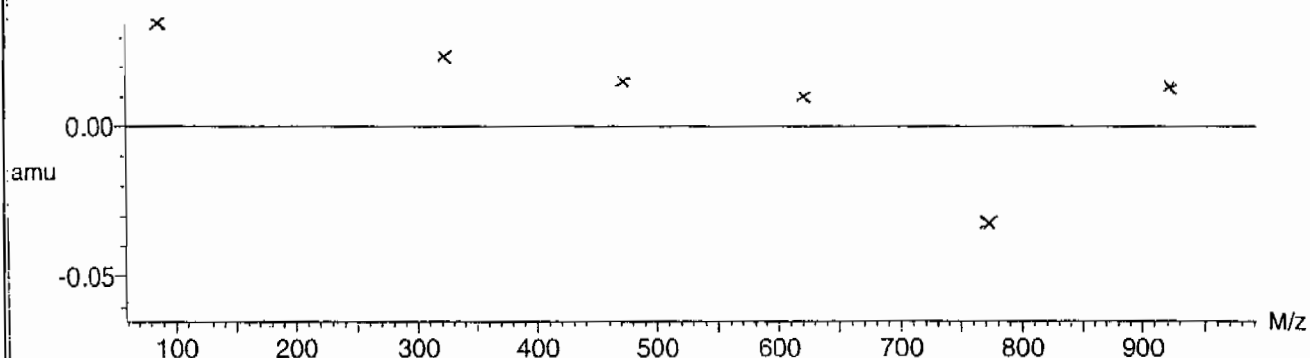


Mass difference (Raw - Ref mass)



Residuals

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



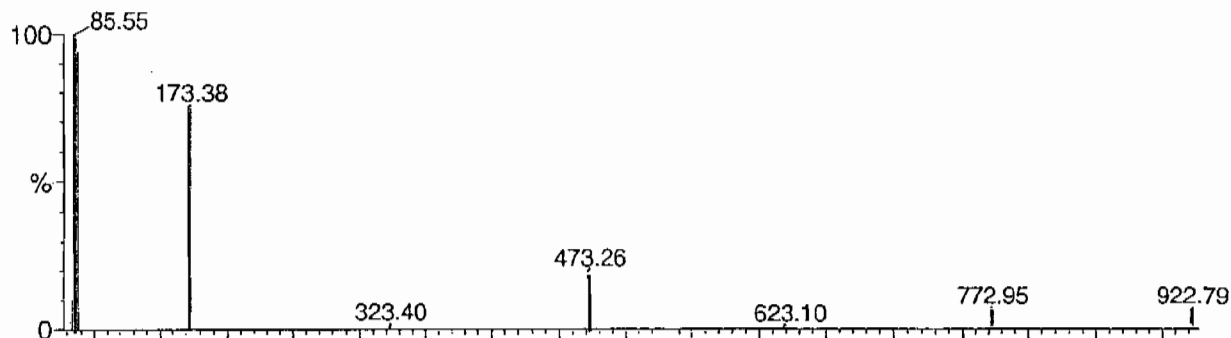
Calibration Report - MS2 Static

Page 1 of 1

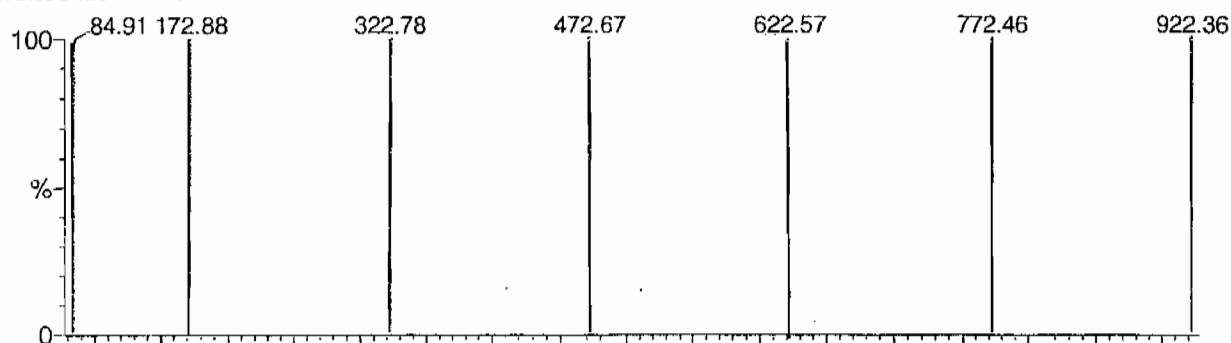
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Data file: STATMS2 - Uncalibrated

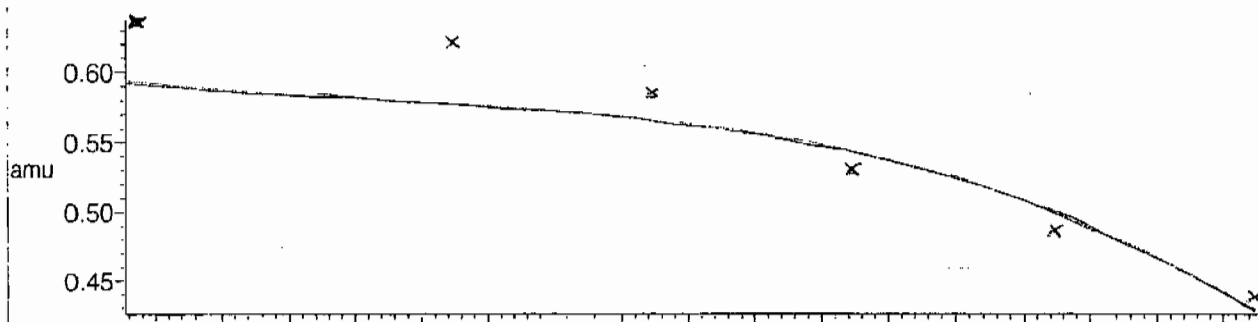
7 matches of 7 tested references



Reference file: Nairb

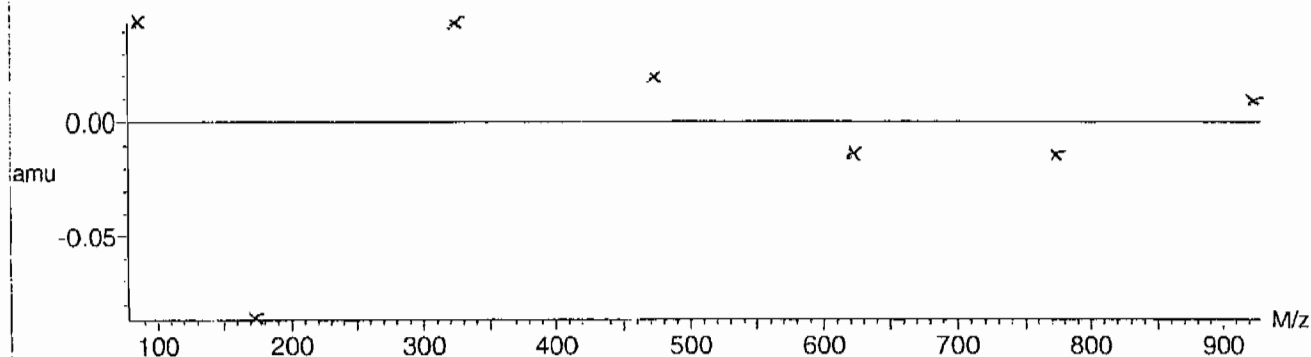


Mass difference (Raw - Ref mass)



Residuals

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



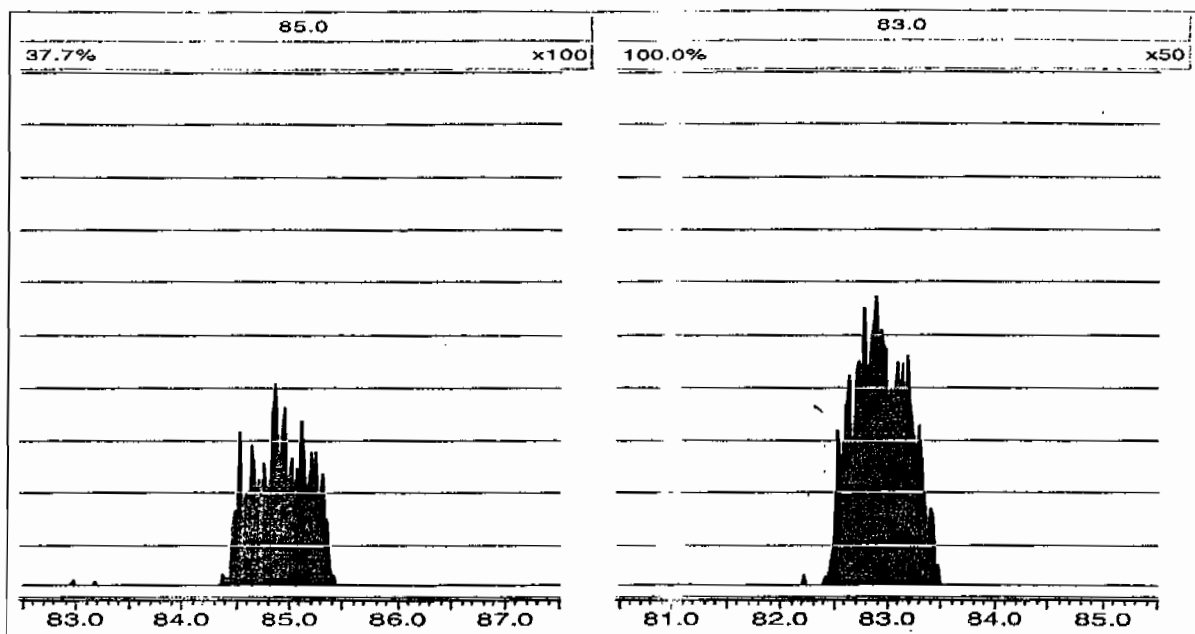
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Sunday, March 14, 2010 11:36:48 Eastern Standard Time



Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-1983-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS

HPPLC 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	per0314006a	14-MAR-10	17326				
Lower Area Limit			8663				
Upper Area Limit			34652				
1202054222	per0314012a	14-MAR-10 17:09	15696.9	3.48	3.45797	.994	
1202054223	per0314013a	14-MAR-10 17:17	15699.2	3.48	3.49522	1.004	
1202054226	per0314014a	14-MAR-10 17:25	17337.1	3.52	3.54497	1.007	
247794001	per0314033a	14-MAR-10 19:59	15980.8	3.43	3.45797	1.008	
247794002	per0314034a	14-MAR-10 20:07	16178.5	3.43	3.43317	1.001	
247794003	per0314038a	14-MAR-10 20:40	15795.8	3.45	3.44547	.999	
247794004	per0314039a	14-MAR-10 20:48	15234.4	3.43			
247794005	per0314040a	14-MAR-10 20:56	15267.8	3.43			

SAMPLE DATA

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: 957940
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8317
 Date Received: 23-FEB-10
 GEL Job No (SDG): 10-1983-1
 GEL Sample ID: 247794001
 Date Filtered: 06-MAR-10
 Injection Volume (uL): 20
 %Solids: 93.7

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.534	2.14	0.534	ug/kg	U	1	14-MAR-10 19:59	per0314033a
	Perchlorate Isotope Ratio						1	14-MAR-10 19:59	per0314033a
14797-73-0	Perchlorate-101	.534	2.14	0.534	ug/kg	U	1	14-MAR-10 19:59	per0314033a
	Perchlorate-O(18)			5.10	ug/kg		1	14-MAR-10 19:59	per0314033a

[^] 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

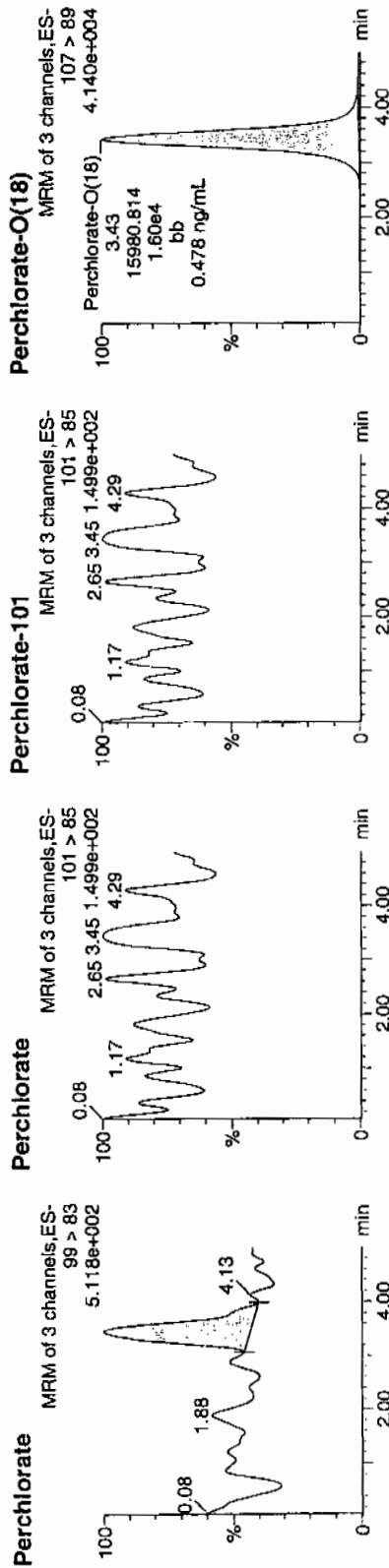
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314033a
Date: 14-Mar-2010
Time: 19:59:09
ID: 247794001
Vial: 1:6,A

WJ
03-15-10

WJW | 957943 | 5020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
247794001	Perchlorate	99 > 83	3.46	122.230	122.230	bb			0.0031			15.131	0.00
247794001	Perchlorate-101	101 > 85											
247794001	Perchlorate-O(18)	107 > 89	3.43	15980.814	15980.814	bb			0.4776	95.52	-4.48	1259.8...	

WJW
3/16/10

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: 257940
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8319
 Date Received: 23-FEB-10
 GEL Job No (SDG): 10-1983-1
 GEL Sample ID: 247794002
 Date Filtered: 06-MAR-10
 Injection Volume (uL): 20
 %Solids: 96.7

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.517	2.07	0.517	ug/kg	U	1	14-MAR-10 20:07	per0314034a
	Perchlorate Isotope Ratio						1	14-MAR-10 20:07	per0314034a
14797-73-0	Perchlorate-101	.517	2.07	0.517	ug/kg	U	1	14-MAR-10 20:07	per0314034a
	Perchlorate-O(18)			5.00	ug/kg		1	14-MAR-10 20:07	per0314034a

[^] 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\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314034a

Date: 14-Mar-2010

Time: 20:07:21

ID: 247794002

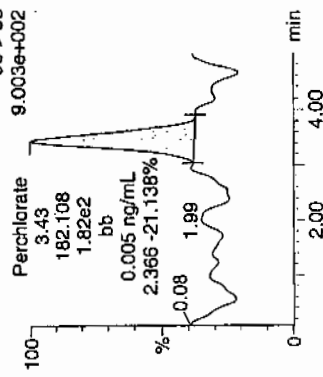
Vial: 1:6,B

33-15-10

17777 | 957543 | 50720 | 11

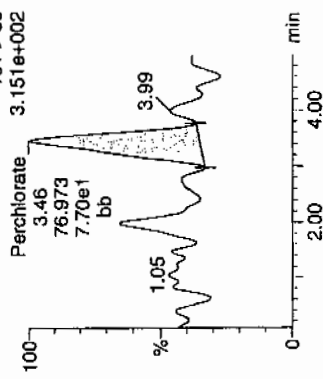
Perchlorate

MRM of 3 channels, ES-
99 > 83



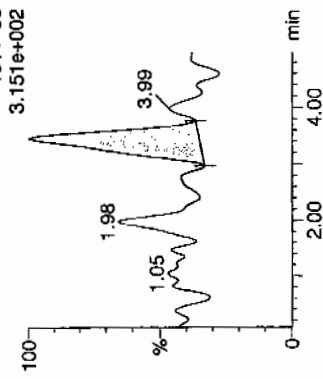
Perchlorate

MRM of 3 channels, ES-
101 > 85



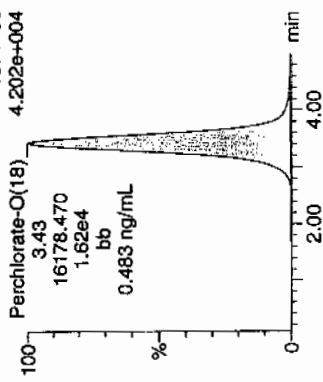
Perchlorate-101

MRM of 3 channels, ES-
101 > 85



Perchlorate-O(18)

MRM of 3 channels, ES-
107 > 89



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
247794002	Perchlorate	99 > 83	3.43	182.108	182.108	bb			0.0047			29.550	2.37
247794002	Perchlorate-101	101 > 85	3.46	76.973	76.973	bb			0.0061			9.898	
247794002	Perchlorate-O(18)	107 > 89	3.43	16178.470	16178.470	bb			0.4835	96.70	-3.30	3178.7...	

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3/16/10

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: 957940
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8316
 Date Received: 23-FEB-10
 GEL Job No (SDG): 10-1983-1
 GEL Sample ID: 247794003
 Date Filtered: 06-MAR-10
 Injection Volume (uL): 20
 %Solids: 96

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.521	2.08	0.521	ug/kg	U	1	14-MAR-10 20:40	per0314038a
	Perchlorate Isotope Ratio						1	14-MAR-10 20:40	per0314038a
14797-73-0	Perchlorate-101	.521	2.08	0.521	ug/kg	U	1	14-MAR-10 20:40	per0314038a
	Perchlorate-O(18)			4.92	ug/kg		1	14-MAR-10 20:40	per0314038a

[^] 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

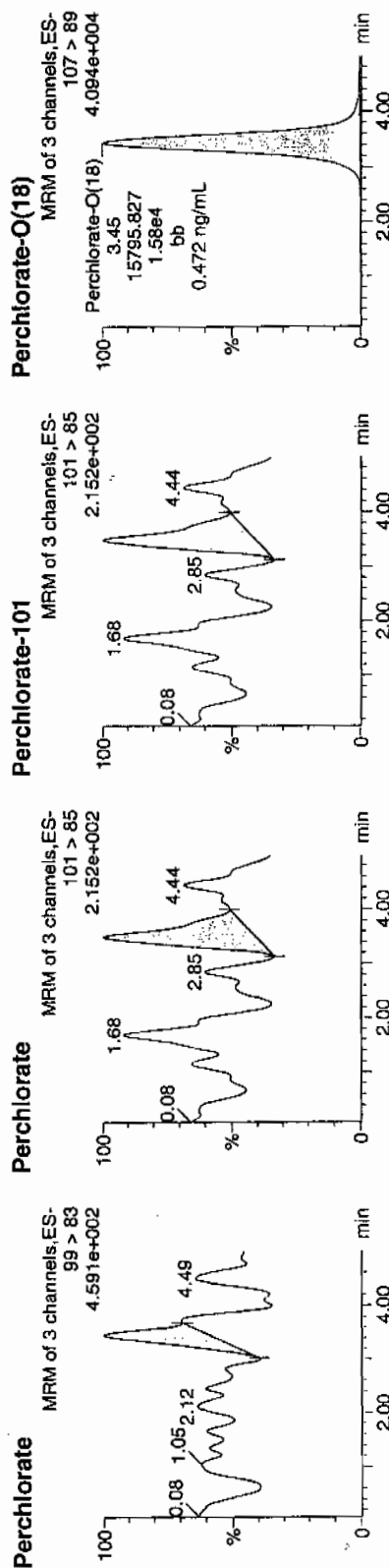
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314038a
Date: 14-Mar-2010
Time: 20:40:12
ID: 247794003
Vial: 1:6,C

03-15-10

15795827 | 5072 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
247794003	Perchlorate	99 > 83	3.45	58.053	58.053	bb			0.0015			7.843	1.21
247794003	Perchlorate-101	101 > 85	3.50	48.115	48.115	bb			0.0038			9.064	
247794003	Perchlorate-O(18)	107 > 89	3.45	15795.827	15795.827	bb			0.4720	94.41	-5.59	7205.9...	

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3/16/10

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: 957940
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8326
 Date Received: 23-FEB-10
 GEL Job No (SDG): 10-1983-1
 GEL Sample ID: 247794004
 Date Filtered: 06-MAR-10
 Injection Volume (uL): 20
 %Solids: 96

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.521	2.08	0.521	ug/kg	U	1	14-MAR-10 20:48	per0314039a
	Perchlorate Isotope Ratio						1	14-MAR-10 20:48	per0314039a
14797-73-0	Perchlorate-101	.521	2.08	0.521	ug/kg	U	1	14-MAR-10 20:48	per0314039a
	Perchlorate-O(18)			4.74	ug/kg		1	14-MAR-10 20:48	per0314039a

[^] 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\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314039a

Date: 14-Mar-2010

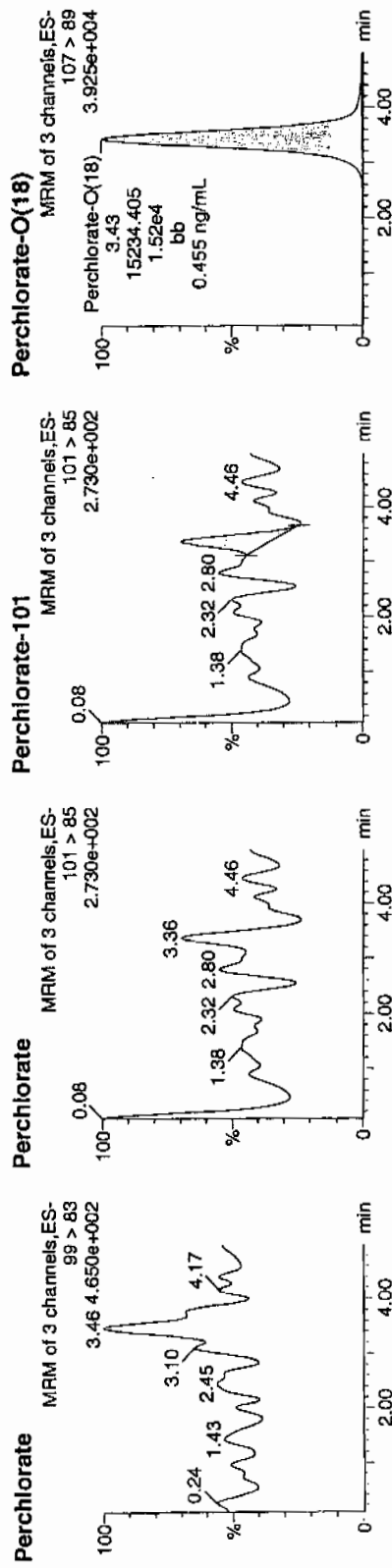
Time: 20:48:15

ID: 247794004

Vial: 1:6,D

03-15-10

12221957943 | 5000 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
247794004	Perchlorate	99 > 83											0.00
247794004	Perchlorate-101	101 > 85	3.36	23.701	23.701	bb			0.0019			4.543	
247794004	Perchlorate-Q(18)	107 > 89	3.43	15234.405	15234.405	bb			0.4553	91.05	-8.95	1672.5...	

107
3/16/10

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: 957940

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8318

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1983-1

GEL Sample ID: 247794005

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 95.5

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.524	2.1	0.524	ug/kg	U	1	14-MAR-10 20:56	per0314040a
	Perchlorate Isotope Ratio						1	14-MAR-10 20:56	per0314040a
14797-73-0	Perchlorate-101	.524	2.1	0.524	ug/kg	U	1	14-MAR-10 20:56	per0314040a
	Perchlorate-O(18)			4.78	ug/kg		1	14-MAR-10 20:56	per0314040a

[^] 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

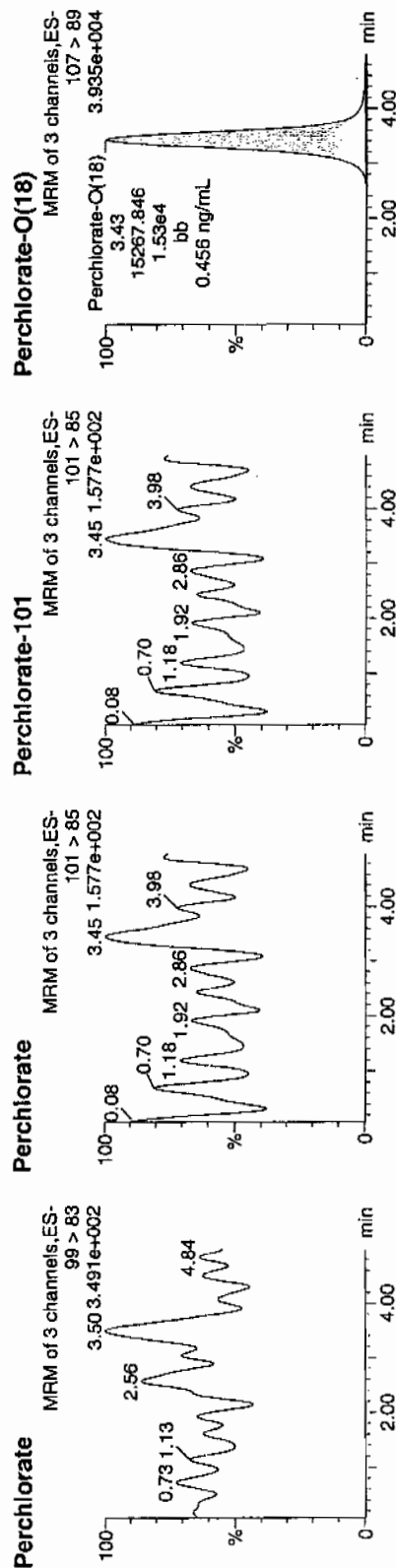
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Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314040a
Date: 14-Mar-2010
Time: 20:56:17
ID: 247794005
Vial: 1:6,E

03-15-10

16222 | 957943 | 5220 | 1 | 1



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
247794005	Perchlorate	99 > 83											0.00
247794005	Perchlorate-101	101 > 85											
247794005	Perchlorate-O(18)	107 > 89	3.43	15267.846	15267.846	bb			0.4563	91.25	-8.75	2213.9...	

16222
3/16/10

STANDARDS DATA

Perchlorate Initial Calibration

GEL Job No.(SDG): 10-1983-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 14-MAR-10

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

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

Parname Perchlorate

Coefficient of Determination:

Calibration Curve: 39154.12

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

GEL Job No.(SDG): 10-1983-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 14-MAR-10

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

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

Paramname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 12679.04

Response Type: External Standard

Curve Type: RF

Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time

Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per031410a.mdb 15 Mar 2010 08:54:46

Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per031410a.cdb 15 Mar 2010 08:56:54

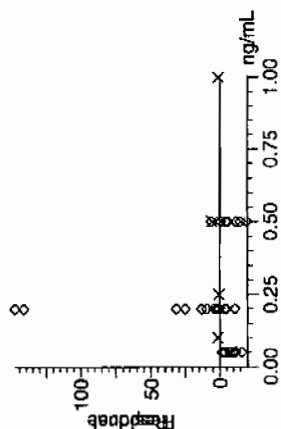
Compound name: Perchlorate

Response Factor: 39154.1

RRF SD: 1960.58, % Relative SD: 5.00734 ✓

Response type: External Std, Area ✓

Curve type: RF ✓



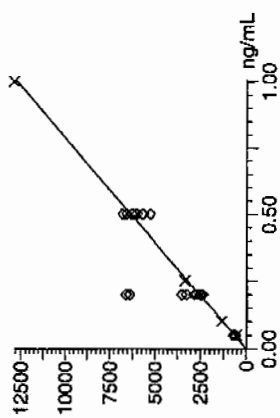
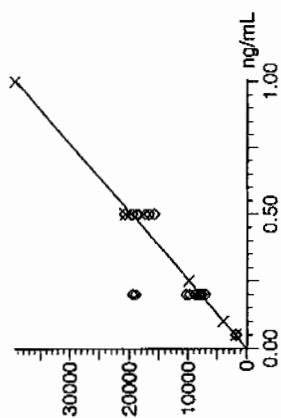
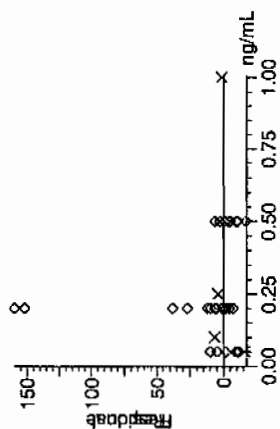
Compound name: Perchlorate-101

Response Factor: 12679

RRF SD: 1159.92, % Relative SD: 9.14836 ✓

Response type: External Std, Area ✓

Curve type: RF ✓



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1477
3/16/10

Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

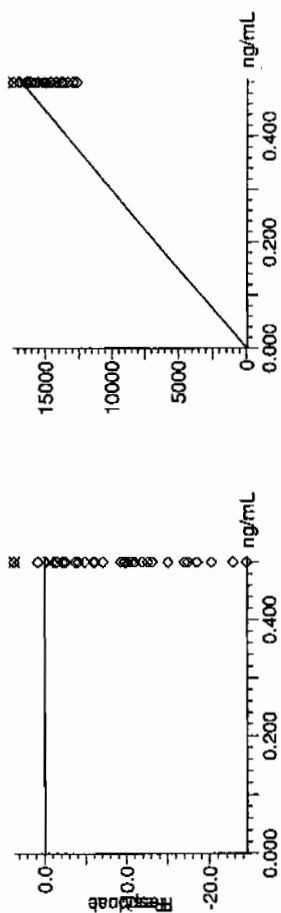
Compound name: Perchlorate-O(18)

Response Factor: 33462.4

RRF SD: 678.465, % Relative SD: 2.02755

Response type: External Std, Area

Curve type: Rf



Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1983-1

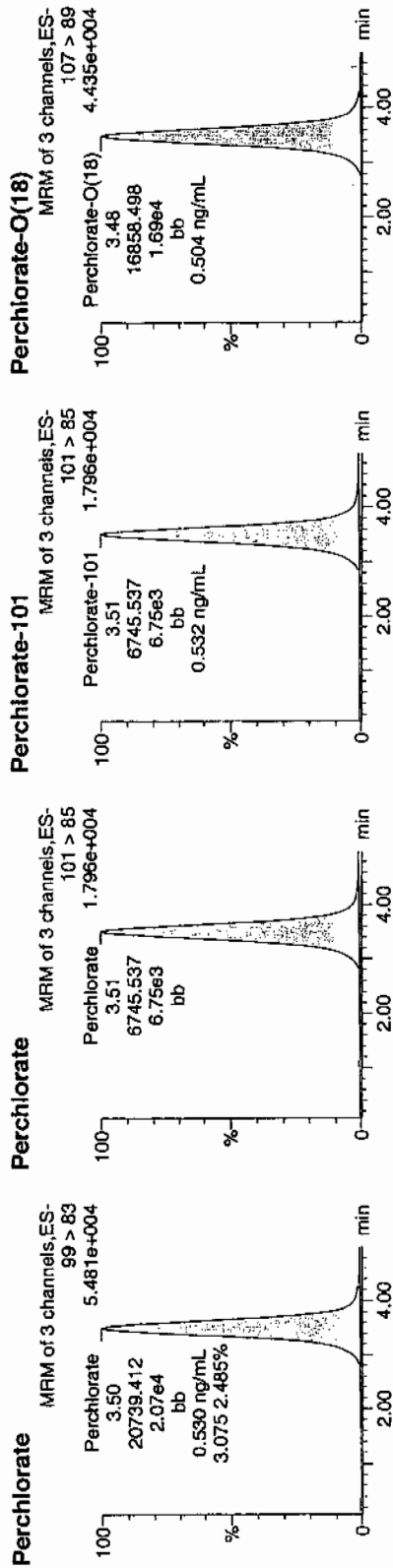
Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.53	105.94	14-MAR-10 16:45	per0314009a
Perchlorate Isotope Ratio		3.07		14-MAR-10 16:45	per0314009a
Perchlorate-101	.5	.53	106.4	14-MAR-10 16:45	per0314009a

Name: per0314009a
Date: 14-Mar-2010
Time: 16:45:39
ID: WCL100309-06ICV
Vial: 1:2,A

Pure
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03-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	pg/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-06ICV	Perchlorate	99 > 83	3.50	20739.412	20739.412	bb			0.5297	105.94	5.94	4083.9...	3.07
WCL100309-06ICV	Perchlorate-101	101 > 85	3.51	6745.537	6745.537	bb			0.5320	106.40	6.40	253.341	
WCL100309-06ICV	Perchlorate-O(18)	107 > 89	3.48	16858.498	16858.498	bb			0.5038	100.76	0.76	7322.5...	

$$\frac{20739.412}{39154.1} = 0.5297$$

not
3/14/10

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1983-1

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	99.52	14-MAR-10 18:30	per0314022a
Perchlorate Isotope Ratio		3.12		14-MAR-10 18:30	per0314022a
Perchlorate-101	.5	.49	98.56	14-MAR-10 18:30	per0314022a
Perchlorate	.5	.5	99.03	14-MAR-10 20:15	per0314035a
Perchlorate Isotope Ratio		2.97		14-MAR-10 20:15	per0314035a
Perchlorate-101	.5	.52	103.01	14-MAR-10 20:15	per0314035a
Perchlorate	.5	.5	99.09	14-MAR-10 22:01	per0314048a
Perchlorate Isotope Ratio		3.18		14-MAR-10 22:01	per0314048a
Perchlorate-101	.5	.48	96.26	14-MAR-10 22:01	per0314048a

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
 Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314022a

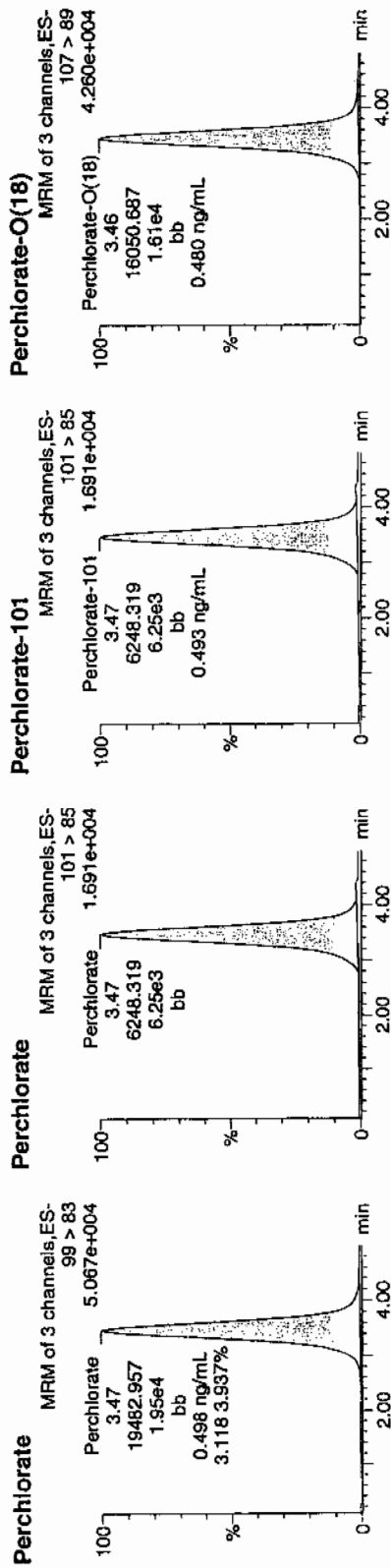
Date: 14-Mar-2010

Time: 18:30:11

ID: WCL100309-06CCV

Vial: 1:2,A

Pure
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03-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-06CCV	Perchlorate	99 > 83	3.47	19482.957	19482.957	bb			0.4976	99.52	-0.48	1472.0...	3.12
WCL100309-06CCV	Perchlorate-101	101 > 85	3.47	6248.319	6248.319	bb			0.4928	98.56	-1.44	709.723	
WCL100309-06CCV	Perchlorate-O(18)	107 > 89	3.46	16050.687	16050.687	bb			0.4787	95.93	-4.07	2122.7...	

Handwritten notes: 14877, 3/16/10

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314035a

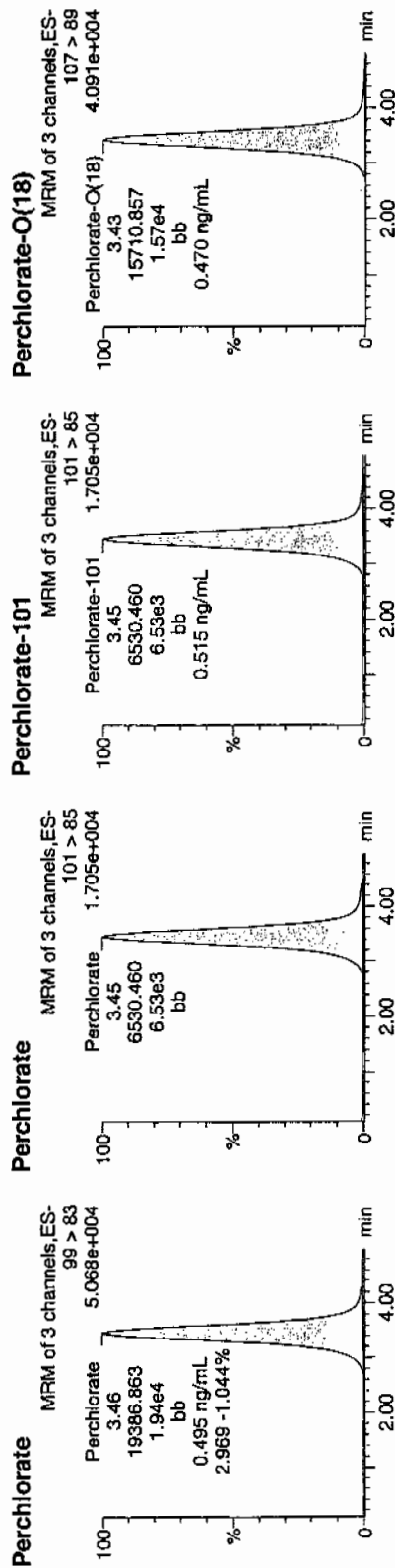
Date: 14-Mar-2010

Time: 20:15:24

ID: WCL100309-06CCV

Vial: 1:2,A

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03-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-06CCV	Perchlorate	99 > 83	3.46	19386.863	19386.863	bb			0.4951	99.03	-0.97	5888.7...	2.97
WCL100309-06CCV	Perchlorate-101	101 > 85	3.45	6530.460	6530.460	bb			0.5151	103.01	3.01	2522.5...	
WCL100309-06CCV	Perchlorate-O(18)	107 > 89	3.43	15710.857	15710.857	bb			0.4695	93.90	-6.10	4011.6...	

4.077
3/14/10

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charfers W. Wilson

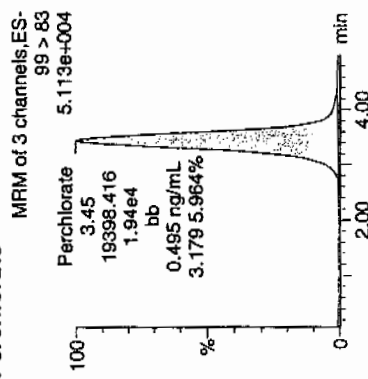
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Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

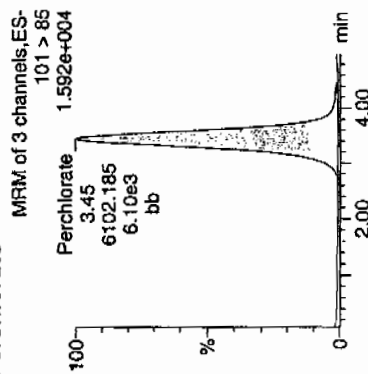
Name: per0314048a
Date: 14-Mar-2010
Time: 22:01:03
ID: WCL100309-06CCV
Vial: 1:2,A

Pure
0.452
03-15-10

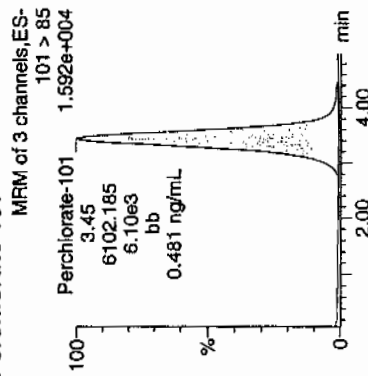
Perchlorate



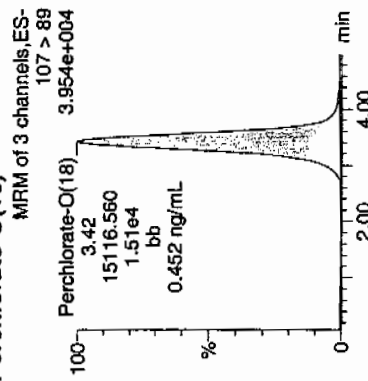
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-06CCV	Perchlorate	99 > 83	3.45	19398.416	19398.416	bb			0.4954	99.09	-0.91	1156.9...	3.18
WCL100309-06CCV	Perchlorate-101	101 > 85	3.45	6102.185	6102.185	bb			0.4813	96.26	-3.74	549.321	
WCL100309-06CCV	Perchlorate-O(18)	107 > 89	3.42	15116.560	15116.560	bb			0.4517	90.35	-9.65	2164.6...	

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Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1983-1

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	97.03	14-MAR-10 17:01	per0314011a
Perchlorate Isotope Ratio		2.72		14-MAR-10 17:01	per0314011a
Perchlorate-101	.05	.06	110.09	14-MAR-10 17:01	per0314011a
Perchlorate	.05	.05	98.74	14-MAR-10 18:46	per0314024a
Perchlorate Isotope Ratio		2.77		14-MAR-10 18:46	per0314024a
Perchlorate-101	.05	.06	110.06	14-MAR-10 18:46	per0314024a
Perchlorate	.05	.05	93.02	14-MAR-10 20:32	per0314037a
Perchlorate Isotope Ratio		2.73		14-MAR-10 20:32	per0314037a
Perchlorate-101	.05	.05	105.06	14-MAR-10 20:32	per0314037a
Perchlorate	.05	.05	98.54	14-MAR-10 22:17	per0314050a
Perchlorate Isotope Ratio		3.35		14-MAR-10 22:17	per0314050a

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1983-1

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate-101	.05	.05	90.8	14-MAR-10 22:17	per0314050a
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Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314011a

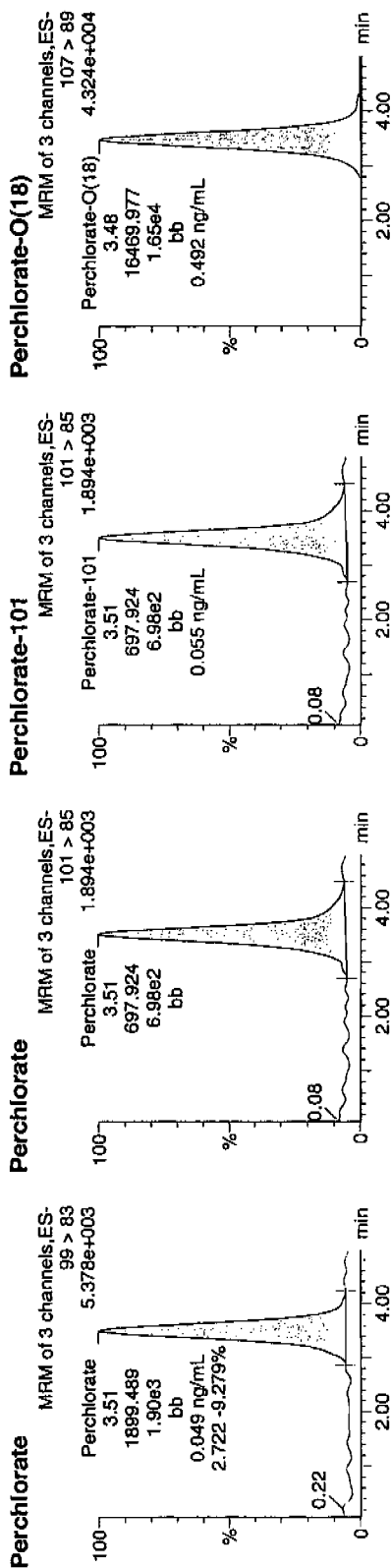
Date: 14-Mar-2010

Time: 17:01:44

ID: WCL100309-07CRI

Vial: 1:2,B

Pur
03-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	pg/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-07CRI	Perchlorate	99 > 83	3.51	1899.489	1899.489	bb			0.0485	97.03	-2.97	100.911	2.72
WCL100309-07CRI	Perchlorate-101	101 > 85	3.51	697.924	697.924	bb			0.0550	110.09	10.09	108.979	
WCL100309-07CRI	Perchlorate-O(18)	107 > 89	3.48	16469.977	16469.977	bb			0.4922	98.44	-1.56	5729.9...	

$$\frac{1899.489}{59154.1} = 0.0485$$

WCL
3/16/10

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
 Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314024a

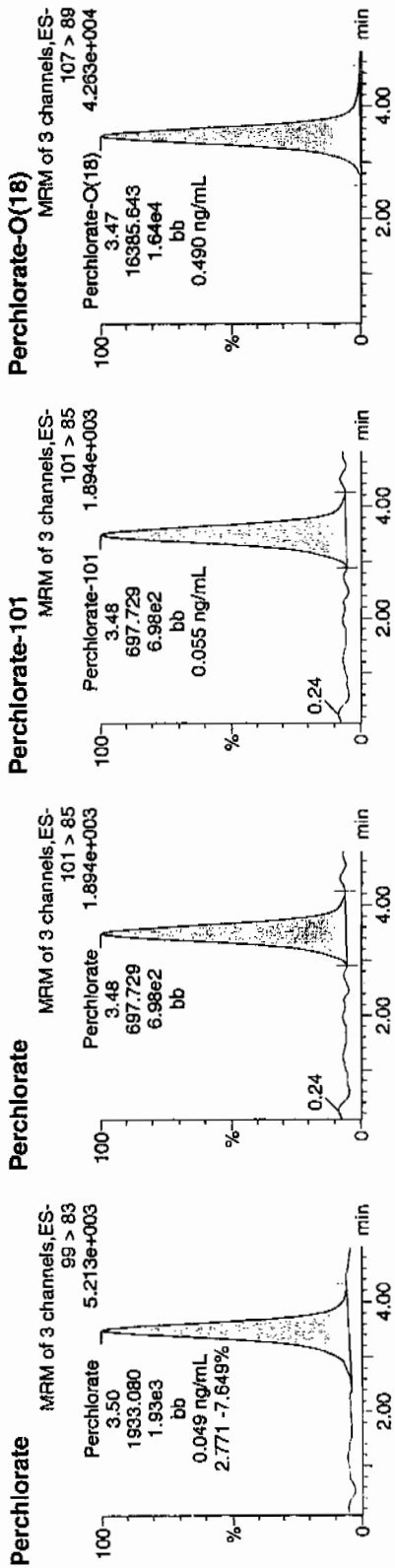
Date: 14-Mar-2010

Time: 18:46:16

ID: WCL100309-07CRI

Vial: 1:2,B

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 and
 03-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100309-07CRI	Perchlorate	99 > 83	3.50	1933.080	1933.080	bb			0.0494	98.74	-1.26	118.141	2.77
WCL100309-07CRI	Perchlorate-101	101 > 85	3.48	697.729	697.729	bb			0.0550	110.06	10.06	138.112	
WCL100309-07CRI	Perchlorate-O(18)	107 > 89	3.47	16385.643	16385.643	bb			0.4897	97.93	-2.07	1621.0...	

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 3/16/10

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qid

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
 Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314037a

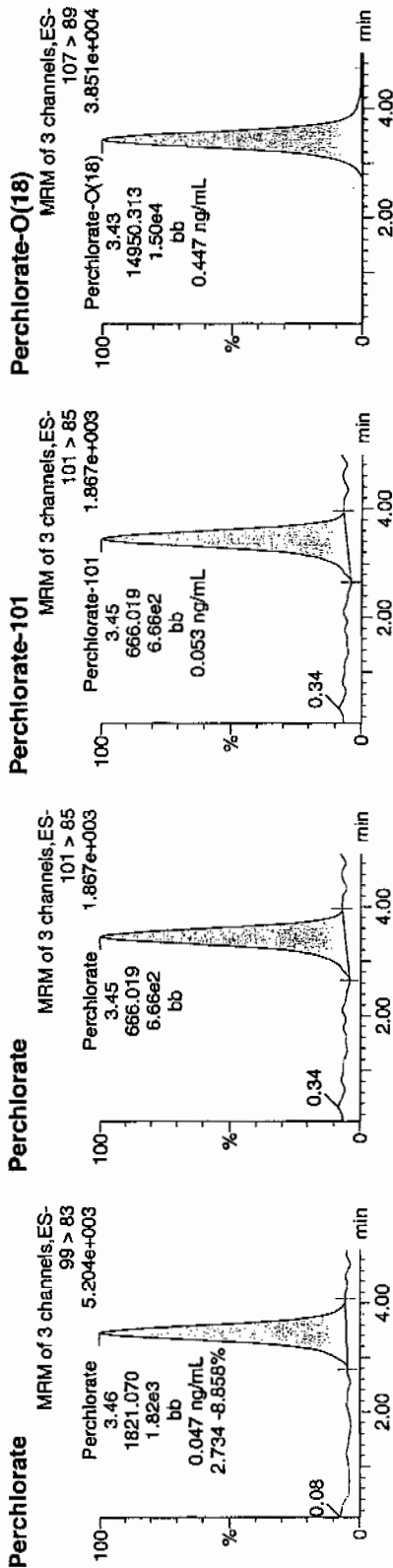
Date: 14-Mar-2010

Time: 20:32:00

ID: WCL100309-07CRI

Vial: 1:2,B

Pure
 03-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100309-07CRI	Perchlorate	99 > 83	3.46	1821.070	1821.070	bb			0.0465	93.02	-6.98	81.504	2.73
WCL100309-07CRI	Perchlorate-101	101 > 85	3.45	666.019	666.019	bb			0.0525	105.06	5.06	97.852	
WCL100309-07CRI	Perchlorate-O(18)	107 > 89	3.43	14950.313	14950.313	bb			0.4468	89.36	-10.64	701.016	

3/16/10

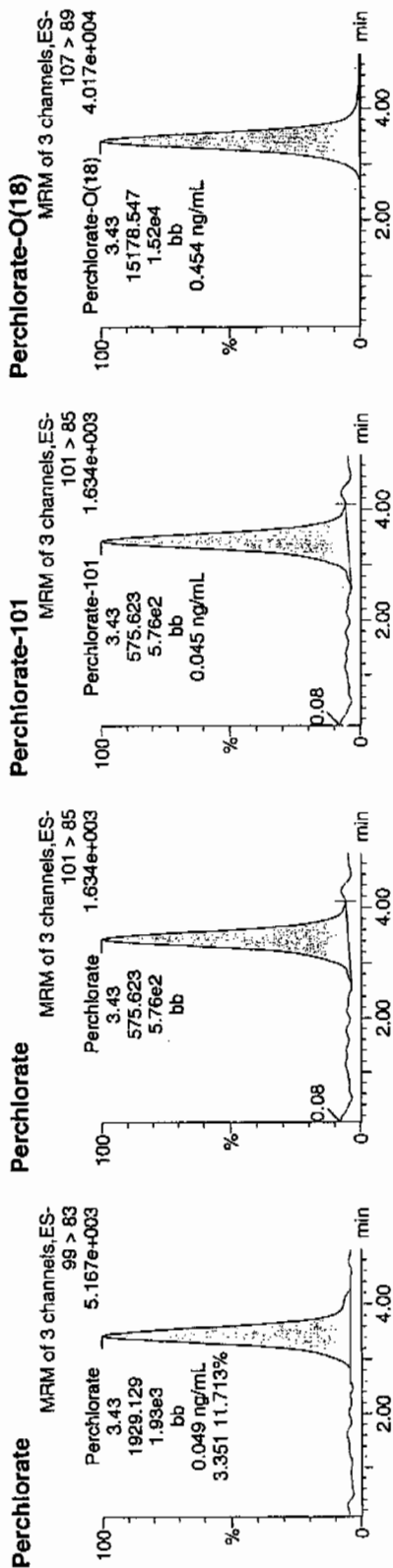
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314050a
Date: 14-Mar-2010
Time: 22:17:38
ID: WCL100309-07CRI
Vial: 1:2,B

Pure
0.03-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-07CRI	Perchlorate	99 > 83	3.43	1929.129	1929.129	bb			0.0493	98.54	-1.46	139.995	3.35
WCL100309-07CRI	Perchlorate-101	101 > 85	3.43	575.623	575.623	bb			0.0454	90.80	-9.20	79.878	
WCL100309-07CRI	Perchlorate-O(18)	107 > 89	3.43	15178.547	15178.547	bb			0.4536	90.72	-9.28	3402.8...	

WCL
3/16/10

QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: EPA 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 957940
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. MB
 Date Received: 06-MAR-10
 GEL Job No (SDG): 10-1983-1
 GEL Sample ID: 1202054222
 Date Filtered: 06-MAR-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	14-MAR-10 17:09	per0314012a
	Perchlorate Isotope Ratio						1	14-MAR-10 17:09	per0314012a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	14-MAR-10 17:09	per0314012a
	Perchlorate-O(18)			4.69	ug/kg		1	14-MAR-10 17:09	per0314012a

[^] 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\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314012a

Date: 14-Mar-2010

Time: 17:09:48

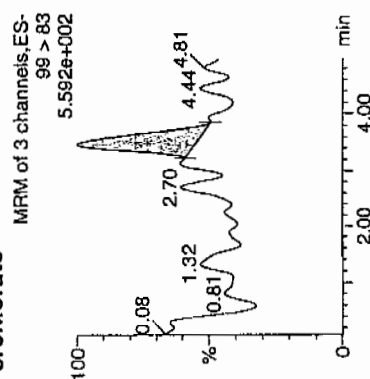
ID: 1202054222

Vial: 1:3,A

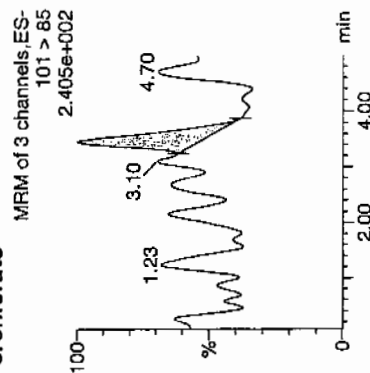
33-15-10

1202054222 | 3000 | MB | 11

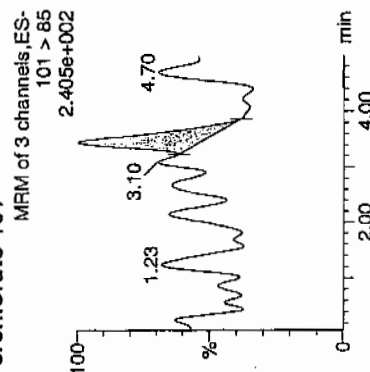
Perchlorate



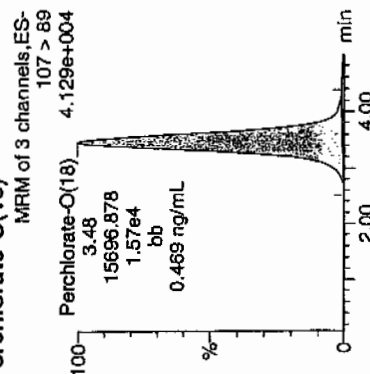
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	Conc (ng/mL)	% Rec	% Dev	S/N	Int Ratio
1202054222	Perchlorate	99 > 83	3.46	79.881	79.881	bb			0.0020			8.584	2.57
1202054222	Perchlorate-101	101 > 85	3.46	31.131	31.131	bb			0.0025			4.972	
1202054222	Perchlorate-O(18)	107 > 89	3.48	15696.878	15696.878	bb			0.4691	93.82	-6.18	335.431	

NOT
2/12/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC Client Sample No. LCS
 Lab Code: GEL Date Received: 06-MAR-10
 Instrument: LCMSMS GEL Job No (SDG): 10-1983-1
 Method: EPA 6850 Modified GEL Sample ID: 1202054223
 Matrix: SOIL Date Filtered: 06-MAR-10
 Extraction Batch ID: 957940 Injection Volume (uL): 20
 Extraction Type: Solid Prep %Solids: 100
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	2.02	ug/kg		1	14-MAR-10 17:17	per0314013a
	Perchlorate Isotope Ratio			3.11			1	14-MAR-10 17:17	per0314013a
14797-73-0	Perchlorate-101	.5	2	2.01	ug/kg		1	14-MAR-10 17:17	per0314013a
	Perchlorate-O(18)			4.69	ug/kg		1	14-MAR-10 17:17	per0314013a

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

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

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qid

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

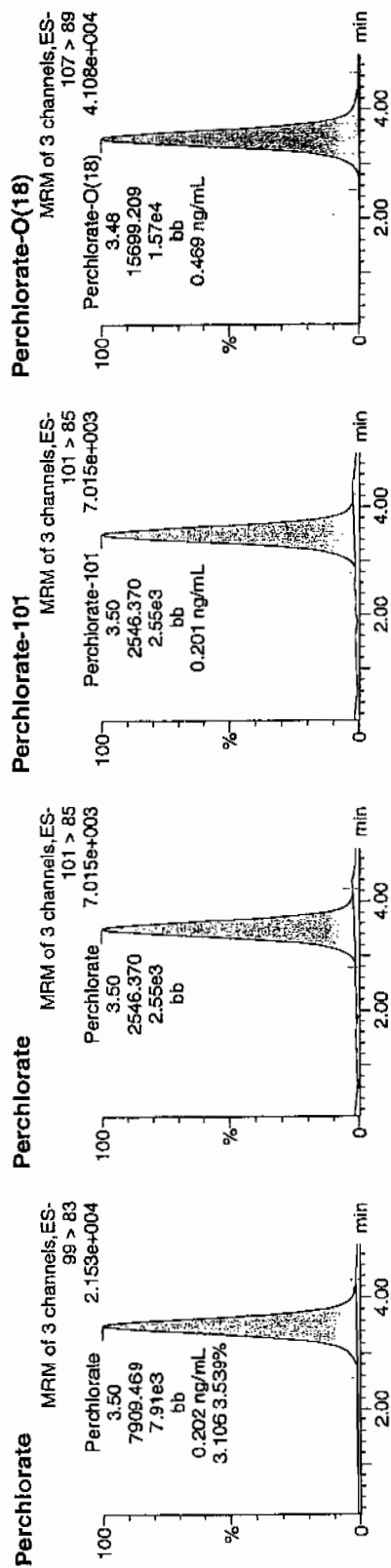
Name: per0314013a

Date: 14-Mar-2010

Time: 17:17:50

ID: 1202054223

Vial: 1:3,B



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	%ML	%Rec	%Dev	S/N	Ion Ratio
1202054223	Perchlorate	99 > 83	3.50	7909.469	7909.469	bb			0.2020	101.00	1.00	696.498	3.11
1202054223	Perchlorate-101	101 > 85	3.50	2546.370	2546.370	bb			0.2008	100.42	0.42	342.500	
1202054223	Perchlorate-Q(18)	107 > 89	3.48	15699.209	15699.209	bb			0.4692	99.85	-6.17	5403.0...	

$$\frac{7909.469}{39141} = 0.2020$$

3/16/00
Lester

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: 957940 Verified by:
 Analyst: Jareth Shirley
 Method: SW846 6850 Modified
 Lab SOP: GL-OA-E-067 REV# 6
 Instrument: MicroMass Quattro Ultima

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)	Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
1202054222 MB	06-MAR-2010 16:48:00	2	20	10	ICS	1202054226	10 ug/L ICV/CCV Second Source	UCL000226-01.1	4	mL	Desalting cartridges used: 100217-1-H & 100304-1-Ba
1202054223 LCS	06-MAR-2010 16:48:00	2	20	10	LCS	1202054223	10 ug/L ICV/CCV Second Source	UCL000226-01.1	4	mL	
247539001	06-MAR-2010 16:48:00	2	20	10	MS	1202054224	10 ug/L ICV/CCV Second Source	UCL000226-01.1	4	mL	
247539002	06-MAR-2010 16:48:00	2	20	10	MSD	1202054225	10 ug/L ICV/CCV Second Source	UCL000226-01.1	4	mL	
1202054224 MS (247539002)	06-MAR-2010 16:48:00	2	20	10							
1202054225 MSD (247539002)	06-MAR-2010 16:48:00	2	20	10							
247539003	06-MAR-2010 16:48:00	2	20	10							
247539004	06-MAR-2010 16:48:00	2	20	10							
247539005	06-MAR-2010 16:48:00	2	20	10							
247539006	06-MAR-2010 16:48:00	2	20	10							
247539007	06-MAR-2010 16:48:00	2	20	10							
247539008	06-MAR-2010 16:48:00	2	20	10							
247539009	06-MAR-2010 16:48:00	2	20	10							
247539010	06-MAR-2010 16:48:00	2	20	10							
247539011	06-MAR-2010 16:48:00	2	20	10							
247790002	06-MAR-2010 16:48:00	2	20	10							
247790003	06-MAR-2010 16:48:00	2	20	10							
247790004	06-MAR-2010 16:48:00	2	20	10							
247790005	06-MAR-2010 16:48:00	2	20	10							
247790006	06-MAR-2010 16:48:00	2	20	10							
247790007	06-MAR-2010 16:48:00	2	20	10							
247790008	06-MAR-2010 16:48:00	2	20	10							
247790009	06-MAR-2010 16:48:00	2	20	10							
247790010	06-MAR-2010 16:48:00	2	20	10							
247790011	06-MAR-2010 16:48:00	2	20	10							
247790012	06-MAR-2010 16:48:00	2	20	10							
247790013	06-MAR-2010 16:48:00	2	20	10							
247790014	06-MAR-2010 16:48:00	2	20	10							
247790015	06-MAR-2010 16:48:00	2	20	10							
247790016	06-MAR-2010 16:48:00	2	20	10							
247790017	06-MAR-2010 16:48:00	2	20	10							
247790018	06-MAR-2010 16:48:00	2	20	10							
247790019	06-MAR-2010 16:48:00	2	20	10							
247790020	06-MAR-2010 16:48:00	2	20	10							

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Reviewed BY: LAH
Date: 3/16/10
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100309-06

Method: EPA 6850-Modified
Int. Std.: UCL100210-01
Mobile Phase Lot#: 1278668, 1271949
Standard-Samp Reagent Lot#: 1271949

Date: 03/14/10
Extr. Injection Volume: 20uL
Sequence Number: per031410a
Initial Calibration Date: 03/14/10

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0314001a	IPB001	CWW	3/14/2010 15:41			1		USE	B
per0314002a	IPB001	CWW	3/14/2010 15:49			1		USE	B
per0314003a	WCLICAL-01	CWW	3/14/2010 15:57			1		USE	I
per0314004a	WCLICAL-02	CWW	3/14/2010 16:05			1		USE	I
per0314005a	WCLICAL-03	CWW	3/14/2010 16:13			1		USE	I
per0314006a	WCLICAL-04	CWW	3/14/2010 16:21			1		USE	I
per0314007a	WCLICAL-05	CWW	3/14/2010 16:29			1		USE	I
per0314008a	IPB002	CWW	3/14/2010 16:37			1		USE	B
per0314009a	WCLICV	CWW	3/14/2010 16:45			1		USE	C
per0314010a	IPB003	CWW	3/14/2010 16:53			1		USE	B
per0314011a	WCLCRI	CWW	3/14/2010 17:01			1		USE	C
per0314012a	1202054222	CWW	3/14/2010 17:09	957943	VARIOUS	1	LANL	USE	S
per0314013a	1202054223	CWW	3/14/2010 17:17	957943	VARIOUS	1	LANL	USE	S
per0314014a	1202054226	CWW	3/14/2010 17:25	957943	VARIOUS	1	LANL	USE	S
per0314015a	247539001	CWW	3/14/2010 17:33	957943	10-1960	1	LANL	USE	S
per0314016a	247539002	CWW	3/14/2010 17:41	957943	10-1960	1	LANL	USE	S
per0314017a	1202054224	CWW	3/14/2010 17:49	957943	10-1960	1	LANL	USE	S
per0314018a	1202054225	CWW	3/14/2010 17:58	957943	10-1960	1	LANL	USE	S
per0314019a	247539003	CWW	3/14/2010 18:06	957943	10-1960	1	LANL	USE	S
per0314020a	247539004	CWW	3/14/2010 18:14	957943	10-1960	1	LANL	USE	S
per0314021a	247539005	CWW	3/14/2010 18:22	957943	10-1960	1	LANL	USE	S
per0314022a	WCLCCV	CWW	3/14/2010 18:30			1		USE	C
per0314023a	IPB004	CWW	3/14/2010 18:38			1		USE	B
per0314024a	WCLCRI	CWW	3/14/2010 18:46			1		USE	C
per0314025a	247539006	CWW	3/14/2010 18:54	957943	10-1960	1	LANL	USE	S
per0314026a	247539007	CWW	3/14/2010 19:02	957943	10-1960	1	LANL	USE	S
per0314027a	247539008	CWW	3/14/2010 19:10	957943	10-1960	1	LANL	USE	S
per0314028a	247539009	CWW	3/14/2010 19:18	957943	10-1960	1	LANL	USE	S
per0314029a	247539010	CWW	3/14/2010 19:26	957943	10-1960	1	LANL	USE	S

per0314030a	247539011	CWW	3/14/2010 19:34	957943	10-1960	1	LANL	USE	S
per0314031a	247790002	CWW	3/14/2010 19:42	957943	10-1981	1	LANL	USE	S
per0314032a	247790003	CWW	3/14/2010 19:51	957943	10-1981	1	LANL	USE	S
per0314033a	247794001	CWW	3/14/2010 19:59	957943	10-1983-1	1	LANL	USE	S
per0314034a	247794002	CWW	3/14/2010 20:07	957943	10-1983-1	1	LANL	USE	S
per0314035a	WCLCCV	CWW	3/14/2010 20:15			1		USE	C
per0314036a	IPB005	CWW	3/14/2010 20:23			1		USE	B
per0314037a	WCLCRI	CWW	3/14/2010 20:32			1		USE	C
per0314038a	247794003	CWW	3/14/2010 20:40	957943	10-1983-1	1	LANL	USE	S
per0314039a	247794004	CWW	3/14/2010 20:48	957943	10-1983-1	1	LANL	USE	S
per0314040a	247794005	CWW	3/14/2010 20:56	957943	10-1983-1	1	LANL	USE	S
per0314041a	IPB006	CWW	3/14/2010 21:04			1		USE	B
per0314042a	1202056703	CWW	3/14/2010 21:12	959038	VARIOUS	1	LANL	USE	S
per0314043a	1202056704	CWW	3/14/2010 21:20	959038	VARIOUS	1	LANL	USE	S
per0314044a	1202056709	CWW	3/14/2010 21:28	959038	VARIOUS	1	LANL	USE	S
per0314045a	247431002	CWW	3/14/2010 21:36	959038	10-1927	1	LANL	USE	S
per0314046a	247817001	CWW	3/14/2010 21:44	959038	10-2001	1	LANL	USE	S
per0314047a	247829001	CWW	3/14/2010 21:53	959038	10-2006	1	LANL	USE	S
per0314048a	WCLCCV	CWW	3/14/2010 22:01			1		USE	C
per0314049a	IPB007	CWW	3/14/2010 22:09			1		USE	B
per0314050a	WCLCRI	CWW	3/14/2010 22:17			1		USE	C
per0314051a	248023001	CWW	3/14/2010 22:25	959038	10-2040	1	LANL	USE	S
per0314052a	248024002	CWW	3/14/2010 22:34	959038	10-2046	1	LANL	USE	S
per0314053a	248024004	CWW	3/14/2010 22:42	959038	10-2046	1	LANL	USE	S
per0314054a	248044001	CWW	3/14/2010 22:50	959038	10-2058	1	LANL	USE	S
per0314055a	1202056707	CWW	3/14/2010 22:58	959038	10-2058	1	LANL	USE	S
per0314056a	1202056708	CWW	3/14/2010 23:06	959038	10-2058	1	LANL	USE	S
per0314057a	248044003	CWW	3/14/2010 23:14	959038	10-2058	1	LANL	USE	S
per0314058a	248044005	CWW	3/14/2010 23:22	959038	10-2058	1	LANL	USE	S
per0314059a	248044006	CWW	3/14/2010 23:30	959038	10-2058	1	LANL	USE	S
per0314060a	248164001	CWW	3/14/2010 23:38	959038	10-2111	1	LANL	USE	S
per0314061a	WCLCCV	CWW	3/14/2010 23:46			1		USE	C
per0314062a	IPB008	CWW	3/14/2010 23:54			1		USE	B
per0314063a	WCLCRI	CWW	3/15/2010 0:02			1		USE	C
per0314064a	248164003	CWW	3/15/2010 0:10	959038	10-2111	1	LANL	USE	S
per0314065a	IPB009	CWW	3/15/2010 0:19			1		USE	B
per0314066a	1202056594	CWW	3/15/2010 0:27	958963	VARIOUS	1	LANL	USE	S

per0314067a	1202056595	CWW	3/15/2010 0:35	958963	VARIOUS	1	LANL	USE	S
per0314068a	1202056598	CWW	3/15/2010 0:43	958963	VARIOUS	1	LANL	USE	S
per0314069a	248041001	CWW	3/15/2010 0:51	958963	10-2069-1	1	LANL	USE	S
per0314070a	248041002	CWW	3/15/2010 0:59	958963	10-2069-1	1	LANL	USE	S
per0314071a	248041003	CWW	3/15/2010 1:07	958963	10-2069-1	1	LANL	USE	S
per0314072a	248041004	CWW	3/15/2010 1:15	958963	10-2069-1	1	LANL	USE	S
per0314073a	248041005	CWW	3/15/2010 1:24	958963	10-2069-1	1	LANL	USE	S
per0314074a	WCLCCV	CWW	3/15/2010 1:32			1		USE	C
per0314075a	IPB010	CWW	3/15/2010 1:40			1		USE	B
per0314076a	WCLCRI	CWW	3/15/2010 1:48			1		USE	C
per0314077a	248054001	CWW	3/15/2010 1:56	958963	10-2081-1	1	LANL	USE	S
per0314078a	248054002	CWW	3/15/2010 2:04	958963	10-2081-1	1	LANL	USE	S
per0314079a	248054003	CWW	3/15/2010 2:12	958963	10-2081-1	1	LANL	USE	S
per0314080a	248054004	CWW	3/15/2010 2:21	958963	10-2081-1	1	LANL	USE	S
per0314081a	248068001	CWW	3/15/2010 2:29	958963	10-2088	1	LANL	USE	S
per0314082a	248068002	CWW	3/15/2010 2:37	958963	10-2088	1	LANL	USE	S
per0314083a	248110001	CWW	3/15/2010 2:45	958963	10-2090-1	1	LANL	USE	S
per0314084a	1202056596	CWW	3/15/2010 2:53	958963	10-2090-1	1	LANL	USE	S
per0314085a	1202056597	CWW	3/15/2010 3:01	958963	10-2090-1	1	LANL	USE	S
per0314086a	248110002	CWW	3/15/2010 3:09	958963	10-2090-1	1	LANL	USE	S
per0314087a	WCLCCV	CWW	3/15/2010 3:17			1		USE	C
per0314088a	IPB011	CWW	3/15/2010 3:25			1		USE	B
per0314089a	WCLCRI	CWW	3/15/2010 3:34			1		USE	C
per0314090a	248110003	CWW	3/15/2010 3:42	958963	10-2090-1	1	LANL	USE	S
per0314091a	248110004	CWW	3/15/2010 3:50	958963	10-2090-1	1	LANL	USE	S
per0314092a	248110005	CWW	3/15/2010 3:58	958963	10-2090-1	1	LANL	USE	S
per0314093a	248110006	CWW	3/15/2010 4:06	958963	10-2090-1	1	LANL	USE	S
per0314094a	248110007	CWW	3/15/2010 4:14	958963	10-2090-1	1	LANL	USE	S
per0314095a	248110008	CWW	3/15/2010 4:22	958963	10-2090-1	1	LANL	USE	S
per0314096a	WCLCCV	CWW	3/15/2010 4:30			1		USE	C
per0314097a	IPB012	CWW	3/15/2010 4:39			1		USE	B
per0314098a	WCLCRI	CWW	3/15/2010 4:47			1		USE	C
per0314099a	1202056604	CWW	3/15/2010 4:55	958968	VARIOUS	1	LANL	DUSE_RA	S
per0314100a	1202056605	CWW	3/15/2010 5:03	958968	VARIOUS	1	LANL	DUSE_RA	S
per0314101a	1202056613	CWW	3/15/2010 5:11	958968	VARIOUS	1	LANL	DUSE_RA	S
per0314102a	248058001	CWW	3/15/2010 5:19	958968	10-2083	1	LANL	DUSE_RA	S
per0314103a	248058002	CWW	3/15/2010 5:27	958968	10-2083	1	LANL	DUSE_RA	S

per0314104a	248058003	CWW	3/15/2010 5:35	958968	10-2083	1	LANL	DUSE_RA	S
per0314105a	248058004	CWW	3/15/2010 5:43	958968	10-2083	1	LANL	DUSE_RA	S
per0314106a	WCLCCV	CWW	3/15/2010 5:52			1		DUSE	C
per0314107a	IPB013	CWW	3/15/2010 6:00			1		DUSE	B
per0314108a	WCLCRI	CWW	3/15/2010 6:08			1		DUSE	C
per0314109a	248058005	CWW	3/15/2010 6:16	958968	10-2093	1	LANL	DUSE-RA	S
per0314110a	248058006	CWW	3/15/2010 6:24	958968	10-2093	1	LANL	DUSE-RA	S
per0314111a	248058007	CWW	3/15/2010 6:32	958968	10-2093	1	LANL	DUSE-RA	S
per0314112a	248058008	CWW	3/15/2010 6:40	958968	10-2093	1	LANL	DUSE-RA	S
per0314113a	248065001	CWW	3/15/2010 6:49	958968	10-2086	1	LANL	DUSE-RA	S
per0314114a	1202056606	CWW	3/15/2010 6:57	958968	10-2086	1	LANL	DUSE-RA	S
per0314115a	1202056607	CWW	3/15/2010 7:05	958968	10-2086	1	LANL	DUSE-RA	S
per0314116a	WCLCCV	CWW	3/15/2010 7:13			1		DUSE	C
per0314117a	IPB014	CWW	3/15/2010 7:21			1		DUSE	B
per0314118a	WCLCRI	CWW	3/15/2010 7:29			1		DUSE	C

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

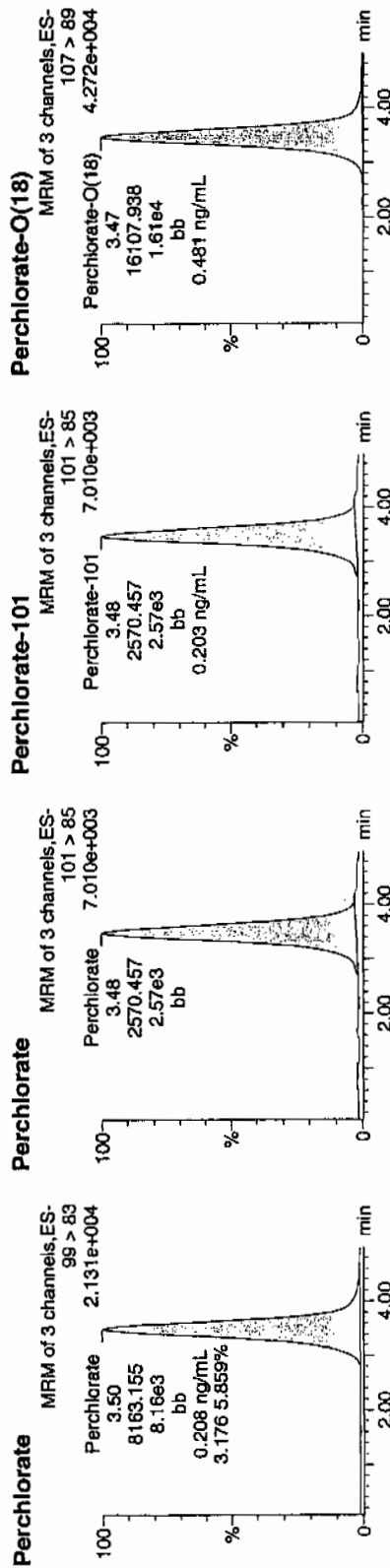
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314017a
Date: 14-Mar-2010
Time: 17:49:59
ID: 1202054224
Vial: 1:3,F

03-15-10

1202054224 | 50203 | ns | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202054224	Perchlorate	99 > 83	3.50	8163.155	8163.155	bb			0.2085	104.24	4.24	601.123	3.18
1202054224	Perchlorate-101	101 > 85	3.48	2570.457	2570.457	bb			0.2027	101.37	1.37	897.235	
1202054224	Perchlorate-O(18)	107 > 89	3.47	16107.938	16107.938	bb			0.4814	96.27	-3.73	2806.3...	

$$\frac{8163.155}{39154.1} = 2.27\%$$

3/16/10

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314018a

Date: 14-Mar-2010

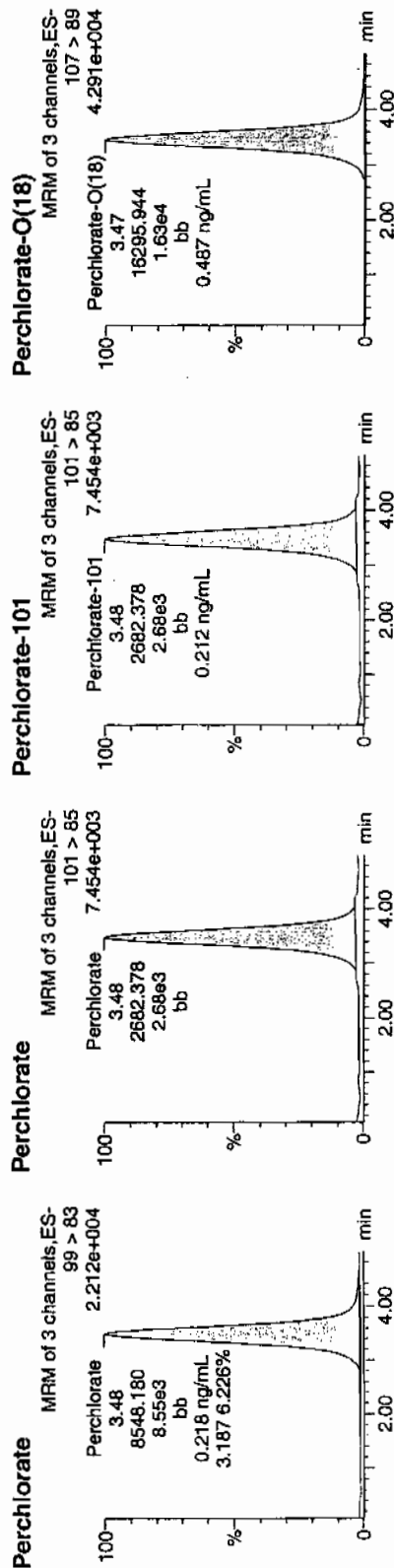
Time: 17:58:00

ID: 1202054225

Vial: 1:4,A

03-15-10

1202054225 | 5070 | MS011



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion	Ratio
1202054225	Perchlorate	99 > 83	3.48	8548.180	8548.180	bb			0.2183	109.16	9.16	1432.9...		3.19
1202054225	Perchlorate-101	101 > 85	3.48	2682.378	2682.378	bb			0.2116	105.78	5.78	402.666		
1202054225	Perchlorate-O(18)	107 > 89	3.47	16295.944	16295.944	bb			0.4870	97.40	-2.60	873.814		

3/16/10

Isotope Ratio Criteria

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

2.31-3.85

Tune Criteria

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

Metals Analysis

Case Narrative

**Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1983**

Sample Analysis

Sample ID	Client ID
247793001	RE15-10-8330
1202053053	Method Blank (MB) ICP
1202053054	Laboratory Control Sample (LCS)
1202053057	247830002(GW29-10-13277L) Serial Dilution (SD)
1202053055	247830002(GW29-10-13277D) Sample Duplicate (DUP)
1202053056	247830002(GW29-10-13277S) Matrix Spike (MS)
1202053058	Method Blank (MB) ICP-MS
1202053059	Laboratory Control Sample (LCS)
1202053062	247830002(GW29-10-13277L) Serial Dilution (SD)
1202053060	247830002(GW29-10-13277D) Sample Duplicate (DUP)
1202053061	247830002(GW29-10-13277S) Matrix Spike (MS)
1202056223	Method Blank (MB) CVAA
1202056224	Laboratory Control Sample (LCS)
1202056227	247771001(RE15-10-8272L) Serial Dilution (SD)
1202056225	247771001(RE15-10-8272D) Sample Duplicate (DUP)
1202056226	247771001(RE15-10-8272S) Matrix Spike (MS)

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

Method/Analysis Information

Analytical Batch: 957492, 957494 and 958777

Prep Batch : 957491, 957493 and 958775

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 standards met the advisory control limits with the exceptions of uranium and zinc, which recovered outside of the advisory limits of 70-130%.

ICSA/ICSAB Statement

All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements

All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

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: 247830002 (GW29-10-13277) and 247771001 (RE15-10-8272).

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 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 established 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 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: Kristen Parson Date: 4/21/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1983

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247793001

BASIS: As Received

DATE COLLECTED 17-FEB-10

CLIENT ID: RE15-10-8330

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: WATER

%SOLIDS: 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	SKJ	04/20/10 13:20	100420-3	957494
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	SKJ	04/20/10 13:20	100420-3	957494
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	SKJ	04/20/10 16:08	100420-5	957494
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	03/19/10 13:50	031910-1	957492
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	03/19/10 13:50	031910-1	957492
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	SKJ	04/20/10 16:08	100420-5	957494
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	03/19/10 13:50	031910-1	957492
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	SKJ	04/20/10 13:20	100420-3	957494
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	03/03/10 11:22	030310W2-6	958777
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-09-7	Potassium	329	ug/L		50	150	150	1	P	HSC	03/19/10 13:50	031910-1	957492
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-23-5	Sodium	202	ug/L	J	100	300	300	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	SKJ	04/20/10 13:20	100420-3	957494
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	04/20/10 15:10	100420-2	957494
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:50	031910-1	957492
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	03/19/10 13:50	031910-1	957492

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957492	957491	SW846 3005A	50	mL	50	mL	03/01/10	BXA1
957494	957493	SW846 3005A	50	mL	50	mL	03/02/10	FGA
958777	958775	SW846 7470A Prep	20	mL	20	mL	03/02/10	TXB3

Quality Control Summary

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1983

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,MER536,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										
	Mercury	5.03	ug/L	5	ug/L	100.6	90.0 - 110.0	AV	03-MAR-10 10:32	030310W2-6
	Aluminum	5180	ug/L	5000	ug/L	103.7	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Arsenic	480	ug/L	500	ug/L	96.1	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Barium	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Calcium	5170	ug/L	5000	ug/L	103.5	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Chromium	491	ug/L	500	ug/L	98.3	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Cobalt	516	ug/L	500	ug/L	103.3	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Copper	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Iron	5240	ug/L	5000	ug/L	104.9	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Magnesium	5440	ug/L	5000	ug/L	108.8	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Nickel	510	ug/L	500	ug/L	102	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Potassium	2560	ug/L	2500	ug/L	102.3	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Selenium	2610	ug/L	2500	ug/L	104.4	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Silver	260	ug/L	250	ug/L	104.2	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Sodium	2460	ug/L	2500	ug/L	98.5	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Vanadium	516	ug/L	500	ug/L	103.3	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Zinc	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Antimony	49.1	ug/L	50	ug/L	98.1	90.0 - 110.0	MS	20-APR-10 12:39	100420-3
	Beryllium	49.2	ug/L	50	ug/L	98.4	90.0 - 110.0	MS	20-APR-10 12:39	100420-3
	Manganese	50.4	ug/L	50	ug/L	100.8	90.0 - 110.0	MS	20-APR-10 12:39	100420-3
	Thallium	50	ug/L	50	ug/L	99.9	90.0 - 110.0	MS	20-APR-10 12:39	100420-3
	Uranium	51.7	ug/L	50	ug/L	103.5	90.0 - 110.0	MS	20-APR-10 13:43	100420-2
	Cadmium	52.3	ug/L	50	ug/L	104.6	90.0 - 110.0	MS	20-APR-10 15:46	100420-5
	Lead	52	ug/L	50	ug/L	104.1	90.0 - 110.0	MS	20-APR-10 15:46	100420-5
CCV01										
	Mercury	5.12	ug/L	5	ug/L	102.5	80.0 - 120.0	AV	03-MAR-10 10:38	030310W2-6
	Aluminum	5010	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Arsenic	510	ug/L	500	ug/L	101.9	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Barium	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Calcium	5190	ug/L	5000	ug/L	103.9	90.0 - 110.0	P	19-MAR-10 08:47	031910-1

SW846

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1983

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,MER536,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>
	Chromium	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Cobalt	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Copper	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Iron	5300	ug/L	5000	ug/L	106	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Magnesium	5370	ug/L	5000	ug/L	107.5	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Nickel	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Potassium	5210	ug/L	5000	ug/L	104.1	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Selenium	522	ug/L	500	ug/L	104.3	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Silver	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Sodium	10300	ug/L	10000	ug/L	103.1	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Vanadium	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Zinc	494	ug/L	500	ug/L	98.7	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Antimony	50	ug/L	50	ug/L	99.9	90.0 - 110.0	MS	20-APR-10 12:55	100420-3
	Beryllium	51.4	ug/L	50	ug/L	102.9	90.0 - 110.0	MS	20-APR-10 12:55	100420-3
	Manganese	51.1	ug/L	50	ug/L	102.2	90.0 - 110.0	MS	20-APR-10 12:55	100420-3
	Thallium	51	ug/L	50	ug/L	101.9	90.0 - 110.0	MS	20-APR-10 12:55	100420-3
	Uranium	52.3	ug/L	50	ug/L	104.6	90.0 - 110.0	MS	20-APR-10 14:00	100420-2
	Cadmium	51.3	ug/L	50	ug/L	102.5	90.0 - 110.0	MS	20-APR-10 15:57	100420-5
	Lead	52.4	ug/L	50	ug/L	104.7	90.0 - 110.0	MS	20-APR-10 15:57	100420-5
CCV02	Mercury	5.41	ug/L	5	ug/L	108.2	80.0 - 120.0	AV	03-MAR-10 11:02	030310W2-6
	Aluminum	5140	ug/L	5000	ug/L	102.9	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Arsenic	507	ug/L	500	ug/L	101.5	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Barium	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Calcium	5190	ug/L	5000	ug/L	103.8	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Chromium	500	ug/L	500	ug/L	100	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Cobalt	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Copper	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Iron	5230	ug/L	5000	ug/L	104.7	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Magnesium	5410	ug/L	5000	ug/L	108.2	90.0 - 110.0	P	19-MAR-10 09:08	031910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1983

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,MER536,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>
	Nickel	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Potassium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Selenium	522	ug/L	500	ug/L	104.5	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Silver	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Sodium	9900	ug/L	10000	ug/L	99	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Vanadium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Zinc	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Antimony	49.5	ug/L	50	ug/L	98.9	90.0 – 110.0	MS	20-APR-10 13:04	100420-3
	Beryllium	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	20-APR-10 13:04	100420-3
	Manganese	51.4	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	20-APR-10 13:04	100420-3
	Thallium	50.9	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	20-APR-10 13:04	100420-3
	Uranium	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	20-APR-10 14:30	100420-2
	Cadmium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	20-APR-10 16:15	100420-5
	Lead	52.3	ug/L	50	ug/L	104.7	90.0 – 110.0	MS	20-APR-10 16:15	100420-5
CCV03										
	Mercury	5.14	ug/L	5	ug/L	102.8	80.0 – 120.0	AV	03-MAR-10 11:26	030310W2-6
	Aluminum	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Arsenic	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Barium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Calcium	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Chromium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Cobalt	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Copper	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Iron	5320	ug/L	5000	ug/L	106.4	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Magnesium	5390	ug/L	5000	ug/L	107.7	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Nickel	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Potassium	5220	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Selenium	523	ug/L	500	ug/L	104.7	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Silver	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Sodium	10500	ug/L	10000	ug/L	104.9	90.0 – 110.0	P	19-MAR-10 10:18	031910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1983

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,MER536,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>
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	19-MAR-10 10:18	031910-1
	Zinc	495	ug/L	500	ug/L	99	90.0 - 110.0	P	19-MAR-10 10:18	031910-1
	Antimony	49	ug/L	50	ug/L	98	90.0 - 110.0	MS	20-APR-10 13:36	100420-3
	Beryllium	50.2	ug/L	50	ug/L	100.5	90.0 - 110.0	MS	20-APR-10 13:36	100420-3
	Manganese	50.5	ug/L	50	ug/L	101	90.0 - 110.0	MS	20-APR-10 13:36	100420-3
	Thallium	49.4	ug/L	50	ug/L	98.7	90.0 - 110.0	MS	20-APR-10 13:36	100420-3
	Uranium	52.1	ug/L	50	ug/L	104.2	90.0 - 110.0	MS	20-APR-10 14:57	100420-2
	Cadmium	51.2	ug/L	50	ug/L	102.3	90.0 - 110.0	MS	20-APR-10 16:35	100420-5
	Lead	53	ug/L	50	ug/L	106	90.0 - 110.0	MS	20-APR-10 16:35	100420-5
CCV04	Aluminum	5250	ug/L	5000	ug/L	105	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Arsenic	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Barium	504	ug/L	500	ug/L	100.9	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Calcium	5230	ug/L	5000	ug/L	104.7	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Chromium	505	ug/L	500	ug/L	101	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Cobalt	512	ug/L	500	ug/L	102.5	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Copper	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Iron	5270	ug/L	5000	ug/L	105.5	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Magnesium	5330	ug/L	5000	ug/L	106.6	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Nickel	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Potassium	5370	ug/L	5000	ug/L	107.4	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Selenium	523	ug/L	500	ug/L	104.6	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Silver	506	ug/L	500	ug/L	101.1	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Sodium	10200	ug/L	10000	ug/L	102.5	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Vanadium	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Zinc	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Antimony	48.9	ug/L	50	ug/L	97.9	90.0 - 110.0	MS	20-APR-10 14:10	100420-3
	Beryllium	52.2	ug/L	50	ug/L	104.3	90.0 - 110.0	MS	20-APR-10 14:10	100420-3
	Manganese	50.8	ug/L	50	ug/L	101.7	90.0 - 110.0	MS	20-APR-10 14:10	100420-3
	Thallium	49.8	ug/L	50	ug/L	99.6	90.0 - 110.0	MS	20-APR-10 14:10	100420-3

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1983

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,MER536,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	Uranium	52.1	ug/L	50	ug/L	104.2	90.0 - 110.0	MS	20-APR-10 15:27	100420-2
	Aluminum	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Arsenic	510	ug/L	500	ug/L	102	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Barium	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Calcium	5210	ug/L	5000	ug/L	104.1	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Chromium	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Cobalt	513	ug/L	500	ug/L	102.5	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Copper	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Iron	5290	ug/L	5000	ug/L	105.9	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Magnesium	5320	ug/L	5000	ug/L	106.5	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Nickel	511	ug/L	500	ug/L	102.1	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Potassium	5290	ug/L	5000	ug/L	105.8	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Selenium	524	ug/L	500	ug/L	104.9	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Silver	509	ug/L	500	ug/L	101.7	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Sodium	10400	ug/L	10000	ug/L	104.3	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Zinc	504	ug/L	500	ug/L	100.7	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
CCV06	Aluminum	5040	ug/L	5000	ug/L	100.8	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Arsenic	519	ug/L	500	ug/L	103.8	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Barium	517	ug/L	500	ug/L	103.4	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Calcium	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Chromium	517	ug/L	500	ug/L	103.4	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Cobalt	524	ug/L	500	ug/L	104.7	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Copper	510	ug/L	500	ug/L	102	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Iron	5230	ug/L	5000	ug/L	104.6	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Magnesium	5290	ug/L	5000	ug/L	105.7	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Nickel	522	ug/L	500	ug/L	104.4	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Potassium	5160	ug/L	5000	ug/L	103.3	90.0 - 110.0	P	19-MAR-10 13:15	031910-1

SW846

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1983

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,MER536,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>
	Selenium	534	ug/L	500	ug/L	106.9	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Silver	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Sodium	10000	ug/L	10000	ug/L	100.2	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Vanadium	521	ug/L	500	ug/L	104.2	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Zinc	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
CCV07	Aluminum	5110	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Arsenic	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Barium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Calcium	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Chromium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Cobalt	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Copper	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Iron	5250	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Magnesium	5350	ug/L	5000	ug/L	107	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Nickel	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Potassium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Selenium	520	ug/L	500	ug/L	104.1	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Silver	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Sodium	10300	ug/L	10000	ug/L	102.9	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Vanadium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Zinc	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
CCV08	Aluminum	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Arsenic	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Barium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Calcium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Chromium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Cobalt	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Copper	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	19-MAR-10 15:12	031910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1983

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,MER536,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	5040	ug/L	5000	ug/L	100.9	90.0 - 110.0	P	19-MAR-10 15:12	031910-1
	Magnesium	5180	ug/L	5000	ug/L	103.5	90.0 - 110.0	P	19-MAR-10 15:12	031910-1
	Nickel	510	ug/L	500	ug/L	102	90.0 - 110.0	P	19-MAR-10 15:12	031910-1
	Potassium	5070	ug/L	5000	ug/L	101.4	90.0 - 110.0	P	19-MAR-10 15:12	031910-1
	Selenium	522	ug/L	500	ug/L	104.4	90.0 - 110.0	P	19-MAR-10 15:12	031910-1
	Silver	510	ug/L	500	ug/L	102	90.0 - 110.0	P	19-MAR-10 15:12	031910-1
	Sodium	9760	ug/L	10000	ug/L	97.6	90.0 - 110.0	P	19-MAR-10 15:12	031910-1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 - 110.0	P	19-MAR-10 15:12	031910-1
	Zinc	502	ug/L	500	ug/L	100.5	90.0 - 110.0	P	19-MAR-10 15:12	031910-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1983

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS3,ICPMS5,MER536,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										
	Mercury	.156	ug/L	.2	ug/L	77.8	70.0 – 130.0	AV	03-MAR-10 10:36	030310W2-6
	Manganese	6.17	ug/L	5	ug/L	123.4	70.0 – 130.0	MS	20-APR-10 12:46	100420-3
	Thallium	1.23	ug/L	1	ug/L	122.5	70.0 – 130.0	MS	20-APR-10 12:46	100420-3
	Beryllium	.64	ug/L	.5	ug/L	128	70.0 – 130.0	MS	20-APR-10 12:46	100420-3
	Antimony	2.85	ug/L	3	ug/L	94.9	70.0 – 130.0	MS	20-APR-10 12:46	100420-3
	Uranium	.291	ug/L	.2	ug/L	145.5	70.0 – 130.0	MS	20-APR-10 13:50	100420-2
	Lead	2.49	ug/L	2	ug/L	124.7	70.0 – 130.0	MS	20-APR-10 15:51	100420-5
	Cadmium	1.24	ug/L	1	ug/L	124	70.0 – 130.0	MS	20-APR-10 15:51	100420-5
PQL01										
	Cobalt	5.16	ug/L	5	ug/L	103.2	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Barium	5.23	ug/L	5	ug/L	104.6	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Arsenic	34.4	ug/L	30	ug/L	114.7	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Sodium	286	ug/L	300	ug/L	95.2	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Silver	5.16	ug/L	5	ug/L	103.2	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Potassium	170	ug/L	150	ug/L	113.2	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Nickel	5.46	ug/L	5	ug/L	109.2	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Magnesium	344	ug/L	300	ug/L	114.8	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Iron	117	ug/L	100	ug/L	116.6	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Aluminum	211	ug/L	200	ug/L	105.6	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Chromium	5.11	ug/L	5	ug/L	102.1	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Copper	10.4	ug/L	10	ug/L	104	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Vanadium	4.92	ug/L	5	ug/L	98.3	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Zinc	13.7	ug/L	10	ug/L	137.3	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Calcium	223	ug/L	200	ug/L	111.7	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Selenium	30.3	ug/L	30	ug/L	101.1	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
PQL02										
	Aluminum	211	ug/L	200	ug/L	105.6	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Iron	107	ug/L	100	ug/L	107.5	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Magnesium	384	ug/L	300	ug/L	128	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Nickel	5.52	ug/L	5	ug/L	110.4	70.0 – 130.0	P	19-MAR-10 10:25	031910-1

METALS
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CRDL Standard for AA & ICP

SDG No: 10-1983

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: ICPMS3,ICPMS5,MER536,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	171	ug/L	150	ug/L	113.7	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Silver	5.08	ug/L	5	ug/L	101.7	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Sodium	287	ug/L	300	ug/L	95.6	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Arsenic	32.7	ug/L	30	ug/L	109	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Barium	5.33	ug/L	5	ug/L	106.6	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Cobalt	5.4	ug/L	5	ug/L	108.1	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Copper	10.1	ug/L	10	ug/L	101.2	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Vanadium	5.01	ug/L	5	ug/L	100.3	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Zinc	13.6	ug/L	10	ug/L	135.7	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Calcium	221	ug/L	200	ug/L	110.5	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Selenium	31	ug/L	30	ug/L	103.4	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Chromium	5.12	ug/L	5	ug/L	102.3	70.0 – 130.0	P	19-MAR-10 10:25	031910-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1983

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>
ICB01	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	03-MAR-10 10:34	030310W2-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-MAR-10 07:50	031910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 07:50	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 07:50	031910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-MAR-10 07:50	031910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 07:50	031910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 07:50	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-MAR-10 07:50	031910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-MAR-10 07:50	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-MAR-10 07:50	031910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-MAR-10 07:50	031910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-MAR-10 07:50	031910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 07:50	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 07:50	031910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-MAR-10 07:50	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 07:50	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-MAR-10 07:50	031910-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-APR-10 12:43	100420-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	20-APR-10 12:43	100420-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	20-APR-10 12:43	100420-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	20-APR-10 12:43	100420-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	20-APR-10 13:46	100420-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-APR-10 15:48	100420-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	20-APR-10 15:48	100420-5
CCB01	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	03-MAR-10 10:40	030310W2-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-MAR-10 08:54	031910-1
	Arsenic	5.21	+/-30	J	5.0	30.0	LIQ	P	19-MAR-10 08:54	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 08:54	031910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-MAR-10 08:54	031910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 08:54	031910-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1983

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	19-MAR-10 08:54	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-MAR-10 08:54	031910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-MAR-10 08:54	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-MAR-10 08:54	031910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-MAR-10 08:54	031910-1
	Potassium	79.8	+/-150	J	50.0	150	LIQ	P	19-MAR-10 08:54	031910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 08:54	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 08:54	031910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-MAR-10 08:54	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 08:54	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-MAR-10 08:54	031910-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-APR-10 12:58	100420-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	20-APR-10 12:58	100420-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	20-APR-10 12:58	100420-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	20-APR-10 12:58	100420-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	20-APR-10 14:03	100420-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-APR-10 15:59	100420-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	20-APR-10 15:59	100420-5
CCB02	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	03-MAR-10 11:04	030310W2-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-MAR-10 09:15	031910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 09:15	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 09:15	031910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-MAR-10 09:15	031910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 09:15	031910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 09:15	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-MAR-10 09:15	031910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-MAR-10 09:15	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-MAR-10 09:15	031910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-MAR-10 09:15	031910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-MAR-10 09:15	031910-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1983

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>
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 09:15	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 09:15	031910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-MAR-10 09:15	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 09:15	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-MAR-10 09:15	031910-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-APR-10 13:07	100420-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	20-APR-10 13:07	100420-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	20-APR-10 13:07	100420-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	20-APR-10 13:07	100420-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	20-APR-10 14:33	100420-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-APR-10 16:17	100420-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	20-APR-10 16:17	100420-5
CCB03	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	03-MAR-10 11:28	030310W2-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-MAR-10 10:32	031910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 10:32	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 10:32	031910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-MAR-10 10:32	031910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 10:32	031910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 10:32	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-MAR-10 10:32	031910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-MAR-10 10:32	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-MAR-10 10:32	031910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-MAR-10 10:32	031910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-MAR-10 10:32	031910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 10:32	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 10:32	031910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-MAR-10 10:32	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 10:32	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-MAR-10 10:32	031910-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-APR-10 13:39	100420-3

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1983

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>
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	20-APR-10 13:39	100420-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	20-APR-10 13:39	100420-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	20-APR-10 13:39	100420-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	20-APR-10 15:00	100420-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-APR-10 16:37	100420-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	20-APR-10 16:37	100420-5
CCB04	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-MAR-10 11:45	031910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 11:45	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 11:45	031910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-MAR-10 11:45	031910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 11:45	031910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 11:45	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-MAR-10 11:45	031910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-MAR-10 11:45	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-MAR-10 11:45	031910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-MAR-10 11:45	031910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-MAR-10 11:45	031910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 11:45	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 11:45	031910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-MAR-10 11:45	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 11:45	031910-1
	Zinc	4.13	+/-10	J	3.3	10.0	LIQ	P	19-MAR-10 11:45	031910-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-APR-10 14:13	100420-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	20-APR-10 14:13	100420-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	20-APR-10 14:13	100420-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	20-APR-10 14:13	100420-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	20-APR-10 15:31	100420-2
CCB05	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-MAR-10 12:56	031910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 12:56	031910-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1983

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 12:56	031910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-MAR-10 12:56	031910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 12:56	031910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 12:56	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-MAR-10 12:56	031910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-MAR-10 12:56	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-MAR-10 12:56	031910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-MAR-10 12:56	031910-1
	Potassium	50.99	+/-150	J	50.0	150	LIQ	P	19-MAR-10 12:56	031910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 12:56	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 12:56	031910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-MAR-10 12:56	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 12:56	031910-1
	Zinc	3.36	+/-10	J	3.3	10.0	LIQ	P	19-MAR-10 12:56	031910-1
CCB06	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-MAR-10 13:22	031910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 13:22	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 13:22	031910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-MAR-10 13:22	031910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 13:22	031910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 13:22	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-MAR-10 13:22	031910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-MAR-10 13:22	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-MAR-10 13:22	031910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-MAR-10 13:22	031910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-MAR-10 13:22	031910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 13:22	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 13:22	031910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-MAR-10 13:22	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 13:22	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-MAR-10 13:22	031910-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1983

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB07	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-MAR-10 14:24	031910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 14:24	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 14:24	031910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-MAR-10 14:24	031910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 14:24	031910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 14:24	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-MAR-10 14:24	031910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-MAR-10 14:24	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-MAR-10 14:24	031910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-MAR-10 14:24	031910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-MAR-10 14:24	031910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 14:24	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 14:24	031910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-MAR-10 14:24	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 14:24	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-MAR-10 14:24	031910-1
CCB08	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-MAR-10 15:19	031910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 15:19	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 15:19	031910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-MAR-10 15:19	031910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 15:19	031910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 15:19	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-MAR-10 15:19	031910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-MAR-10 15:19	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-MAR-10 15:19	031910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-MAR-10 15:19	031910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-MAR-10 15:19	031910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 15:19	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 15:19	031910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-MAR-10 15:19	031910-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1983

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 15:19	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-MAR-10 15:19	031910-1

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-1983
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>
1202053053	Aluminum	68	ug/L	+/-200	U	P	68	200
	Arsenic	5	ug/L	+/-30	U	P	5	30
	Barium	1	ug/L	+/-5	U	P	1	5
	Calcium	50	ug/L	+/-200	U	P	50	200
	Chromium	1.7	ug/L	+/-5	J	P	1	5
	Cobalt	1	ug/L	+/-5	U	P	1	5
	Copper	3	ug/L	+/-10	U	P	3	10
	Iron	30	ug/L	+/-100	U	P	30	100
	Magnesium	85	ug/L	+/-300	U	P	85	300
	Nickel	1.5	ug/L	+/-5	U	P	1.5	5
	Potassium	50	ug/L	+/-150	U	P	50	150
	Selenium	5	ug/L	+/-30	U	P	5	30
	Silver	1	ug/L	+/-5	U	P	1	5
	Sodium	100	ug/L	+/-300	U	P	100	300
	Vanadium	1	ug/L	+/-5	U	P	1	5
	Zinc	3.3	ug/L	+/-10	U	P	3.3	10
1202053058	Antimony	1	ug/L	+/-3	U	MS	1	3
	Beryllium	0.1	ug/L	+/-0.5	U	MS	0.1	0.5
	Cadmium	0.11	ug/L	+/-1	U	MS	0.11	1
	Lead	0.5	ug/L	+/-2	U	MS	0.5	2
	Manganese	1	ug/L	+/-5	U	MS	1	5
	Thallium	0.3	ug/L	+/-1	U	MS	0.3	1
	Uranium	0.05	ug/L	+/-0.2	U	MS	0.05	0.2
1202056223	Mercury	0.066	ug/L	+/-0.2	U	AV	0.066	0.2

METALS

-4-

Interference Check Sample

SDG No: 10-1983

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	512000	ug/L	500000	ug/L	103	80.0 – 120.0	19-MAR-10 08:04	031910-1
	Arsenic	8.97	ug/L					19-MAR-10 08:04	031910-1
	Barium	0.525	ug/L					19-MAR-10 08:04	031910-1
	Calcium	473000	ug/L	500000	ug/L	94.6	80.0 – 120.0	19-MAR-10 08:04	031910-1
	Chromium	0.655	ug/L					19-MAR-10 08:04	031910-1
	Cobalt	-1.25	ug/L					19-MAR-10 08:04	031910-1
	Copper	2.12	ug/L					19-MAR-10 08:04	031910-1
	Iron	185000	ug/L	200000	ug/L	92.5	80.0 – 120.0	19-MAR-10 08:04	031910-1
	Magnesium	488000	ug/L	500000	ug/L	97.7	80.0 – 120.0	19-MAR-10 08:04	031910-1
	Nickel	3.43	ug/L					19-MAR-10 08:04	031910-1
	Potassium	-190.0	ug/L					19-MAR-10 08:04	031910-1
	Selenium	-1.44	ug/L					19-MAR-10 08:04	031910-1
	Silver	-1.58	ug/L					19-MAR-10 08:04	031910-1
	Sodium	9.4	ug/L					19-MAR-10 08:04	031910-1
	Vanadium	-3.12	ug/L					19-MAR-10 08:04	031910-1
	Zinc	0.975	ug/L					19-MAR-10 08:04	031910-1
ICSAB01									
	Aluminum	514000	ug/L	500000	ug/L	103	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Arsenic	525	ug/L	500	ug/L	105	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Barium	492	ug/L	500	ug/L	98.5	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Calcium	478000	ug/L	500000	ug/L	95.5	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Chromium	486	ug/L	500	ug/L	97.2	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Cobalt	445	ug/L	500	ug/L	89	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Copper	547	ug/L	500	ug/L	110	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Iron	188000	ug/L	200000	ug/L	94	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Magnesium	492000	ug/L	500000	ug/L	98.4	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Nickel	452	ug/L	500	ug/L	90.5	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Potassium	5280	ug/L	5000	ug/L	106	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Selenium	2560	ug/L	2500	ug/L	102	80.0 – 120.0	19-MAR-10 08:11	031910-1

METALS
-4-
Interference Check Sample

SDG No: 10-1983

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	274	ug/L	250	ug/L	110	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Sodium	5500	ug/L	5000	ug/L	110	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Vanadium	508	ug/L	500	ug/L	102	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Zinc	493	ug/L	500	ug/L	98.5	80.0 – 120.0	19-MAR-10 08:11	031910-1

METALS

-4-

Interference Check Sample

SDG No: 10-1983

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	Uranium	-0.004	ug/L					20-APR-10 13:53	100420-2
ICSAB01	Uranium	19.7	ug/L	20	ug/L	98.4	80.0 - 120.0	20-APR-10 13:56	100420-2

METALS
-4-
Interference Check Sample

SDG No: 10-1983

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									
	Antimony	0.108	ug/L					20-APR-10 12:49	100420-3
	Beryllium	0.125	ug/L					20-APR-10 12:49	100420-3
	Manganese	5.63	ug/L					20-APR-10 12:49	100420-3
	Thallium	-0.014	ug/L					20-APR-10 12:49	100420-3
ICSAB01									
	Antimony	18.8	ug/L	20	ug/L	94.1	80.0 - 120.0	20-APR-10 12:52	100420-3
	Beryllium	19.8	ug/L	20	ug/L	98.8	80.0 - 120.0	20-APR-10 12:52	100420-3
	Manganese	25.2	ug/L	25.8	ug/L	97.6	80.0 - 120.0	20-APR-10 12:52	100420-3
	Thallium	19.5	ug/L	20	ug/L	97.5	80.0 - 120.0	20-APR-10 12:52	100420-3

METALS
-4-
Interference Check Sample

SDG No: 10-1983

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									
	Cadmium	0.465	ug/L					20-APR-10 15:53	100420-5
	Lead	0.197	ug/L					20-APR-10 15:53	100420-5
ICSAB01									
	Cadmium	19.1	ug/L	20.44	ug/L	93.2	80.0 - 120.0	20-APR-10 15:55	100420-5
	Lead	19.8	ug/L	20.19	ug/L	98.3	80.0 - 120.0	20-APR-10 15:55	100420-5

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1983 Client ID GW29-10-13277S

Contract: LANL01006 Level: Low

Matrix: WATER % Solids:

Sample ID: 247830002 Spike ID: 1202053056

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Sodium	ug/L		26000		21600		5000	87	N/A	P
Vanadium	ug/L	75-125	535		16.2		500	104		P
Zinc	ug/L		3930		3320		500	122	N/A	P
Aluminum	ug/L	75-125	11000		4770		5000	124		P
Arsenic	ug/L	75-125	527		8.89	J	500	104		P
Barium	ug/L	75-125	886		352		500	107		P
Calcium	ug/L		33500		26800		5000	134	N/A	P
Chromium	ug/L	75-125	528		25.6		500	100		P
Cobalt	ug/L	75-125	575		78.5		500	99.3		P
Copper	ug/L	75-125	561		33.5		500	106		P
Iron	ug/L		63700		51700		5000	240	N/A	P
Magnesium	ug/L	75-125	12100		6410		5000	113		P
Nickel	ug/L	75-125	547		44		500	101		P
Potassium	ug/L	75-125	10100		4470		5000	113		P
Selenium	ug/L	75-125	513		5	U	500	103		P
Silver	ug/L	75-125	503		1	U	500	100		P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1983 Client ID GW29-10-13277S

Contract: LANL01006 Level: Low

Matrix: WATER % Solids:

Sample ID: 247830002 Spike ID: 1202053061

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	201		1	U	200	101		MS
Beryllium	ug/L	75-125	50.4		0.452	J	50	99.9		MS
Cadmium	ug/L	75-125	10.5		0.214	J	10	103		MS
Lead	ug/L	75-125	42.4		4.26		40	95.3		MS
Manganese	ug/L		1030		900		50	254	N/A	MS
Thallium	ug/L	75-125	78		0.3	U	100	77.9		MS
Uranium	ug/L	75-125	58.6		1.85		50	114		MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1983 **Client ID** RE15-10-8272S**Contract:** LANL01004 **Level:** Low**Matrix:** WATER **% Solids:****Sample ID:** 247771001 **Spike ID:** 1202056226

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75-125	2.18		0.066	U	2	108		AV

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1983

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: GW29-10-13277D

Sample ID: 247830002

Duplicate ID: 1202053055

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	+/-20%	4770		5340		11.4		P
Arsenic	ug/L	+/-30	8.89 J		7.25 J		20.4		P
Barium	ug/L	+/-20%	352		371		5.23		P
Calcium	ug/L	+/-20%	26800		27500		2.38		P
Chromium	ug/L	+/-20%	25.6		28.5		10.9		P
Cobalt	ug/L	+/-20%	78.5		82.3		4.78		P
Copper	ug/L	+/-10	33.5		36.9		9.69		P
Iron	ug/L	+/-20%	51700		55800		7.7		P
Magnesium	ug/L	+/-20%	6410		6580		2.57		P
Nickel	ug/L	+/-20%	44		47.6		7.75		P
Potassium	ug/L	+/-20%	4470		4540		1.55		P
Selenium	ug/L		5 U		5 U				P
Silver	ug/L		1 U		1 U				P
Sodium	ug/L	+/-20%	21600		20400		5.57		P
Vanadium	ug/L	+/-5	16.2		17.7		9.19		P
Zinc	ug/L	+/-20%	3320		3450		3.84		P

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1983

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: GW29-10-13277D

Sample ID: 247830002

Duplicate ID: 1202053060

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		1 U		1 U				MS
Beryllium	ug/L	+/- .5	0.452 J		0.477 J		5.38		MS
Cadmium	ug/L	+/-1	0.214 J		0.21 J		1.89		MS
Lead	ug/L	+/-2	4.26		4.22		1.16		MS
Manganese	ug/L	+/-20%	900		913		1.43		MS
Thallium	ug/L		0.3 U		0.3 U				MS
Uranium	ug/L	+/-20%	1.85		1.85		.217		MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1983

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8272D

Sample ID: 247771001

Duplicate ID: 1202056225

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. 10-1983

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>
1202053054								
	Aluminum	ug/L	5000	5090		102	80-120	P
	Arsenic	ug/L	500	518		104	80-120	P
	Barium	ug/L	500	521		104	80-120	P
	Calcium	ug/L	5000	5120		102	80-120	P
	Chromium	ug/L	500	509		102	80-120	P
	Cobalt	ug/L	500	511		102	80-120	P
	Copper	ug/L	500	513		103	80-120	P
	Iron	ug/L	5000	5140		103	80-120	P
	Magnesium	ug/L	5000	5280		106	80-120	P
	Nickel	ug/L	500	518		104	80-120	P
	Potassium	ug/L	5000	5200		104	80-120	P
	Selenium	ug/L	500	526		105	80-120	P
	Silver	ug/L	500	501		100	80-120	P
	Sodium	ug/L	5000	5150		103	80-120	P
	Vanadium	ug/L	500	519		104	80-120	P
	Zinc	ug/L	500	500		100	80-120	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-1983

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>
1202053059								
	Antimony	ug/L	50	51.2		102	80-120	MS
	Beryllium	ug/L	50	54.7		109	80-120	MS
	Cadmium	ug/L	50	50.9		102	80-120	MS
	Lead	ug/L	50	51.7		103	80-120	MS
	Manganese	ug/L	50	51.1		102	80-120	MS
	Thallium	ug/L	50	44.3		88.7	80-120	MS
	Uranium	ug/L	50	55.1		110	80-120	MS

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1983

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>
1202056224	Mercury	ug/L	2	2.24		112	80-120	AV

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1983 Client ID GW29-10-13277L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 247830002 Serial Dilution ID: 1202053057

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	4770		4760		.21		10	P
Arsenic	8.89	J	25	U	100			P
Barium	352		356		1.14		10	P
Calcium	26800		26500		1.12		10	P
Chromium	25.6		25.2		1.76			P
Cobalt	78.5		80		1.91		10	P
Copper	33.5		32.7	J	2.39			P
Iron	51700		51500		.387		10	P
Magnesium	6410		6750		5.3		10	P
Nickel	44		43.9		.341			P
Potassium	4470		4440		.783		10	P
Selenium	5	U	25	U				P
Silver	1	U	5	U				P
Sodium	21600		21000		3.01		10	P
Vanadium	16.2		15.2	J	6.48			P
Zinc	3320		3400		2.26		10	P

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1983 Client ID GW29-10-13277L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 247830002 Serial Dilution ID: 1202053062

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	1	U	5	U				MS
Beryllium	.452	J	.765	J	69.2			MS
Cadmium	.214	J	.55	U	100			MS
Lead	4.26		4.5	J	5.63			MS
Manganese	900		1010		12.2	E	10	MS
Thallium	.3	U	5.3					MS
Uranium	1.85		4.9		165			MS

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1983 Client ID RE15-10-8272L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 247771001 Serial Dilution ID: 1202056227

Analyte	Initial Value ng/L	C	Serial Value ng/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.066	U	.33	U				AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1983

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 957491							
1202053053	MB for batch 957491	MB	W	01-MAR-10	50mL	50mL	
1202053054	LCS for batch 957491	LCS	W	01-MAR-10	50mL	50mL	
1202053056	GW29-10-13277S	MS	W	01-MAR-10	50mL	50mL	
1202053055	GW29-10-13277D	DUP	W	01-MAR-10	50mL	50mL	
247793001	RE15-10-8330	SAMPLE	W	01-MAR-10	50mL	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1983

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	957493						
1202053058	MB for batch 957493	MB	W	02-MAR-10	50mL	50mL	
1202053059	LCS for batch 957493	LCS	W	02-MAR-10	50mL	50mL	
1202053061	GW29-10-13277S	MS	W	02-MAR-10	50mL	50mL	
1202053060	GW29-10-13277D	DUP	W	02-MAR-10	50mL	50mL	
247793001	RE15-10-8330	SAMPLE	W	02-MAR-10	50mL	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1983

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	958775						
1202056223	MB for batch 958775	MB	W	02-MAR-10	20mL	20mL	
1202056224	LCS for batch 958775	LCS	W	02-MAR-10	20mL	20mL	
1202056226	RE15-10-8272S	MS	W	02-MAR-10	20mL	20mL	
1202056225	RE15-10-8272D	DUP	W	02-MAR-10	20mL	20mL	
247793001	RE15-10-8330	SAMPLE	W	02-MAR-10	20mL	20mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 20-APR-10

End Date: 20-APR-10

Client Sdg: 10-1983

Method MS

Data File: 100420-3

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	12:30:00		X			X									X							X			
S10	1	12:33:00		X			X									X							X			
S100	1	12:36:00		X			X									X							X			
ICV01	1	12:39:00		X			X									X							X			
ICB01	1	12:43:00		X			X									X							X			
CRDL01	1	12:46:00		X			X									X							X			
ICSA01	1	12:49:00		X			X									X							X			
ICSAB01	1	12:52:00		X			X									X							X			
CCV01	1	12:55:00		X			X									X							X			
CCB01	1	12:58:00		X			X									X							X			
LR01	1	13:01:00		X			X									X							X			
CCV02	1	13:04:00		X			X									X							X			
CCB02	1	13:07:00		X			X									X							X			
1202053058	1	13:11:00		X			X									X							X			
1202053059	1	13:14:00		X			X									X							X			
ZZZZZZ	1	13:17:00																								
247793001	1	13:20:00		X			X									X							X			
ZZZZZZ	1	13:23:00																								
ZZZZZZ	1	13:26:00																								
ZZZZZZ	1	13:29:00																								
ZZZZZZ	1	13:32:00																								
CCV03	1	13:36:00		X			X									X							X			
CCB03	1	13:39:00		X			X									X							X			
ZZZZZZ	10	13:42:00																								
ZZZZZZ	10	13:45:00																								
ZZZZZZ	10	13:48:00																								
ZZZZZZ	50	13:51:00																								
ZZZZZZ	1	13:54:00																								
1202053060	1	13:57:00		X			X									X							X			
1202053061	1	14:00:00		X			X									X							X			
1202053062	5	14:04:00		X			X									X							X			
ZZZZZZ	1	14:07:00																								
CCV04	1	14:10:00		X			X									X							X			
CCB04	1	14:13:00		X			X									X							X			

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 20-APR-10

End Date: 20-APR-10

Client Sdg: 10-1983

Method MS

Data File: 100420-5

Samp No.	D/F	Run Time	Al	Sh	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	15:40:00						X						X												
S10	1	15:42:00						X						X												
S100	1	15:44:00						X						X												
ICV01	1	15:46:00						X						X												
ICB01	1	15:48:00						X						X												
CRDL01	1	15:51:00						X						X												
ICSA01	1	15:53:00						X						X												
ICSAB01	1	15:55:00						X						X												
CCV01	1	15:57:00						X						X												
CCB01	1	15:59:00						X						X												
1202053058	1	16:02:00						X						X												
1202053059	1	16:04:00						X						X												
ZZZZZZ	1	16:06:00																								
247793001	1	16:08:00						X						X												
ZZZZZZ	1	16:11:00																								
ZZZZZZ	1	16:13:00																								
CCV02	1	16:15:00						X						X												
CCB02	1	16:17:00						X						X												
ZZZZZZ	1	16:19:00																								
ZZZZZZ	1	16:22:00																								
ZZZZZZ	1	16:24:00																								
1202053060	1	16:26:00						X						X												
1202053061	1	16:28:00						X						X												
1202053062	5	16:30:00						X						X												
ZZZZZZ	1	16:33:00																								
CCV03	1	16:35:00						X						X												
CCB03	1	16:37:00						X						X												

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 19-MAR-10

Client Sdg: 10-1983

Method P

Data File: 031910-1

End Date: 19-MAR-10

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	07:10:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S0.1	1	07:17:00			X	X				X	X	X						X	X	X	X				X	X
S0.5	1	07:23:00	X		X	X			X	X	X	X			X			X	X	X	X				X	X
SCAL	1	07:30:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S10	1	07:37:00	X						X				X		X							X				
ICV01	1	07:43:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICB01	1	07:50:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
PQL01	1	07:57:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSA01	1	08:04:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSAB01	1	08:11:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR01	1	08:18:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR02	1	08:24:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	08:31:00																								
ZZZZZZ	1	08:38:00																								
CCV01	1	08:47:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB01	1	08:54:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR03	1	09:01:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV02	1	09:08:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB02	1	09:15:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	09:29:00																								
ZZZZZZ	1	09:36:00																								
ZZZZZZ	1	09:43:00																								
ZZZZZZ	1	09:49:00																								
ZZZZZZ	20	09:56:00																								
ZZZZZZ	20	10:03:00																								
ZZZZZZ	10	10:11:00																								
CCV03	1	10:18:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
PQL02	1	10:25:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB03	1	10:32:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	10:42:00																								
ZZZZZZ	1	10:49:00																								
ZZZZZZ	1	10:56:00																								
ZZZZZZ	1	11:03:00																								
ZZZZZZ	1	11:10:00																								
ZZZZZZ	1	11:17:00																								
ZZZZZZ	5	11:24:00																								
ZZZZZZ	1	11:31:00																								
CCV04	1	11:38:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB04	1	11:45:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	11:52:00																								

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																		
ZZZZZZ	1	11:59:00																		
ZZZZZZ	1	12:07:00																		
ZZZZZZ	1	12:14:00																		
ZZZZZZ	1	12:21:00																		
ZZZZZZ	1	12:28:00																		
ZZZZZZ	1	12:35:00																		
ZZZZZZ	1	12:42:00																		
CCV05	1	12:49:00	X		X	X			X	X	X	X	X		X		X	X	X	X
CCB05	1	12:56:00	X		X	X			X	X	X	X	X		X		X	X	X	X
CCV06	1	13:15:00	X		X	X			X	X	X	X	X		X		X	X	X	X
CCB06	1	13:22:00	X		X	X			X	X	X	X	X		X		X	X	X	X
1202053053	1	13:29:00	X		X	X			X	X	X	X	X		X		X	X	X	X
1202053054	1	13:36:00	X		X	X			X	X	X	X	X		X		X	X	X	X
ZZZZZZ	1	13:43:00																		
247793001	1	13:50:00	X		X	X			X	X	X	X	X		X		X	X	X	X
ZZZZZZ	1	13:56:00																		
ZZZZZZ	1	14:03:00																		
ZZZZZZ	1	14:10:00																		
CCV07	1	14:17:00	X		X	X			X	X	X	X	X		X		X	X	X	X
CCB07	1	14:24:00	X		X	X			X	X	X	X	X		X		X	X	X	X
ZZZZZZ	1	14:31:00																		
ZZZZZZ	1	14:38:00																		
1202053055	1	14:45:00	X		X	X			X	X	X	X	X		X		X	X	X	X
1202053056	1	14:52:00	X		X	X			X	X	X	X	X		X		X	X	X	X
1202053057	5	14:59:00	X		X	X			X	X	X	X	X		X		X	X	X	X
ZZZZZZ	1	15:05:00																		
CCV08	1	15:12:00	X		X	X			X	X	X	X	X		X		X	X	X	X
CCB08	1	15:19:00	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: MER536

Start Date: 03-MAR-10

End Date: 03-MAR-10

Client Sdg: 10-1983

Method AV

Data File: 030310W2-6

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	10:20:00															X									
S0.2	1	10:22:00															X									
S0.5	1	10:24:00															X									
S2.0	1	10:26:00															X									
S5.0	1	10:28:00															X									
S10	1	10:30:00															X									
ICV01	1	10:32:00															X									
ICB01	1	10:34:00															X									
CRDL01	1	10:36:00															X									
CCV01	1	10:38:00															X									
CCB01	1	10:40:00															X									
ZZZZZZ	1	10:42:00																								
ZZZZZZ	1	10:44:00																								
ZZZZZZ	1	10:46:00																								
ZZZZZZ	1	10:48:00																								
ZZZZZZ	1	10:50:00																								
ZZZZZZ	5	10:52:00																								
ZZZZZZ	1	10:54:00																								
ZZZZZZ	1	10:56:00																								
ZZZZZZ	1	10:58:00																								
ZZZZZZ	1	11:00:00																								
CCV02	1	11:02:00															X									
CCB02	1	11:04:00															X									
ZZZZZZ	1	11:06:00																								
1202056223	1	11:08:00															X									
1202056224	1	11:10:00															X									
ZZZZZZ	1	11:12:00																								
1202056225	1	11:14:00															X									
1202056226	1	11:16:00															X									
1202056227	5	11:18:00															X									
ZZZZZZ	1	11:20:00																								
247793001	1	11:22:00															X									
ZZZZZZ	1	11:24:00																								
CCV03	1	11:26:00															X									
CCB03	1	11:28:00															X									

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS3

Start Date: 20-APR-10

End Date: 20-APR-10

Client Sdg: 10-1983

Method: MS

Data File: 100420-2

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	13:33:00																						X		
S10	1	13:36:00																						X		
S100	1	13:40:00																						X		
ICV01	1	13:43:00																						X		
ICB01	1	13:46:00																						X		
CRDL01	1	13:50:00																						X		
ICSA01	1	13:53:00																						X		
ICSAB01	1	13:56:00																						X		
CCV01	1	14:00:00																						X		
CCB01	1	14:03:00																						X		
ZZZZZZ	2	14:06:00																								
ZZZZZZ	40	14:10:00																								
ZZZZZZ	2	14:13:00																								
ZZZZZZ	2	14:16:00																								
ZZZZZZ	2	14:20:00																								
ZZZZZZ	2	14:23:00																								
ZZZZZZ	10	14:27:00																								
CCV02	1	14:30:00																						X		
CCB02	1	14:33:00																						X		
ZZZZZZ	2	14:37:00																								
ZZZZZZ	2	14:40:00																								
ZZZZZZ	2	14:43:00																								
ZZZZZZ	2	14:47:00																								
ZZZZZZ	2	14:50:00																								
ZZZZZZ	2	14:54:00																								
CCV03	1	14:57:00																						X		
CCB03	1	15:00:00																						X		
I202053058	1	15:04:00																						X		
I202053059	1	15:07:00																						X		
247793001	1	15:10:00																						X		
ZZZZZZ	1	15:14:00																								
I202053060	1	15:17:00																						X		
I202053061	1	15:20:00																						X		
I202053062	5	15:24:00																						X		
CCV04	1	15:27:00																						X		
CCB04	1	15:31:00																						X		

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1983

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP/MS	<u>Analyte</u>	<u>Wavelength</u> (nm)	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
LIQUID	Aluminum		15.0	30
	Antimony		1.0	3
	Arsenic		1.6	5
	Barium		0.6	2
	Beryllium		0.1	.5
	Cadmium		0.11	1
	Calcium		65.0	200
	Chromium		2.0	10
	Cobalt		0.1	1
	Copper		0.33	1
	Iron		33.0	100
	Lead		0.5	2
	Magnesium		5.2	15
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		1.0	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Uranium		0.05	.2
	Vanadium		3.0	10
	Zinc		3.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1983

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

		<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u> <u>ug/L</u>	<u>RDL</u> <u>ug/L</u>
MERCURY	<u>Analyte</u>			
LIQUID	Mercury		0.066	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1983

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: GELGEL Job No: **10-1983**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02697	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: **10-1983**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	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
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Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1983**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	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: GEL

GEL Job No: 10-1983

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silica
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: **10-1983**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silicon	Silver	Strontium	Sulfur	Thallium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	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	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1983

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Tin	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-15.4932	3.30431	0.00000	-2.81282	0.00000
Arsenic	188.979	0.00000	-8.66313	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	-2.20293	0.00000
Beryllium	313.107	0.00000	-2.27027	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	-0.19473	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.39645	-1.41250	0.00000
Cobalt	228.616	0.00000	2.09497	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.55360	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	-9.37529	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	0.81635	-4.04400	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	-8.29801	0.00000	1.88584	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.43915	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	1.05947	-1.91382	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-1983

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>
Zinc	1000	2500	ug/L	01-FEB-10
Aluminum	1	50000	ug/L	01-FEB-10
Antimony	1000	250	ug/L	01-FEB-10
Arsenic	1000	1000	ug/L	01-FEB-10
Barium	1000	1000	ug/L	01-FEB-10
Beryllium	1000	1000	ug/L	01-FEB-10
Cadmium	1000	1000	ug/L	01-FEB-10
Calcium	500	50000	ug/L	01-FEB-10
Chromium	1000	1000	ug/L	01-FEB-10
Cobalt	1000	1000	ug/L	01-FEB-10
Copper	1000	1000	ug/L	01-FEB-10
Iron	500	50000	ug/L	01-FEB-10
Lead	1000	5000	ug/L	01-FEB-10
Magnesium	1	50000	ug/L	01-FEB-10
Manganese	1000	1000	ug/L	01-FEB-10
Nickel	1000	1000	ug/L	01-FEB-10
Potassium	1	50000	ug/L	01-FEB-10
Selenium	1000	500	ug/L	01-FEB-10
Silver	1000	250	ug/L	01-FEB-10
Sodium	1	50000	ug/L	01-FEB-10
Thallium	1000	500	ug/L	01-FEB-10
Uranium	1000	5000	ug/L	01-FEB-10
Vanadium	1000	100	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-1983

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-FEB-10
Antimony	20	10000	ug/L	01-FEB-10
Arsenic	20	10000	ug/L	01-FEB-10
Barium	20	15000	ug/L	01-FEB-10
Beryllium	20	3000	ug/L	01-FEB-10
Cadmium	20	10000	ug/L	01-FEB-10
Calcium	20	500000	ug/L	01-FEB-10
Chromium	20	25000	ug/L	01-FEB-10
Cobalt	20	10000	ug/L	01-FEB-10
Copper	20	20000	ug/L	01-FEB-10
Iron	20	500000	ug/L	01-FEB-10
Lead	20	25000	ug/L	01-FEB-10
Magnesium	20	500000	ug/L	01-FEB-10
Manganese	20	10000	ug/L	01-FEB-10
Nickel	20	10000	ug/L	01-FEB-10
Potassium	20	300000	ug/L	01-FEB-10
Selenium	20	10000	ug/L	01-FEB-10
Silver	20	1000	ug/L	01-FEB-10
Sodium	20	500000	ug/L	01-FEB-10
Thallium	20	10000	ug/L	01-FEB-10
Uranium	20	15000	ug/L	01-FEB-10
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-1983

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-FEB-10
Antimony	1000	250	ug/L	01-FEB-10
Arsenic	1000	1000	ug/L	01-FEB-10
Barium	1000	1000	ug/L	01-FEB-10
Beryllium	1000	1000	ug/L	01-FEB-10
Cadmium	1000	1000	ug/L	01-FEB-10
Calcium	500	50000	ug/L	01-FEB-10
Chromium	1000	1000	ug/L	01-FEB-10
Cobalt	1000	1000	ug/L	01-FEB-10
Copper	1000	1000	ug/L	01-FEB-10
Iron	500	50000	ug/L	01-FEB-10
Lead	1000	5000	ug/L	01-FEB-10
Magnesium	1	50000	ug/L	01-FEB-10
Manganese	1000	1000	ug/L	01-FEB-10
Nickel	1000	1000	ug/L	01-FEB-10
Potassium	1	50000	ug/L	01-FEB-10
Selenium	1000	500	ug/L	01-FEB-10
Silver	1000	250	ug/L	01-FEB-10
Sodium	1	50000	ug/L	01-FEB-10
Thallium	1000	500	ug/L	01-FEB-10
Uranium	1000	5000	ug/L	01-FEB-10
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10

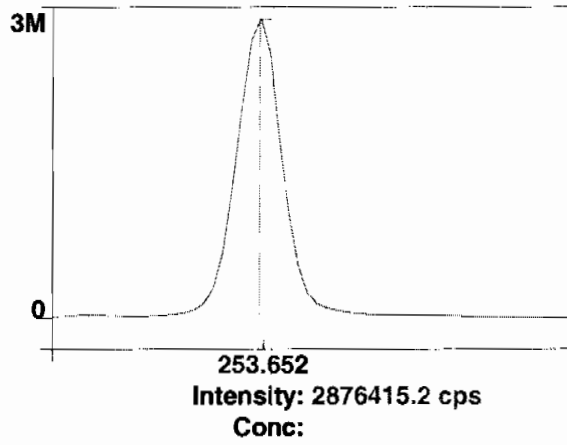
Raw Data

Method: Hg_ReAlign
Result: 042110

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



1

3/19/2010 06:54:45 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): -0.000 Slit adjustment: 0

Analysis Begun

Start Time: 3/19/2010 07:10:13 Plasma On Time: 3/15/2010 06:51:19
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\031910.sif

Batch ID:

Results Data Set: 031910

Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded

Method Name: General Eng.2AX

IEC File: 011110.iec

Method Description:

Method Last Saved: 3/18/2010 18:42:02

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: 3/19/2010 07:10:15

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	4353.7	4353.7	0.000 %	07:12:08
1	Y RADIAL	4701.2	4701.2	0.000 %	07:12:08
1	Al 396.153Radial†	-70.7	-71.4	[0.00] ug/L	07:12:28
1	Ca 317.933Radial†	17.3	17.5	[0.00] ug/L	07:12:28
1	Fe 238.204 Radial†	9.7	9.8	[0.00] ug/L	07:12:28
1	K 766.490 Radial†	2594.9	2619.5	[0.00] ug/L	07:12:08
1	Mg 279.077 IEC†	0.4	0.4	[0.00] ug/L	07:12:28
1	Na 589.592 Radial†	-880.1	-888.4	[0.00] ug/L	07:12:08
1	Sr 421.552†	28.7	28.9	[0.00] ug/L	07:12:08
1	Sc 361.383	813923.1	813923.1	0.0000 %	07:13:24
1	Y 371.029	687856.7	687856.7	0.0000 %	07:13:24
1	Ag 328.068†	163.2	164.2	[0.00] ug/L	07:13:24
1	As 188.979†	-27.2	-27.4	[0.00] ug/L	07:13:44
1	B 249.677†	-533.0	-536.2	[0.00] ug/L	07:13:44
1	Ba 233.527†	-6.3	-6.3	[0.00] ug/L	07:13:44
1	Be 313.107†	-3672.2	-3694.3	[0.00] ug/L	07:13:24
1	Cd 226.502†	-177.2	-178.3	[0.00] ug/L	07:13:44
1	Co 228.616†	-39.2	-39.4	[0.00] ug/L	07:13:44
1	Cr 267.716†	70.5	70.9	[0.00] ug/L	07:13:44
1	Cu 324.752†	5494.6	5527.6	[0.00] ug/L	07:13:24
1	Mn 257.610†	391.2	393.5	[0.00] ug/L	07:13:44
1	Mo 202.031†	4.3	4.3	[0.00] ug/L	07:13:44
1	Ni 231.604†	78.3	78.8	[0.00] ug/L	07:13:44
1	P 214.914†	181.5	182.6	[0.00] ug/L	07:13:44
1	Pb 220.353†	-56.8	-57.2	[0.00] ug/L	07:13:44
1	S 181.975 Axial†	28.5	28.7	[0.00] ug/L	07:13:44
1	Sb 206.836†	27.2	27.4	[0.00] ug/L	07:13:44
1	Se 196.026†	-14.5	-14.6	[0.00] ug/L	07:13:44
1	Si 251.611†	480.1	483.0	[0.00] ug/L	07:13:44
1	Sn 189.927†	11.1	11.2	[0.00] ug/L	07:13:44
1	Ti 334.940†	-1120.6	-1127.3	[0.00] ug/L	07:13:24
1	Tl 190.801†	-33.9	-34.1	[0.00] ug/L	07:13:44
1	U 409.014†	-2254.8	-2268.4	[0.00] ug/L	07:13:24
1	V 292.402†	-1344.0	-1352.1	[0.00] ug/L	07:13:24
1	Zn 213.857†	561.6	565.0	[0.00] ug/L	07:13:44
1	SiO2†	511.8	514.9	[0.00] ug/L	07:14:55
2	Sc Radial	4414.0	4414.0	0.000 %	07:12:33
2	Y RADIAL	4778.8	4778.8	0.000 %	07:12:33
2	Al 396.153Radial†	-78.8	-78.5	[0.00] ug/L	07:12:53
2	Ca 317.933Radial†	16.9	16.9	[0.00] ug/L	07:12:53
2	Fe 238.204 Radial†	7.2	7.2	[0.00] ug/L	07:12:53
2	K 766.490 Radial†	2539.4	2528.4	[0.00] ug/L	07:12:33
2	Mg 279.077 IEC†	1.1	1.0	[0.00] ug/L	07:12:53
2	Na 589.592 Radial†	-865.3	-861.6	[0.00] ug/L	07:12:33
2	Sr 421.552†	13.8	13.7	[0.00] ug/L	07:12:33
2	Sc 361.383	820260.9	820260.9	0.0000 %	07:13:50
2	Y 371.029	692610.2	692610.2	0.0000 %	07:13:50
2	Ag 328.068†	188.4	188.1	[0.00] ug/L	07:13:50
2	As 188.979†	-24.0	-23.9	[0.00] ug/L	07:14:10
2	B 249.677†	-538.2	-537.3	[0.00] ug/L	07:14:10
2	Ba 233.527†	-4.3	-4.3	[0.00] ug/L	07:14:10
2	Be 313.107†	-3734.7	-3728.2	[0.00] ug/L	07:13:50
2	Cd 226.502†	-161.4	-161.2	[0.00] ug/L	07:14:10
2	Co 228.616†	-38.5	-38.4	[0.00] ug/L	07:14:10
2	Cr 267.716†	73.2	73.0	[0.00] ug/L	07:14:10
2	Cu 324.752†	5607.8	5597.9	[0.00] ug/L	07:13:50
2	Mn 257.610†	387.1	386.5	[0.00] ug/L	07:14:10
2	Mo 202.031†	6.2	6.2	[0.00] ug/L	07:14:10
2	Ni 231.604†	95.9	95.7	[0.00] ug/L	07:14:10
2	P 214.914†	197.1	196.7	[0.00] ug/L	07:14:10
2	Pb 220.353†	-49.7	-49.6	[0.00] ug/L	07:14:10
2	S 181.975 Axial†	30.2	30.2	[0.00] ug/L	07:14:10
2	Sb 206.836†	22.6	22.5	[0.00] ug/L	07:14:10
2	Se 196.026†	-17.3	-17.3	[0.00] ug/L	07:14:10
2	Si 251.611†	500.7	499.8	[0.00] ug/L	07:14:10
2	Sn 189.927†	4.3	4.3	[0.00] ug/L	07:14:10
2	Ti 334.940†	-1112.7	-1110.8	[0.00] ug/L	07:13:50
2	Tl 190.801†	-27.8	-27.8	[0.00] ug/L	07:14:10
2	U 409.014†	-2181.2	-2177.4	[0.00] ug/L	07:13:50
2	V 292.402†	-1308.1	-1305.8	[0.00] ug/L	07:13:50

2	Zn 213.857†	572.4	571.4	[0.00]	ug/L	07:14:10
2	SiO2†	481.0	480.2	[0.00]	ug/L	07:15:15
3	Sc Radial	4417.5	4417.5	0.000	%	07:12:58
3	Y RADIAL	4801.7	4801.7	0.000	%	07:12:58
3	Al 396.153Radial†	-84.8	-84.4	[0.00]	ug/L	07:13:18
3	Ca 317.933Radial†	12.8	12.8	[0.00]	ug/L	07:13:18
3	Fe 238.204 Radial†	8.5	8.4	[0.00]	ug/L	07:13:18
3	K 766.490 Radial†	2661.8	2648.3	[0.00]	ug/L	07:12:58
3	Mg 279.077 IEC†	3.1	3.1	[0.00]	ug/L	07:13:18
3	Na 589.592 Radial†	-879.8	-875.3	[0.00]	ug/L	07:12:58
3	Sr 421.552†	19.9	19.8	[0.00]	ug/L	07:12:58
3	Sc 361.383	822290.3	822290.3	0.0000	%	07:14:15
3	Y 371.029	694473.4	694473.4	0.0000	%	07:14:15
3	Ag 328.068†	204.0	203.1	[0.00]	ug/L	07:14:15
3	As 188.979†	-29.2	-29.1	[0.00]	ug/L	07:14:35
3	B 249.677†	-540.9	-538.6	[0.00]	ug/L	07:14:35
3	Ba 233.527†	8.5	8.5	[0.00]	ug/L	07:14:35
3	Be 313.107†	-3786.6	-3770.6	[0.00]	ug/L	07:14:15
3	Cd 226.502†	-173.2	-172.5	[0.00]	ug/L	07:14:35
3	Co 228.616†	-61.1	-60.8	[0.00]	ug/L	07:14:35
3	Cr 267.716†	70.8	70.5	[0.00]	ug/L	07:14:35
3	Cu 324.752†	5553.8	5530.4	[0.00]	ug/L	07:14:15
3	Mn 257.610†	388.8	387.2	[0.00]	ug/L	07:14:35
3	Mo 202.031†	15.1	15.1	[0.00]	ug/L	07:14:35
3	Ni 231.604†	78.0	77.7	[0.00]	ug/L	07:14:35
3	P 214.914†	183.3	182.6	[0.00]	ug/L	07:14:35
3	Pb 220.353†	-68.4	-68.2	[0.00]	ug/L	07:14:35
3	S 181.975 Axial†	31.8	31.7	[0.00]	ug/L	07:14:35
3	Sb 206.836†	21.2	21.1	[0.00]	ug/L	07:14:35
3	Se 196.026†	-19.1	-19.0	[0.00]	ug/L	07:14:35
3	Si 251.611†	483.8	481.8	[0.00]	ug/L	07:14:35
3	Sn 189.927†	6.0	6.0	[0.00]	ug/L	07:14:35
3	Ti 334.940†	-1130.3	-1125.5	[0.00]	ug/L	07:14:15
3	Tl 190.801†	-25.5	-25.4	[0.00]	ug/L	07:14:35
3	U 409.014†	-2176.0	-2166.9	[0.00]	ug/L	07:14:15
3	V 292.402†	-1299.9	-1294.4	[0.00]	ug/L	07:14:15
3	Zn 213.857†	576.3	573.9	[0.00]	ug/L	07:14:35
3	SiO2†	505.1	502.9	[0.00]	ug/L	07:15:35

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	818824.8	4364.54	0.53%	0.0000 %
Sc Radial	4395.1	35.85	0.82%	0.000 %
Y 371.029	691646.8	3411.92	0.49%	0.0000 %
Y RADIAL	4760.6	52.66	1.11%	0.000 %
Ag 328.068†	185.1	19.62	10.60%	[0.00] ug/L
Al 396.153Radial†	-78.1	6.49	8.31%	[0.00] ug/L
As 188.979†	-26.8	2.63	9.80%	[0.00] ug/L
B 249.677†	-537.4	1.22	0.23%	[0.00] ug/L
Ba 233.527†	-0.7	8.03	>999.9%	[0.00] ug/L
Be 313.107†	-3731.0	38.23	1.02%	[0.00] ug/L
Ca 317.933Radial†	15.7	2.56	16.28%	[0.00] ug/L
Cd 226.502†	-170.6	8.70	5.10%	[0.00] ug/L
Co 228.616†	-46.2	12.65	27.38%	[0.00] ug/L
Cr 267.716†	71.5	1.34	1.87%	[0.00] ug/L
Cu 324.752†	5552.0	39.81	0.72%	[0.00] ug/L
Fe 238.204 Radial†	8.5	1.30	15.32%	[0.00] ug/L
K 766.490 Radial†	2598.8	62.57	2.41%	[0.00] ug/L
Mg 279.077 IEC†	1.5	1.42	93.27%	[0.00] ug/L
Mn 257.610†	389.1	3.91	1.00%	[0.00] ug/L
Mo 202.031†	8.5	5.74	67.28%	[0.00] ug/L
Na 589.592 Radial†	-875.1	13.40	1.53%	[0.00] ug/L
Ni 231.604†	84.1	10.11	12.03%	[0.00] ug/L
P 214.914†	187.3	8.17	4.36%	[0.00] ug/L
Pb 220.353†	-58.3	9.33	16.01%	[0.00] ug/L
S 181.975 Axial†	30.2	1.49	4.94%	[0.00] ug/L
Sb 206.836†	23.7	3.28	13.84%	[0.00] ug/L
Se 196.026†	-17.0	2.24	13.19%	[0.00] ug/L
Si 251.611†	488.2	10.08	2.06%	[0.00] ug/L

Sn 189.927†	7.2	3.58	49.92%	[0.00]	ug/L
Sr 421.552†	20.8	7.65	36.76%	[0.00]	ug/L
Ti 334.940†	-1121.2	9.07	0.81%	[0.00]	ug/L
Tl 190.801†	-29.1	4.53	15.58%	[0.00]	ug/L
U 409.014†	-2204.2	55.80	2.53%	[0.00]	ug/L
V 292.402†	-1317.4	30.53	2.32%	[0.00]	ug/L
Zn 213.857†	570.1	4.60	0.81%	[0.00]	ug/L
SiO2†	499.3	17.63	3.53%	[0.00]	ug/L

Sequence No.: 2
 Sample ID: S0.1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 3/19/2010 07:17:46
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Analysis Time
1	Sc Radial	4299.2	4299.2	97.8 %	07:19:44
1	Y RADIAL	4673.1	4673.1	98.16 %	07:19:44
1	K 766.490 Radial†	7813.6	5389.1	[1000] ug/L	07:19:39
1	Sr 421.552†	12088.1	12336.8	[100] ug/L	07:19:44
1	Sc 361.383	819565.4	819565.4	100.09 %	07:20:11
1	Y 371.029	689971.2	689971.2	99.758 %	07:20:11
1	Ag 328.068†	19793.2	19590.2	[100] ug/L	07:20:11
1	As 188.979†	168.5	195.1	[100] ug/L	07:20:31
1	B 249.677†	2888.3	3423.0	[100] ug/L	07:20:11
1	Ba 233.527†	10948.2	10939.0	[100] ug/L	07:20:11
1	Be 313.107†	234967.8	238486.5	[100] ug/L	07:20:11
1	Cd 226.502†	6701.2	6865.8	[100] ug/L	07:20:31
1	Co 228.616†	3917.8	3960.4	[100] ug/L	07:20:31
1	Cr 267.716†	7686.1	7607.7	[100] ug/L	07:20:11
1	Cu 324.752†	36199.8	30615.1	[100] ug/L	07:20:11
1	Mn 257.610†	79100.7	78640.2	[100] ug/L	07:20:11
1	Mo 202.031†	1143.2	1133.6	[100] ug/L	07:20:31
1	Ni 231.604†	3285.2	3198.1	[100] ug/L	07:20:31
1	P 214.914†	856.5	668.4	[500] ug/L	07:20:31
1	Pb 220.353†	619.7	677.4	[100] ug/L	07:20:31
1	S 181.975 Axial†	142.1	111.8	[200] ug/L	07:20:31
1	Sb 206.836†	263.5	239.6	[100] ug/L	07:20:31
1	Se 196.026†	105.0	121.8	[100] ug/L	07:20:31
1	Si 251.611†	13768.7	13268.1	[500] ug/L	07:20:11
1	Sn 189.927†	444.8	437.2	[100] ug/L	07:20:31
1	Ti 334.940†	56944.7	58014.5	[100] ug/L	07:20:11
1	Tl 190.801†	236.6	265.5	[100] ug/L	07:20:31
1	U 409.014†	1277.7	3480.8	[100] ug/L	07:20:11
1	V 292.402†	11266.0	12573.2	[100] ug/L	07:20:11
1	Zn 213.857†	8992.7	8414.5	[100] ug/L	07:20:11
1	SiO2†	13699.9	13188.2	[1069.5] ug/L	07:21:27
2	Sc Radial	4351.7	4351.7	99.0 %	07:19:54
2	Y RADIAL	4736.2	4736.2	99.49 %	07:19:54
2	K 766.490 Radial†	7639.5	5116.9	[1000] ug/L	07:19:49
2	Sr 421.552†	12186.1	12286.7	[100] ug/L	07:19:54
2	Sc 361.383	806559.5	806559.5	98.502 %	07:20:36
2	Y 371.029	679008.4	679008.4	98.173 %	07:20:36
2	Ag 328.068†	19410.1	19520.1	[100] ug/L	07:20:36
2	As 188.979†	160.0	189.2	[100] ug/L	07:20:57
2	B 249.677†	2853.4	3434.1	[100] ug/L	07:20:36
2	Ba 233.527†	10778.3	10943.0	[100] ug/L	07:20:36
2	Be 313.107†	231279.8	238527.9	[100] ug/L	07:20:36
2	Cd 226.502†	6685.7	6958.0	[100] ug/L	07:20:57
2	Co 228.616†	3912.0	4017.7	[100] ug/L	07:20:57
2	Cr 267.716†	7564.8	7608.4	[100] ug/L	07:20:36
2	Cu 324.752†	35581.8	30570.9	[100] ug/L	07:20:36
2	Mn 257.610†	77938.0	78734.1	[100] ug/L	07:20:36
2	Mo 202.031†	1144.1	1152.9	[100] ug/L	07:20:57
2	Ni 231.604†	3297.2	3263.3	[100] ug/L	07:20:57
2	P 214.914†	848.3	673.9	[500] ug/L	07:20:57
2	Pb 220.353†	620.7	688.5	[100] ug/L	07:20:57
2	S 181.975 Axial†	146.4	118.4	[200] ug/L	07:20:57
2	Sb 206.836†	264.3	244.6	[100] ug/L	07:20:57
2	Se 196.026†	107.5	126.1	[100] ug/L	07:20:57
2	Si 251.611†	13541.3	13259.0	[500] ug/L	07:20:36
2	Sn 189.927†	446.3	445.9	[100] ug/L	07:20:57
2	Ti 334.940†	56083.7	58057.7	[100] ug/L	07:20:36
2	Tl 190.801†	232.7	265.4	[100] ug/L	07:20:57
2	U 409.014†	1337.0	3561.5	[100] ug/L	07:20:36

2	V 292.402†	11053.6	12539.2	[100]	ug/L	07:20:36
2	Zn 213.857†	8858.1	8422.7	[100]	ug/L	07:20:36
2	SiO2†	13722.0	13431.3	[1069.5]	ug/L	07:21:32
3	Sc Radial	4298.2	4298.2	97.8	%	07:20:04
3	Y RADIAL	4680.6	4680.6	98.32	%	07:20:04
3	K 766.490 Radial†	7824.1	5401.6	[1000]	ug/L	07:19:59
3	Sr 421.552†	12067.8	12318.9	[100]	ug/L	07:20:04
3	Sc 361.383	819475.4	819475.4	100.08	%	07:21:02
3	Y 371.029	690004.4	690004.4	99.763	%	07:21:02
3	Ag 328.068†	19783.4	19582.5	[100]	ug/L	07:21:02
3	As 188.979†	160.2	186.9	[100]	ug/L	07:21:22
3	B 249.677†	2918.4	3453.5	[100]	ug/L	07:21:02
3	Ba 233.527†	10967.6	10959.6	[100]	ug/L	07:21:02
3	Be 313.107†	234959.9	238504.4	[100]	ug/L	07:21:02
3	Cd 226.502†	6644.2	6809.6	[100]	ug/L	07:21:22
3	Co 228.616†	3875.7	3918.8	[100]	ug/L	07:21:22
3	Cr 267.716†	7681.2	7603.6	[100]	ug/L	07:21:02
3	Cu 324.752†	36243.6	30662.8	[100]	ug/L	07:21:02
3	Mn 257.610†	79237.9	78785.9	[100]	ug/L	07:21:02
3	Mo 202.031†	1142.7	1133.3	[100]	ug/L	07:21:22
3	Ni 231.604†	3256.6	3170.0	[100]	ug/L	07:21:22
3	P 214.914†	855.5	667.5	[500]	ug/L	07:21:22
3	Pb 220.353†	594.6	652.4	[100]	ug/L	07:21:22
3	S 181.975 Axial†	141.7	111.4	[200]	ug/L	07:21:22
3	Sb 206.836†	256.8	232.9	[100]	ug/L	07:21:22
3	Se 196.026†	97.7	114.6	[100]	ug/L	07:21:22
3	Si 251.611†	13838.2	13339.0	[500]	ug/L	07:21:02
3	Sn 189.927†	447.8	440.3	[100]	ug/L	07:21:22
3	Ti 334.940†	57007.2	58083.1	[100]	ug/L	07:21:02
3	Tl 190.801†	233.6	262.6	[100]	ug/L	07:21:22
3	U 409.014†	1393.7	3596.8	[100]	ug/L	07:21:02
3	V 292.402†	11249.5	12558.0	[100]	ug/L	07:21:02
3	Zn 213.857†	9030.1	8452.9	[100]	ug/L	07:21:02
3	SiO2†	13379.9	12869.9	[1069.5]	ug/L	07:21:37

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	815200.1	7483.11	0.92%	99.557	%
Sc Radial	4316.4	30.60	0.71%	98.2	%
Y 371.029	686328.0	6339.00	0.92%	99.231	%
Y RADIAL	4696.6	34.45	0.73%	98.66	%
Ag 328.068†	19564.3	38.44	0.20%	[100]	ug/L
As 188.979†	190.4	4.23	2.22%	[100]	ug/L
B 249.677†	3436.9	15.41	0.45%	[100]	ug/L
Ba 233.527†	10947.2	10.95	0.10%	[100]	ug/L
Be 313.107†	238506.3	20.75	0.01%	[100]	ug/L
Cd 226.502†	6877.8	74.92	1.09%	[100]	ug/L
Co 228.616†	3965.6	49.63	1.25%	[100]	ug/L
Cr 267.716†	7606.6	2.55	0.03%	[100]	ug/L
Cu 324.752†	30616.3	45.95	0.15%	[100]	ug/L
K 766.490 Radial†	5302.5	160.89	3.03%	[1000]	ug/L
Mn 257.610†	78720.1	73.87	0.09%	[100]	ug/L
Mo 202.031†	1139.9	11.27	0.99%	[100]	ug/L
Ni 231.604†	3210.5	47.86	1.49%	[100]	ug/L
P 214.914†	670.0	3.47	0.52%	[500]	ug/L
Pb 220.353†	672.8	18.46	2.74%	[100]	ug/L
S 181.975 Axial†	113.9	3.97	3.49%	[200]	ug/L
Sb 206.836†	239.0	5.88	2.46%	[100]	ug/L
Se 196.026†	120.8	5.83	4.83%	[100]	ug/L
Si 251.611†	13288.7	43.81	0.33%	[500]	ug/L
Sn 189.927†	441.1	4.43	1.00%	[100]	ug/L
Sr 421.552†	12314.1	25.41	0.21%	[100]	ug/L
Ti 334.940†	58051.8	34.72	0.06%	[100]	ug/L
Tl 190.801†	264.5	1.66	0.63%	[100]	ug/L
U 409.014†	3546.4	59.46	1.68%	[100]	ug/L
V 292.402†	12556.8	17.06	0.14%	[100]	ug/L
Zn 213.857†	8430.0	20.23	0.24%	[100]	ug/L
SiO2†	13163.2	281.55	2.14%	[1069.5]	ug/L

Sequence No.: 3

Sample ID: S0.5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 3/19/2010 07:23:48

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	4176.8	4176.8	95.0 %		07:26:01
1	Y RADIAL	4651.6	4651.6	97.71 %		07:25:41
1	Al 396.153Radial†	4914.3	5249.1	[5000] ug/L		07:25:41
1	Ca 317.933Radial†	2634.9	2756.9	[5000] ug/L		07:26:01
1	K 766.490 Radial†	28253.2	27130.7	[5000] ug/L		07:25:41
1	Mg 279.077 IEC†	121.5	126.4	[5000] ug/L		07:26:01
1	Sr 421.552†	60226.2	63352.3	[500] ug/L		07:25:41
1	Sc 361.383	821637.6	821637.6	100.34 %		07:26:58
1	Y 371.029	685019.0	685019.0	99.042 %		07:26:58
1	Ag 328.068†	98692.4	98169.4	[500] ug/L		07:27:03
1	As 188.979†	887.8	911.5	[500] ug/L		07:27:23
1	B 249.677†	17522.6	18000.0	[500] ug/L		07:27:03
1	Ba 233.527†	54446.1	54260.5	[500] ug/L		07:27:03
1	Be 313.107†	1185449.4	1185122.2	[500] ug/L		07:26:58
1	Cd 226.502†	35110.5	35160.9	[500] ug/L		07:27:03
1	Co 228.616†	20009.0	19986.7	[500] ug/L		07:27:03
1	Cr 267.716†	38103.4	37901.5	[500] ug/L		07:27:03
1	Cu 324.752†	159261.1	153163.9	[500] ug/L		07:27:03
1	Mn 257.610†	382996.5	381296.3	[500] ug/L		07:26:58
1	Mo 202.031†	5661.9	5634.0	[500] ug/L		07:27:23
1	Ni 231.604†	16362.9	16222.8	[500] ug/L		07:27:03
1	P 214.914†	3554.2	3354.8	[2500] ug/L		07:27:23
1	Pb 220.353†	3215.7	3263.0	[500] ug/L		07:27:23
1	S 181.975 Axial†	589.7	557.5	[1000] ug/L		07:27:23
1	Sb 206.836†	1218.1	1190.2	[500] ug/L		07:27:23
1	Se 196.026†	576.1	591.1	[500] ug/L		07:27:23
1	Si 251.611†	67712.5	66992.5	[2500] ug/L		07:27:03
1	Sn 189.927†	2220.6	2205.8	[500] ug/L		07:27:23
1	Ti 334.940†	286976.2	287114.9	[500] ug/L		07:27:03
1	Tl 190.801†	1277.6	1302.4	[500] ug/L		07:27:23
1	U 409.014†	14882.9	17036.1	[500] ug/L		07:27:03
1	V 292.402†	62512.7	63616.1	[500] ug/L		07:27:03
1	Zn 213.857†	42904.3	42187.4	[500] ug/L		07:27:03
1	SiO2†	66118.3	65392.6	[5347.5] ug/L		07:28:31
2	Sc Radial	4187.9	4187.9	95.3 %		07:26:26
2	Y RADIAL	4622.9	4622.9	97.11 %		07:26:06
2	Al 396.153Radial†	4898.9	5219.3	[5000] ug/L		07:26:06
2	Ca 317.933Radial†	2632.3	2746.8	[5000] ug/L		07:26:26
2	K 766.490 Radial†	28051.2	26840.0	[5000] ug/L		07:26:06
2	Mg 279.077 IEC†	123.8	128.4	[5000] ug/L		07:26:26
2	Sr 421.552†	59628.2	62556.9	[500] ug/L		07:26:06
2	Sc 361.383	825022.8	825022.8	100.76 %		07:27:29
2	Y 371.029	687439.8	687439.8	99.392 %		07:27:29
2	Ag 328.068†	97697.4	96778.3	[500] ug/L		07:27:34
2	As 188.979†	890.6	910.7	[500] ug/L		07:27:54
2	B 249.677†	17330.0	17737.2	[500] ug/L		07:27:34
2	Ba 233.527†	53830.4	53426.7	[500] ug/L		07:27:34
2	Be 313.107†	1189558.3	1184352.8	[500] ug/L		07:27:29
2	Cd 226.502†	34616.6	34527.2	[500] ug/L		07:27:34
2	Co 228.616†	19815.7	19713.0	[500] ug/L		07:27:34
2	Cr 267.716†	37703.7	37349.0	[500] ug/L		07:27:34
2	Cu 324.752†	157566.2	150830.5	[500] ug/L		07:27:34
2	Mn 257.610†	384618.0	381339.5	[500] ug/L		07:27:29
2	Mo 202.031†	5644.3	5593.4	[500] ug/L		07:27:54
2	Ni 231.604†	16177.2	15971.6	[500] ug/L		07:27:34
2	P 214.914†	3569.2	3355.1	[2500] ug/L		07:27:54
2	Pb 220.353†	3211.8	3245.9	[500] ug/L		07:27:54
2	S 181.975 Axial†	589.2	554.6	[1000] ug/L		07:27:54
2	Sb 206.836†	1221.4	1188.5	[500] ug/L		07:27:54

2	Se 196.026†	590.5	603.1	[500]	ug/L	07:27:54
2	Si 251.611†	66983.6	65992.2	[2500]	ug/L	07:27:34
2	Sn 189.927†	2206.0	2182.2	[500]	ug/L	07:27:54
2	Ti 334.940†	284172.9	283159.3	[500]	ug/L	07:27:34
2	Tl 190.801†	1271.4	1291.0	[500]	ug/L	07:27:54
2	U 409.014†	14780.1	16873.3	[500]	ug/L	07:27:34
2	V 292.402†	61704.6	62558.5	[500]	ug/L	07:27:34
2	Zn 213.857†	42493.9	41604.6	[500]	ug/L	07:27:34
2	SiO2†	66791.9	65790.8	[5347.5]	ug/L	07:28:36
3	Sc Radial	4203.5	4203.5	95.6	%	07:26:51
3	Y RADIAL	4694.9	4694.9	98.62	%	07:26:31
3	Al 396.153Radial†	4935.9	5239.0	[5000]	ug/L	07:26:31
3	Ca 317.933Radial†	2631.7	2735.9	[5000]	ug/L	07:26:51
3	K 766.490 Radial†	28217.2	26904.4	[5000]	ug/L	07:26:31
3	Mg 279.077 IEC†	124.5	128.6	[5000]	ug/L	07:26:51
3	Sr 421.552†	60103.1	62821.5	[500]	ug/L	07:26:31
3	Sc 361.383	826571.9	826571.9	100.95	%	07:28:00
3	Y 371.029	687898.7	687898.7	99.458	%	07:28:00
3	Ag 328.068†	99152.7	98038.2	[500]	ug/L	07:28:05
3	As 188.979†	889.6	908.1	[500]	ug/L	07:28:25
3	B 249.677†	17693.7	18065.2	[500]	ug/L	07:28:05
3	Ba 233.527†	54817.6	54304.6	[500]	ug/L	07:28:05
3	Be 313.107†	1190349.2	1182923.6	[500]	ug/L	07:28:00
3	Cd 226.502†	35274.6	35114.6	[500]	ug/L	07:28:05
3	Co 228.616†	20091.0	19948.9	[500]	ug/L	07:28:05
3	Cr 267.716†	38295.2	37864.7	[500]	ug/L	07:28:05
3	Cu 324.752†	160283.3	153229.1	[500]	ug/L	07:28:05
3	Mn 257.610†	385572.6	381569.8	[500]	ug/L	07:28:00
3	Mo 202.031†	5688.1	5626.2	[500]	ug/L	07:28:25
3	Ni 231.604†	16456.1	16217.8	[500]	ug/L	07:28:05
3	P 214.914†	3559.1	3338.4	[2500]	ug/L	07:28:25
3	Pb 220.353†	3226.6	3254.6	[500]	ug/L	07:28:25
3	S 181.975 Axial†	594.2	558.4	[1000]	ug/L	07:28:25
3	Sb 206.836†	1241.9	1206.6	[500]	ug/L	07:28:25
3	Se 196.026†	590.7	602.1	[500]	ug/L	07:28:25
3	Si 251.611†	68168.0	67040.9	[2500]	ug/L	07:28:05
3	Sn 189.927†	2212.7	2184.8	[500]	ug/L	07:28:25
3	Ti 334.940†	289122.7	287534.1	[500]	ug/L	07:28:05
3	Tl 190.801†	1277.8	1294.9	[500]	ug/L	07:28:25
3	U 409.014†	15107.2	17169.8	[500]	ug/L	07:28:05
3	V 292.402†	62733.4	63462.9	[500]	ug/L	07:28:05
3	Zn 213.857†	43215.4	42240.3	[500]	ug/L	07:28:05
3	SiO2†	66865.0	65739.0	[5347.5]	ug/L	07:28:41

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	824410.7	2523.46	0.31%	100.68 %
Sc Radial	4189.4	13.40	0.32%	95.3 %
Y 371.029	686785.8	1547.25	0.23%	99.297 %
Y RADIAL	4656.5	36.25	0.78%	97.81 %
Ag 328.068†	97662.0	768.09	0.79%	[500] ug/L
Al 396.153Radial†	5235.8	15.16	0.29%	[5000] ug/L
As 188.979†	910.1	1.80	0.20%	[500] ug/L
B 249.677†	17934.1	173.65	0.97%	[500] ug/L
Ba 233.527†	53997.2	494.58	0.92%	[500] ug/L
Be 313.107†	1184132.9	1115.71	0.09%	[500] ug/L
Ca 317.933Radial†	2746.5	10.52	0.38%	[5000] ug/L
Cd 226.502†	34934.2	353.27	1.01%	[500] ug/L
Co 228.616†	19882.9	148.31	0.75%	[500] ug/L
Cr 267.716†	37705.1	308.91	0.82%	[500] ug/L
Cu 324.752†	152407.8	1366.39	0.90%	[500] ug/L
K 766.490 Radial†	26958.4	152.71	0.57%	[5000] ug/L
Mg 279.077 IEC†	127.8	1.24	0.97%	[5000] ug/L
Mn 257.610†	381401.8	147.04	0.04%	[500] ug/L
Mo 202.031†	5617.9	21.56	0.38%	[500] ug/L
Ni 231.604†	16137.4	143.62	0.89%	[500] ug/L
P 214.914†	3349.4	9.54	0.28%	[2500] ug/L
Pb 220.353†	3254.5	8.54	0.26%	[500] ug/L
S 181.975 Axial†	556.8	1.98	0.36%	[1000] ug/L

Sb 206.836†	1195.1	9.96	0.83%	[500] ug/L
Se 196.026†	598.8	6.64	1.11%	[500] ug/L
Si 251.611†	66675.2	592.00	0.89%	[2500] ug/L
Sn 189.927†	2190.9	12.95	0.59%	[500] ug/L
Sr 421.552†	62910.2	405.09	0.64%	[500] ug/L
Ti 334.940†	285936.1	2413.92	0.84%	[500] ug/L
Tl 190.801†	1296.1	5.78	0.45%	[500] ug/L
U 409.014†	17026.4	148.49	0.87%	[500] ug/L
V 292.402†	63212.5	571.55	0.90%	[500] ug/L
Zn 213.857†	42010.8	352.73	0.84%	[500] ug/L
SiO2†	65640.8	216.53	0.33%	[5347.5] ug/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 3/19/2010 07:30:51

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	4344.4	4344.4	98.8 %	07:32:44
1	Y RADIAL	4668.8	4668.8	98.07 %	07:32:44
1	Al 396.153Radial†	9900.0	10093.5	[10000] ug/L	07:32:44
1	Ca 317.933Radial†	5333.2	5379.7	[10000] ug/L	07:32:44
1	Fe 238.204 Radial†	855.1	856.7	[10000] ug/L	07:33:04
1	K 766.490 Radial†	54124.1	52156.7	[10000] ug/L	07:32:44
1	Mg 279.077 IEC†	245.6	246.9	[10000] ug/L	07:33:04
1	Na 589.592 Radial†	26296.6	27478.5	[10000] ug/L	07:32:44
1	Sr 421.552†	122992.3	124406.1	[1000] ug/L	07:32:44
1	Sc 361.383	819368.6	819368.6	100.07 %	07:34:03
1	Y 371.029	681762.9	681762.9	98.571 %	07:34:03
1	Ag 328.068†	192124.2	191811.5	[1000] ug/L	07:34:03
1	As 188.979†	1787.9	1813.5	[1000] ug/L	07:34:23
1	B 249.677†	35038.7	35552.8	[1000] ug/L	07:34:03
1	Ba 233.527†	106549.2	106479.2	[1000] ug/L	07:34:03
1	Be 313.107†	2343163.6	2345339.4	[1000] ug/L	07:34:03
1	Cd 226.502†	68574.5	68699.6	[1000] ug/L	07:34:03
1	Co 228.616†	38220.4	38241.3	[1000] ug/L	07:34:23
1	Cr 267.716†	74436.4	74315.5	[1000] ug/L	07:34:03
1	Cu 324.752†	307593.6	301837.4	[1000] ug/L	07:34:03
1	Mn 257.610†	760183.6	759290.0	[1000] ug/L	07:34:03
1	Mo 202.031†	11214.5	11198.6	[1000] ug/L	07:34:23
1	Ni 231.604†	31271.9	31167.1	[1000] ug/L	07:34:23
1	P 214.914†	6883.9	6692.0	[5000] ug/L	07:34:23
1	Pb 220.353†	6420.7	6474.7	[1000] ug/L	07:34:23
1	S 181.975 Axial†	1148.2	1117.2	[2000] ug/L	07:34:23
1	Sb 206.836†	2390.0	2364.7	[1000] ug/L	07:34:23
1	Se 196.026†	1177.1	1193.2	[1000] ug/L	07:34:23
1	Si 251.611†	131710.3	131134.7	[5000] ug/L	07:34:03
1	Sn 189.927†	4409.0	4398.9	[1000] ug/L	07:34:23
1	Ti 334.940†	574509.8	575249.8	[1000] ug/L	07:34:03
1	Tl 190.801†	2539.4	2566.8	[1000] ug/L	07:34:23
1	U 409.014†	30310.0	32494.1	[1000] ug/L	07:34:03
1	V 292.402†	123779.9	125015.2	[1000] ug/L	07:34:03
1	Zn 213.857†	82765.8	82140.8	[1000] ug/L	07:34:03
1	SiO2†	132053.9	131467.0	[10695] ug/L	07:35:24
2	Sc Radial	4357.0	4357.0	99.1 %	07:33:09
2	Y RADIAL	4710.6	4710.6	98.95 %	07:33:09
2	Al 396.153Radial†	9962.0	10127.1	[10000] ug/L	07:33:09
2	Ca 317.933Radial†	5341.3	5372.3	[10000] ug/L	07:33:09
2	Fe 238.204 Radial†	854.5	853.6	[10000] ug/L	07:33:29
2	K 766.490 Radial†	54185.4	52060.1	[10000] ug/L	07:33:09
2	Mg 279.077 IEC†	247.3	247.9	[10000] ug/L	07:33:29
2	Na 589.592 Radial†	26245.8	27350.2	[10000] ug/L	07:33:09
2	Sr 421.552†	123608.6	124667.8	[1000] ug/L	07:33:09
2	Sc 361.383	825030.9	825030.9	100.76 %	07:34:31
2	Y 371.029	685551.0	685551.0	99.119 %	07:34:31
2	Ag 328.068†	193526.5	191885.6	[1000] ug/L	07:34:31
2	As 188.979†	1800.1	1813.4	[1000] ug/L	07:34:51
2	B 249.677†	35389.2	35660.3	[1000] ug/L	07:34:31
2	Ba 233.527†	107337.0	106530.3	[1000] ug/L	07:34:31
2	Be 313.107†	2360060.0	2346038.1	[1000] ug/L	07:34:31
2	Cd 226.502†	69252.4	68902.1	[1000] ug/L	07:34:31
2	Co 228.616†	38675.7	38431.0	[1000] ug/L	07:34:51
2	Cr 267.716†	75156.9	74520.0	[1000] ug/L	07:34:31
2	Cu 324.752†	310179.0	302293.8	[1000] ug/L	07:34:31
2	Mn 257.610†	766947.4	760789.2	[1000] ug/L	07:34:31
2	Mo 202.031†	11357.1	11263.1	[1000] ug/L	07:34:51
2	Ni 231.604†	31613.1	31291.2	[1000] ug/L	07:34:51

2	P 214.914†	6950.8	6711.2	[5000]	ug/L	07:34:51
2	Pb 220.353†	6501.7	6511.1	[1000]	ug/L	07:34:51
2	S 181.975 Axial†	1154.9	1116.1	[2000]	ug/L	07:34:51
2	Sb 206.836†	2442.5	2400.4	[1000]	ug/L	07:34:51
2	Se 196.026†	1199.8	1207.7	[1000]	ug/L	07:34:51
2	Si 251.611†	132902.2	131414.3	[5000]	ug/L	07:34:31
2	Sn 189.927†	4443.2	4402.6	[1000]	ug/L	07:34:51
2	Ti 334.940†	579279.1	576042.9	[1000]	ug/L	07:34:31
2	Tl 190.801†	2581.0	2590.7	[1000]	ug/L	07:34:51
2	U 409.014†	30791.4	32764.0	[1000]	ug/L	07:34:31
2	V 292.402†	124696.3	125075.7	[1000]	ug/L	07:34:31
2	Zn 213.857†	83432.2	82234.5	[1000]	ug/L	07:34:31
2	SiO2†	132062.1	130569.4	[10695]	ug/L	07:35:29
3	Sc Radial	4286.2	4286.2	97.5	%	07:33:35
3	Y RADIAL	4648.8	4648.8	97.65	%	07:33:35
3	Al 396.153Radial†	9858.2	10186.7	[10000]	ug/L	07:33:35
3	Ca 317.933Radial†	5285.1	5403.6	[10000]	ug/L	07:33:35
3	Fe 238.204 Radial†	857.4	870.7	[10000]	ug/L	07:33:55
3	K 766.490 Radial†	53393.5	52151.0	[10000]	ug/L	07:33:35
3	Mg 279.077 IEC†	248.5	253.3	[10000]	ug/L	07:33:55
3	Na 589.592 Radial†	25596.1	27121.3	[10000]	ug/L	07:33:35
3	Sr 421.552†	121376.4	124438.7	[1000]	ug/L	07:33:35
3	Sc 361.383	819528.5	819528.5	100.09	%	07:34:58
3	Y 371.029	680490.9	680490.9	98.387	%	07:34:58
3	Ag 328.068†	192351.3	192001.0	[1000]	ug/L	07:34:58
3	As 188.979†	1810.4	1835.6	[1000]	ug/L	07:35:18
3	B 249.677†	35087.9	35595.1	[1000]	ug/L	07:34:58
3	Ba 233.527†	106371.3	106280.7	[1000]	ug/L	07:34:58
3	Be 313.107†	2336429.7	2338154.4	[1000]	ug/L	07:34:58
3	Cd 226.502†	68339.3	68451.2	[1000]	ug/L	07:34:58
3	Co 228.616†	38543.9	38557.0	[1000]	ug/L	07:35:18
3	Cr 267.716†	74336.2	74200.8	[1000]	ug/L	07:34:58
3	Cu 324.752†	308824.8	303007.6	[1000]	ug/L	07:34:58
3	Mn 257.610†	760159.6	759117.9	[1000]	ug/L	07:34:58
3	Mo 202.031†	11311.6	11293.3	[1000]	ug/L	07:35:18
3	Ni 231.604†	31511.2	31400.1	[1000]	ug/L	07:35:18
3	P 214.914†	6937.1	6743.8	[5000]	ug/L	07:35:18
3	Pb 220.353†	6481.7	6534.5	[1000]	ug/L	07:35:18
3	S 181.975 Axial†	1151.4	1120.2	[2000]	ug/L	07:35:18
3	Sb 206.836†	2431.5	2405.7	[1000]	ug/L	07:35:18
3	Se 196.026†	1185.9	1201.9	[1000]	ug/L	07:35:18
3	Si 251.611†	131907.0	131305.6	[5000]	ug/L	07:34:58
3	Sn 189.927†	4448.1	4437.1	[1000]	ug/L	07:35:18
3	Ti 334.940†	575356.7	575983.9	[1000]	ug/L	07:34:58
3	Tl 190.801†	2562.9	2589.7	[1000]	ug/L	07:35:18
3	U 409.014†	30555.8	32733.8	[1000]	ug/L	07:34:58
3	V 292.402†	123490.0	124701.4	[1000]	ug/L	07:34:58
3	Zn 213.857†	82686.9	82045.8	[1000]	ug/L	07:34:58
3	SiO2†	131524.8	130912.6	[10695]	ug/L	07:35:34

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	821309.3	3223.93	0.39%	100.30 %
Sc Radial	4329.2	37.77	0.87%	98.5 %
Y 371.029	682601.6	2632.21	0.39%	98.692 %
Y RADIAL	4676.1	31.56	0.67%	98.22 %
Ag 328.068†	191899.4	95.49	0.05%	[1000] ug/L
Al 396.153Radial†	10135.8	47.17	0.47%	[10000] ug/L
As 188.979†	1820.9	12.80	0.70%	[1000] ug/L
B 249.677†	35602.8	54.15	0.15%	[1000] ug/L
Ba 233.527†	106430.1	131.89	0.12%	[1000] ug/L
Be 313.107†	2343177.3	4363.95	0.19%	[1000] ug/L
Ca 317.933Radial†	5385.2	16.38	0.30%	[10000] ug/L
Cd 226.502†	68684.3	225.84	0.33%	[1000] ug/L
Co 228.616†	38409.7	158.92	0.41%	[1000] ug/L
Cr 267.716†	74345.5	161.70	0.22%	[1000] ug/L
Cu 324.752†	302379.6	589.80	0.20%	[1000] ug/L
Fe 238.204 Radial†	860.3	9.13	1.06%	[10000] ug/L
K 766.490 Radial†	52122.6	54.20	0.10%	[10000] ug/L

Mg 279.077 IEC†	249.4	3.39	1.36%	[10000]	ug/L
Mn 257.610†	759732.4	919.29	0.12%	[1000]	ug/L
Mo 202.031†	11251.7	48.40	0.43%	[1000]	ug/L
Na 589.592 Radial†	27316.7	180.92	0.66%	[10000]	ug/L
Ni 231.604†	31286.1	116.56	0.37%	[1000]	ug/L
P 214.914†	6715.7	26.19	0.39%	[5000]	ug/L
Pb 220.353†	6506.8	30.09	0.46%	[1000]	ug/L
S 181.975 Axial†	1117.8	2.14	0.19%	[2000]	ug/L
Sb 206.836†	2390.3	22.30	0.93%	[1000]	ug/L
Se 196.026†	1201.0	7.29	0.61%	[1000]	ug/L
Si 251.611†	131284.9	140.98	0.11%	[5000]	ug/L
Sn 189.927†	4412.9	21.08	0.48%	[1000]	ug/L
Sr 421.552†	124504.2	142.63	0.11%	[1000]	ug/L
Ti 334.940†	575758.8	441.87	0.08%	[1000]	ug/L
Tl 190.801†	2582.4	13.54	0.52%	[1000]	ug/L
U 409.014†	32663.9	147.89	0.45%	[1000]	ug/L
V 292.402†	124930.8	200.93	0.16%	[1000]	ug/L
Zn 213.857†	82140.4	94.36	0.11%	[1000]	ug/L
SiO2†	130983.0	452.91	0.35%	[10695]	ug/L

Sequence No.: 5
 Sample ID: S10
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 3/19/2010 07:37:45
 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	4263.0	4263.0	97.0 %		07:39:59
1	Y RADIAL	4575.6	4575.6	96.11 %		07:39:59
1	Al 396.153Radial†	49831.2	51453.0	[50000] ug/L		07:39:39
1	Ca 317.933Radial†	25954.1	26742.4	[50000] ug/L		07:39:39
1	Fe 238.204 Radial†	1687.7	1731.5	[20000] ug/L		07:39:59
1	Mg 279.077 IEC†	1178.7	1213.7	[50000] ug/L		07:39:59
1	Na 589.592 Radial†	55567.4	58164.0	[20000] ug/L		07:39:39
1	Sc 361.383	789692.1	789692.1	96.442 %		07:40:56
1	Y 371.029	653528.4	653528.4	94.489 %		07:40:56
2	Sc Radial	4290.8	4290.8	97.6 %		07:40:24
2	Y RADIAL	4619.8	4619.8	97.04 %		07:40:24
2	Al 396.153Radial†	48689.3	49950.4	[50000] ug/L		07:40:04
2	Ca 317.933Radial†	25266.7	25864.9	[50000] ug/L		07:40:04
2	Fe 238.204 Radial†	1692.1	1724.8	[20000] ug/L		07:40:24
2	Mg 279.077 IEC†	1181.2	1208.4	[50000] ug/L		07:40:24
2	Na 589.592 Radial†	54008.3	56195.6	[20000] ug/L		07:40:04
2	Sc 361.383	793240.2	793240.2	96.875 %		07:41:02
2	Y 371.029	656699.3	656699.3	94.947 %		07:41:02
3	Sc Radial	4280.8	4280.8	97.4 %		07:40:49
3	Y RADIAL	4602.7	4602.7	96.68 %		07:40:49
3	Al 396.153Radial†	49877.2	51287.3	[50000] ug/L		07:40:29
3	Ca 317.933Radial†	25897.8	26573.7	[50000] ug/L		07:40:29
3	Fe 238.204 Radial†	1689.6	1726.2	[20000] ug/L		07:40:49
3	Mg 279.077 IEC†	1178.0	1207.9	[50000] ug/L		07:40:49
3	Na 589.592 Radial†	55072.5	57418.3	[20000] ug/L		07:40:29
3	Sc 361.383	800906.3	800906.3	97.812 %		07:41:07
3	Y 371.029	662694.7	662694.7	95.814 %		07:41:07

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib Units
Sc 361.383	794612.9	5731.76	0.72%	97.043 %	
Sc Radial	4278.2	14.08	0.33%	97.3 %	
Y 371.029	657640.8	4655.12	0.71%	95.083 %	
Y RADIAL	4599.4	22.30	0.48%	96.61 %	
Al 396.153Radial†	50896.9	823.85	1.62%	[50000] ug/L	
Ca 317.933Radial†	26393.7	465.66	1.76%	[50000] ug/L	
Fe 238.204 Radial†	1727.5	3.53	0.20%	[20000] ug/L	
Mg 279.077 IEC†	1210.0	3.21	0.27%	[50000] ug/L	
Na 589.592 Radial†	57259.3	993.78	1.74%	[20000] ug/L	

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	192.6	0.00000	0.999974	
Al 396.153Radial	3	Lin Thru 0	0.0	1.018	0.00000	0.999996	
As 188.979	3	Lin Thru 0	0.0	1.821	0.00000	0.999992	
B 249.677	3	Lin Thru 0	0.0	35.65	0.00000	0.999990	
Ba 233.527	3	Lin Thru 0	0.0	106.8	0.00000	0.999980	
Be 313.107	3	Lin Thru 0	0.0	2348	0.00000	0.999990	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5285	0.00000	0.999985	
Cd 226.502	3	Lin Thru 0	0.0	68.92	0.00000	0.999977	
Co 228.616	3	Lin Thru 0	0.0	38.69	0.00000	0.999900	
Cr 267.716	3	Lin Thru 0	0.0	74.57	0.00000	0.999982	
Cu 324.752	3	Lin Thru 0	0.0	302.9	0.00000	0.999994	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0863	0.00000	0.999999	
K 766.490 Radial	3	Lin Thru 0	0.0	5.249	0.00000	0.999907	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0242	0.00000	0.999969
Mn 257.610	3	Lin Thru 0	0.0	760.6	0.00000	0.999994
Mo 202.031	3	Lin Thru 0	0.0	11.25	0.00000	0.999999
Na 589.592 Radia	2	Lin Thru 0	0.0	2.837	0.00000	0.999829
Ni 231.604	3	Lin Thru 0	0.0	31.49	0.00000	0.999920
P 214.914	3	Lin Thru 0	0.0	1.342	0.00000	0.999999
Pb 220.353	3	Lin Thru 0	0.0	6.509	0.00000	0.999995
S 181.975 Axial	3	Lin Thru 0	0.0	0.5586	0.00000	0.999997
Sb 206.836	3	Lin Thru 0	0.0	2.390	0.00000	1.000000
Se 196.026	3	Lin Thru 0	0.0	1.200	0.00000	0.999999
Si 251.611	3	Lin Thru 0	0.0	26.34	0.00000	0.999980
Sn 189.927	3	Lin Thru 0	0.0	4.407	0.00000	0.999996
Sr 421.552	3	Lin Thru 0	0.0	124.8	0.00000	0.999990
Ti 334.940	3	Lin Thru 0	0.0	575.0	0.00000	0.999996
Tl 190.801	3	Lin Thru 0	0.0	2.585	0.00000	0.999997
U 409.014	3	Lin Thru 0	0.0	32.96	0.00000	0.999836
V 292.402	3	Lin Thru 0	0.0	125.2	0.00000	0.999989
Zn 213.857	3	Lin Thru 0	0.0	82.53	0.00000	0.999957
SiO2	3	Lin Thru 0	0.0	12.25	0.00000	1.000000

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/19/2010 07:43:19

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	4236.5	4236.5	96.4 %		07:45:31
1	Y RADIAL	4746.7	4746.7	99.71 %		07:45:11
1	Al 396.153Radial†	5043.7	5310.7	5190.6 ug/L	5190.6 ppb	07:45:11
1	Ca 317.933Radial†	2646.9	2730.3	5166.3 ug/L	5166.3 ppb	07:45:31
1	Fe 238.204 Radial†	443.6	451.8	5249.8 ug/L	5249.8 ppb	07:45:31
1	K 766.490 Radial†	15378.7	13355.8	2541.1 ug/L	2541.1 ppb	07:45:11
1	Mg 279.077 IEC†	129.9	133.2	5494.7 ug/L	5494.7 ppb	07:45:31
1	Na 589.592 Radial†	5945.3	7043.0	2482.8 ug/L	2482.8 ppb	07:45:11
1	Sr 421.552†	65683.4	68121.9	546.01 ug/L	546.01 ppb	07:45:11
1	Sc 361.383	828020.8	828020.8	101.12 %		07:46:29
1	Y 371.029	691853.4	691853.4	100.03 %		07:46:29
1	Ag 328.068†	50281.0	49537.5	260.39 ug/L	260.39 ppb	07:46:29
1	As 188.979†	842.0	859.4	476.13 ug/L	476.13 ppb	07:46:49
1	B 249.677†	18333.9	18667.6	521.37 ug/L	521.37 ppb	07:46:29
1	Ba 233.527†	55293.2	54679.8	513.44 ug/L	513.44 ppb	07:46:29
1	Be 313.107†	620824.3	617660.4	264.14 ug/L	264.14 ppb	07:46:29
1	Cd 226.502†	34825.2	34609.1	502.04 ug/L	502.04 ppb	07:46:29
1	Co 228.616†	20188.0	20010.0	517.35 ug/L	517.35 ppb	07:46:29
1	Cr 267.716†	37007.0	36524.5	490.87 ug/L	490.87 ppb	07:46:29
1	Cu 324.752†	161407.2	154062.6	508.63 ug/L	508.63 ppb	07:46:29
1	Mn 257.610†	397858.6	393050.9	517.08 ug/L	517.08 ppb	07:46:29
1	Mo 202.031†	6082.7	6006.6	534.40 ug/L	534.40 ppb	07:46:49
1	Ni 231.604†	16297.5	16032.5	508.84 ug/L	508.84 ppb	07:46:29
1	P 214.914†	3585.3	3358.2	2402.7 ug/L	2402.7 ppb	07:46:49
1	Pb 220.353†	3230.6	3253.0	501.29 ug/L	501.29 ppb	07:46:49
1	S 181.975 Axial†	1435.1	1389.0	2485.7 ug/L	2485.7 ppb	07:46:49
1	Sb 206.836†	1237.1	1199.7	521.16 ug/L	521.16 ppb	07:46:49
1	Se 196.026†	3117.5	3099.8	2600.8 ug/L	2600.8 ppb	07:46:49
1	Si 251.611†	132565.1	130604.6	4951.6 ug/L	4951.6 ppb	07:46:29
1	Sn 189.927†	2396.2	2362.4	536.72 ug/L	536.72 ppb	07:46:49
1	Ti 334.940†	289993.6	287894.1	500.51 ug/L	500.51 ppb	07:46:29
1	Tl 190.801†	1336.3	1350.6	525.90 ug/L	525.90 ppb	07:46:49
1	U 409.014†	14608.3	16650.2	503.45 ug/L	503.45 ppb	07:46:29
1	V 292.402†	63227.7	63842.9	516.94 ug/L	516.94 ppb	07:46:29
1	Zn 213.857†	43406.0	42353.9	508.47 ug/L	508.47 ppb	07:46:29
1	SiO2†	131517.0	129557.0	10559 ug/L	10559 ppb	07:47:47
2	Sc Radial	4236.2	4236.2	96.4 %		07:45:57
2	Y RADIAL	4735.0	4735.0	99.46 %		07:45:37
2	Al 396.153Radial†	5034.3	5301.2	5181.0 ug/L	5181.0 ppb	07:45:37
2	Ca 317.933Radial†	2653.7	2737.5	5180.0 ug/L	5180.0 ppb	07:45:57
2	Fe 238.204 Radial†	444.4	452.6	5259.7 ug/L	5259.7 ppb	07:45:57
2	K 766.490 Radial†	15389.8	13368.3	2543.5 ug/L	2543.5 ppb	07:45:37
2	Mg 279.077 IEC†	128.0	131.2	5414.3 ug/L	5414.3 ppb	07:45:57
2	Na 589.592 Radial†	5861.5	6956.4	2452.3 ug/L	2452.3 ppb	07:45:37
2	Sr 421.552†	65138.0	67560.5	541.51 ug/L	541.51 ppb	07:45:37
2	Sc 361.383	820882.8	820882.8	100.25 %		07:46:55
2	Y 371.029	687024.5	687024.5	99.332 %		07:46:55
2	Ag 328.068†	49859.0	49548.8	260.46 ug/L	260.46 ppb	07:46:55
2	As 188.979†	857.3	882.0	488.48 ug/L	488.48 ppb	07:47:15
2	B 249.677†	18074.8	18566.8	518.55 ug/L	518.55 ppb	07:46:55
2	Ba 233.527†	54807.3	54670.6	513.35 ug/L	513.35 ppb	07:46:55
2	Be 313.107†	615521.6	617709.5	264.16 ug/L	264.16 ppb	07:46:55
2	Cd 226.502†	34435.0	34519.3	500.74 ug/L	500.74 ppb	07:46:55
2	Co 228.616†	19937.1	19933.4	515.39 ug/L	515.39 ppb	07:46:55
2	Cr 267.716†	36766.8	36603.1	491.93 ug/L	491.93 ppb	07:46:55
2	Cu 324.752†	159435.0	153483.3	506.73 ug/L	506.73 ppb	07:46:55
2	Mn 257.610†	393797.0	392420.7	516.26 ug/L	516.26 ppb	07:46:55
2	Mo 202.031†	6112.4	6088.6	541.69 ug/L	541.69 ppb	07:47:15
2	Ni 231.604†	16226.6	16101.8	511.04 ug/L	511.04 ppb	07:46:55

2	P 214.914†	3616.6	3420.3	2449.3 ug/L	2449.3 ppb	07:47:15
2	Pb 220.353†	3236.1	3286.3	506.43 ug/L	506.43 ppb	07:47:15
2	S 181.975 Axial†	1446.8	1413.0	2528.5 ug/L	2528.5 ppb	07:47:15
2	Sb 206.836†	1247.3	1220.5	530.13 ug/L	530.13 ppb	07:47:15
2	Se 196.026†	3136.4	3145.5	2638.9 ug/L	2638.9 ppb	07:47:15
2	Si 251.611†	131086.9	130270.1	4938.8 ug/L	4938.8 ppb	07:46:55
2	Sn 189.927†	2402.1	2388.9	542.72 ug/L	542.72 ppb	07:47:15
2	Ti 334.940†	287075.9	287477.4	499.80 ug/L	499.80 ppb	07:46:55
2	Tl 190.801†	1363.4	1389.1	540.79 ug/L	540.79 ppb	07:47:15
2	U 409.014†	14162.5	16331.2	493.76 ug/L	493.76 ppb	07:46:55
2	V 292.402†	62608.2	63768.7	516.43 ug/L	516.43 ppb	07:46:55
2	Zn 213.857†	42973.0	42295.1	507.75 ug/L	507.75 ppb	07:46:55
2	SiO2†	129984.9	129159.7	10526 ug/L	10526 ppb	07:47:52
3	Sc Radial	4249.4	4249.4	96.7 %		07:46:22
3	Y RADIAL	4742.6	4742.6	99.62 %		07:46:02
3	Al 396.153Radial†	5051.7	5303.0	5183.1 ug/L	5183.1 ppb	07:46:02
3	Ca 317.933Radial†	2658.2	2733.6	5172.6 ug/L	5172.6 ppb	07:46:22
3	Fe 238.204 Radial†	442.5	449.2	5220.7 ug/L	5220.7 ppb	07:46:22
3	K 766.490 Radial†	15649.2	13587.0	2585.2 ug/L	2585.2 ppb	07:46:02
3	Mg 279.077 IEC†	128.5	131.3	5417.7 ug/L	5417.7 ppb	07:46:22
3	Na 589.592 Radial†	5869.2	6945.6	2448.5 ug/L	2448.5 ppb	07:46:02
3	Sr 421.552†	65487.0	67711.5	542.72 ug/L	542.72 ppb	07:46:02
3	Sc 361.383	827095.9	827095.9	101.01 %		07:47:21
3	Y 371.029	692361.2	692361.2	100.10 %		07:47:21
3	Ag 328.068†	50259.5	49571.7	260.55 ug/L	260.55 ppb	07:47:21
3	As 188.979†	842.1	860.4	476.66 ug/L	476.66 ppb	07:47:41
3	B 249.677†	18172.4	18528.1	517.47 ug/L	517.47 ppb	07:47:21
3	Ba 233.527†	55205.3	54653.9	513.19 ug/L	513.19 ppb	07:47:21
3	Be 313.107†	620935.3	618456.9	264.48 ug/L	264.48 ppb	07:47:21
3	Cd 226.502†	34701.6	34525.3	500.83 ug/L	500.83 ppb	07:47:21
3	Co 228.616†	20116.9	19961.9	516.11 ug/L	516.11 ppb	07:47:21
3	Cr 267.716†	37016.0	36574.3	491.54 ug/L	491.54 ppb	07:47:21
3	Cu 324.752†	160873.9	153713.2	507.48 ug/L	507.48 ppb	07:47:21
3	Mn 257.610†	396517.7	392163.4	515.92 ug/L	515.92 ppb	07:47:21
3	Mo 202.031†	6064.4	5995.2	533.39 ug/L	533.39 ppb	07:47:41
3	Ni 231.604†	16302.2	16055.1	509.55 ug/L	509.55 ppb	07:47:21
3	P 214.914†	3576.3	3353.2	2399.2 ug/L	2399.2 ppb	07:47:41
3	Pb 220.353†	3197.5	3223.8	496.81 ug/L	496.81 ppb	07:47:41
3	S 181.975 Axial†	1440.1	1395.5	2497.3 ug/L	2497.3 ppb	07:47:41
3	Sb 206.836†	1240.5	1204.4	523.11 ug/L	523.11 ppb	07:47:41
3	Se 196.026†	3103.0	3088.9	2591.7 ug/L	2591.7 ppb	07:47:41
3	Si 251.611†	131993.1	130185.0	4935.6 ug/L	4935.6 ppb	07:47:21
3	Sn 189.927†	2394.1	2363.0	536.84 ug/L	536.84 ppb	07:47:41
3	Ti 334.940†	289182.3	287411.7	499.68 ug/L	499.68 ppb	07:47:21
3	Tl 190.801†	1341.9	1357.6	528.61 ug/L	528.61 ppb	07:47:41
3	U 409.014†	14513.2	16572.3	501.08 ug/L	501.08 ppb	07:47:21
3	V 292.402†	62962.4	63650.2	515.39 ug/L	515.39 ppb	07:47:21
3	Zn 213.857†	43202.6	42200.5	506.62 ug/L	506.62 ppb	07:47:21
3	SiO2†	131712.1	129895.6	10586 ug/L	10586 ppb	07:47:57

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	825333.2	100.79 %	0.474			0.47%
Sc Radial	4240.7	96.5 %	0.17			0.18%
Y 371.029	690413.1	99.822 %	0.4259			0.43%
Y RADIAL	4741.4	99.60 %	0.126			0.13%
Ag 328.068†	49552.7	260.47 ug/L	0.083	260.47 ppb	0.083	0.03%
QC value within limits for Ag 328.068 Recovery = 104.19%						
Al 396.153Radial†	5304.9	5184.9 ug/L	5.08	5184.9 ppb	5.08	0.10%
QC value within limits for Al 396.153Radial Recovery = 103.70%						
As 188.979†	867.3	480.42 ug/L	6.979	480.42 ppb	6.979	1.45%
QC value within limits for As 188.979 Recovery = 96.08%						
B 249.677†	18587.5	519.13 ug/L	2.017	519.13 ppb	2.017	0.39%
QC value within limits for B 249.677 Recovery = 103.83%						
Ba 233.527†	54668.1	513.32 ug/L	0.125	513.32 ppb	0.125	0.02%
QC value within limits for Ba 233.527 Recovery = 102.66%						
Be 313.107†	617942.3	264.26 ug/L	0.189	264.26 ppb	0.189	0.07%
QC value within limits for Be 313.107 Recovery = 105.70%						
Ca 317.933Radial†	2733.8	5173.0 ug/L	6.84	5173.0 ppb	6.84	0.13%

QC value within limits for Ca 317.933 Radial Recovery = 103.46%							
Cd 226.502†	34551.2	501.21 ug/L	0.728	501.21 ppb	0.728	0.15%	
QC value within limits for Cd 226.502 Recovery = 100.24%							
Co 228.616†	19968.4	516.29 ug/L	0.993	516.29 ppb	0.993	0.19%	
QC value within limits for Co 228.616 Recovery = 103.26%							
Cr 267.716†	36567.3	491.45 ug/L	0.535	491.45 ppb	0.535	0.11%	
QC value within limits for Cr 267.716 Recovery = 98.29%							
Cu 324.752†	153753.0	507.61 ug/L	0.960	507.61 ppb	0.960	0.19%	
QC value within limits for Cu 324.752 Recovery = 101.52%							
Fe 238.204 Radial†	451.2	5243.4 ug/L	20.29	5243.4 ppb	20.29	0.39%	
QC value within limits for Fe 238.204 Radial Recovery = 104.87%							
K 766.490 Radial†	13437.0	2556.6 ug/L	24.79	2556.6 ppb	24.79	0.97%	
QC value within limits for K 766.490 Radial Recovery = 102.26%							
Mg 279.077 IEC†	131.9	5442.2 ug/L	45.49	5442.2 ppb	45.49	0.84%	
QC value within limits for Mg 279.077 IEC Recovery = 108.84%							
Mn 257.610†	392545.0	516.42 ug/L	0.600	516.42 ppb	0.600	0.12%	
QC value within limits for Mn 257.610 Recovery = 103.28%							
Mo 202.031†	6030.1	536.49 ug/L	4.528	536.49 ppb	4.528	0.84%	
QC value within limits for Mo 202.031 Recovery = 107.30%							
Na 589.592 Radial†	6981.7	2461.2 ug/L	18.82	2461.2 ppb	18.82	0.76%	
QC value within limits for Na 589.592 Radial Recovery = 98.45%							
Ni 231.604†	16063.1	509.81 ug/L	1.124	509.81 ppb	1.124	0.22%	
QC value within limits for Ni 231.604 Recovery = 101.96%							
P 214.914†	3377.2	2417.1 ug/L	27.99	2417.1 ppb	27.99	1.16%	
QC value within limits for P 214.914 Recovery = 96.68%							
Pb 220.353†	3254.4	501.51 ug/L	4.813	501.51 ppb	4.813	0.96%	
QC value within limits for Pb 220.353 Recovery = 100.30%							
S 181.975 Axial†	1399.2	2503.8 ug/L	22.17	2503.8 ppb	22.17	0.89%	
QC value within limits for S 181.975 Axial Recovery = 100.15%							
Sb 206.836†	1208.2	524.80 ug/L	4.720	524.80 ppb	4.720	0.90%	
QC value within limits for Sb 206.836 Recovery = 104.96%							
Se 196.026†	3111.4	2610.5 ug/L	25.06	2610.5 ppb	25.06	0.96%	
QC value within limits for Se 196.026 Recovery = 104.42%							
Si 251.611†	130353.2	4942.0 ug/L	8.43	4942.0 ppb	8.43	0.17%	
QC value within limits for Si 251.611 Recovery = 98.84%							
Sn 189.927†	2371.4	538.76 ug/L	3.429	538.76 ppb	3.429	0.64%	
QC value within limits for Sn 189.927 Recovery = 107.75%							
Sr 421.552†	67798.0	543.41 ug/L	2.329	543.41 ppb	2.329	0.43%	
QC value within limits for Sr 421.552 Recovery = 108.68%							
Ti 334.940†	287594.4	499.99 ug/L	0.450	499.99 ppb	0.450	0.09%	
QC value within limits for Ti 334.940 Recovery = 100.00%							
Tl 190.801†	1365.7	531.77 ug/L	7.929	531.77 ppb	7.929	1.49%	
QC value within limits for Tl 190.801 Recovery = 106.35%							
U 409.014†	16517.9	499.43 ug/L	5.048	499.43 ppb	5.048	1.01%	
QC value within limits for U 409.014 Recovery = 99.89%							
V 292.402†	63753.9	516.25 ug/L	0.792	516.25 ppb	0.792	0.15%	
QC value within limits for V 292.402 Recovery = 103.25%							
Zn 213.857†	42283.2	507.61 ug/L	0.936	507.61 ppb	0.936	0.18%	
QC value within limits for Zn 213.857 Recovery = 101.52%							
SiO2†	129537.4	10557 ug/L	30.2	10557 ppb	30.2	0.29%	
QC value within limits for SiO2 Recovery = 98.71%							
All analyte(s) passed QC.							

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 3/19/2010 07:50:08

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	4227.6	4227.6	96.2 %		07:52:21
1	Y RADIAL	4774.1	4774.1	100.3 %		07:52:01
1	Al 396.153Radial†	-68.9	6.4	6.3185 ug/L	6.3185 ppb	07:52:21
1	Ca 317.933Radial†	18.9	4.0	7.5299 ug/L	7.5299 ppb	07:52:21
1	Fe 238.204 Radial†	9.1	1.0	11.562 ug/L	11.562 ppb	07:52:21
1	K 766.490 Radial†	2602.7	107.0	20.388 ug/L	20.388 ppb	07:52:01
1	Mg 279.077 IEC†	1.1	-0.4	-16.653 ug/L	-16.653 ppb	07:52:21
1	Na 589.592 Radial†	-877.3	-37.0	-13.028 ug/L	-13.028 ppb	07:52:01
1	Sr 421.552†	-2.3	-23.2	-0.1857 ug/L	-0.1857 ppb	07:52:01
1	Sc 361.383	822500.8	822500.8	100.45 %		07:53:18
1	Y 371.029	694388.9	694388.9	100.40 %		07:53:18
1	Ag 328.068†	219.4	33.2	0.1721 ug/L	0.1721 ppb	07:53:18
1	As 188.979†	-14.3	12.6	6.8925 ug/L	6.8925 ppb	07:53:38
1	B 249.677†	-143.2	394.8	11.075 ug/L	11.075 ppb	07:53:38
1	Ba 233.527†	3.8	4.5	0.0412 ug/L	0.0412 ppb	07:53:38
1	Be 313.107†	-3620.9	126.3	0.0535 ug/L	0.0535 ppb	07:53:18
1	Cd 226.502†	-170.4	1.0	0.0130 ug/L	0.0130 ppb	07:53:38
1	Co 228.616†	-53.3	-6.9	-0.1775 ug/L	-0.1775 ppb	07:53:38
1	Cr 267.716†	81.7	9.8	0.1311 ug/L	0.1311 ppb	07:53:38
1	Cu 324.752†	5460.0	-116.4	-0.3851 ug/L	-0.3851 ppb	07:53:18
1	Mn 257.610†	435.0	44.0	0.0597 ug/L	0.0597 ppb	07:53:38
1	Mo 202.031†	12.1	3.5	0.3106 ug/L	0.3106 ppb	07:53:38
1	Ni 231.604†	74.1	-10.3	-0.3261 ug/L	-0.3261 ppb	07:53:38
1	P 214.914†	199.0	10.8	8.1501 ug/L	8.1501 ppb	07:53:38
1	Pb 220.353†	-64.9	-6.3	-0.9611 ug/L	-0.9611 ppb	07:53:38
1	S 181.975 Axial†	28.0	-2.3	-4.1877 ug/L	-4.1877 ppb	07:53:38
1	Sb 206.836†	25.3	1.5	0.6355 ug/L	0.6355 ppb	07:53:38
1	Se 196.026†	-18.2	-1.2	-0.9475 ug/L	-0.9475 ppb	07:53:38
1	Si 251.611†	523.3	32.7	1.2394 ug/L	1.2394 ppb	07:53:38
1	Sn 189.927†	9.4	2.2	0.5039 ug/L	0.5039 ppb	07:53:38
1	Ti 334.940†	-1203.2	-76.6	-0.1322 ug/L	-0.1322 ppb	07:53:18
1	Tl 190.801†	-32.0	-2.7	-1.0626 ug/L	-1.0626 ppb	07:53:38
1	U 409.014†	-2124.4	89.3	2.7075 ug/L	2.7075 ppb	07:53:18
1	V 292.402†	-1376.1	-52.5	-0.4113 ug/L	-0.4113 ppb	07:53:18
1	Zn 213.857†	569.1	-3.5	-0.0418 ug/L	-0.0418 ppb	07:53:38
1	SiO2†	542.5	40.7	3.3134 ug/L	3.3134 ppb	07:54:49
2	Sc Radial	4262.1	4262.1	97.0 %		07:52:47
2	Y RADIAL	4708.4	4708.4	98.90 %		07:52:27
2	Al 396.153Radial†	-75.6	0.2	0.1122 ug/L	0.1122 ppb	07:52:47
2	Ca 317.933Radial†	15.6	0.4	0.7040 ug/L	0.7040 ppb	07:52:47
2	Fe 238.204 Radial†	8.1	-0.1	-1.2667 ug/L	-1.2667 ppb	07:52:47
2	K 766.490 Radial†	2562.5	43.7	8.3262 ug/L	8.3262 ppb	07:52:27
2	Mg 279.077 IEC†	0.5	-1.0	-43.214 ug/L	-43.214 ppb	07:52:47
2	Na 589.592 Radial†	-902.5	-55.5	-19.565 ug/L	-19.565 ppb	07:52:27
2	Sr 421.552†	-0.1	-20.9	-0.1676 ug/L	-0.1676 ppb	07:52:27
2	Sc 361.383	809397.3	809397.3	98.849 %		07:53:44
2	Y 371.029	684094.8	684094.8	98.908 %		07:53:44
2	Ag 328.068†	108.4	-75.5	-0.3948 ug/L	-0.3948 ppb	07:53:44
2	As 188.979†	-26.5	-0.0	-0.0164 ug/L	-0.0164 ppb	07:54:04
2	B 249.677†	-133.5	402.3	11.288 ug/L	11.288 ppb	07:54:04
2	Ba 233.527†	-10.0	-9.4	-0.0882 ug/L	-0.0882 ppb	07:54:04
2	Be 313.107†	-3759.4	-72.2	-0.0306 ug/L	-0.0306 ppb	07:53:44
2	Cd 226.502†	-175.0	-6.4	-0.0927 ug/L	-0.0927 ppb	07:54:04
2	Co 228.616†	-54.4	-8.9	-0.2262 ug/L	-0.2262 ppb	07:54:04
2	Cr 267.716†	75.5	4.9	0.0640 ug/L	0.0640 ppb	07:54:04
2	Cu 324.752†	5612.9	126.3	0.4151 ug/L	0.4151 ppb	07:53:44
2	Mn 257.610†	405.8	21.5	0.0299 ug/L	0.0299 ppb	07:54:04
2	Mo 202.031†	22.9	14.6	1.3019 ug/L	1.3019 ppb	07:54:04
2	Ni 231.604†	81.9	-1.2	-0.0393 ug/L	-0.0393 ppb	07:54:04

2	P 214.914†	176.7	-8.5	-6.4383 ug/L	-6.4383 ppb	07:54:04
2	Pb 220.353†	-50.1	7.6	1.1742 ug/L	1.1742 ppb	07:54:04
2	S 181.975 Axial†	28.6	-1.2	-2.1912 ug/L	-2.1912 ppb	07:54:04
2	Sb 206.836†	26.4	3.0	1.2919 ug/L	1.2919 ppb	07:54:04
2	Se 196.026†	-26.5	-9.8	-8.1711 ug/L	-8.1711 ppb	07:54:04
2	Si 251.611†	511.4	29.2	1.0927 ug/L	1.0927 ppb	07:54:04
2	Sn 189.927†	7.7	0.6	0.1470 ug/L	0.1470 ppb	07:54:04
2	Ti 334.940†	-1067.3	41.5	0.0743 ug/L	0.0743 ppb	07:53:44
2	Tl 190.801†	-29.0	-0.3	-0.1073 ug/L	-0.1073 ppb	07:54:04
2	U 409.014†	-2072.2	107.9	3.2725 ug/L	3.2725 ppb	07:53:44
2	V 292.402†	-1292.4	10.0	0.1038 ug/L	0.1038 ppb	07:53:44
2	Zn 213.857†	554.3	-9.3	-0.1129 ug/L	-0.1129 ppb	07:54:04
2	SiO2†	534.3	41.2	3.3239 ug/L	3.3239 ppb	07:55:09
3	Sc Radial	4234.0	4234.0	96.3 %		07:53:12
3	Y RADIAL	4724.6	4724.6	99.24 %		07:52:52
3	Al 396.153Radial†	-81.6	-6.6	-6.5359 ug/L	-6.5359 ppb	07:53:12
3	Ca 317.933Radial†	16.3	1.3	2.3818 ug/L	2.3818 ppb	07:53:12
3	Fe 238.204 Radial†	9.4	1.3	15.504 ug/L	15.504 ppb	07:53:12
3	K 766.490 Radial†	2538.1	35.9	6.8490 ug/L	6.8490 ppb	07:52:52
3	Mg 279.077 IEC†	4.4	3.0	123.58 ug/L	123.58 ppb	07:53:12
3	Na 589.592 Radial†	-910.3	-69.8	-24.604 ug/L	-24.604 ppb	07:52:52
3	Sr 421.552†	52.7	33.9	0.2718 ug/L	0.2718 ppb	07:52:52
3	Sc 361.383	824073.6	824073.6	100.64 %		07:54:09
3	Y 371.029	697428.4	697428.4	100.84 %		07:54:09
3	Ag 328.068†	260.6	73.8	0.3839 ug/L	0.3839 ppb	07:54:09
3	As 188.979†	-24.2	2.7	1.4956 ug/L	1.4956 ppb	07:54:29
3	B 249.677†	-133.9	404.3	11.340 ug/L	11.340 ppb	07:54:29
3	Ba 233.527†	24.9	25.4	0.2395 ug/L	0.2395 ppb	07:54:29
3	Be 313.107†	-3640.4	113.8	0.0487 ug/L	0.0487 ppb	07:54:09
3	Cd 226.502†	-164.0	7.7	0.1121 ug/L	0.1121 ppb	07:54:29
3	Co 228.616†	-49.5	-3.0	-0.0776 ug/L	-0.0776 ppb	07:54:29
3	Cr 267.716†	78.7	6.7	0.0889 ug/L	0.0889 ppb	07:54:29
3	Cu 324.752†	5545.9	-41.4	-0.1401 ug/L	-0.1401 ppb	07:54:09
3	Mn 257.610†	423.7	31.9	0.0384 ug/L	0.0384 ppb	07:54:29
3	Mo 202.031†	12.7	4.1	0.3639 ug/L	0.3639 ppb	07:54:29
3	Ni 231.604†	92.7	8.1	0.2558 ug/L	0.2558 ppb	07:54:29
3	P 214.914†	185.9	-2.6	-1.9063 ug/L	-1.9063 ppb	07:54:29
3	Pb 220.353†	-55.4	3.3	0.4986 ug/L	0.4986 ppb	07:54:29
3	S 181.975 Axial†	25.6	-4.7	-8.4722 ug/L	-8.4722 ppb	07:54:29
3	Sb 206.836†	24.2	0.4	0.1882 ug/L	0.1882 ppb	07:54:29
3	Se 196.026†	-16.5	0.5	0.4855 ug/L	0.4855 ppb	07:54:29
3	Si 251.611†	522.6	31.1	1.1761 ug/L	1.1761 ppb	07:54:29
3	Sn 189.927†	14.3	7.0	1.5931 ug/L	1.5931 ppb	07:54:29
3	Ti 334.940†	-1072.1	56.0	0.0843 ug/L	0.0843 ppb	07:54:09
3	Tl 190.801†	-26.9	2.3	0.9032 ug/L	0.9032 ppb	07:54:29
3	U 409.014†	-1972.4	244.3	7.4112 ug/L	7.4112 ppb	07:54:09
3	V 292.402†	-1263.2	62.3	0.5170 ug/L	0.5170 ppb	07:54:09
3	Zn 213.857†	568.9	-4.8	-0.0621 ug/L	-0.0621 ppb	07:54:29
3	SiO2†	526.0	23.4	1.8968 ug/L	1.8968 ppb	07:55:29

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	818657.3	99.980 %	0.9841			0.98%
Sc Radial	4241.2	96.5 %	0.42			0.43%
Y 371.029	691970.7	100.05 %	1.010			1.01%
Y RADIAL	4735.7	99.48 %	0.719			0.72%
Ag 328.068†	10.5	0.0537 ug/L	0.40263	0.0537 ppb	0.40263	749.28%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-0.0	-0.0351 ug/L	6.42850	-0.0351 ppb	6.42850	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	5.1	2.7906 ug/L	3.63190	2.7906 ppb	3.63190	130.15%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	400.5	11.235 ug/L	0.1403	11.235 ppb	0.1403	1.25%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	6.8	0.0642 ug/L	0.16504	0.0642 ppb	0.16504	257.23%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	56.0	0.0239 ug/L	0.04720	0.0239 ppb	0.04720	197.83%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1.9	3.5386 ug/L	3.55694	3.5386 ppb	3.55694	100.52%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	0.7	0.0108 ug/L	0.10245	0.0108 ppb	0.10245	947.92%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-6.3	-0.1604 ug/L	0.07575	-0.1604 ppb	0.07575	47.21%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	7.1	0.0947 ug/L	0.03391	0.0947 ppb	0.03391	35.82%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-10.5	-0.0367 ug/L	0.41001	-0.0367 ppb	0.41001	>999.9%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.7	8.5999 ug/L	8.76910	8.5999 ppb	8.76910	101.97%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	62.2	11.854 ug/L	7.4269	11.854 ppb	7.4269	62.65%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.5	21.237 ug/L	89.6187	21.237 ppb	89.6187	422.00%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	32.5	0.0427 ug/L	0.01531	0.0427 ppb	0.01531	35.88%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	7.4	0.6588 ug/L	0.55759	0.6588 ppb	0.55759	84.64%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-54.1	-19.066 ug/L	5.8042	-19.066 ppb	5.8042	30.44%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-1.2	-0.0366 ug/L	0.29096	-0.0366 ppb	0.29096	795.90%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-0.1	-0.0648 ug/L	7.46648	-0.0648 ppb	7.46648	>999.9%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	1.5	0.2372 ug/L	1.09140	0.2372 ppb	1.09140	460.05%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-2.8	-4.9504 ug/L	3.20920	-4.9504 ppb	3.20920	64.83%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	1.6	0.7052 ug/L	0.55515	0.7052 ppb	0.55515	78.72%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-3.5	-2.8777 ug/L	4.63988	-2.8777 ppb	4.63988	161.23%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	31.0	1.1694 ug/L	0.07358	1.1694 ppb	0.07358	6.29%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	3.3	0.7480 ug/L	0.75332	0.7480 ppb	0.75332	100.71%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-3.4	-0.0272 ug/L	0.25907	-0.0272 ppb	0.25907	952.37%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	6.9	0.0088 ug/L	0.12217	0.0088 ppb	0.12217	>999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.2	-0.0889 ug/L	0.98302	-0.0889 ppb	0.98302	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	147.2	4.4637 ug/L	2.56816	4.4637 ppb	2.56816	57.53%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	6.6	0.0698 ug/L	0.46509	0.0698 ppb	0.46509	666.11%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-5.9	-0.0723 ug/L	0.03665	-0.0723 ppb	0.03665	50.72%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	35.1	2.8447 ug/L	0.82097	2.8447 ppb	0.82097	28.86%
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: 3/19/2010 07:57:41

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	4245.6	4245.6	96.6 %		07:59:54
1	Y RADIAL	4767.8	4767.8	100.2 %		07:59:34
1	Al 396.153Radial†	133.0	215.8	211.49 ug/L	211.49 ppb	07:59:54
1	Ca 317.933Radial†	126.9	115.7	218.92 ug/L	218.92 ppb	07:59:54
1	Fe 238.204 Radial†	17.7	9.9	114.61 ug/L	114.61 ppb	07:59:54
1	K 766.490 Radial†	3386.5	907.0	172.60 ug/L	172.60 ppb	07:59:34
1	Mg 279.077 IEC†	8.9	7.7	318.80 ug/L	318.80 ppb	07:59:54
1	Na 589.592 Radial†	-60.9	812.1	286.28 ug/L	286.28 ppb	07:59:34
1	Sr 421.552†	640.5	642.3	5.1465 ug/L	5.1465 ppb	07:59:34
1	Sc 361.383	812136.9	812136.9	99.183 %		08:00:50
1	Y 371.029	686807.1	686807.1	99.300 %		08:00:50
1	Ag 328.068†	1209.8	1034.6	5.3773 ug/L	5.3773 ppb	08:00:50
1	As 188.979†	35.4	62.5	34.339 ug/L	34.339 ppb	08:01:10
1	B 249.677†	1543.2	2093.3	58.692 ug/L	58.692 ppb	08:00:50
1	Ba 233.527†	549.9	555.1	5.2128 ug/L	5.2128 ppb	08:01:10
1	Be 313.107†	8135.1	11933.1	5.0926 ug/L	5.0926 ppb	08:00:50
1	Cd 226.502†	189.2	361.4	5.2462 ug/L	5.2462 ppb	08:01:10
1	Co 228.616†	146.1	193.5	5.0142 ug/L	5.0142 ppb	08:01:10
1	Cr 267.716†	456.1	388.3	5.2039 ug/L	5.2039 ppb	08:01:10
1	Cu 324.752†	8656.8	3176.1	10.462 ug/L	10.462 ppb	08:00:50
1	Mn 257.610†	8403.4	8083.6	10.627 ug/L	10.627 ppb	08:00:50
1	Mo 202.031†	123.8	116.3	10.352 ug/L	10.352 ppb	08:01:10
1	Ni 231.604†	241.6	159.5	5.0629 ug/L	5.0629 ppb	08:01:10
1	P 214.914†	390.7	206.6	151.89 ug/L	151.89 ppb	08:01:10
1	Pb 220.353†	30.8	89.3	13.777 ug/L	13.777 ppb	08:01:10
1	S 181.975 Axial†	80.2	50.7	90.708 ug/L	90.708 ppb	08:01:10
1	Sb 206.836†	48.7	25.4	10.975 ug/L	10.975 ppb	08:01:10
1	Se 196.026†	23.6	40.7	34.377 ug/L	34.377 ppb	08:01:10
1	Si 251.611†	3086.7	2623.9	99.485 ug/L	99.485 ppb	08:01:10
1	Sn 189.927†	45.2	38.4	8.7521 ug/L	8.7521 ppb	08:01:10
1	Ti 334.940†	1751.7	2887.3	4.9985 ug/L	4.9985 ppb	08:00:50
1	Tl 190.801†	25.5	54.8	21.246 ug/L	21.246 ppb	08:01:10
1	U 409.014†	-392.1	1808.8	54.852 ug/L	54.852 ppb	08:00:50
1	V 292.402†	-753.3	557.9	4.6884 ug/L	4.6884 ppb	08:00:50
1	Zn 213.857†	1676.7	1120.5	13.513 ug/L	13.513 ppb	08:01:10
1	SiO2†	3159.0	2685.6	218.90 ug/L	218.90 ppb	08:02:07
2	Sc Radial	4256.7	4256.7	96.9 %		08:00:19
2	Y RADIAL	4740.6	4740.6	99.58 %		07:59:59
2	Al 396.153Radial†	133.7	216.1	211.76 ug/L	211.76 ppb	08:00:19
2	Ca 317.933Radial†	133.1	121.7	230.30 ug/L	230.30 ppb	08:00:19
2	Fe 238.204 Radial†	19.0	11.2	129.88 ug/L	129.88 ppb	08:00:19
2	K 766.490 Radial†	3378.3	889.3	169.24 ug/L	169.24 ppb	07:59:59
2	Mg 279.077 IEC†	10.6	9.4	386.96 ug/L	386.96 ppb	08:00:19
2	Na 589.592 Radial†	-44.7	829.0	292.24 ug/L	292.24 ppb	07:59:59
2	Sr 421.552†	676.8	678.0	5.4327 ug/L	5.4327 ppb	07:59:59
2	Sc 361.383	801259.4	801259.4	97.855 %		08:01:16
2	Y 371.029	678307.1	678307.1	98.071 %		08:01:16
2	Ag 328.068†	1161.0	1001.3	5.2110 ug/L	5.2110 ppb	08:01:16
2	As 188.979†	31.1	58.6	32.207 ug/L	32.207 ppb	08:01:36
2	B 249.677†	1398.3	1966.3	55.127 ug/L	55.127 ppb	08:01:16
2	Ba 233.527†	552.1	564.9	5.3055 ug/L	5.3055 ppb	08:01:36
2	Be 313.107†	7983.7	11889.7	5.0737 ug/L	5.0737 ppb	08:01:16
2	Cd 226.502†	167.9	342.2	4.9656 ug/L	4.9656 ppb	08:01:36
2	Co 228.616†	157.6	207.3	5.3712 ug/L	5.3712 ppb	08:01:36
2	Cr 267.716†	439.2	377.4	5.0596 ug/L	5.0596 ppb	08:01:36
2	Cu 324.752†	8568.0	3203.8	10.554 ug/L	10.554 ppb	08:01:16
2	Mn 257.610†	8238.3	8029.8	10.555 ug/L	10.555 ppb	08:01:16
2	Mo 202.031†	129.4	123.7	11.006 ug/L	11.006 ppb	08:01:36
2	Ni 231.604†	255.4	176.9	5.6155 ug/L	5.6155 ppb	08:01:36

2	P 214.914†	384.2	205.3	150.90 ug/L	150.90 ppb	08:01:36
2	Pb 220.353†	12.7	71.3	11.005 ug/L	11.005 ppb	08:01:36
2	S 181.975 Axial†	79.4	50.9	91.168 ug/L	91.168 ppb	08:01:36
2	Sb 206.836†	45.8	23.1	10.044 ug/L	10.044 ppb	08:01:36
2	Se 196.026†	19.7	37.1	31.393 ug/L	31.393 ppb	08:01:36
2	Si 251.611†	3082.1	2661.5	100.90 ug/L	100.90 ppb	08:01:36
2	Sn 189.927†	45.7	39.6	9.0109 ug/L	9.0109 ppb	08:01:36
2	Ti 334.940†	1629.0	2785.9	4.8185 ug/L	4.8185 ppb	08:01:16
2	Tl 190.801†	25.8	55.4	21.494 ug/L	21.494 ppb	08:01:36
2	U 409.014†	-410.1	1785.1	54.130 ug/L	54.130 ppb	08:01:16
2	V 292.402†	-698.7	603.5	5.0593 ug/L	5.0593 ppb	08:01:16
2	Zn 213.857†	1690.2	1157.1	13.951 ug/L	13.951 ppb	08:01:36
2	SiO2†	3155.7	2725.5	222.13 ug/L	222.13 ppb	08:02:12
3	Sc Radial	4251.9	4251.9	96.7 %		08:00:44
3	Y RADIAL	4745.3	4745.3	99.68 %		08:00:24
3	Al 396.153Radial†	131.9	214.4	210.14 ug/L	210.14 ppb	08:00:44
3	Ca 317.933Radial†	128.1	116.7	220.87 ug/L	220.87 ppb	08:00:44
3	Fe 238.204 Radial†	17.0	9.1	105.35 ug/L	105.35 ppb	08:00:44
3	K 766.490 Radial†	3366.8	881.4	167.74 ug/L	167.74 ppb	08:00:24
3	Mg 279.077 IEC†	9.2	7.9	327.36 ug/L	327.36 ppb	08:00:44
3	Na 589.592 Radial†	-82.1	790.3	278.59 ug/L	278.59 ppb	08:00:24
3	Sr 421.552†	676.9	678.9	5.4400 ug/L	5.4400 ppb	08:00:24
3	Sc 361.383	809668.4	809668.4	98.882 %		08:01:41
3	Y 371.029	684999.1	684999.1	99.039 %		08:01:41
3	Ag 328.068†	1111.9	939.3	4.8848 ug/L	4.8848 ppb	08:01:41
3	As 188.979†	39.5	66.8	36.695 ug/L	36.695 ppb	08:02:01
3	B 249.677†	1432.9	1986.5	55.697 ug/L	55.697 ppb	08:01:41
3	Ba 233.527†	543.7	550.5	5.1700 ug/L	5.1700 ppb	08:02:01
3	Be 313.107†	8221.7	12045.7	5.1405 ug/L	5.1405 ppb	08:01:41
3	Cd 226.502†	183.8	356.5	5.1759 ug/L	5.1759 ppb	08:02:01
3	Co 228.616†	148.7	196.6	5.0937 ug/L	5.0937 ppb	08:02:01
3	Cr 267.716†	443.8	377.3	5.0573 ug/L	5.0573 ppb	08:02:01
3	Cu 324.752†	8543.8	3088.5	10.174 ug/L	10.174 ppb	08:01:41
3	Mn 257.610†	8388.1	8093.9	10.639 ug/L	10.639 ppb	08:01:41
3	Mo 202.031†	121.9	114.7	10.207 ug/L	10.207 ppb	08:02:01
3	Ni 231.604†	260.7	179.6	5.7006 ug/L	5.7006 ppb	08:02:01
3	P 214.914†	386.5	203.6	149.69 ug/L	149.69 ppb	08:02:01
3	Pb 220.353†	18.8	77.4	11.941 ug/L	11.941 ppb	08:02:01
3	S 181.975 Axial†	81.1	51.8	92.740 ug/L	92.740 ppb	08:02:01
3	Sb 206.836†	47.2	24.0	10.393 ug/L	10.393 ppb	08:02:01
3	Se 196.026†	12.7	29.8	25.236 ug/L	25.236 ppb	08:02:01
3	Si 251.611†	3109.9	2656.9	100.74 ug/L	100.74 ppb	08:02:01
3	Sn 189.927†	47.7	41.0	9.3474 ug/L	9.3474 ppb	08:02:01
3	Ti 334.940†	1745.7	2886.7	4.9992 ug/L	4.9992 ppb	08:01:41
3	Tl 190.801†	26.8	56.2	21.792 ug/L	21.792 ppb	08:02:01
3	U 409.014†	-546.4	1651.6	50.085 ug/L	50.085 ppb	08:01:41
3	V 292.402†	-711.5	597.9	4.9984 ug/L	4.9984 ppb	08:01:41
3	Zn 213.857†	1689.0	1138.0	13.723 ug/L	13.723 ppb	08:02:01
3	SiO2†	3182.7	2719.4	221.65 ug/L	221.65 ppb	08:02:17

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	807688.2	98.640 %		0.6965			0.71%
Sc Radial	4251.4	96.7 %		0.13			0.13%
Y 371.029	683371.1	98.803 %		0.6474			0.66%
Y RADIAL	4751.3	99.80 %		0.306			0.31%
Ag 328.068†	991.8	5.1577 ug/L		0.25053	5.1577 ppb	0.25053	4.86%
QC value within limits for Ag 328.068 Recovery = 103.15%							
Al 396.153Radial†	215.5	211.13 ug/L		0.870	211.13 ppb	0.870	0.41%
QC value within limits for Al 396.153Radial Recovery = 105.57%							
As 188.979†	62.6	34.414 ug/L		2.2453	34.414 ppb	2.2453	6.52%
QC value within limits for As 188.979 Recovery = 114.71%							
B 249.677†	2015.4	56.505 ug/L		1.9154	56.505 ppb	1.9154	3.39%
QC value within limits for B 249.677 Recovery = 113.01%							
Ba 233.527†	556.8	5.2294 ug/L		0.06925	5.2294 ppb	0.06925	1.32%
QC value within limits for Ba 233.527 Recovery = 104.59%							
Be 313.107†	11956.2	5.1023 ug/L		0.03444	5.1023 ppb	0.03444	0.68%
QC value within limits for Be 313.107 Recovery = 102.05%							
Ca 317.933Radial†	118.0	223.36 ug/L		6.081	223.36 ppb	6.081	2.72%

QC value within limits for Ca 317.933 Radial Recovery = 111.68%							
Cd 226.502†	353.4	5.1292 ug/L	0.14600	5.1292 ppb	0.14600	2.85%	
QC value within limits for Cd 226.502 Recovery = 102.58%							
Co 228.616†	199.1	5.1597 ug/L	0.18742	5.1597 ppb	0.18742	3.63%	
QC value within limits for Co 228.616 Recovery = 103.19%							
Cr 267.716†	381.0	5.1070 ug/L	0.08399	5.1070 ppb	0.08399	1.64%	
QC value within limits for Cr 267.716 Recovery = 102.14%							
Cu 324.752†	3156.1	10.397 ug/L	0.1981	10.397 ppb	0.1981	1.91%	
QC value within limits for Cu 324.752 Recovery = 103.97%							
Fe 238.204 Radial†	10.1	116.61 ug/L	12.388	116.61 ppb	12.388	10.62%	
QC value within limits for Fe 238.204 Radial Recovery = 116.61%							
K 766.490 Radial†	892.6	169.86 ug/L	2.490	169.86 ppb	2.490	1.47%	
QC value within limits for K 766.490 Radial Recovery = 113.24%							
Mg 279.077 IEC†	8.3	344.37 ug/L	37.126	344.37 ppb	37.126	10.78%	
QC value within limits for Mg 279.077 IEC Recovery = 114.79%							
Mn 257.610†	8069.1	10.607 ug/L	0.0455	10.607 ppb	0.0455	0.43%	
QC value within limits for Mn 257.610 Recovery = 106.07%							
Mo 202.031†	118.2	10.522 ug/L	0.4257	10.522 ppb	0.4257	4.05%	
QC value within limits for Mo 202.031 Recovery = 105.22%							
Na 589.592 Radial†	810.5	285.70 ug/L	6.845	285.70 ppb	6.845	2.40%	
QC value within limits for Na 589.592 Radial Recovery = 95.23%							
Ni 231.604†	172.0	5.4597 ug/L	0.34627	5.4597 ppb	0.34627	6.34%	
QC value within limits for Ni 231.604 Recovery = 109.19%							
P 214.914†	205.2	150.83 ug/L	1.104	150.83 ppb	1.104	0.73%	
QC value within limits for P 214.914 Recovery = 100.55%							
Pb 220.353†	79.3	12.241 ug/L	1.4102	12.241 ppb	1.4102	11.52%	
QC value within limits for Pb 220.353 Recovery = 122.41%							
S 181.975 Axial†	51.2	91.538 ug/L	1.0656	91.538 ppb	1.0656	1.16%	
QC value within limits for S 181.975 Axial Recovery = 91.54%							
Sb 206.836†	24.2	10.471 ug/L	0.4701	10.471 ppb	0.4701	4.49%	
QC value within limits for Sb 206.836 Recovery = 104.71%							
Se 196.026†	35.9	30.335 ug/L	4.6611	30.335 ppb	4.6611	15.37%	
QC value within limits for Se 196.026 Recovery = 101.12%							
Si 251.611†	2647.5	100.38 ug/L	0.775	100.38 ppb	0.775	0.77%	
QC value within limits for Si 251.611 Recovery = 100.38%							
Sn 189.927†	39.7	9.0368 ug/L	0.29853	9.0368 ppb	0.29853	3.30%	
QC value within limits for Sn 189.927 Recovery = 90.37%							
Sr 421.552†	666.4	5.3397 ug/L	0.16737	5.3397 ppb	0.16737	3.13%	
QC value within limits for Sr 421.552 Recovery = 106.79%							
Ti 334.940†	2853.3	4.9388 ug/L	0.10410	4.9388 ppb	0.10410	2.11%	
QC value within limits for Ti 334.940 Recovery = 98.78%							
Tl 190.801†	55.4	21.511 ug/L	0.2730	21.511 ppb	0.2730	1.27%	
QC value within limits for Tl 190.801 Recovery = 107.55%							
U 409.014†	1748.5	53.022 ug/L	2.5696	53.022 ppb	2.5696	4.85%	
QC value within limits for U 409.014 Recovery = 106.04%							
V 292.402†	586.4	4.9153 ug/L	0.19891	4.9153 ppb	0.19891	4.05%	
QC value within limits for V 292.402 Recovery = 98.31%							
Zn 213.857†	1138.5	13.729 ug/L	0.2193	13.729 ppb	0.2193	1.60%	
QC value greater than the upper limit for Zn 213.857 Recovery = 137.29%							
SiO2†	2710.2	220.90 ug/L	1.746	220.90 ppb	1.746	0.79%	
QC value within limits for SiO2 Recovery = 103.71%							
QC Failed. Continue with analysis.							

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 13

Date Collected: 3/19/2010 08:04:28

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	3920.8	3920.8	89.2 %		08:06:41
1	Y RADIAL	4255.0	4255.0	89.38 %		08:06:41
1	Al 396.153Radial†	468586.1	525352.2	516040 ug/L	516040 ppb	08:06:21
1	Ca 317.933Radial†	224935.9	252132.2	477090 ug/L	477090 ppb	08:06:21
1	Fe 238.204 Radial†	14279.3	15998.3	185370 ug/L	185370 ppb	08:06:41
1	K 766.490 Radial†	2233.0	-95.6	-177.79 ug/L	-177.79 ppb	08:06:21
1	Mg 279.077 IEC†	10594.3	11874.5	489650 ug/L	489650 ppb	08:06:41
1	Na 589.592 Radial†	-736.1	50.0	17.626 ug/L	17.626 ppb	08:06:41
1	Sr 421.552†	455.0	489.2	0.3587 ug/L	0.3587 ppb	08:06:41
1	Sc 361.383	711859.2	711859.2	86.937 %		08:07:38
1	Y 371.029	589005.7	589005.7	85.160 %		08:07:38
1	Ag 328.068†	-8544.0	-10013.0	-1.1206 ug/L	-1.1206 ppb	08:07:38
1	As 188.979†	-91.2	-78.1	0.3558 ug/L	0.3558 ppb	08:07:58
1	B 249.677†	234.3	806.9	-7.4693 ug/L	-7.4693 ppb	08:07:38
1	Ba 233.527†	-483.4	-555.4	0.4708 ug/L	0.4708 ppb	08:07:58
1	Be 313.107†	-3961.7	-826.0	-0.4074 ug/L	-0.4074 ppb	08:07:38
1	Cd 226.502†	1036.4	1362.8	0.6368 ug/L	0.6368 ppb	08:07:58
1	Co 228.616†	-1.8	44.2	-1.5292 ug/L	-1.5292 ppb	08:07:58
1	Cr 267.716†	-1170.5	-1417.9	0.6295 ug/L	0.6295 ppb	08:07:58
1	Cu 324.752†	2762.6	-2374.2	1.9508 ug/L	1.9508 ppb	08:07:58
1	Mn 257.610†	-266.0	-695.1	-2.6341 ug/L	-2.6341 ppb	08:07:38
1	Mo 202.031†	-207.6	-247.3	-1.9158 ug/L	-1.9158 ppb	08:07:58
1	Ni 231.604†	165.6	106.5	3.3806 ug/L	3.3806 ppb	08:07:58
1	P 214.914†	163.7	1.0	-19.106 ug/L	-19.106 ppb	08:07:58
1	Pb 220.353†	-643.0	-681.3	-10.248 ug/L	-10.248 ppb	08:07:58
1	S 181.975 Axial†	34.7	9.8	-79.226 ug/L	-79.226 ppb	08:07:58
1	Sb 206.836†	61.2	46.7	1.8899 ug/L	1.8899 ppb	08:07:58
1	Se 196.026†	-737.5	-831.3	4.6258 ug/L	4.6258 ppb	08:07:58
1	Si 251.611†	353.1	-82.0	-2.8425 ug/L	-2.8425 ppb	08:07:58
1	Sn 189.927†	-323.4	-379.2	-11.932 ug/L	-11.932 ppb	08:07:58
1	Ti 334.940†	-13245.3	-14114.4	-0.5760 ug/L	-0.5760 ppb	08:07:38
1	Tl 190.801†	-56.4	-35.8	-14.081 ug/L	-14.081 ppb	08:07:58
1	U 409.014†	-766.4	1322.6	19.037 ug/L	19.037 ppb	08:07:38
1	V 292.402†	470.2	1858.3	-2.8990 ug/L	-2.8990 ppb	08:07:58
1	Zn 213.857†	2564.8	2380.1	1.0881 ug/L	1.0881 ppb	08:07:58
1	SiO2†	380.9	-61.2	-4.3969 ug/L	-4.3969 ppb	08:08:55
2	Sc Radial	3895.3	3895.3	88.6 %		08:07:06
2	Y RADIAL	4206.8	4206.8	88.37 %		08:07:06
2	Al 396.153Radial†	461570.8	520869.5	511640 ug/L	511640 ppb	08:06:46
2	Ca 317.933Radial†	221149.1	249507.4	472120 ug/L	472120 ppb	08:06:46
2	Fe 238.204 Radial†	14177.3	15987.8	185250 ug/L	185250 ppb	08:07:06
2	K 766.490 Radial†	2093.1	-237.1	-203.08 ug/L	-203.08 ppb	08:06:46
2	Mg 279.077 IEC†	10491.8	11836.4	488080 ug/L	488080 ppb	08:07:06
2	Na 589.592 Radial†	-755.5	22.6	7.9842 ug/L	7.9842 ppb	08:07:06
2	Sr 421.552†	436.5	471.7	0.2555 ug/L	0.2555 ppb	08:07:06
2	Sc 361.383	718309.4	718309.4	87.724 %		08:08:04
2	Y 371.029	594864.3	594864.3	86.007 %		08:08:04
2	Ag 328.068†	-8802.7	-10219.6	-2.1639 ug/L	-2.1639 ppb	08:08:04
2	As 188.979†	-71.1	-54.2	13.461 ug/L	13.461 ppb	08:08:24
2	B 249.677†	320.1	902.3	-4.7766 ug/L	-4.7766 ppb	08:08:04
2	Ba 233.527†	-494.1	-562.5	0.3993 ug/L	0.3993 ppb	08:08:24
2	Be 313.107†	-3916.5	-733.5	-0.3687 ug/L	-0.3687 ppb	08:08:04
2	Cd 226.502†	1052.8	1370.8	0.7640 ug/L	0.7640 ppb	08:08:24
2	Co 228.616†	24.8	74.5	-0.7426 ug/L	-0.7426 ppb	08:08:24
2	Cr 267.716†	-1176.9	-1413.1	0.6812 ug/L	0.6812 ppb	08:08:24
2	Cu 324.752†	2830.9	-2325.0	2.1075 ug/L	2.1075 ppb	08:08:24
2	Mn 257.610†	-401.1	-846.3	-2.7806 ug/L	-2.7806 ppb	08:08:04
2	Mo 202.031†	-202.8	-239.7	-1.3101 ug/L	-1.3101 ppb	08:08:24
2	Ni 231.604†	157.8	95.8	3.0425 ug/L	3.0425 ppb	08:08:24

2	P 214.914†	142.0	-25.4	-39.810 ug/L	-39.810 ppb	08:08:24
2	Pb 220.353†	-626.2	-655.5	-7.3083 ug/L	-7.3083 ppb	08:08:24
2	S 181.975 Axial†	33.1	7.6	-82.324 ug/L	-82.324 ppb	08:08:24
2	Sb 206.836†	57.9	42.3	0.2175 ug/L	0.2175 ppb	08:08:24
2	Se 196.026†	-747.2	-834.8	-0.0402 ug/L	-0.0402 ppb	08:08:24
2	Si 251.611†	394.3	-38.6	-1.2048 ug/L	-1.2048 ppb	08:08:24
2	Sn 189.927†	-320.8	-372.8	-11.367 ug/L	-11.367 ppb	08:08:24
2	Ti 334.940†	-13503.6	-14272.0	-1.3874 ug/L	-1.3874 ppb	08:08:04
2	Tl 190.801†	-66.2	-46.4	-18.205 ug/L	-18.205 ppb	08:08:24
2	U 409.014†	-803.9	1287.9	17.995 ug/L	17.995 ppb	08:08:04
2	V 292.402†	431.2	1808.9	-3.2983 ug/L	-3.2983 ppb	08:08:24
2	Zn 213.857†	2544.3	2330.3	0.5041 ug/L	0.5041 ppb	08:08:24
2	SiO2†	365.5	-82.7	-6.1658 ug/L	-6.1658 ppb	08:09:00
3	Sc Radial	3942.4	3942.4	89.7 %		08:07:32
3	Y RADIAL	4260.7	4260.7	89.50 %		08:07:32
3	Al 396.153Radial†	465460.7	518986.8	509790 ug/L	509790 ppb	08:07:12
3	Ca 317.933Radial†	222404.3	247926.9	469130 ug/L	469130 ppb	08:07:12
3	Fe 238.204 Radial†	14272.6	15903.0	184260 ug/L	184260 ppb	08:07:32
3	K 766.490 Radial†	2182.7	-165.4	-188.41 ug/L	-188.41 ppb	08:07:12
3	Mg 279.077 IEC†	10595.7	11810.8	487020 ug/L	487020 ppb	08:07:32
3	Na 589.592 Radial†	-778.4	7.4	2.5977 ug/L	2.5977 ppb	08:07:32
3	Sr 421.552†	437.6	467.0	0.2402 ug/L	0.2402 ppb	08:07:32
3	Sc 361.383	710682.9	710682.9	86.793 %		08:08:29
3	Y 371.029	587564.2	587564.2	84.951 %		08:08:29
3	Ag 328.068†	-8544.3	-10029.6	-1.4420 ug/L	-1.4420 ppb	08:08:29
3	As 188.979†	-70.5	-54.5	13.089 ug/L	13.089 ppb	08:08:49
3	B 249.677†	259.8	836.6	-6.4560 ug/L	-6.4560 ppb	08:08:29
3	Ba 233.527†	-457.9	-526.8	0.7037 ug/L	0.7037 ppb	08:08:49
3	Be 313.107†	-3965.0	-837.3	-0.4118 ug/L	-0.4118 ppb	08:08:29
3	Cd 226.502†	1043.0	1372.4	0.8901 ug/L	0.8901 ppb	08:08:49
3	Co 228.616†	-1.0	45.0	-1.4890 ug/L	-1.4890 ppb	08:08:49
3	Cr 267.716†	-1159.4	-1407.3	0.6536 ug/L	0.6536 ppb	08:08:49
3	Cu 324.752†	2863.3	-2253.0	2.2920 ug/L	2.2920 ppb	08:08:49
3	Mn 257.610†	-330.0	-769.3	-2.7332 ug/L	-2.7332 ppb	08:08:29
3	Mo 202.031†	-196.9	-235.4	-1.0397 ug/L	-1.0397 ppb	08:08:49
3	Ni 231.604†	178.7	121.9	3.8690 ug/L	3.8690 ppb	08:08:49
3	P 214.914†	162.7	0.1	-20.545 ug/L	-20.545 ppb	08:08:49
3	Pb 220.353†	-656.2	-697.7	-14.099 ug/L	-14.099 ppb	08:08:49
3	S 181.975 Axial†	42.3	18.6	-62.284 ug/L	-62.284 ppb	08:08:49
3	Sb 206.836†	52.8	37.1	-1.9255 ug/L	-1.9255 ppb	08:08:49
3	Se 196.026†	-745.0	-841.4	-8.9102 ug/L	-8.9102 ppb	08:08:49
3	Si 251.611†	372.9	-58.6	-1.9659 ug/L	-1.9659 ppb	08:08:49
3	Sn 189.927†	-328.8	-386.0	-14.835 ug/L	-14.835 ppb	08:08:49
3	Ti 334.940†	-13136.3	-14014.0	-1.2548 ug/L	-1.2548 ppb	08:08:29
3	Tl 190.801†	-69.7	-51.2	-20.066 ug/L	-20.066 ppb	08:08:49
3	U 409.014†	-736.8	1355.3	20.153 ug/L	20.153 ppb	08:08:29
3	V 292.402†	426.1	1808.4	-3.1711 ug/L	-3.1711 ppb	08:08:49
3	Zn 213.857†	2566.5	2386.9	1.3317 ug/L	1.3317 ppb	08:08:49
3	SiO2†	334.0	-114.6	-8.7798 ug/L	-8.7798 ppb	08:09:05

Mean Data: ICSEA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	713617.2	87.151 %	0.5014			0.58%
Sc Radial	3919.5	89.2 %	0.54			0.60%
Y 371.029	590478.1	85.373 %	0.5590			0.65%
Y RADIAL	4240.8	89.08 %	0.622			0.70%
Ag 328.068†	-10087.4	-1.5755 ug/L	0.53429	-1.5755 ppb	0.53429	33.91%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	521736.2	512490 ug/L	3212.1	512490 ppb	3212.1	0.63%
QC value within limits for Al 396.153Radial Recovery = 102.50%						
As 188.979†	-62.3	8.9685 ug/L	7.46115	8.9685 ppb	7.46115	83.19%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	848.6	-6.2340 ug/L	1.36000	-6.2340 ppb	1.36000	21.82%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-548.2	0.5246 ug/L	0.15915	0.5246 ppb	0.15915	30.34%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-798.9	-0.3960 ug/L	0.02374	-0.3960 ppb	0.02374	5.99%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	249855.5	472780 ug/L	4019.3	472780 ppb	4019.3	0.85%

QC value within limits for Ca 317.933 Radial Recovery = 94.56%							
Cd 226.502†	1368.7	0.7636 ug/L	0.12665	0.7636 ppb	0.12665	16.59%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	54.6	-1.2536 ug/L	0.44296	-1.2536 ppb	0.44296	35.33%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-1412.8	0.6548 ug/L	0.02586	0.6548 ppb	0.02586	3.95%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-2317.4	2.1168 ug/L	0.17081	2.1168 ppb	0.17081	8.07%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	15963.0	184960 ug/L	605.0	184960 ppb	605.0	0.33%	
QC value within limits for Fe 238.204 Radial Recovery = 92.48%							
K 766.490 Radial†	-166.0	-189.76 ug/L	12.700	-189.76 ppb	12.700	6.69%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	11840.6	488250 ug/L	1320.7	488250 ppb	1320.7	0.27%	
QC value within limits for Mg 279.077 IEC Recovery = 97.65%							
Mn 257.610†	-770.2	-2.7160 ug/L	0.07477	-2.7160 ppb	0.07477	2.75%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-240.8	-1.4219 ug/L	0.44861	-1.4219 ppb	0.44861	31.55%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	26.7	9.4025 ug/L	7.61365	9.4025 ppb	7.61365	80.97%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	108.1	3.4307 ug/L	0.41549	3.4307 ppb	0.41549	12.11%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-8.1	-26.487 ug/L	11.5606	-26.487 ppb	11.5606	43.65%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-678.2	-10.552 ug/L	3.4057	-10.552 ppb	3.4057	32.28%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	12.0	-74.612 ug/L	10.7874	-74.612 ppb	10.7874	14.46%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	42.0	0.0607 ug/L	1.91250	0.0607 ppb	1.91250	>999.9%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-835.9	-1.4415 ug/L	6.87597	-1.4415 ppb	6.87597	476.99%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-59.7	-2.0044 ug/L	0.81955	-2.0044 ppb	0.81955	40.89%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-379.4	-12.711 ug/L	1.8610	-12.711 ppb	1.8610	14.64%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	475.9	0.2848 ug/L	0.06445	0.2848 ppb	0.06445	22.63%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-14133.4	-1.0727 ug/L	0.43523	-1.0727 ppb	0.43523	40.57%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-44.5	-17.450 ug/L	3.0630	-17.450 ppb	3.0630	17.55%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	1321.9	19.062 ug/L	1.0788	19.062 ppb	1.0788	5.66%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	1825.2	-3.1228 ug/L	0.20398	-3.1228 ppb	0.20398	6.53%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	2365.8	0.9747 ug/L	0.42531	0.9747 ppb	0.42531	43.64%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
Sio2†	-86.1	-6.4475 ug/L	2.20499	-6.4475 ppb	2.20499	34.20%	
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: 3/19/2010 08:11:16

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	3929.4	3929.4	89.4 %		08:13:28
1	Y RADIAL	4274.8	4274.8	89.80 %		08:13:28
1	Al 396.153Radial†	461471.5	516235.9	507060 ug/L	507060 ppb	08:13:08
1	Ca 317.933Radial†	222675.9	249048.2	471250 ug/L	471250 ppb	08:13:08
1	Fe 238.204 Radial†	14573.7	16292.3	188790 ug/L	188790 ppb	08:13:28
1	K 766.490 Radial†	27582.5	28252.3	5222.4 ug/L	5222.4 ppb	08:13:08
1	Mg 279.077 IEC†	10715.6	11983.9	494160 ug/L	494160 ppb	08:13:28
1	Na 589.592 Radial†	12902.7	15306.9	5396.0 ug/L	5396.0 ppb	08:13:08
1	Sr 421.552†	56906.9	63629.8	506.52 ug/L	506.52 ppb	08:13:08
1	Sc 361.383	720288.2	720288.2	87.966 %		08:14:26
1	Y 371.029	594435.6	594435.6	85.945 %		08:14:26
1	Ag 328.068†	37624.4	42586.3	274.73 ug/L	274.73 ppb	08:14:26
1	As 188.979†	754.1	884.0	532.66 ug/L	532.66 ppb	08:14:46
1	B 249.677†	16639.1	19452.7	513.79 ug/L	513.79 ppb	08:14:26
1	Ba 233.527†	45572.8	51808.0	492.14 ug/L	492.14 ppb	08:14:26
1	Be 313.107†	509360.8	582773.2	249.25 ug/L	249.25 ppb	08:14:26
1	Cd 226.502†	29115.2	33268.9	463.61 ug/L	463.61 ppb	08:14:46
1	Co 228.616†	15201.6	17327.4	445.24 ug/L	445.24 ppb	08:14:46
1	Cr 267.716†	30631.0	34749.9	486.52 ug/L	486.52 ppb	08:14:26
1	Cu 324.752†	148588.6	163363.8	549.04 ug/L	549.04 ppb	08:14:26
1	Mn 257.610†	320306.8	363736.2	476.68 ug/L	476.68 ppb	08:14:26
1	Mo 202.031†	4633.3	5258.6	487.71 ug/L	487.71 ppb	08:14:46
1	Ni 231.604†	12601.2	14241.0	451.98 ug/L	451.98 ppb	08:14:46
1	P 214.914†	3139.5	3381.7	2390.1 ug/L	2390.1 ppb	08:14:46
1	Pb 220.353†	1997.6	2329.2	450.62 ug/L	450.62 ppb	08:14:46
1	S 181.975 Axial†	1333.5	1485.8	2564.9 ug/L	2564.9 ppb	08:14:46
1	Sb 206.836†	1162.5	1297.9	543.31 ug/L	543.31 ppb	08:14:46
1	Se 196.026†	1939.8	2222.1	2556.9 ug/L	2556.9 ppb	08:14:46
1	Si 251.611†	121964.3	138161.0	5239.2 ug/L	5239.2 ppb	08:14:26
1	Sn 189.927†	1579.3	1788.2	478.67 ug/L	478.67 ppb	08:14:46
1	Ti 334.940†	244598.2	279180.8	507.93 ug/L	507.93 ppb	08:14:26
1	Tl 190.801†	961.9	1122.5	437.65 ug/L	437.65 ppb	08:14:46
1	U 409.014†	13648.4	17719.7	515.02 ug/L	515.02 ppb	08:14:26
1	V 292.402†	56031.7	65014.4	508.15 ug/L	508.15 ppb	08:14:26
1	Zn 213.857†	38636.8	43352.3	493.43 ug/L	493.43 ppb	08:14:26
1	SiO2†	120760.5	136781.4	11150 ug/L	11150 ppb	08:15:44
2	Sc Radial	3946.5	3946.5	89.8 %		08:13:54
2	Y RADIAL	4277.8	4277.8	89.86 %		08:13:54
2	Al 396.153Radial†	472937.5	526772.2	517410 ug/L	517410 ppb	08:13:34
2	Ca 317.933Radial†	228578.7	254544.5	481650 ug/L	481650 ppb	08:13:34
2	Fe 238.204 Radial†	14556.7	16202.9	187750 ug/L	187750 ppb	08:13:54
2	K 766.490 Radial†	28173.1	28776.6	5318.7 ug/L	5318.7 ppb	08:13:34
2	Mg 279.077 IEC†	10699.3	11913.9	491280 ug/L	491280 ppb	08:13:54
2	Na 589.592 Radial†	13381.9	15778.1	5562.1 ug/L	5562.1 ppb	08:13:34
2	Sr 421.552†	58340.8	64951.3	517.04 ug/L	517.04 ppb	08:13:34
2	Sc 361.383	719730.9	719730.9	87.898 %		08:14:52
2	Y 371.029	594594.5	594594.5	85.968 %		08:14:52
2	Ag 328.068†	37665.4	42666.1	274.69 ug/L	274.69 ppb	08:14:52
2	As 188.979†	733.5	861.3	519.90 ug/L	519.90 ppb	08:15:12
2	B 249.677†	16494.5	19302.8	509.76 ug/L	509.76 ppb	08:14:52
2	Ba 233.527†	45632.5	51915.9	493.12 ug/L	493.12 ppb	08:14:52
2	Be 313.107†	509580.7	583471.7	249.55 ug/L	249.55 ppb	08:14:52
2	Cd 226.502†	29008.1	33172.6	462.32 ug/L	462.32 ppb	08:15:12
2	Co 228.616†	15102.4	17227.9	442.69 ug/L	442.69 ppb	08:15:12
2	Cr 267.716†	30639.4	34786.4	486.90 ug/L	486.90 ppb	08:14:52
2	Cu 324.752†	148069.9	162904.5	547.47 ug/L	547.47 ppb	08:14:52
2	Mn 257.610†	319951.8	363614.3	476.54 ug/L	476.54 ppb	08:14:52
2	Mo 202.031†	4644.0	5274.9	489.20 ug/L	489.20 ppb	08:15:12
2	Ni 231.604†	12562.9	14208.5	450.95 ug/L	450.95 ppb	08:15:12

2	P 214.914†	3115.9	3357.6	2375.9 ug/L	2375.9 ppb	08:15:12
2	Pb 220.353†	1987.6	2319.6	451.73 ug/L	451.73 ppb	08:15:12
2	S 181.975 Axial†	1323.2	1475.2	2544.0 ug/L	2544.0 ppb	08:15:12
2	Sb 206.836†	1137.8	1270.8	531.74 ug/L	531.74 ppb	08:15:12
2	Se 196.026†	1929.4	2212.0	2548.8 ug/L	2548.8 ppb	08:15:12
2	Si 251.611†	121859.8	138149.5	5238.8 ug/L	5238.8 ppb	08:14:52
2	Sn 189.927†	1577.9	1788.0	480.53 ug/L	480.53 ppb	08:15:12
2	Ti 334.940†	244000.0	278715.6	508.76 ug/L	508.76 ppb	08:14:52
2	Tl 190.801†	973.5	1136.6	443.10 ug/L	443.10 ppb	08:15:12
2	U 409.014†	13501.3	17564.4	510.42 ug/L	510.42 ppb	08:14:52
2	V 292.402†	56069.0	65106.1	508.99 ug/L	508.99 ppb	08:14:52
2	Zn 213.857†	38575.9	43317.0	493.16 ug/L	493.16 ppb	08:14:52
2	SiO2†	121690.4	137945.6	11245 ug/L	11245 ppb	08:15:49
3	Sc Radial	3955.1	3955.1	90.0 %		08:14:19
3	Y RADIAL	4282.0	4282.0	89.95 %		08:14:19
3	Al 396.153Radial†	473789.5	526577.2	517220 ug/L	517220 ppb	08:13:59
3	Ca 317.933Radial†	228286.7	253668.2	479990 ug/L	479990 ppb	08:13:59
3	Fe 238.204 Radial†	14574.2	16187.1	187570 ug/L	187570 ppb	08:14:19
3	K 766.490 Radial†	28154.5	28687.9	5302.4 ug/L	5302.4 ppb	08:13:59
3	Mg 279.077 IEC†	10706.9	11896.6	490560 ug/L	490560 ppb	08:14:19
3	Na 589.592 Radial†	13327.1	15684.9	5529.2 ug/L	5529.2 ppb	08:13:59
3	Sr 421.552†	58635.9	65138.4	518.55 ug/L	518.55 ppb	08:13:59
3	Sc 361.383	717692.3	717692.3	87.649 %		08:15:18
3	Y 371.029	592016.4	592016.4	85.595 %		08:15:18
3	Ag 328.068†	37419.2	42507.0	273.82 ug/L	273.82 ppb	08:15:18
3	As 188.979†	734.9	865.3	522.04 ug/L	522.04 ppb	08:15:38
3	B 249.677†	16478.1	19337.4	510.75 ug/L	510.75 ppb	08:15:18
3	Ba 233.527†	45400.4	51798.6	492.01 ug/L	492.01 ppb	08:15:18
3	Be 313.107†	505147.9	580061.1	248.09 ug/L	248.09 ppb	08:15:18
3	Cd 226.502†	29070.9	33338.0	464.74 ug/L	464.74 ppb	08:15:38
3	Co 228.616†	15202.6	17391.1	446.92 ug/L	446.92 ppb	08:15:38
3	Cr 267.716†	30397.7	34609.6	484.51 ug/L	484.51 ppb	08:15:18
3	Cu 324.752†	147241.9	162438.3	545.92 ug/L	545.92 ppb	08:15:18
3	Mn 257.610†	318560.0	363060.3	475.82 ug/L	475.82 ppb	08:15:18
3	Mo 202.031†	4659.6	5307.7	492.08 ug/L	492.08 ppb	08:15:38
3	Ni 231.604†	12615.1	14308.6	454.13 ug/L	454.13 ppb	08:15:38
3	P 214.914†	3126.1	3379.3	2392.5 ug/L	2392.5 ppb	08:15:38
3	Pb 220.353†	1981.7	2319.2	451.65 ug/L	451.65 ppb	08:15:38
3	S 181.975 Axial†	1326.1	1482.7	2557.5 ug/L	2557.5 ppb	08:15:38
3	Sb 206.836†	1177.2	1319.5	552.20 ug/L	552.20 ppb	08:15:38
3	Se 196.026†	1947.1	2238.4	2570.2 ug/L	2570.2 ppb	08:15:38
3	Si 251.611†	121149.0	137732.4	5222.9 ug/L	5222.9 ppb	08:15:18
3	Sn 189.927†	1579.5	1795.0	481.83 ug/L	481.83 ppb	08:15:38
3	Ti 334.940†	242971.7	278330.9	507.93 ug/L	507.93 ppb	08:15:18
3	Tl 190.801†	945.2	1107.5	431.81 ug/L	431.81 ppb	08:15:38
3	U 409.014†	13527.8	17638.3	512.69 ug/L	512.69 ppb	08:15:18
3	V 292.402†	55602.3	64754.9	506.25 ug/L	506.25 ppb	08:15:18
3	Zn 213.857†	38305.4	43133.0	490.94 ug/L	490.94 ppb	08:15:18
3	SiO2†	121243.0	137828.4	11236 ug/L	11236 ppb	08:15:54

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	719237.2	87.838 %	0.1669			0.19%
Sc Radial	3943.7	89.7 %	0.30			0.33%
Y 371.029	593682.2	85.836 %	0.2089			0.24%
Y RADIAL	4278.2	89.87 %	0.076			0.08%
Ag 328.068†	42586.5	274.42 ug/L	0.516	274.42 ppb	0.516	0.19%
QC value within limits for Ag 328.068 Recovery = 109.77%						
Al 396.153Radial†	523195.1	513900 ug/L	5920.7	513900 ppb	5920.7	1.15%
QC value within limits for Al 396.153Radial Recovery = 102.78%						
As 188.979†	870.2	524.87 ug/L	6.835	524.87 ppb	6.835	1.30%
QC value within limits for As 188.979 Recovery = 104.97%						
B 249.677†	19364.3	511.43 ug/L	2.100	511.43 ppb	2.100	0.41%
QC value within limits for B 249.677 Recovery = 102.29%						
Ba 233.527†	51840.8	492.43 ug/L	0.607	492.43 ppb	0.607	0.12%
QC value within limits for Ba 233.527 Recovery = 98.49%						
Be 313.107†	582102.0	248.96 ug/L	0.768	248.96 ppb	0.768	0.31%
QC value within limits for Be 313.107 Recovery = 99.59%						
Ca 317.933Radial†	252420.3	477630 ug/L	5587.7	477630 ppb	5587.7	1.17%

QC value within limits for Ca 317.933 Radial Recovery = 95.53%							
Cd 226.502†	33259.8	463.56 ug/L	1.211	463.56 ppb	1.211	0.26%	
QC value within limits for Cd 226.502 Recovery = 92.71%							
Co 228.616†	17315.5	444.95 ug/L	2.129	444.95 ppb	2.129	0.48%	
QC value within limits for Co 228.616 Recovery = 88.99%							
Cr 267.716†	34715.3	485.98 ug/L	1.287	485.98 ppb	1.287	0.26%	
QC value within limits for Cr 267.716 Recovery = 97.20%							
Cu 324.752†	162902.2	547.48 ug/L	1.559	547.48 ppb	1.559	0.28%	
QC value within limits for Cu 324.752 Recovery = 109.50%							
Fe 238.204 Radial†	16227.4	188040 ug/L	657.2	188040 ppb	657.2	0.35%	
QC value within limits for Fe 238.204 Radial Recovery = 94.02%							
K 766.490 Radial†	28572.3	5281.2 ug/L	51.56	5281.2 ppb	51.56	0.98%	
QC value within limits for K 766.490 Radial Recovery = 105.62%							
Mg 279.077 IEC†	11931.5	492000 ug/L	1907.0	492000 ppb	1907.0	0.39%	
QC value within limits for Mg 279.077 IEC Recovery = 98.40%							
Mn 257.610†	363470.3	476.34 ug/L	0.461	476.34 ppb	0.461	0.10%	
QC value within limits for Mn 257.610 Recovery = 95.27%							
Mo 202.031†	5280.4	489.66 ug/L	2.224	489.66 ppb	2.224	0.45%	
QC value within limits for Mo 202.031 Recovery = 97.93%							
Na 589.592 Radial†	15589.9	5495.8 ug/L	87.97	5495.8 ppb	87.97	1.60%	
QC value within limits for Na 589.592 Radial Recovery = 109.92%							
Ni 231.604†	14252.7	452.36 ug/L	1.621	452.36 ppb	1.621	0.36%	
QC value within limits for Ni 231.604 Recovery = 90.47%							
P 214.914†	3372.9	2386.2 ug/L	8.95	2386.2 ppb	8.95	0.38%	
QC value within limits for P 214.914 Recovery = 95.45%							
Pb 220.353†	2322.7	451.34 ug/L	0.618	451.34 ppb	0.618	0.14%	
QC value within limits for Pb 220.353 Recovery = 90.27%							
S 181.975 Axial†	1481.2	2555.4 ug/L	10.60	2555.4 ppb	10.60	0.41%	
QC value within limits for S 181.975 Axial Recovery = 102.22%							
Sb 206.836†	1296.0	542.42 ug/L	10.256	542.42 ppb	10.256	1.89%	
QC value within limits for Sb 206.836 Recovery = 108.48%							
Se 196.026†	2224.2	2558.7 ug/L	10.81	2558.7 ppb	10.81	0.42%	
QC value within limits for Se 196.026 Recovery = 102.35%							
Si 251.611†	138014.3	5233.7 ug/L	9.30	5233.7 ppb	9.30	0.18%	
QC value within limits for Si 251.611 Recovery = 104.67%							
Sn 189.927†	1790.4	480.34 ug/L	1.588	480.34 ppb	1.588	0.33%	
QC value within limits for Sn 189.927 Recovery = 96.07%							
Sr 421.552†	64573.1	514.03 ug/L	6.551	514.03 ppb	6.551	1.27%	
QC value within limits for Sr 421.552 Recovery = 102.81%							
Ti 334.940†	278742.4	508.21 ug/L	0.478	508.21 ppb	0.478	0.09%	
QC value within limits for Ti 334.940 Recovery = 101.64%							
Tl 190.801†	1122.2	437.52 ug/L	5.646	437.52 ppb	5.646	1.29%	
QC value within limits for Tl 190.801 Recovery = 87.50%							
U 409.014†	17640.8	512.71 ug/L	2.298	512.71 ppb	2.298	0.45%	
QC value within limits for U 409.014 Recovery = 102.54%							
V 292.402†	64958.4	507.80 ug/L	1.406	507.80 ppb	1.406	0.28%	
QC value within limits for V 292.402 Recovery = 101.56%							
Zn 213.857†	43267.4	492.51 ug/L	1.364	492.51 ppb	1.364	0.28%	
QC value within limits for Zn 213.857 Recovery = 98.50%							
SiO2†	137518.5	11210 ug/L	52.3	11210 ppb	52.3	0.47%	
QC value within limits for SiO2 Recovery = 104.82%							
All analyte(s) passed QC.							

Sequence No.: 11
 Sample ID: LR1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 15
 Date Collected: 3/19/2010 08:18:04
 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	3858.3	3858.3	87.8 %		08:20:17
1	Y RADIAL	4204.0	4204.0	88.31 %		08:20:17
1	Al 396.153Radial†	464225.3	528893.5	519520 ug/L	519520 ppb	08:19:57
1	Ca 317.933Radial†	223881.2	255015.3	482540 ug/L	482540 ppb	08:19:57
1	Fe 238.204 Radial†	33047.8	37637.5	436100 ug/L	436100 ppb	08:20:17
1	K 766.490 Radial†	2465.2	209.4	-328.44 ug/L	-328.44 ppb	08:19:57
1	Mg 279.077 IEC†	10432.1	11882.0	489700 ug/L	489700 ppb	08:20:17
1	Na 589.592 Radial†	1320643.5	1505266.9	530640 ug/L	530640 ppb	08:19:57
1	Sr 421.552†	1394.9	1568.2	8.9670 ug/L	8.9670 ppb	08:20:17
1	Sc 361.383	692124.4	692124.4	84.527 %		08:21:15
1	Y 371.029	573747.0	573747.0	82.954 %		08:21:15
1	Ag 328.068†	-19613.3	-23388.8	-5.2352 ug/L	-5.2352 ppb	08:21:15
1	As 188.979†	-142.9	-142.3	23.974 ug/L	23.974 ppb	08:21:35
1	B 249.677†	872.5	1569.6	-26.808 ug/L	-26.808 ppb	08:21:15
1	Ba 233.527†	-1321.0	-1562.1	-1.3183 ug/L	-1.3183 ppb	08:21:35
1	Be 313.107†	-9468.2	-7470.4	-3.2304 ug/L	-3.2304 ppb	08:21:15
1	Cd 226.502†	2655.0	3311.7	5.9163 ug/L	5.9163 ppb	08:21:35
1	Co 228.616†	194.4	276.1	0.7761 ug/L	0.7761 ppb	08:21:35
1	Cr 267.716†	-1023.6	-1282.5	23.115 ug/L	23.115 ppb	08:21:35
1	Cu 324.752†	582.4	-4862.9	-1.2373 ug/L	-1.2373 ppb	08:21:15
1	Mn 257.610†	-20079.9	-24144.8	-8.7155 ug/L	-8.7155 ppb	08:21:15
1	Mo 202.031†	-437.4	-526.0	-7.1607 ug/L	-7.1607 ppb	08:21:35
1	Ni 231.604†	224.5	181.6	5.7615 ug/L	5.7615 ppb	08:21:35
1	P 214.914†	473.6	373.1	58.508 ug/L	58.508 ppb	08:21:35
1	Pb 220.353†	-449.8	-473.9	-13.265 ug/L	-13.265 ppb	08:21:35
1	S 181.975 Axial†	45.7	23.9	-54.613 ug/L	-54.613 ppb	08:21:35
1	Sb 206.836†	49.4	34.7	-6.5923 ug/L	-6.5923 ppb	08:21:35
1	Se 196.026†	-1806.4	-2120.1	-347.16 ug/L	-347.16 ppb	08:21:35
1	Si 251.611†	-299.5	-842.5	-31.407 ug/L	-31.407 ppb	08:21:35
1	Sn 189.927†	-339.4	-408.7	-32.054 ug/L	-32.054 ppb	08:21:35
1	Ti 334.940†	-11536.9	-12527.6	-3.6494 ug/L	-3.6494 ppb	08:21:15
1	Tl 190.801†	-84.5	-70.9	-27.844 ug/L	-27.844 ppb	08:21:35
1	U 409.014†	414094.0	492102.3	14880 ug/L	14880 ppb	08:21:15
1	V 292.402†	1055.9	2566.7	-5.6116 ug/L	-5.6116 ppb	08:21:35
1	Zn 213.857†	4619.7	4895.3	-5.9615 ug/L	-5.9615 ppb	08:21:35
1	SiO2†	-253.8	-799.6	-63.985 ug/L	-63.985 ppb	08:22:32
2	Sc Radial	3862.7	3862.7	87.9 %		08:20:43
2	Y RADIAL	4199.0	4199.0	88.20 %		08:20:43
2	Al 396.153Radial†	461838.3	525564.2	516250 ug/L	516250 ppb	08:20:23
2	Ca 317.933Radial†	223024.1	253744.3	480140 ug/L	480140 ppb	08:20:23
2	Fe 238.204 Radial†	33136.1	37694.2	436750 ug/L	436750 ppb	08:20:43
2	K 766.490 Radial†	2317.4	38.0	-359.39 ug/L	-359.39 ppb	08:20:23
2	Mg 279.077 IEC†	10466.5	11907.4	490740 ug/L	490740 ppb	08:20:43
2	Na 589.592 Radial†	1316291.1	1498569.5	528280 ug/L	528280 ppb	08:20:23
2	Sr 421.552†	1406.5	1579.6	9.0762 ug/L	9.0762 ppb	08:20:43
2	Sc 361.383	730532.2	730532.2	89.217 %		08:21:41
2	Y 371.029	605265.0	605265.0	87.511 %		08:21:41
2	Ag 328.068†	-19445.3	-21980.6	2.9810 ug/L	2.9810 ppb	08:21:41
2	As 188.979†	-136.7	-126.4	32.829 ug/L	32.829 ppb	08:22:01
2	B 249.677†	952.3	1604.8	-25.925 ug/L	-25.925 ppb	08:21:41
2	Ba 233.527†	-1364.7	-1528.9	-0.9888 ug/L	-0.9888 ppb	08:22:01
2	Be 313.107†	-9512.7	-6931.4	-3.0000 ug/L	-3.0000 ppb	08:21:41
2	Cd 226.502†	2640.5	3130.3	3.0561 ug/L	3.0561 ppb	08:22:01
2	Co 228.616†	193.3	262.9	0.4413 ug/L	0.4413 ppb	08:22:01
2	Cr 267.716†	-1053.2	-1252.0	23.918 ug/L	23.918 ppb	08:22:01
2	Cu 324.752†	530.5	-4957.4	-1.0589 ug/L	-1.0589 ppb	08:21:41
2	Mn 257.610†	-20279.0	-23119.0	-7.3448 ug/L	-7.3448 ppb	08:21:41
2	Mo 202.031†	-388.0	-443.4	0.2051 ug/L	0.2051 ppb	08:22:01
2	Ni 231.604†	244.4	189.9	6.0255 ug/L	6.0255 ppb	08:22:01

2	P 214.914†	460.8	329.2	24.570 ug/L	24.570 ppb	08:22:01
2	Pb 220.353†	-451.1	-447.3	-10.020 ug/L	-10.020 ppb	08:22:01
2	S 181.975 Axial†	65.6	43.3	-19.239 ug/L	-19.239 ppb	08:22:01
2	Sb 206.836†	71.3	56.2	2.7172 ug/L	2.7172 ppb	08:22:01
2	Se 196.026†	-1799.4	-2000.0	-246.22 ug/L	-246.22 ppb	08:22:01
2	Si 251.611†	-238.1	-755.1	-28.180 ug/L	-28.180 ppb	08:22:01
2	Sn 189.927†	-334.8	-382.4	-26.547 ug/L	-26.547 ppb	08:22:01
2	Ti 334.940†	-11966.2	-12291.2	-3.2854 ug/L	-3.2854 ppb	08:21:41
2	Tl 190.801†	-81.0	-61.7	-24.259 ug/L	-24.259 ppb	08:22:01
2	U 409.014†	412871.2	464975.3	14057 ug/L	14057 ppb	08:21:41
2	V 292.402†	1032.4	2474.6	-7.8937 ug/L	-7.8937 ppb	08:22:01
2	Zn 213.857†	4602.5	4588.7	-9.7762 ug/L	-9.7762 ppb	08:22:01
2	SiO2†	-292.8	-827.5	-66.459 ug/L	-66.459 ppb	08:22:37
3	Sc Radial	3792.3	3792.3	86.3 %		08:21:08
3	Y RADIAL	4133.1	4133.1	86.82 %		08:21:08
3	Al 396.153Radial†	464025.1	537857.3	528320 ug/L	528320 ppb	08:20:48
3	Ca 317.933Radial†	223657.0	259190.2	490440 ug/L	490440 ppb	08:20:48
3	Fe 238.204 Radial†	32562.1	37729.2	437160 ug/L	437160 ppb	08:21:08
3	K 766.490 Radial†	2391.3	172.7	-341.14 ug/L	-341.14 ppb	08:20:48
3	Mg 279.077 IEC†	10258.7	11887.7	489930 ug/L	489930 ppb	08:21:08
3	Na 589.592 Radial†	1317202.9	1527439.6	538460 ug/L	538460 ppb	08:20:48
3	Sr 421.552†	1379.4	1577.8	8.9853 ug/L	8.9853 ppb	08:21:08
3	Sc 361.383	694267.4	694267.4	84.788 %		08:22:07
3	Y 371.029	575265.2	575265.2	83.173 %		08:22:07
3	Ag 328.068†	-19833.7	-23577.2	-6.0148 ug/L	-6.0148 ppb	08:22:07
3	As 188.979†	-136.5	-134.2	28.664 ug/L	28.664 ppb	08:22:27
3	B 249.677†	971.8	1683.5	-23.784 ug/L	-23.784 ppb	08:22:07
3	Ba 233.527†	-1352.4	-1594.4	-1.5876 ug/L	-1.5876 ppb	08:22:27
3	Be 313.107†	-9518.2	-7494.8	-3.2398 ug/L	-3.2398 ppb	08:22:07
3	Cd 226.502†	2641.5	3286.0	5.4396 ug/L	5.4396 ppb	08:22:27
3	Co 228.616†	198.7	280.6	0.8817 ug/L	0.8817 ppb	08:22:27
3	Cr 267.716†	-1048.2	-1307.7	22.878 ug/L	22.878 ppb	08:22:27
3	Cu 324.752†	478.2	-4988.0	-1.6100 ug/L	-1.6100 ppb	08:22:07
3	Mn 257.610†	-20061.9	-24050.2	-8.4958 ug/L	-8.4958 ppb	08:22:07
3	Mo 202.031†	-407.4	-489.1	-3.7020 ug/L	-3.7020 ppb	08:22:27
3	Ni 231.604†	237.1	195.5	6.2055 ug/L	6.2055 ppb	08:22:27
3	P 214.914†	471.4	368.6	56.630 ug/L	56.630 ppb	08:22:27
3	Pb 220.353†	-461.8	-486.3	-13.261 ug/L	-13.261 ppb	08:22:27
3	S 181.975 Axial†	57.5	37.6	-31.678 ug/L	-31.678 ppb	08:22:27
3	Sb 206.836†	68.6	57.3	2.6559 ug/L	2.6559 ppb	08:22:27
3	Se 196.026†	-1780.3	-2082.7	-310.14 ug/L	-310.14 ppb	08:22:27
3	Si 251.611†	-272.2	-809.2	-30.184 ug/L	-30.184 ppb	08:22:27
3	Sn 189.927†	-340.5	-408.7	-30.723 ug/L	-30.723 ppb	08:22:27
3	Ti 334.940†	-11350.1	-12265.2	-2.1655 ug/L	-2.1655 ppb	08:22:07
3	Tl 190.801†	-95.1	-83.0	-32.522 ug/L	-32.522 ppb	08:22:27
3	U 409.014†	416181.0	493051.5	14909 ug/L	14909 ppb	08:22:07
3	V 292.402†	1073.7	2583.8	-5.5239 ug/L	-5.5239 ppb	08:22:27
3	Zn 213.857†	4591.0	4844.6	-6.7377 ug/L	-6.7377 ppb	08:22:27
3	SiO2†	-295.7	-848.1	-68.030 ug/L	-68.030 ppb	08:22:42

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	705641.3	86.177 %		2.6358			3.06%
Sc Radial	3837.8	87.3 %		0.90			1.03%
Y 371.029	584759.1	84.546 %		2.5699			3.04%
Y RADIAL	4178.7	87.78 %		0.831			0.95%
Ag 328.068†	-22982.2	-2.7564 ug/L		4.98395	-2.7564 ppb	4.98395	180.82%
Al 396.153Radial†	530771.7	521360 ug/L		6245.4	521360 ppb	6245.4	1.20%
QC value within limits for Al 396.153Radial Recovery = 104.27%							
As 188.979†	-134.3	28.489 ug/L		4.4300	28.489 ppb	4.4300	15.55%
B 249.677†	1619.3	-25.506 ug/L		1.5552	-25.506 ppb	1.5552	6.10%
Ba 233.527†	-1561.8	-1.2983 ug/L		0.29988	-1.2983 ppb	0.29988	23.10%
Be 313.107†	-7298.9	-3.1567 ug/L		0.13583	-3.1567 ppb	0.13583	4.30%
Ca 317.933Radial†	255983.3	484370 ug/L		5391.1	484370 ppb	5391.1	1.11%
QC value within limits for Ca 317.933Radial Recovery = 96.87%							
Cd 226.502†	3242.6	4.8040 ug/L		1.53236	4.8040 ppb	1.53236	31.90%
Co 228.616†	273.2	0.6997 ug/L		0.22995	0.6997 ppb	0.22995	32.86%
Cr 267.716†	-1280.7	23.303 ug/L		0.5453	23.303 ppb	0.5453	2.34%
Cu 324.752†	-4936.1	-1.3021 ug/L		0.28121	-1.3021 ppb	0.28121	21.60%

Fe 238.204 Radial†	37687.0	436670 ug/L	536.3	436670 ppb	536.3	0.12%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.33%						
K 766.490 Radial†	140.0	-342.99 ug/L	15.557	-342.99 ppb	15.557	4.54%
Mg 279.077 IEC†	11892.4	490120 ug/L	550.1	490120 ppb	550.1	0.11%
QC value within limits for Mg 279.077 IEC Recovery = 98.02%						
Mn 257.610†	-23771.3	-8.1853 ug/L	0.73620	-8.1853 ppb	0.73620	8.99%
Mo 202.031†	-486.1	-3.5526 ug/L	3.68516	-3.5526 ppb	3.68516	103.73%
Na 589.592 Radial†	1510425.3	532460 ug/L	5326.8	532460 ppb	5326.8	1.00%
QC value within limits for Na 589.592 Radial Recovery = 106.49%						
Ni 231.604†	189.0	5.9975 ug/L	0.22333	5.9975 ppb	0.22333	3.72%
P 214.914†	357.0	46.570 ug/L	19.0751	46.570 ppb	19.0751	40.96%
Pb 220.353†	-469.2	-12.182 ug/L	1.8719	-12.182 ppb	1.8719	15.37%
S 181.975 Axial†	34.9	-35.177 ug/L	17.9448	-35.177 ppb	17.9448	51.01%
Sb 206.836†	49.4	-0.4064 ug/L	5.35721	-0.4064 ppb	5.35721	>999.9%
Se 196.026†	-2067.6	-301.17 ug/L	51.066	-301.17 ppb	51.066	16.96%
Si 251.611†	-802.2	-29.924 ug/L	1.6288	-29.924 ppb	1.6288	5.44%
Sn 189.927†	-399.9	-29.775 ug/L	2.8732	-29.775 ppb	2.8732	9.65%
Sr 421.552†	1575.2	9.0095 ug/L	0.05848	9.0095 ppb	0.05848	0.65%
Ti 334.940†	-12361.3	-3.0334 ug/L	0.77339	-3.0334 ppb	0.77339	25.50%
Tl 190.801†	-71.9	-28.208 ug/L	4.1435	-28.208 ppb	4.1435	14.69%
U 409.014†	483376.4	14615 ug/L	483.7	14615 ppb	483.7	3.31%
QC value within limits for U 409.014 Recovery = 97.43%						
V 292.402†	2541.7	-6.3431 ug/L	1.34363	-6.3431 ppb	1.34363	21.18%
Zn 213.857†	4776.2	-7.4918 ug/L	2.01607	-7.4918 ppb	2.01607	26.91%
SiO2†	-825.1	-66.158 ug/L	2.0394	-66.158 ppb	2.0394	3.08%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 16

Date Collected: 3/19/2010 08:24:52

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	4137.8	4137.8	94.1 %		08:27:10
1	Y RADIAL	4644.1	4644.1	97.55 %		08:26:50
1	Al 396.153Radial†	390.0	492.3	15.191 ug/L	15.191 ppb	08:26:50
1	Ca 317.933Radial†	33.8	20.2	38.282 ug/L	38.282 ppb	08:27:10
1	Fe 238.204 Radial†	-17.3	-26.9	-23.574 ug/L	-23.574 ppb	08:27:10
1	K 766.490 Radial†	1547401.2	1641029.2	312650 ug/L	312650 ppb	08:26:45
1	Mg 279.077 IEC†	-3.3	-5.0	-105.68 ug/L	-105.68 ppb	08:27:10
1	Na 589.592 Radial†	-347.1	506.4	178.52 ug/L	178.52 ppb	08:26:50
1	Sr 421.552†	1216543.4	1292174.6	10358 ug/L	10358 ppb	08:26:45
1	Sc 361.383	804970.1	804970.1	98.308 %		08:28:28
1	Y 371.029	666238.5	666238.5	96.326 %		08:28:28
1	Ag 328.068†	-6177.1	-6468.5	7.0301 ug/L	7.0301 ppb	08:28:33
1	As 188.979†	17708.3	18039.8	9966.6 ug/L	9966.6 ppb	08:28:33
1	B 249.677†	175916.7	179481.8	5007.7 ug/L	5007.7 ppb	08:28:28
1	Ba 233.527†	1479029.4	1504486.3	14114 ug/L	14114 ppb	08:28:28
1	Be 313.107†	6728544.3	6848082.8	2938.4 ug/L	2938.4 ppb	08:28:21
1	Cd 226.502†	658581.0	670086.7	9729.0 ug/L	9729.0 ppb	08:28:28
1	Co 228.616†	365808.7	372151.0	9616.9 ug/L	9616.9 ppb	08:28:28
1	Cr 267.716†	1773359.1	1803809.5	24204 ug/L	24204 ppb	08:28:28
1	Cu 324.752†	6042194.5	6140637.0	20273 ug/L	20273 ppb	08:28:21
1	Mn 257.610†	7074413.2	7195784.5	9461.1 ug/L	9461.1 ppb	08:28:21
1	Mo 202.031†	106826.9	108657.0	9658.6 ug/L	9658.6 ppb	08:28:33
1	Ni 231.604†	306782.5	311978.6	9901.8 ug/L	9901.8 ppb	08:28:28
1	P 214.914†	23485.0	23701.9	13724 ug/L	13724 ppb	08:28:33
1	Pb 220.353†	155065.2	157792.4	24255 ug/L	24255 ppb	08:28:28
1	S 181.975 Axial†	28593.5	29055.4	52015 ug/L	52015 ppb	08:28:33
1	Sb 206.836†	24495.7	24893.6	10774 ug/L	10774 ppb	08:28:33
1	Se 196.026†	12052.6	12277.0	10257 ug/L	10257 ppb	08:28:33
1	Si 251.611†	1232990.0	1253723.3	47476 ug/L	47476 ppb	08:28:28
1	Sn 189.927†	43906.6	44655.1	10133 ug/L	10133 ppb	08:28:33
1	Ti 334.940†	5587153.3	5684437.1	9876.8 ug/L	9876.8 ppb	08:28:21
1	Tl 190.801†	24418.9	24868.3	9687.0 ug/L	9687.0 ppb	08:28:33
1	U 409.014†	-1200.6	983.0	-24.275 ug/L	-24.275 ppb	08:28:28
1	V 292.402†	1238824.8	1261464.1	10190 ug/L	10190 ppb	08:28:28
1	Zn 213.857†	1148798.8	1168001.2	14062 ug/L	14062 ppb	08:28:28
1	SiO2†	1231318.9	1252012.3	101920 ug/L	101920 ppb	08:29:19
2	Sc Radial	4145.5	4145.5	94.3 %		08:27:41
2	Y RADIAL	4527.2	4527.2	95.10 %		08:27:21
2	Al 396.153Radial†	369.2	469.5	-8.7245 ug/L	-8.7245 ppb	08:27:21
2	Ca 317.933Radial†	32.2	18.5	34.943 ug/L	34.943 ppb	08:27:41
2	Fe 238.204 Radial†	-18.2	-27.8	-32.856 ug/L	-32.856 ppb	08:27:41
2	K 766.490 Radial†	1542370.3	1632628.8	311050 ug/L	311050 ppb	08:27:16
2	Mg 279.077 IEC†	-5.6	-7.4	-205.17 ug/L	-205.17 ppb	08:27:41
2	Na 589.592 Radial†	-354.2	499.6	176.11 ug/L	176.11 ppb	08:27:21
2	Sr 421.552†	1209601.5	1282403.8	10279 ug/L	10279 ppb	08:27:16
2	Sc 361.383	811868.5	811868.5	99.150 %		08:28:48
2	Y 371.029	670978.1	670978.1	97.012 %		08:28:48
2	Ag 328.068†	-6279.8	-6518.8	6.8157 ug/L	6.8157 ppb	08:28:53
2	As 188.979†	17949.0	18129.6	10015 ug/L	10015 ppb	08:28:53
2	B 249.677†	177983.5	180045.9	5023.5 ug/L	5023.5 ppb	08:28:48
2	Ba 233.527†	1494980.9	1507790.9	14145 ug/L	14145 ppb	08:28:48
2	Be 313.107†	6732933.5	6794353.7	2915.3 ug/L	2915.3 ppb	08:28:41
2	Cd 226.502†	666918.4	672803.4	9768.4 ug/L	9768.4 ppb	08:28:48
2	Co 228.616†	370193.2	373411.3	9649.8 ug/L	9649.8 ppb	08:28:48
2	Cr 267.716†	1791743.9	1807024.5	24247 ug/L	24247 ppb	08:28:48
2	Cu 324.752†	6030940.7	6077063.1	20063 ug/L	20063 ppb	08:28:41
2	Mn 257.610†	7074899.8	7135130.0	9381.4 ug/L	9381.4 ppb	08:28:41
2	Mo 202.031†	108087.3	109004.9	9689.6 ug/L	9689.6 ppb	08:28:53
2	Ni 231.604†	310630.5	313208.0	9940.8 ug/L	9940.8 ppb	08:28:48

2	P 214.914†	23794.6	23811.2	13848 ug/L	13848 ppb	08:28:53
2	Pb 220.353†	156895.5	158298.2	24333 ug/L	24333 ppb	08:28:48
2	S 181.975 Axial†	29039.9	29258.5	52379 ug/L	52379 ppb	08:28:53
2	Sb 206.836†	24818.6	25007.5	10823 ug/L	10823 ppb	08:28:53
2	Se 196.026†	12224.9	12346.6	10315 ug/L	10315 ppb	08:28:53
2	Si 251.611†	1246148.3	1256337.3	47575 ug/L	47575 ppb	08:28:48
2	Sn 189.927†	44475.4	44849.3	10178 ug/L	10178 ppb	08:28:53
2	Ti 334.940†	5582866.5	5631822.9	9785.3 ug/L	9785.3 ppb	08:28:41
2	Tl 190.801†	24653.6	24894.0	9695.6 ug/L	9695.6 ppb	08:28:53
2	U 409.014†	-1298.1	895.0	-27.040 ug/L	-27.040 ppb	08:28:48
2	V 292.402†	1250891.0	1262926.4	10202 ug/L	10202 ppb	08:28:48
2	Zn 213.857†	1161089.0	1170467.4	14092 ug/L	14092 ppb	08:28:48
2	SiO2†	1234688.1	1244767.8	101320 ug/L	101320 ppb	08:29:25
3	Sc Radial	4156.1	4156.1	94.6 %		08:28:11
3	Y RADIAL	4593.1	4593.1	96.48 %		08:27:51
3	Al 396.153Radial†	406.4	507.9	24.084 ug/L	24.084 ppb	08:27:51
3	Ca 317.933Radial†	32.6	18.8	35.616 ug/L	35.616 ppb	08:28:11
3	Fe 238.204 Radial†	-11.3	-20.4	53.420 ug/L	53.420 ppb	08:28:11
3	K 766.490 Radial†	1534339.9	1619978.5	308640 ug/L	308640 ppb	08:27:46
3	Mg 279.077 IEC†	-5.4	-7.2	-196.31 ug/L	-196.31 ppb	08:28:11
3	Na 589.592 Radial†	-370.0	483.8	170.55 ug/L	170.55 ppb	08:27:51
3	Sr 421.552†	1205944.7	1275275.8	10222 ug/L	10222 ppb	08:27:46
3	Sc 361.383	799541.9	799541.9	97.645 %		08:29:08
3	Y 371.029	660328.4	660328.4	95.472 %		08:29:08
3	Ag 328.068†	-6237.4	-6572.9	6.6426 ug/L	6.6426 ppb	08:29:13
3	As 188.979†	17849.2	18306.5	10114 ug/L	10114 ppb	08:29:13
3	B 249.677†	175494.5	180264.3	5029.5 ug/L	5029.5 ppb	08:29:08
3	Ba 233.527†	1476470.2	1512079.6	14185 ug/L	14185 ppb	08:29:08
3	Be 313.107†	6787317.6	6954741.4	2984.1 ug/L	2984.1 ppb	08:29:01
3	Cd 226.502†	659516.8	675593.3	9808.9 ug/L	9808.9 ppb	08:29:08
3	Co 228.616†	365913.6	374784.7	9685.0 ug/L	9685.0 ppb	08:29:08
3	Cr 267.716†	1770674.5	1813307.1	24331 ug/L	24331 ppb	08:29:08
3	Cu 324.752†	6079322.5	6220388.3	20537 ug/L	20537 ppb	08:29:01
3	Mn 257.610†	7133186.6	7304831.8	9604.5 ug/L	9604.5 ppb	08:29:01
3	Mo 202.031†	107562.7	110148.3	9791.2 ug/L	9791.2 ppb	08:29:13
3	Ni 231.604†	306847.3	314163.7	9971.1 ug/L	9971.1 ppb	08:29:08
3	P 214.914†	23753.0	24138.6	13999 ug/L	13999 ppb	08:29:13
3	Pb 220.353†	155100.2	158899.1	24425 ug/L	24425 ppb	08:29:08
3	S 181.975 Axial†	28855.2	29520.9	52849 ug/L	52849 ppb	08:29:13
3	Sb 206.836†	24631.3	25201.6	10908 ug/L	10908 ppb	08:29:13
3	Se 196.026†	12064.9	12372.8	10337 ug/L	10337 ppb	08:29:13
3	Si 251.611†	1229504.0	1258668.3	47662 ug/L	47662 ppb	08:29:08
3	Sn 189.927†	44342.4	45404.7	10304 ug/L	10304 ppb	08:29:13
3	Ti 334.940†	5623242.8	5759982.3	10008 ug/L	10008 ppb	08:29:01
3	Tl 190.801†	24541.9	25162.9	9802.4 ug/L	9802.4 ppb	08:29:13
3	U 409.014†	-1135.1	1041.7	-22.786 ug/L	-22.786 ppb	08:29:08
3	V 292.402†	1234480.5	1265570.5	10225 ug/L	10225 ppb	08:29:08
3	Zn 213.857†	1148149.8	1175270.1	14149 ug/L	14149 ppb	08:29:08
3	SiO2†	1217210.0	1246066.7	101430 ug/L	101430 ppb	08:29:31

Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	805460.2	98.368 %		0.7545			0.77%
Sc Radial	4146.4	94.3 %		0.21			0.22%
Y 371.029	665848.3	96.270 %		0.7714			0.80%
Y RADIAL	4588.1	96.38 %		1.231			1.28%
Ag 328.068†	-6520.1	6.8295 ug/L		0.19414	6.8295 ppb	0.19414	2.84%
Al 396.153Radial†	489.9	10.184 ug/L		16.9680	10.184 ppb	16.9680	166.62%
As 188.979†	18158.6	10032 ug/L		75.0	10032 ppb	75.0	0.75%
QC value within limits for As 188.979 Recovery = 100.32%							
B 249.677†	179930.7	5020.2 ug/L		11.23	5020.2 ppb	11.23	0.22%
QC value within limits for B 249.677 Recovery = 100.40%							
Ba 233.527†	1508118.9	14148 ug/L		35.7	14148 ppb	35.7	0.25%
QC value within limits for Ba 233.527 Recovery = 94.32%							
Be 313.107†	6865726.0	2945.9 ug/L		35.01	2945.9 ppb	35.01	1.19%
QC value within limits for Be 313.107 Recovery = 98.20%							
Ca 317.933Radial†	19.2	36.280 ug/L		1.7659	36.280 ppb	1.7659	4.87%
Cd 226.502†	672827.8	9768.8 ug/L		39.97	9768.8 ppb	39.97	0.41%
QC value within limits for Cd 226.502 Recovery = 97.69%							

Co 228.616†	373449.0	9650.6 ug/L	34.05	9650.6 ppb	34.05	0.35%
QC value within limits for Co 228.616 Recovery = 96.51%						
Cr 267.716†	1808047.0	24260 ug/L	64.8	24260 ppb	64.8	0.27%
QC value within limits for Cr 267.716 Recovery = 97.04%						
Cu 324.752†	6146029.5	20291 ug/L	237.1	20291 ppb	237.1	1.17%
QC value within limits for Cu 324.752 Recovery = 101.46%						
Fe 238.204 Radial†	-25.0	-1.0033 ug/L	47.36013	-1.0033 ppb	47.36013	>999.9%
K 766.490 Radial†	1631212.1	310780 ug/L	2019.1	310780 ppb	2019.1	0.65%
QC value within limits for K 766.490 Radial Recovery = 103.59%						
Mg 279.077 IEC†	-6.6	-169.05 ug/L	55.058	-169.05 ppb	55.058	32.57%
Mn 257.610†	7211915.4	9482.4 ug/L	113.07	9482.4 ppb	113.07	1.19%
QC value within limits for Mn 257.610 Recovery = 94.82%						
Mo 202.031†	109270.1	9713.1 ug/L	69.35	9713.1 ppb	69.35	0.71%
QC value within limits for Mo 202.031 Recovery = 97.13%						
Na 589.592 Radial†	496.6	175.06 ug/L	4.087	175.06 ppb	4.087	2.33%
Ni 231.604†	313116.8	9937.9 ug/L	34.77	9937.9 ppb	34.77	0.35%
QC value within limits for Ni 231.604 Recovery = 99.38%						
P 214.914†	23883.9	13857 ug/L	137.5	13857 ppb	137.5	0.99%
QC value within limits for P 214.914 Recovery = 92.38%						
Pb 220.353†	158329.9	24337 ug/L	85.2	24337 ppb	85.2	0.35%
QC value within limits for Pb 220.353 Recovery = 97.35%						
S 181.975 Axial†	29278.3	52414 ug/L	417.8	52414 ppb	417.8	0.80%
QC value within limits for S 181.975 Axial Recovery = 104.83%						
Sb 206.836†	25034.3	10835 ug/L	67.7	10835 ppb	67.7	0.63%
QC value within limits for Sb 206.836 Recovery = 108.35%						
Se 196.026†	12332.1	10303 ug/L	41.5	10303 ppb	41.5	0.40%
QC value within limits for Se 196.026 Recovery = 103.03%						
Si 251.611†	1256243.0	47571 ug/L	93.1	47571 ppb	93.1	0.20%
QC value within limits for Si 251.611 Recovery = 95.14%						
Sn 189.927†	44969.7	10205 ug/L	88.3	10205 ppb	88.3	0.87%
QC value within limits for Sn 189.927 Recovery = 102.05%						
Sr 421.552†	1283284.7	10286 ug/L	68.0	10286 ppb	68.0	0.66%
QC value within limits for Sr 421.552 Recovery = 102.86%						
Ti 334.940†	5692080.8	9890.1 ug/L	112.01	9890.1 ppb	112.01	1.13%
QC value within limits for Ti 334.940 Recovery = 98.90%						
Tl 190.801†	24975.1	9728.3 ug/L	64.27	9728.3 ppb	64.27	0.66%
QC value within limits for Tl 190.801 Recovery = 97.28%						
U 409.014†	973.2	-24.700 ug/L	2.1584	-24.700 ppb	2.1584	8.74%
V 292.402†	1263320.3	10206 ug/L	17.5	10206 ppb	17.5	0.17%
QC value within limits for V 292.402 Recovery = 102.06%						
Zn 213.857†	1171246.2	14101 ug/L	44.3	14101 ppb	44.3	0.31%
QC value within limits for Zn 213.857 Recovery = 94.01%						
SiO2†	1247615.6	101560 ug/L	316.3	101560 ppb	316.3	0.31%
QC value within limits for SiO2 Recovery = 94.91%						
All analyte(s) passed QC.						

=====
Analysis Begun

Start Time: 3/19/2010 08:47:07

Plasma On Time: 3/15/2010 06:51:19

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\031910.sif

Batch ID:

Results Data Set: 031910

Results Library: C:\pe\Optima3\Results\Results.mdb
=====

Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 3/19/2010 07:15:37

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: 3/19/2010 08:47:08

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4305.8	4305.8	98.0 %			08:49:20
1	Y RADIAL	4716.7	4716.7	99.08 %			08:49:00
1	Al 396.153Radial†	4931.5	5111.8	4997.3 ug/L		4997.3 ppb	08:49:00

1	Ca 317.933Radial†	2710.1	2750.6	5204.7 ug/L	5204.7 ppb	08:49:20
1	Fe 238.204 Radial†	455.7	456.7	5306.4 ug/L	5306.4 ppb	08:49:20
1	K 766.490 Radial†	29165.1	27171.3	5170.4 ug/L	5170.4 ppb	08:49:00
1	Mg 279.077 IEC†	127.8	129.0	5319.9 ug/L	5319.9 ppb	08:49:20
1	Na 589.592 Radial†	27601.2	29048.8	10240 ug/L	10240 ppb	08:49:00
1	Sr 421.552†	62875.2	64158.5	514.24 ug/L	514.24 ppb	08:49:00
1	Sc 361.383	842688.6	842688.6	102.91 %		08:50:18
1	Y 371.029	702082.9	702082.9	101.51 %		08:50:18
1	Ag 328.068†	97152.7	94216.3	492.30 ug/L	492.30 ppb	08:50:23
1	As 188.979†	915.3	916.2	507.22 ug/L	507.22 ppb	08:50:43
1	B 249.677†	17731.7	17766.9	496.15 ug/L	496.15 ppb	08:50:23
1	Ba 233.527†	53823.5	52300.0	491.10 ug/L	491.10 ppb	08:50:23
1	Be 313.107†	1211376.0	1180802.4	503.88 ug/L	503.88 ppb	08:50:18
1	Cd 226.502†	34646.6	33836.1	490.81 ug/L	490.81 ppb	08:50:23
1	Co 228.616†	19740.5	19227.7	497.07 ug/L	497.07 ppb	08:50:23
1	Cr 267.716†	37683.1	36544.5	491.12 ug/L	491.12 ppb	08:50:23
1	Cu 324.752†	156492.6	146509.0	483.70 ug/L	483.70 ppb	08:50:23
1	Mn 257.610†	390297.8	378856.0	498.43 ug/L	498.43 ppb	08:50:18
1	Mo 202.031†	5708.4	5538.2	492.77 ug/L	492.77 ppb	08:50:43
1	Ni 231.604†	16164.2	15622.4	495.83 ug/L	495.83 ppb	08:50:23
1	P 214.914†	3592.6	3303.6	2366.4 ug/L	2366.4 ppb	08:50:43
1	Pb 220.353†	3247.3	3213.6	495.10 ug/L	495.10 ppb	08:50:43
1	S 181.975 Axial†	591.1	544.2	973.26 ug/L	973.26 ppb	08:50:43
1	Sb 206.836†	1250.0	1190.9	516.03 ug/L	516.03 ppb	08:50:43
1	Se 196.026†	596.8	596.8	515.55 ug/L	515.55 ppb	08:50:43
1	Si 251.611†	66710.0	64332.6	2436.2 ug/L	2436.2 ppb	08:50:23
1	Sn 189.927†	2261.3	2190.1	497.61 ug/L	497.61 ppb	08:50:43
1	Ti 334.940†	283251.6	276351.5	480.46 ug/L	480.46 ppb	08:50:23
1	Tl 190.801†	1282.3	1275.1	496.57 ug/L	496.57 ppb	08:50:43
1	U 409.014†	14644.3	16433.8	496.87 ug/L	496.87 ppb	08:50:23
1	V 292.402†	61720.7	61290.3	495.97 ug/L	495.97 ppb	08:50:23
1	Zn 213.857†	42521.3	40747.1	489.11 ug/L	489.11 ppb	08:50:23
1	SiO2†	66780.4	64389.9	5241.6 ug/L	5241.6 ppb	08:51:50
2	Sc Radial	4310.3	4310.3	98.1 %		08:49:46
2	Y RADIAL	4803.0	4803.0	100.9 %		08:49:26
2	Al 396.153Radial†	5008.9	5185.5	5069.2 ug/L	5069.2 ppb	08:49:26
2	Ca 317.933Radial†	2706.8	2744.3	5192.8 ug/L	5192.8 ppb	08:49:46
2	Fe 238.204 Radial†	454.3	454.8	5284.6 ug/L	5284.6 ppb	08:49:46
2	K 766.490 Radial†	29710.5	27696.0	5270.2 ug/L	5270.2 ppb	08:49:26
2	Mg 279.077 IEC†	130.0	131.0	5404.3 ug/L	5404.3 ppb	08:49:46
2	Na 589.592 Radial†	28243.8	29674.3	10461 ug/L	10461 ppb	08:49:26
2	Sr 421.552†	64090.9	65330.4	523.63 ug/L	523.63 ppb	08:49:26
2	Sc 361.383	835415.1	835415.1	102.03 %		08:50:49
2	Y 371.029	696746.4	696746.4	100.74 %		08:50:49
2	Ag 328.068†	98655.9	96511.5	504.24 ug/L	504.24 ppb	08:50:54
2	As 188.979†	915.8	924.4	511.79 ug/L	511.79 ppb	08:51:14
2	B 249.677†	18161.0	18337.7	512.14 ug/L	512.14 ppb	08:50:54
2	Ba 233.527†	54512.5	53430.6	501.72 ug/L	501.72 ppb	08:50:54
2	Be 313.107†	1202410.4	1182263.0	504.53 ug/L	504.53 ppb	08:50:49
2	Cd 226.502†	35172.4	34644.5	502.56 ug/L	502.56 ppb	08:50:54
2	Co 228.616†	20017.6	19666.3	508.40 ug/L	508.40 ppb	08:50:54
2	Cr 267.716†	38195.4	37365.3	502.14 ug/L	502.14 ppb	08:50:54
2	Cu 324.752†	159175.9	150462.8	496.75 ug/L	496.75 ppb	08:50:54
2	Mn 257.610†	387381.3	379299.3	499.01 ug/L	499.01 ppb	08:50:49
2	Mo 202.031†	5767.0	5643.9	502.17 ug/L	502.17 ppb	08:51:14
2	Ni 231.604†	16383.4	15974.0	506.99 ug/L	506.99 ppb	08:50:54
2	P 214.914†	3601.9	3343.1	2393.4 ug/L	2393.4 ppb	08:51:14
2	Pb 220.353†	3277.1	3270.3	503.85 ug/L	503.85 ppb	08:51:14
2	S 181.975 Axial†	602.5	560.3	1002.1 ug/L	1002.1 ppb	08:51:14
2	Sb 206.836†	1254.1	1205.5	522.43 ug/L	522.43 ppb	08:51:14
2	Se 196.026†	611.7	616.6	531.97 ug/L	531.97 ppb	08:51:14
2	Si 251.611†	67838.4	66003.0	2499.5 ug/L	2499.5 ppb	08:50:54
2	Sn 189.927†	2268.7	2216.5	503.59 ug/L	503.59 ppb	08:51:14
2	Ti 334.940†	287345.1	282760.0	491.58 ug/L	491.58 ppb	08:50:54
2	Tl 190.801†	1298.2	1301.6	506.83 ug/L	506.83 ppb	08:51:14
2	U 409.014†	15075.3	16980.2	513.43 ug/L	513.43 ppb	08:50:54
2	V 292.402†	62616.3	62690.3	507.30 ug/L	507.30 ppb	08:50:54
2	Zn 213.857†	43043.2	41618.3	499.58 ug/L	499.58 ppb	08:50:54
2	SiO2†	67536.8	65696.3	5347.9 ug/L	5347.9 ppb	08:51:56
3	Sc Radial	4320.9	4320.9	98.3 %		08:50:11
3	Y RADIAL	4722.3	4722.3	99.20 %		08:49:51

3	Al 396.153Radial†	4930.1	5092.8	4978.3 ug/L	4978.3 ppb	08:49:51
3	Ca 317.933Radial†	2709.3	2740.1	5184.9 ug/L	5184.9 ppb	08:50:11
3	Fe 238.204 Radial†	457.4	456.8	5308.2 ug/L	5308.2 ppb	08:50:11
3	K 766.490 Radial†	29302.8	27207.3	5177.2 ug/L	5177.2 ppb	08:49:51
3	Mg 279.077 IEC†	130.2	130.9	5398.3 ug/L	5398.3 ppb	08:50:11
3	Na 589.592 Radial†	27688.5	29039.1	10237 ug/L	10237 ppb	08:49:51
3	Sr 421.552†	62909.5	63969.0	512.72 ug/L	512.72 ppb	08:49:51
3	Sc 361.383	833064.0	833064.0	101.74 %		08:51:20
3	Y 371.029	694093.3	694093.3	100.35 %		08:51:20
3	Ag 328.068†	96658.0	94820.7	495.44 ug/L	495.44 ppb	08:51:25
3	As 188.979†	909.2	920.4	509.56 ug/L	509.56 ppb	08:51:45
3	B 249.677†	17772.0	18005.6	502.84 ug/L	502.84 ppb	08:51:25
3	Ba 233.527†	53540.6	52626.1	494.16 ug/L	494.16 ppb	08:51:25
3	Be 313.107†	1198980.6	1182217.9	504.49 ug/L	504.49 ppb	08:51:20
3	Cd 226.502†	34489.0	34070.1	494.21 ug/L	494.21 ppb	08:51:25
3	Co 228.616†	19647.2	19357.6	500.44 ug/L	500.44 ppb	08:51:25
3	Cr 267.716†	37544.8	36831.6	494.97 ug/L	494.97 ppb	08:51:25
3	Cu 324.752†	155601.0	147389.4	486.61 ug/L	486.61 ppb	08:51:25
3	Mn 257.610†	386953.3	379950.2	499.87 ug/L	499.87 ppb	08:51:20
3	Mo 202.031†	5728.1	5621.6	500.19 ug/L	500.19 ppb	08:51:45
3	Ni 231.604†	16137.8	15777.9	500.76 ug/L	500.76 ppb	08:51:25
3	P 214.914†	3584.6	3336.0	2390.0 ug/L	2390.0 ppb	08:51:45
3	Pb 220.353†	3264.9	3267.4	503.37 ug/L	503.37 ppb	08:51:45
3	S 181.975 Axial†	592.3	552.0	987.22 ug/L	987.22 ppb	08:51:45
3	Sb 206.836†	1243.0	1198.1	519.27 ug/L	519.27 ppb	08:51:45
3	Se 196.026†	592.4	599.2	517.57 ug/L	517.57 ppb	08:51:45
3	Si 251.611†	66318.2	64696.5	2449.9 ug/L	2449.9 ppb	08:51:25
3	Sn 189.927†	2253.3	2207.6	501.58 ug/L	501.58 ppb	08:51:45
3	Ti 334.940†	281695.2	278001.5	483.32 ug/L	483.32 ppb	08:51:25
3	Tl 190.801†	1289.9	1297.0	505.05 ug/L	505.05 ppb	08:51:45
3	U 409.014†	14513.9	16470.0	497.96 ug/L	497.96 ppb	08:51:25
3	V 292.402†	61261.2	61531.5	498.00 ug/L	498.00 ppb	08:51:25
3	Zn 213.857†	42320.7	41027.2	492.47 ug/L	492.47 ppb	08:51:25
3	SiO2†	66750.8	65110.6	5300.2 ug/L	5300.2 ppb	08:52:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	837055.9	102.23 %	0.613			0.60%
Sc Radial	4312.3	98.1 %	0.18			0.18%
Y 371.029	697640.9	100.87 %	0.588			0.58%
Y RADIAL	4747.3	99.72 %	1.014			1.02%
Ag 328.068†	95182.9	497.33 ug/L	6.190	497.33 ppb	6.190	1.24%
QC value within limits for Ag 328.068 Recovery = 99.47%						
Al 396.153Radial†	5130.0	5014.9 ug/L	47.95	5014.9 ppb	47.95	0.96%
QC value within limits for Al 396.153Radial Recovery = 100.30%						
As 188.979†	920.3	509.52 ug/L	2.282	509.52 ppb	2.282	0.45%
QC value within limits for As 188.979 Recovery = 101.90%						
B 249.677†	18036.7	503.71 ug/L	8.027	503.71 ppb	8.027	1.59%
QC value within limits for B 249.677 Recovery = 100.74%						
Ba 233.527†	52785.6	495.66 ug/L	5.463	495.66 ppb	5.463	1.10%
QC value within limits for Ba 233.527 Recovery = 99.13%						
Be 313.107†	1181761.1	504.30 ug/L	0.363	504.30 ppb	0.363	0.07%
QC value within limits for Be 313.107 Recovery = 100.86%						
Ca 317.933Radial†	2745.0	5194.1 ug/L	9.96	5194.1 ppb	9.96	0.19%
QC value within limits for Ca 317.933Radial Recovery = 103.88%						
Cd 226.502†	34183.6	495.86 ug/L	6.043	495.86 ppb	6.043	1.22%
QC value within limits for Cd 226.502 Recovery = 99.17%						
Co 228.616†	19417.2	501.97 ug/L	5.822	501.97 ppb	5.822	1.16%
QC value within limits for Co 228.616 Recovery = 100.39%						
Cr 267.716†	36913.8	496.08 ug/L	5.590	496.08 ppb	5.590	1.13%
QC value within limits for Cr 267.716 Recovery = 99.22%						
Cu 324.752†	148120.4	489.02 ug/L	6.848	489.02 ppb	6.848	1.40%
QC value within limits for Cu 324.752 Recovery = 97.80%						
Fe 238.204 Radial†	456.1	5299.7 ug/L	13.14	5299.7 ppb	13.14	0.25%
QC value within limits for Fe 238.204 Radial Recovery = 105.99%						
K 766.490 Radial†	27358.2	5205.9 ug/L	55.79	5205.9 ppb	55.79	1.07%
QC value within limits for K 766.490 Radial Recovery = 104.12%						
Mg 279.077 IEC†	130.3	5374.1 ug/L	47.09	5374.1 ppb	47.09	0.88%
QC value within limits for Mg 279.077 IEC Recovery = 107.48%						

Mn 257.610†	379368.5	499.10 ug/L	0.722	499.10 ppb	0.722	0.14%
QC value within limits for Mn 257.610 Recovery = 99.82%						
Mo 202.031†	5601.2	498.37 ug/L	4.955	498.37 ppb	4.955	0.99%
QC value within limits for Mo 202.031 Recovery = 99.67%						
Na 589.592 Radial†	29254.1	10313 ug/L	128.3	10313 ppb	128.3	1.24%
QC value within limits for Na 589.592 Radial Recovery = 103.13%						
Ni 231.604†	15791.4	501.19 ug/L	5.592	501.19 ppb	5.592	1.12%
QC value within limits for Ni 231.604 Recovery = 100.24%						
P 214.914†	3327.6	2383.3 ug/L	14.70	2383.3 ppb	14.70	0.62%
QC value within limits for P 214.914 Recovery = 95.33%						
Pb 220.353†	3250.5	500.77 ug/L	4.917	500.77 ppb	4.917	0.98%
QC value within limits for Pb 220.353 Recovery = 100.15%						
S 181.975 Axial†	552.2	987.54 ug/L	14.439	987.54 ppb	14.439	1.46%
QC value within limits for S 181.975 Axial Recovery = 98.75%						
Sb 206.836†	1198.2	519.24 ug/L	3.201	519.24 ppb	3.201	0.62%
QC value within limits for Sb 206.836 Recovery = 103.85%						
Se 196.026†	604.2	521.70 ug/L	8.953	521.70 ppb	8.953	1.72%
QC value within limits for Se 196.026 Recovery = 104.34%						
Si 251.611†	65010.7	2461.9 ug/L	33.30	2461.9 ppb	33.30	1.35%
QC value within limits for Si 251.611 Recovery = 98.47%						
Sn 189.927†	2204.7	500.93 ug/L	3.046	500.93 ppb	3.046	0.61%
QC value within limits for Sn 189.927 Recovery = 100.19%						
Sr 421.552†	64486.0	516.86 ug/L	5.911	516.86 ppb	5.911	1.14%
QC value within limits for Sr 421.552 Recovery = 103.37%						
Ti 334.940†	279037.7	485.12 ug/L	5.777	485.12 ppb	5.777	1.19%
QC value within limits for Ti 334.940 Recovery = 97.02%						
Tl 190.801†	1291.2	502.82 ug/L	5.485	502.82 ppb	5.485	1.09%
QC value within limits for Tl 190.801 Recovery = 100.56%						
U 409.014†	16628.0	502.75 ug/L	9.259	502.75 ppb	9.259	1.84%
QC value within limits for U 409.014 Recovery = 100.55%						
V 292.402†	61837.4	500.42 ug/L	6.043	500.42 ppb	6.043	1.21%
QC value within limits for V 292.402 Recovery = 100.08%						
Zn 213.857†	41130.9	493.72 ug/L	5.346	493.72 ppb	5.346	1.08%
QC value within limits for Zn 213.857 Recovery = 98.74%						
SiO2†	65065.6	5296.6 ug/L	53.27	5296.6 ppb	53.27	1.01%
QC value within limits for SiO2 Recovery = 99.05%						

All analyte(s) passed QC.

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 08:54:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4278.0	4278.0	97.3 %		08:56:23
1	Y RADIAL	4838.9	4838.9	101.6 %		08:56:03
1	Al 396.153Radial†	-75.6	0.4	0.3184 ug/L	0.3184 ppb	08:56:23
1	Ca 317.933Radial†	23.5	8.5	16.044 ug/L	16.044 ppb	08:56:23
1	Fe 238.204 Radial†	8.5	0.3	3.4993 ug/L	3.4993 ppb	08:56:23
1	K 766.490 Radial†	2965.1	447.5	85.252 ug/L	85.252 ppb	08:56:03
1	Mg 279.077 IEC†	0.2	-1.3	-54.781 ug/L	-54.781 ppb	08:56:23
1	Na 589.592 Radial†	-832.8	19.5	6.8849 ug/L	6.8849 ppb	08:56:03
1	Sr 421.552†	5.5	-15.1	-0.1214 ug/L	-0.1214 ppb	08:56:03
1	Sc 361.383	825108.5	825108.5	100.77 %		08:57:20
1	Y 371.029	697408.9	697408.9	100.83 %		08:57:20
1	Ag 328.068†	183.8	-2.8	-0.0178 ug/L	-0.0178 ppb	08:57:20
1	As 188.979†	-22.6	4.4	2.4163 ug/L	2.4163 ppb	08:57:40
1	B 249.677†	152.9	689.1	19.332 ug/L	19.332 ppb	08:57:40
1	Ba 233.527†	8.3	9.0	0.0838 ug/L	0.0838 ppb	08:57:40
1	Be 313.107†	-3650.8	108.0	0.0460 ug/L	0.0460 ppb	08:57:20
1	Cd 226.502†	-153.3	18.5	0.2683 ug/L	0.2683 ppb	08:57:40
1	Co 228.616†	-54.3	-7.7	-0.1957 ug/L	-0.1957 ppb	08:57:40
1	Cr 267.716†	76.4	4.3	0.0557 ug/L	0.0557 ppb	08:57:40
1	Cu 324.752†	5642.6	47.6	0.1550 ug/L	0.1550 ppb	08:57:20
1	Mn 257.610†	411.6	19.4	0.0280 ug/L	0.0280 ppb	08:57:40
1	Mo 202.031†	21.9	13.2	1.1724 ug/L	1.1724 ppb	08:57:40
1	Ni 231.604†	74.1	-10.5	-0.3340 ug/L	-0.3340 ppb	08:57:40
1	P 214.914†	178.9	-9.7	-7.2705 ug/L	-7.2705 ppb	08:57:40
1	Pb 220.353†	-46.9	11.7	1.8038 ug/L	1.8038 ppb	08:57:40
1	S 181.975 Axial†	20.4	-10.0	-17.833 ug/L	-17.833 ppb	08:57:40
1	Sb 206.836†	27.2	3.4	1.4349 ug/L	1.4349 ppb	08:57:40
1	Se 196.026†	-14.3	2.8	2.3246 ug/L	2.3246 ppb	08:57:40
1	Si 251.611†	553.7	61.4	2.3149 ug/L	2.3149 ppb	08:57:40
1	Sn 189.927†	9.9	2.6	0.6033 ug/L	0.6033 ppb	08:57:40
1	Ti 334.940†	-1116.7	13.0	0.0274 ug/L	0.0274 ppb	08:57:20
1	Tl 190.801†	-32.2	-2.9	-1.1249 ug/L	-1.1249 ppb	08:57:40
1	U 409.014†	-2076.1	144.0	4.3671 ug/L	4.3671 ppb	08:57:20
1	V 292.402†	-1348.4	-20.7	-0.1418 ug/L	-0.1418 ppb	08:57:20
1	Zn 213.857†	714.3	138.7	1.6825 ug/L	1.6825 ppb	08:57:40
1	SiO2†	559.1	55.5	4.4993 ug/L	4.4993 ppb	08:58:51
2	Sc Radial	4424.5	4424.5	101 %		08:56:48
2	Y RADIAL	4835.4	4835.4	101.6 %		08:56:28
2	Al 396.153Radial†	-71.2	7.3	7.2099 ug/L	7.2099 ppb	08:56:48
2	Ca 317.933Radial†	25.5	9.7	18.317 ug/L	18.317 ppb	08:56:48
2	Fe 238.204 Radial†	8.6	0.1	0.7604 ug/L	0.7604 ppb	08:56:48
2	K 766.490 Radial†	2915.1	296.9	56.563 ug/L	56.563 ppb	08:56:28
2	Mg 279.077 IEC†	3.1	1.5	63.159 ug/L	63.159 ppb	08:56:48
2	Na 589.592 Radial†	-851.2	29.6	10.439 ug/L	10.439 ppb	08:56:28
2	Sr 421.552†	16.7	-4.2	-0.0342 ug/L	-0.0342 ppb	08:56:28
2	Sc 361.383	825546.1	825546.1	100.82 %		08:57:45
2	Y 371.029	698004.5	698004.5	100.92 %		08:57:45
2	Ag 328.068†	154.1	-32.2	-0.1736 ug/L	-0.1736 ppb	08:57:45
2	As 188.979†	-11.3	15.6	8.5484 ug/L	8.5484 ppb	08:58:05
2	B 249.677†	122.5	658.9	18.485 ug/L	18.485 ppb	08:58:05
2	Ba 233.527†	17.0	17.6	0.1635 ug/L	0.1635 ppb	08:58:05
2	Be 313.107†	-3632.3	128.3	0.0547 ug/L	0.0547 ppb	08:57:45
2	Cd 226.502†	-153.8	18.0	0.2625 ug/L	0.2625 ppb	08:58:05
2	Co 228.616†	-45.7	0.9	0.0233 ug/L	0.0233 ppb	08:58:05
2	Cr 267.716†	76.5	4.4	0.0564 ug/L	0.0564 ppb	08:58:05
2	Cu 324.752†	5580.6	-16.8	-0.0581 ug/L	-0.0581 ppb	08:57:45
2	Mn 257.610†	421.9	29.4	0.0362 ug/L	0.0362 ppb	08:58:05
2	Mo 202.031†	10.0	1.3	0.1193 ug/L	0.1193 ppb	08:58:05
2	Ni 231.604†	82.3	-2.4	-0.0773 ug/L	-0.0773 ppb	08:58:05

2	P 214.914†	185.7	-3.1	-2.2742 ug/L	-2.2742 ppb	08:58:05
2	Pb 220.353†	-49.8	8.9	1.3690 ug/L	1.3690 ppb	08:58:05
2	S 181.975 Axial†	27.7	-2.8	-4.9384 ug/L	-4.9384 ppb	08:58:05
2	Sb 206.836†	29.2	5.3	2.2297 ug/L	2.2297 ppb	08:58:05
2	Se 196.026†	-19.2	-2.0	-1.6916 ug/L	-1.6916 ppb	08:58:05
2	Si 251.611†	540.1	47.5	1.8023 ug/L	1.8023 ppb	08:58:05
2	Sn 189.927†	16.4	9.1	2.0790 ug/L	2.0790 ppb	08:58:05
2	Ti 334.940†	-1116.9	13.4	0.0185 ug/L	0.0185 ppb	08:57:45
2	Tl 190.801†	-24.0	5.3	2.0373 ug/L	2.0373 ppb	08:58:05
2	U 409.014†	-2063.9	157.2	4.7674 ug/L	4.7674 ppb	08:57:45
2	V 292.402†	-1400.4	-71.6	-0.5599 ug/L	-0.5599 ppb	08:57:45
2	Zn 213.857†	717.9	141.9	1.7202 ug/L	1.7202 ppb	08:58:05
2	SiO2†	559.9	56.0	4.5655 ug/L	4.5655 ppb	08:59:11
3	Sc Radial	4211.4	4211.4	95.8 %		08:57:13
3	Y RADIAL	4686.7	4686.7	98.45 %		08:56:53
3	Al 396.153Radial†	-80.5	-5.9	-5.8397 ug/L	-5.8397 ppb	08:57:13
3	Ca 317.933Radial†	17.0	2.1	3.9096 ug/L	3.9096 ppb	08:57:13
3	Fe 238.204 Radial†	8.0	-0.1	-1.4023 ug/L	-1.4023 ppb	08:57:13
3	K 766.490 Radial†	2980.9	512.2	97.574 ug/L	97.574 ppb	08:56:53
3	Mg 279.077 IEC†	0.9	-0.6	-23.241 ug/L	-23.241 ppb	08:57:13
3	Na 589.592 Radial†	-766.9	74.7	26.347 ug/L	26.347 ppb	08:56:53
3	Sr 421.552†	23.5	3.7	0.0298 ug/L	0.0298 ppb	08:56:53
3	Sc 361.383	820504.7	820504.7	100.21 %		08:58:10
3	Y 371.029	693341.7	693341.7	100.25 %		08:58:10
3	Ag 328.068†	152.8	-32.7	-0.1715 ug/L	-0.1715 ppb	08:58:10
3	As 188.979†	-18.3	8.5	4.6781 ug/L	4.6781 ppb	08:58:30
3	B 249.677†	121.5	658.6	18.475 ug/L	18.475 ppb	08:58:30
3	Ba 233.527†	8.5	9.2	0.0850 ug/L	0.0850 ppb	08:58:30
3	Be 313.107†	-3659.6	78.9	0.0335 ug/L	0.0335 ppb	08:58:10
3	Cd 226.502†	-158.0	13.0	0.1883 ug/L	0.1883 ppb	08:58:30
3	Co 228.616†	-37.5	8.8	0.2269 ug/L	0.2269 ppb	08:58:30
3	Cr 267.716†	79.8	8.1	0.1083 ug/L	0.1083 ppb	08:58:30
3	Cu 324.752†	5690.0	126.4	0.4174 ug/L	0.4174 ppb	08:58:10
3	Mn 257.610†	401.9	12.0	0.0166 ug/L	0.0166 ppb	08:58:30
3	Mo 202.031†	9.7	1.2	0.1027 ug/L	0.1027 ppb	08:58:30
3	Ni 231.604†	74.0	-10.2	-0.3245 ug/L	-0.3245 ppb	08:58:30
3	P 214.914†	199.3	11.7	8.5967 ug/L	8.5967 ppb	08:58:30
3	Pb 220.353†	-37.5	20.9	3.2128 ug/L	3.2128 ppb	08:58:30
3	S 181.975 Axial†	33.5	3.2	5.7488 ug/L	5.7488 ppb	08:58:30
3	Sb 206.836†	23.2	-0.5	-0.2012 ug/L	-0.2012 ppb	08:58:30
3	Se 196.026†	-15.7	1.3	1.0768 ug/L	1.0768 ppb	08:58:30
3	Si 251.611†	542.7	53.5	2.0283 ug/L	2.0283 ppb	08:58:30
3	Sn 189.927†	7.9	0.8	0.1757 ug/L	0.1757 ppb	08:58:30
3	Ti 334.940†	-1147.9	-24.4	-0.0399 ug/L	-0.0399 ppb	08:58:10
3	Tl 190.801†	-29.0	0.2	0.0650 ug/L	0.0650 ppb	08:58:30
3	U 409.014†	-2219.3	-10.6	-0.3213 ug/L	-0.3213 ppb	08:58:10
3	V 292.402†	-1372.5	-52.2	-0.4166 ug/L	-0.4166 ppb	08:58:10
3	Zn 213.857†	704.0	132.5	1.6069 ug/L	1.6069 ppb	08:58:30
3	SiO2†	572.1	71.6	5.8426 ug/L	5.8426 ppb	08:59:31

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	823719.8	100.60 %		0.341				0.34%
Sc Radial	4304.6	97.9 %		2.48				2.53%
Y 371.029	696251.7	100.67 %		0.367				0.36%
Y RADIAL	4787.0	100.6 %		1.83				1.82%
Ag 328.068†	-22.6	-0.1210 ug/L		0.08936	-0.1210 ppb		0.08936	73.87%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.6	0.5629 ug/L		6.52825	0.5629 ppb		6.52825	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	9.5	5.2142 ug/L		3.10101	5.2142 ppb		3.10101	59.47%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	668.9	18.764 ug/L		0.4917	18.764 ppb		0.4917	2.62%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.9	0.1107 ug/L		0.04564	0.1107 ppb		0.04564	41.21%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	105.1	0.0447 ug/L		0.01065	0.0447 ppb		0.01065	23.81%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.7	12.757 ug/L		7.7459	12.757 ppb		7.7459	60.72%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	16.5	0.2397 ug/L	0.04458	0.2397 ppb	0.04458	18.60%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	0.7	0.0182 ug/L	0.21136	0.0182 ppb	0.21136	>999.9%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	5.6	0.0734 ug/L	0.03018	0.0734 ppb	0.03018	41.09%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	52.4	0.1714 ug/L	0.23815	0.1714 ppb	0.23815	138.91%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.1	0.9525 ug/L	2.45646	0.9525 ppb	2.45646	257.90%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	418.9	79.796 ug/L	21.0429	79.796 ppb	21.0429	26.37%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.1	-4.9541 ug/L	61.05970	-4.9541 ppb	61.05970	>999.9%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	20.3	0.0269 ug/L	0.00982	0.0269 ppb	0.00982	36.45%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	5.2	0.4648 ug/L	0.61286	0.4648 ppb	0.61286	131.86%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	41.3	14.557 ug/L	10.3641	14.557 ppb	10.3641	71.20%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-7.7	-0.2453 ug/L	0.14554	-0.2453 ppb	0.14554	59.34%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-0.4	-0.3160 ug/L	8.11280	-0.3160 ppb	8.11280	>999.9%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	13.8	2.1285 ug/L	0.96384	2.1285 ppb	0.96384	45.28%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-3.2	-5.6743 ug/L	11.80827	-5.6743 ppb	11.80827	208.10%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	2.7	1.1544 ug/L	1.23947	1.1544 ppb	1.23947	107.37%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	0.7	0.5699 ug/L	2.05554	0.5699 ppb	2.05554	360.68%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	54.1	2.0485 ug/L	0.25687	2.0485 ppb	0.25687	12.54%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	4.2	0.9526 ug/L	0.99861	0.9526 ppb	0.99861	104.83%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-5.2	-0.0419 ug/L	0.07592	-0.0419 ppb	0.07592	181.15%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	0.7	0.0020 ug/L	0.03653	0.0020 ppb	0.03653	>999.9%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	0.8	0.3258 ug/L	1.59716	0.3258 ppb	1.59716	490.27%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	96.8	2.9377 ug/L	2.82949	2.9377 ppb	2.82949	96.32%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-48.2	-0.3728 ug/L	0.21249	-0.3728 ppb	0.21249	57.01%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	137.7	1.6699 ug/L	0.05769	1.6699 ppb	0.05769	3.45%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	61.0	4.9691 ug/L	0.75715	4.9691 ppb	0.75715	15.24%	
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: 3/19/2010 09:01:41

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	4168.4	4168.4	94.8 %		09:03:54
1	Y RADIAL	4671.2	4671.2	98.12 %		09:03:34
1	Al 396.153Radial†	-95.9	-23.0	-21.536 ug/L	-21.536 ppb	09:03:54
1	Ca 317.933Radial†	10.9	-4.2	-7.9891 ug/L	-7.9891 ppb	09:03:54
1	Fe 238.204 Radial†	31552.6	33259.8	385370 ug/L	385370 ppb	09:03:34
1	K 766.490 Radial†	2463.6	-1.2	-0.1828 ug/L	-0.1828 ppb	09:03:34
1	Mg 279.077 IEC†	8.2	7.1	-111.04 ug/L	-111.04 ppb	09:03:54
1	Na 589.592 Radial†	-839.1	-9.6	-3.3743 ug/L	-3.3743 ppb	09:03:34
1	Sr 421.552†	108.5	93.6	0.7503 ug/L	0.7503 ppb	09:03:34
1	Sc 361.383	804663.0	804663.0	98.270 %		09:04:52
1	Y 371.029	675570.8	675570.8	97.676 %		09:04:52
1	Ag 328.068†	-22147.7	-22722.6	1.3619 ug/L	1.3619 ppb	09:04:52
1	As 188.979†	-157.8	-133.8	16.851 ug/L	16.851 ppb	09:05:12
1	B 249.677†	1573.3	2138.4	-2.6414 ug/L	-2.6414 ppb	09:04:52
1	Ba 233.527†	-1501.1	-1526.9	-2.4607 ug/L	-2.4607 ppb	09:04:52
1	Be 313.107†	-3547.0	121.6	0.0516 ug/L	0.0516 ppb	09:04:52
1	Cd 226.502†	2545.1	2760.5	0.2621 ug/L	0.2621 ppb	09:04:52
1	Co 228.616†	597.4	654.1	11.286 ug/L	11.286 ppb	09:05:12
1	Cr 267.716†	-466.6	-546.3	33.551 ug/L	33.551 ppb	09:05:12
1	Cu 324.752†	-1345.0	-6920.6	-2.4866 ug/L	-2.4866 ppb	09:04:52
1	Mn 257.610†	-31215.4	-32153.8	-4.2266 ug/L	-4.2266 ppb	09:04:52
1	Mo 202.031†	-238.6	-251.3	7.5762 ug/L	7.5762 ppb	09:04:52
1	Ni 231.604†	179.0	98.1	3.1049 ug/L	3.1049 ppb	09:05:12
1	P 214.914†	594.2	417.4	5.0000 ug/L	5.0000 ppb	09:05:12
1	Pb 220.353†	167.3	228.6	-19.764 ug/L	-19.764 ppb	09:05:12
1	S 181.975 Axial†	39.8	10.3	18.462 ug/L	18.462 ppb	09:05:12
1	Sb 206.836†	21.4	-1.9	-5.4959 ug/L	-5.4959 ppb	09:05:12
1	Se 196.026†	-1587.1	-1598.1	-223.50 ug/L	-223.50 ppb	09:05:12
1	Si 251.611†	-466.5	-962.8	-36.277 ug/L	-36.277 ppb	09:04:52
1	Sn 189.927†	-22.6	-30.2	-28.971 ug/L	-28.971 ppb	09:05:12
1	Ti 334.940†	-1147.3	-46.2	-0.1313 ug/L	-0.1313 ppb	09:04:52
1	Tl 190.801†	-24.1	4.6	1.3905 ug/L	1.3905 ppb	09:05:12
1	U 409.014†	-57.2	2146.0	21.189 ug/L	21.189 ppb	09:04:52
1	V 292.402†	5156.9	6565.1	-3.8861 ug/L	-3.8861 ppb	09:04:52
1	Zn 213.857†	3563.3	3056.0	-20.632 ug/L	-20.632 ppb	09:05:12
1	SiO2†	-531.6	-1040.3	-84.290 ug/L	-84.290 ppb	09:06:09
2	Sc Radial	4220.4	4220.4	96.0 %		09:04:19
2	Y RADIAL	4695.8	4695.8	98.64 %		09:03:59
2	Al 396.153Radial†	-97.7	-23.6	-22.030 ug/L	-22.030 ppb	09:04:19
2	Ca 317.933Radial†	15.8	0.8	1.4196 ug/L	1.4196 ppb	09:04:19
2	Fe 238.204 Radial†	31639.3	32940.5	381670 ug/L	381670 ppb	09:03:59
2	K 766.490 Radial†	2419.9	-78.7	-14.957 ug/L	-14.957 ppb	09:03:59
2	Mg 279.077 IEC†	9.6	8.5	-49.042 ug/L	-49.042 ppb	09:04:19
2	Na 589.592 Radial†	-819.9	21.3	7.4941 ug/L	7.4941 ppb	09:03:59
2	Sr 421.552†	73.1	55.3	0.4436 ug/L	0.4436 ppb	09:03:59
2	Sc 361.383	814772.9	814772.9	99.505 %		09:05:18
2	Y 371.029	684115.4	684115.4	98.911 %		09:05:18
2	Ag 328.068†	-22528.6	-22825.8	-0.3166 ug/L	-0.3166 ppb	09:05:18
2	As 188.979†	-170.1	-144.2	10.308 ug/L	10.308 ppb	09:05:38
2	B 249.677†	1557.8	2102.9	-3.0390 ug/L	-3.0390 ppb	09:05:18
2	Ba 233.527†	-1537.5	-1544.4	-2.7386 ug/L	-2.7386 ppb	09:05:18
2	Be 313.107†	-3576.5	136.7	0.0579 ug/L	0.0579 ppb	09:05:18
2	Cd 226.502†	2505.0	2688.1	-0.4074 ug/L	-0.4074 ppb	09:05:18
2	Co 228.616†	636.8	686.2	12.164 ug/L	12.164 ppb	09:05:38
2	Cr 267.716†	-490.7	-564.7	32.914 ug/L	32.914 ppb	09:05:38
2	Cu 324.752†	-1389.0	-6947.9	-2.7705 ug/L	-2.7705 ppb	09:05:18
2	Mn 257.610†	-31480.4	-32026.0	-4.4264 ug/L	-4.4264 ppb	09:05:18
2	Mo 202.031†	-265.9	-275.8	5.1133 ug/L	5.1133 ppb	09:05:18
2	Ni 231.604†	160.0	76.7	2.4260 ug/L	2.4260 ppb	09:05:38

2	P 214.914†	604.0	419.7	9.7533 ug/L	9.7533 ppb	09:05:38
2	Pb 220.353†	148.9	207.9	-22.419 ug/L	-22.419 ppb	09:05:38
2	S 181.975 Axial†	36.7	6.7	12.001 ug/L	12.001 ppb	09:05:38
2	Sb 206.836†	26.7	3.2	-3.3702 ug/L	-3.3702 ppb	09:05:38
2	Se 196.026†	-1602.6	-1593.6	-230.43 ug/L	-230.43 ppb	09:05:38
2	Si 251.611†	-451.6	-942.0	-35.459 ug/L	-35.459 ppb	09:05:18
2	Sn 189.927†	-21.3	-28.6	-28.391 ug/L	-28.391 ppb	09:05:38
2	Ti 334.940†	-1185.9	-70.6	-0.1755 ug/L	-0.1755 ppb	09:05:18
2	Tl 190.801†	-35.9	-7.0	-3.0798 ug/L	-3.0798 ppb	09:05:38
2	U 409.014†	-170.3	2033.0	18.184 ug/L	18.184 ppb	09:05:18
2	V 292.402†	5184.7	6527.9	-3.6800 ug/L	-3.6800 ppb	09:05:18
2	Zn 213.857†	3582.0	3029.7	-20.392 ug/L	-20.392 ppb	09:05:38
2	SiO2†	-332.9	-833.9	-67.390 ug/L	-67.390 ppb	09:06:14
3	Sc Radial	4150.7	4150.7	94.4 %		09:04:44
3	Y RADIAL	4717.7	4717.7	99.10 %		09:04:24
3	Al 396.153Radial†	-105.7	-33.8	-31.932 ug/L	-31.932 ppb	09:04:44
3	Ca 317.933Radial†	13.3	-1.6	-3.0737 ug/L	-3.0737 ppb	09:04:44
3	Fe 238.204 Radial†	31506.1	33352.3	386440 ug/L	386440 ppb	09:04:24
3	K 766.490 Radial†	2562.8	114.9	21.945 ug/L	21.945 ppb	09:04:24
3	Mg 279.077 IEC†	10.3	9.3	-19.131 ug/L	-19.131 ppb	09:04:44
3	Na 589.592 Radial†	-841.1	-15.4	-5.4450 ug/L	-5.4450 ppb	09:04:24
3	Sr 421.552†	63.7	46.6	0.3735 ug/L	0.3735 ppb	09:04:24
3	Sc 361.383	818472.2	818472.2	99.957 %		09:05:44
3	Y 371.029	686196.9	686196.9	99.212 %		09:05:44
3	Ag 328.068†	-22590.8	-22785.7	1.3597 ug/L	1.3597 ppb	09:05:44
3	As 188.979†	-159.6	-132.8	17.658 ug/L	17.658 ppb	09:06:04
3	B 249.677†	1700.5	2238.6	-0.0015 ug/L	-0.0015 ppb	09:05:44
3	Ba 233.527†	-1597.3	-1597.3	-3.0907 ug/L	-3.0907 ppb	09:05:44
3	Be 313.107†	-3601.1	128.4	0.0547 ug/L	0.0547 ppb	09:05:44
3	Cd 226.502†	2563.1	2734.9	-0.2206 ug/L	-0.2206 ppb	09:05:44
3	Co 228.616†	596.2	642.6	10.963 ug/L	10.963 ppb	09:06:04
3	Cr 267.716†	-477.4	-549.1	33.624 ug/L	33.624 ppb	09:06:04
3	Cu 324.752†	-1475.3	-7027.9	-2.7850 ug/L	-2.7850 ppb	09:05:44
3	Mn 257.610†	-31871.3	-32274.1	-4.2829 ug/L	-4.2829 ppb	09:05:44
3	Mo 202.031†	-289.1	-297.8	3.5310 ug/L	3.5310 ppb	09:05:44
3	Ni 231.604†	163.4	79.4	2.5118 ug/L	2.5118 ppb	09:06:04
3	P 214.914†	601.0	414.0	1.6780 ug/L	1.6780 ppb	09:06:04
3	Pb 220.353†	165.2	223.6	-20.698 ug/L	-20.698 ppb	09:06:04
3	S 181.975 Axial†	38.6	8.5	15.150 ug/L	15.150 ppb	09:06:04
3	Sb 206.836†	22.5	-1.2	-5.3079 ug/L	-5.3079 ppb	09:06:04
3	Se 196.026†	-1604.4	-1588.1	-212.13 ug/L	-212.13 ppb	09:06:04
3	Si 251.611†	-406.7	-895.1	-33.654 ug/L	-33.654 ppb	09:05:44
3	Sn 189.927†	-25.3	-32.4	-29.546 ug/L	-29.546 ppb	09:06:04
3	Ti 334.940†	-1114.8	5.9	-0.0482 ug/L	-0.0482 ppb	09:05:44
3	Tl 190.801†	-40.4	-11.4	-4.7656 ug/L	-4.7656 ppb	09:06:04
3	U 409.014†	-3.7	2200.5	22.719 ug/L	22.719 ppb	09:05:44
3	V 292.402†	5104.1	6423.7	-5.2245 ug/L	-5.2245 ppb	09:05:44
3	Zn 213.857†	3569.3	3000.7	-21.457 ug/L	-21.457 ppb	09:06:04
3	SiO2†	-395.4	-894.9	-72.310 ug/L	-72.310 ppb	09:06:19

Mean Data: LRI

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	812636.0	99.244	%	0.8730				0.88%
Sc Radial	4179.8	95.1	%	0.82				0.87%
Y 371.029	681961.1	98.600	%	0.8142				0.83%
Y RADIAL	4694.9	98.62	%	0.488				0.49%
Ag 328.068†	-22778.0	0.8017	ug/L	0.96844	0.8017	ppb	0.96844	120.80%
Al 396.153Radial†	-26.8	-25.166	ug/L	5.8648	-25.166	ppb	5.8648	23.30%
As 188.979†	-136.9	14.939	ug/L	4.0310	14.939	ppb	4.0310	26.98%
B 249.677†	2160.0	-1.8940	ug/L	1.65089	-1.8940	ppb	1.65089	87.17%
Ba 233.527†	-1556.2	-2.7633	ug/L	0.31570	-2.7633	ppb	0.31570	11.42%
Be 313.107†	128.9	0.0547	ug/L	0.00317	0.0547	ppb	0.00317	5.79%
Ca 317.933Radial†	-1.7	-3.2144	ug/L	4.70597	-3.2144	ppb	4.70597	146.40%
Cd 226.502†	2727.8	-0.1220	ug/L	0.34551	-0.1220	ppb	0.34551	283.27%
Co 228.616†	661.0	11.471	ug/L	0.6212	11.471	ppb	0.6212	5.42%
Cr 267.716†	-553.4	33.363	ug/L	0.3909	33.363	ppb	0.3909	1.17%
Cu 324.752†	-6965.5	-2.6807	ug/L	0.16824	-2.6807	ppb	0.16824	6.28%
Fe 238.204 Radial†	33184.2	384500	ug/L	2503.3	384500	ppb	2503.3	0.65%
K 766.490 Radial†	11.7	2.2685	ug/L	18.57239	2.2685	ppb	18.57239	818.72%

Mg 279.077 IEC†	8.3	-59.738 ug/L	46.8800	-59.738 ppb	46.8800	78.48%
Mn 257.610†	-32151.3	-4.3119 ug/L	0.10299	-4.3119 ppb	0.10299	2.39%
Mo 202.031†	-275.0	5.4068 ug/L	2.03849	5.4068 ppb	2.03849	37.70%
Na 589.592 Radial†	-1.3	-0.4417 ug/L	6.95019	-0.4417 ppb	6.95019	>999.9%
Ni 231.604†	84.7	2.6809 ug/L	0.36971	2.6809 ppb	0.36971	13.79%
P 214.914†	417.1	5.4771 ug/L	4.05878	5.4771 ppb	4.05878	74.10%
Pb 220.353†	220.0	-20.960 ug/L	1.3465	-20.960 ppb	1.3465	6.42%
S 181.975 Axial†	8.5	15.204 ug/L	3.2307	15.204 ppb	3.2307	21.25%
Sb 206.836†	0.0	-4.7247 ug/L	1.17674	-4.7247 ppb	1.17674	24.91%
Se 196.026†	-1593.3	-222.02 ug/L	9.239	-222.02 ppb	9.239	4.16%
Si 251.611†	-933.3	-35.130 ug/L	1.3424	-35.130 ppb	1.3424	3.82%
Sn 189.927†	-30.4	-28.970 ug/L	0.5777	-28.970 ppb	0.5777	1.99%
Sr 421.552†	65.2	0.5225 ug/L	0.20038	0.5225 ppb	0.20038	38.35%
Ti 334.940†	-37.0	-0.1184 ug/L	0.06463	-0.1184 ppb	0.06463	54.61%
Tl 190.801†	-4.6	-2.1516 ug/L	3.18128	-2.1516 ppb	3.18128	147.86%
U 409.014†	2126.5	20.697 ug/L	2.3074	20.697 ppb	2.3074	11.15%
V 292.402†	6505.6	-4.2635 ug/L	0.83854	-4.2635 ppb	0.83854	19.67%
Zn 213.857†	3028.8	-20.827 ug/L	0.5589	-20.827 ppb	0.5589	2.68%
SiO2†	-923.0	-74.663 ug/L	8.6924	-74.663 ppb	8.6924	11.64%

Sequence No.: 4
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 3/19/2010 09:08:31
 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	4270.1	4270.1	97.2 %		09:10:44
1	Y RADIAL	4722.2	4722.2	99.19 %		09:10:24
1	Al 396.153Radial†	5015.6	5240.5	5123.3 ug/L	5123.3 ppb	09:10:24
1	Ca 317.933Radial†	2685.2	2748.1	5200.0 ug/L	5200.0 ppb	09:10:44
1	Fe 238.204 Radial†	444.5	449.0	5218.2 ug/L	5218.2 ppb	09:10:44
1	K 766.490 Radial†	29180.3	27435.6	5220.8 ug/L	5220.8 ppb	09:10:24
1	Mg 279.077 IEC†	125.9	128.1	5282.8 ug/L	5282.8 ppb	09:10:44
1	Na 589.592 Radial†	26587.3	28240.6	9955.4 ug/L	9955.4 ppb	09:10:24
1	Sr 421.552†	62098.4	63895.1	512.13 ug/L	512.13 ppb	09:10:24
1	Sc 361.383	835263.3	835263.3	102.01 %		09:11:41
1	Y 371.029	695826.9	695826.9	100.60 %		09:11:41
1	Ag 328.068†	98312.6	96192.6	502.56 ug/L	502.56 ppb	09:11:46
1	As 188.979†	917.6	926.3	512.83 ug/L	512.83 ppb	09:12:06
1	B 249.677†	17862.9	18048.7	504.04 ug/L	504.04 ppb	09:11:46
1	Ba 233.527†	54434.3	53363.7	501.08 ug/L	501.08 ppb	09:11:46
1	Be 313.107†	1200300.9	1180409.2	503.74 ug/L	503.74 ppb	09:11:41
1	Cd 226.502†	35059.9	34540.6	501.05 ug/L	501.05 ppb	09:11:46
1	Co 228.616†	20023.4	19675.5	508.65 ug/L	508.65 ppb	09:11:46
1	Cr 267.716†	38027.8	37207.9	500.02 ug/L	500.02 ppb	09:11:46
1	Cu 324.752†	158463.8	149793.1	494.54 ug/L	494.54 ppb	09:11:46
1	Mn 257.610†	382150.2	374240.2	492.36 ug/L	492.36 ppb	09:11:46
1	Mo 202.031†	5765.9	5643.9	502.16 ug/L	502.16 ppb	09:12:06
1	Ni 231.604†	16343.9	15938.2	505.85 ug/L	505.85 ppb	09:11:46
1	P 214.914†	3636.1	3377.2	2419.3 ug/L	2419.3 ppb	09:12:06
1	Pb 220.353†	3269.8	3263.8	502.86 ug/L	502.86 ppb	09:12:06
1	S 181.975 Axial†	600.7	558.7	999.26 ug/L	999.26 ppb	09:12:06
1	Sb 206.836†	1248.4	1200.2	520.17 ug/L	520.17 ppb	09:12:06
1	Se 196.026†	601.5	606.7	523.56 ug/L	523.56 ppb	09:12:06
1	Si 251.611†	67607.5	65788.7	2491.4 ug/L	2491.4 ppb	09:11:46
1	Sn 189.927†	2258.0	2206.4	501.31 ug/L	501.31 ppb	09:12:06
1	Ti 334.940†	286341.1	281827.0	489.97 ug/L	489.97 ppb	09:11:46
1	Tl 190.801†	1304.7	1308.1	509.32 ug/L	509.32 ppb	09:12:06
1	U 409.014†	14816.5	16729.1	505.82 ug/L	505.82 ppb	09:11:46
1	V 292.402†	62225.1	62317.9	504.32 ug/L	504.32 ppb	09:11:46
1	Zn 213.857†	42974.6	41558.7	498.88 ug/L	498.88 ppb	09:11:46
1	SiO2†	67784.3	65950.9	5368.7 ug/L	5368.7 ppb	09:13:13
2	Sc Radial	4267.1	4267.1	97.1 %		09:11:09
2	Y RADIAL	4754.5	4754.5	99.87 %		09:10:49
2	Al 396.153Radial†	5038.4	5267.6	5150.2 ug/L	5150.2 ppb	09:10:49
2	Ca 317.933Radial†	2668.0	2732.4	5170.2 ug/L	5170.2 ppb	09:11:09
2	Fe 238.204 Radial†	442.2	447.0	5194.2 ug/L	5194.2 ppb	09:11:09
2	K 766.490 Radial†	29100.8	27375.1	5209.4 ug/L	5209.4 ppb	09:10:49
2	Mg 279.077 IEC†	129.6	131.9	5441.6 ug/L	5441.6 ppb	09:11:09
2	Na 589.592 Radial†	26364.9	28031.0	9881.5 ug/L	9881.5 ppb	09:10:49
2	Sr 421.552†	62039.1	63879.7	512.00 ug/L	512.00 ppb	09:10:49
2	Sc 361.383	836951.4	836951.4	102.21 %		09:12:12
2	Y 371.029	697139.4	697139.4	100.79 %		09:12:12
2	Ag 328.068†	97894.3	95589.0	499.41 ug/L	499.41 ppb	09:12:17
2	As 188.979†	901.5	908.8	503.18 ug/L	503.18 ppb	09:12:37
2	B 249.677†	17816.6	17968.1	501.79 ug/L	501.79 ppb	09:12:17
2	Ba 233.527†	54115.2	52943.9	497.14 ug/L	497.14 ppb	09:12:17
2	Be 313.107†	1204879.6	1182515.5	504.63 ug/L	504.63 ppb	09:12:12
2	Cd 226.502†	34879.3	34294.5	497.48 ug/L	497.48 ppb	09:12:17
2	Co 228.616†	19921.4	19536.2	505.04 ug/L	505.04 ppb	09:12:17
2	Cr 267.716†	37895.4	37003.2	497.27 ug/L	497.27 ppb	09:12:17
2	Cu 324.752†	157529.2	148565.4	490.48 ug/L	490.48 ppb	09:12:17
2	Mn 257.610†	380465.2	371836.1	489.19 ug/L	489.19 ppb	09:12:17
2	Mo 202.031†	5705.9	5573.8	495.93 ug/L	495.93 ppb	09:12:37
2	Ni 231.604†	16330.3	15892.5	504.40 ug/L	504.40 ppb	09:12:17

2	P 214.914†	3580.1	3315.3	2373.9 ug/L	2373.9 ppb	09:12:37
2	Pb 220.353†	3237.2	3225.4	496.97 ug/L	496.97 ppb	09:12:37
2	S 181.975 Axial†	591.9	548.9	981.65 ug/L	981.65 ppb	09:12:37
2	Sb 206.836†	1238.0	1187.5	514.66 ug/L	514.66 ppb	09:12:37
2	Se 196.026†	596.5	600.5	518.35 ug/L	518.35 ppb	09:12:37
2	Si 251.611†	67153.8	65211.2	2469.5 ug/L	2469.5 ppb	09:12:17
2	Sn 189.927†	2240.3	2184.6	496.37 ug/L	496.37 ppb	09:12:37
2	Ti 334.940†	284868.9	279820.4	486.47 ug/L	486.47 ppb	09:12:17
2	Tl 190.801†	1280.9	1282.3	499.31 ug/L	499.31 ppb	09:12:37
2	U 409.014†	14705.3	16591.0	501.64 ug/L	501.64 ppb	09:12:17
2	V 292.402†	62071.6	62044.7	502.05 ug/L	502.05 ppb	09:12:17
2	Zn 213.857†	42755.3	41259.3	495.27 ug/L	495.27 ppb	09:12:17
2	SiO2†	68107.0	66132.6	5383.7 ug/L	5383.7 ppb	09:13:18
3	Sc Radial	4261.7	4261.7	97.0 %		09:11:34
3	Y RADIAL	4762.6	4762.6	100.0 %		09:11:14
3	Al 396.153Radial†	5041.6	5277.5	5159.8 ug/L	5159.8 ppb	09:11:14
3	Ca 317.933Radial†	2678.0	2746.1	5196.2 ug/L	5196.2 ppb	09:11:34
3	Fe 238.204 Radial†	449.7	455.3	5290.6 ug/L	5290.6 ppb	09:11:34
3	K 766.490 Radial†	29132.2	27445.0	5222.7 ug/L	5222.7 ppb	09:11:14
3	Mg 279.077 IEC†	130.7	133.3	5498.4 ug/L	5498.4 ppb	09:11:34
3	Na 589.592 Radial†	26247.0	27943.4	9850.6 ug/L	9850.6 ppb	09:11:14
3	Sr 421.552†	62138.9	64062.5	513.47 ug/L	513.47 ppb	09:11:14
3	Sc 361.383	831297.4	831297.4	101.52 %		09:12:42
3	Y 371.029	692170.0	692170.0	100.08 %		09:12:42
3	Ag 328.068†	98276.5	96616.8	504.80 ug/L	504.80 ppb	09:12:48
3	As 188.979†	900.4	913.7	505.94 ug/L	505.94 ppb	09:13:08
3	B 249.677†	17875.0	18144.2	506.70 ug/L	506.70 ppb	09:12:48
3	Ba 233.527†	54411.2	53595.5	503.26 ug/L	503.26 ppb	09:12:48
3	Be 313.107†	1194741.7	1180547.0	503.80 ug/L	503.80 ppb	09:12:42
3	Cd 226.502†	35068.4	34712.9	503.55 ug/L	503.55 ppb	09:12:48
3	Co 228.616†	19944.2	19691.1	509.03 ug/L	509.03 ppb	09:12:48
3	Cr 267.716†	38090.4	37447.4	503.24 ug/L	503.24 ppb	09:12:48
3	Cu 324.752†	158408.5	150479.8	496.81 ug/L	496.81 ppb	09:12:48
3	Mn 257.610†	381751.2	375634.4	494.19 ug/L	494.19 ppb	09:12:48
3	Mo 202.031†	5698.4	5604.4	498.66 ug/L	498.66 ppb	09:13:08
3	Ni 231.604†	16336.3	16007.2	508.04 ug/L	508.04 ppb	09:12:48
3	P 214.914†	3559.0	3318.3	2374.9 ug/L	2374.9 ppb	09:13:08
3	Pb 220.353†	3230.4	3240.2	499.23 ug/L	499.23 ppb	09:13:08
3	S 181.975 Axial†	591.9	552.9	988.76 ug/L	988.76 ppb	09:13:08
3	Sb 206.836†	1233.3	1191.2	516.26 ug/L	516.26 ppb	09:13:08
3	Se 196.026†	600.5	608.5	525.25 ug/L	525.25 ppb	09:13:08
3	Si 251.611†	67511.8	66010.7	2499.8 ug/L	2499.8 ppb	09:12:48
3	Sn 189.927†	2230.4	2189.7	497.53 ug/L	497.53 ppb	09:13:08
3	Ti 334.940†	286639.6	283460.1	492.80 ug/L	492.80 ppb	09:12:48
3	Tl 190.801†	1274.1	1284.1	500.05 ug/L	500.05 ppb	09:13:08
3	U 409.014†	14726.7	16710.0	505.23 ug/L	505.23 ppb	09:12:48
3	V 292.402†	62390.5	62771.8	507.88 ug/L	507.88 ppb	09:12:48
3	Zn 213.857†	42899.3	41685.6	500.39 ug/L	500.39 ppb	09:12:48
3	SiO2†	68263.8	66740.2	5433.2 ug/L	5433.2 ppb	09:13:23

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	834504.1	101.91 %	0.354			0.35%
Sc Radial	4266.3	97.1 %	0.10			0.10%
Y 371.029	695045.4	100.49 %	0.372			0.37%
Y RADIAL	4746.4	99.70 %	0.449			0.45%
Ag 328.068†	96132.8	502.25 ug/L	2.706	502.25 ppb	2.706	0.54%
QC value within limits for Ag 328.068 Recovery = 100.45%						
Al 396.153Radial†	5261.9	5144.4 ug/L	18.91	5144.4 ppb	18.91	0.37%
QC value within limits for Al 396.153Radial Recovery = 102.89%						
As 188.979†	916.3	507.32 ug/L	4.968	507.32 ppb	4.968	0.98%
QC value within limits for As 188.979 Recovery = 101.46%						
B 249.677†	18053.7	504.18 ug/L	2.459	504.18 ppb	2.459	0.49%
QC value within limits for B 249.677 Recovery = 100.84%						
Ba 233.527†	53301.0	500.49 ug/L	3.101	500.49 ppb	3.101	0.62%
QC value within limits for Ba 233.527 Recovery = 100.10%						
Be 313.107†	1181157.2	504.06 ug/L	0.496	504.06 ppb	0.496	0.10%
QC value within limits for Be 313.107 Recovery = 100.81%						
Ca 317.933Radial†	2742.2	5188.8 ug/L	16.23	5188.8 ppb	16.23	0.31%

QC value within limits for Ca 317.933 Radial Recovery = 103.78%

Cd	226.502†	34516.0	500.69 ug/L	3.048	500.69 ppb	3.048	0.61%
QC value within limits for Cd 226.502 Recovery = 100.14%							
Co	228.616†	19634.3	507.57 ug/L	2.204	507.57 ppb	2.204	0.43%
QC value within limits for Co 228.616 Recovery = 101.51%							
Cr	267.716†	37219.5	500.17 ug/L	2.991	500.17 ppb	2.991	0.60%
QC value within limits for Cr 267.716 Recovery = 100.03%							
Cu	324.752†	149612.8	493.94 ug/L	3.203	493.94 ppb	3.203	0.65%
QC value within limits for Cu 324.752 Recovery = 98.79%							
Fe	238.204 Radial†	450.4	5234.3 ug/L	50.20	5234.3 ppb	50.20	0.96%
QC value within limits for Fe 238.204 Radial Recovery = 104.69%							
K	766.490 Radial†	27418.6	5217.6 ug/L	7.22	5217.6 ppb	7.22	0.14%
QC value within limits for K 766.490 Radial Recovery = 104.35%							
Mg	279.077 IEC†	131.1	5407.6 ug/L	111.73	5407.6 ppb	111.73	2.07%
QC value within limits for Mg 279.077 IEC Recovery = 108.15%							
Mn	257.610†	373903.6	491.91 ug/L	2.530	491.91 ppb	2.530	0.51%
QC value within limits for Mn 257.610 Recovery = 98.38%							
Mo	202.031†	5607.4	498.92 ug/L	3.125	498.92 ppb	3.125	0.63%
QC value within limits for Mo 202.031 Recovery = 99.78%							
Na	589.592 Radial†	28071.7	9895.9 ug/L	53.83	9895.9 ppb	53.83	0.54%
QC value within limits for Na 589.592 Radial Recovery = 98.96%							
Ni	231.604†	15946.0	506.09 ug/L	1.832	506.09 ppb	1.832	0.36%
QC value within limits for Ni 231.604 Recovery = 101.22%							
P	214.914†	3336.9	2389.4 ug/L	25.93	2389.4 ppb	25.93	1.09%
QC value within limits for P 214.914 Recovery = 95.57%							
Pb	220.353†	3243.1	499.68 ug/L	2.973	499.68 ppb	2.973	0.59%
QC value within limits for Pb 220.353 Recovery = 99.94%							
S	181.975 Axial†	553.5	989.89 ug/L	8.861	989.89 ppb	8.861	0.90%
QC value within limits for S 181.975 Axial Recovery = 98.99%							
Sb	206.836†	1193.0	517.03 ug/L	2.832	517.03 ppb	2.832	0.55%
QC value within limits for Sb 206.836 Recovery = 103.41%							
Se	196.026†	605.2	522.39 ug/L	3.594	522.39 ppb	3.594	0.69%
QC value within limits for Se 196.026 Recovery = 104.48%							
Si	251.611†	65670.2	2486.9 ug/L	15.64	2486.9 ppb	15.64	0.63%
QC value within limits for Si 251.611 Recovery = 99.48%							
Sn	189.927†	2193.6	498.40 ug/L	2.582	498.40 ppb	2.582	0.52%
QC value within limits for Sn 189.927 Recovery = 99.68%							
Sr	421.552†	63945.7	512.53 ug/L	0.813	512.53 ppb	0.813	0.16%
QC value within limits for Sr 421.552 Recovery = 102.51%							
Ti	334.940†	281702.5	489.75 ug/L	3.169	489.75 ppb	3.169	0.65%
QC value within limits for Ti 334.940 Recovery = 97.95%							
Tl	190.801†	1291.5	502.89 ug/L	5.573	502.89 ppb	5.573	1.11%
QC value within limits for Tl 190.801 Recovery = 100.58%							
U	409.014†	16676.7	504.23 ug/L	2.261	504.23 ppb	2.261	0.45%
QC value within limits for U 409.014 Recovery = 100.85%							
V	292.402†	62378.1	504.75 ug/L	2.939	504.75 ppb	2.939	0.58%
QC value within limits for V 292.402 Recovery = 100.95%							
Zn	213.857†	41501.2	498.18 ug/L	2.631	498.18 ppb	2.631	0.53%
QC value within limits for Zn 213.857 Recovery = 99.64%							
SiO2†		66274.6	5395.2 ug/L	33.76	5395.2 ppb	33.76	0.63%
QC value within limits for SiO2 Recovery = 100.89%							

All analyte(s) passed QC.

Sequence No.: 5

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 09:15:34

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	4271.6	4271.6	97.2 %		09:17:46
1	Y RADIAL	4777.6	4777.6	100.4 %		09:17:26
1	Al 396.153Radial†	-79.6	-3.9	-3.8423 ug/L	-3.8423 ppb	09:17:46
1	Ca 317.933Radial†	19.6	4.5	8.4521 ug/L	8.4521 ppb	09:17:46
1	Fe 238.204 Radial†	6.5	-1.8	-20.460 ug/L	-20.460 ppb	09:17:46
1	K 766.490 Radial†	2764.2	245.3	46.730 ug/L	46.730 ppb	09:17:26
1	Mg 279.077 IEC†	2.5	1.0	42.322 ug/L	42.322 ppb	09:17:46
1	Na 589.592 Radial†	-782.7	69.8	24.603 ug/L	24.603 ppb	09:17:26
1	Sr 421.552†	33.1	13.2	0.1058 ug/L	0.1058 ppb	09:17:26
1	Sc 361.383	814482.5	814482.5	99.470 %		09:18:43
1	Y 371.029	687746.5	687746.5	99.436 %		09:18:43
1	Ag 328.068†	219.3	35.3	0.1775 ug/L	0.1775 ppb	09:18:43
1	As 188.979†	-17.3	9.4	5.1795 ug/L	5.1795 ppb	09:19:03
1	B 249.677†	-3.5	533.8	14.980 ug/L	14.980 ppb	09:19:03
1	Ba 233.527†	9.2	10.0	0.0933 ug/L	0.0933 ppb	09:19:03
1	Be 313.107†	-3582.3	129.6	0.0550 ug/L	0.0550 ppb	09:18:43
1	Cd 226.502†	-164.5	5.3	0.0788 ug/L	0.0788 ppb	09:19:03
1	Co 228.616†	-51.3	-5.3	-0.1349 ug/L	-0.1349 ppb	09:19:03
1	Cr 267.716†	75.2	4.1	0.0529 ug/L	0.0529 ppb	09:19:03
1	Cu 324.752†	5609.0	87.0	0.2858 ug/L	0.2858 ppb	09:18:43
1	Mn 257.610†	401.8	14.9	0.0159 ug/L	0.0159 ppb	09:19:03
1	Mo 202.031†	20.3	11.9	1.0542 ug/L	1.0542 ppb	09:19:03
1	Ni 231.604†	83.5	-0.1	-0.0036 ug/L	-0.0036 ppb	09:19:03
1	P 214.914†	187.8	1.5	1.0765 ug/L	1.0765 ppb	09:19:03
1	Pb 220.353†	-53.2	4.8	0.7489 ug/L	0.7489 ppb	09:19:03
1	S 181.975 Axial†	27.3	-2.7	-4.8368 ug/L	-4.8368 ppb	09:19:03
1	Sb 206.836†	39.0	15.5	6.5154 ug/L	6.5154 ppb	09:19:03
1	Se 196.026†	-12.3	4.6	3.7725 ug/L	3.7725 ppb	09:19:03
1	Si 251.611†	533.6	48.3	1.8197 ug/L	1.8197 ppb	09:19:03
1	Sn 189.927†	8.7	1.6	0.3694 ug/L	0.3694 ppb	09:19:03
1	Ti 334.940†	-1171.1	-56.1	-0.1001 ug/L	-0.1001 ppb	09:18:43
1	Tl 190.801†	-28.6	0.4	0.1418 ug/L	0.1418 ppb	09:19:03
1	U 409.014†	-2178.9	13.7	0.4170 ug/L	0.4170 ppb	09:18:43
1	V 292.402†	-1286.3	24.2	0.2131 ug/L	0.2131 ppb	09:18:43
1	Zn 213.857†	690.5	124.1	1.5064 ug/L	1.5064 ppb	09:19:03
1	SiO2†	541.5	45.1	3.6495 ug/L	3.6495 ppb	09:19:59
2	Sc Radial	4262.8	4262.8	97.0 %		09:18:11
2	Y RADIAL	4796.9	4796.9	100.8 %		09:17:51
2	Al 396.153Radial†	-78.0	-2.3	-2.3148 ug/L	-2.3148 ppb	09:18:11
2	Ca 317.933Radial†	19.3	4.3	8.0475 ug/L	8.0475 ppb	09:18:11
2	Fe 238.204 Radial†	7.2	-1.0	-11.440 ug/L	-11.440 ppb	09:18:11
2	K 766.490 Radial†	2748.7	235.2	44.821 ug/L	44.821 ppb	09:17:51
2	Mg 279.077 IEC†	2.8	1.3	55.437 ug/L	55.437 ppb	09:18:11
2	Na 589.592 Radial†	-871.9	-23.9	-8.4179 ug/L	-8.4179 ppb	09:17:51
2	Sr 421.552†	16.5	-3.9	-0.0310 ug/L	-0.0310 ppb	09:17:51
2	Sc 361.383	817570.3	817570.3	99.847 %		09:19:08
2	Y 371.029	690582.6	690582.6	99.846 %		09:19:08
2	Ag 328.068†	196.2	11.4	0.0530 ug/L	0.0530 ppb	09:19:08
2	As 188.979†	-27.6	-0.8	-0.4463 ug/L	-0.4463 ppb	09:19:28
2	B 249.677†	-4.1	533.3	14.962 ug/L	14.962 ppb	09:19:28
2	Ba 233.527†	26.6	27.4	0.2550 ug/L	0.2550 ppb	09:19:28
2	Be 313.107†	-3673.1	52.3	0.0223 ug/L	0.0223 ppb	09:19:08
2	Cd 226.502†	-163.4	7.0	0.1028 ug/L	0.1028 ppb	09:19:28
2	Co 228.616†	-52.3	-6.2	-0.1578 ug/L	-0.1578 ppb	09:19:28
2	Cr 267.716†	111.6	40.2	0.5373 ug/L	0.5373 ppb	09:19:28
2	Cu 324.752†	5650.1	106.8	0.3513 ug/L	0.3513 ppb	09:19:08
2	Mn 257.610†	409.8	21.4	0.0247 ug/L	0.0247 ppb	09:19:28
2	Mo 202.031†	15.6	7.1	0.6264 ug/L	0.6264 ppb	09:19:28
2	Ni 231.604†	69.7	-14.3	-0.4542 ug/L	-0.4542 ppb	09:19:28

2	P 214.914†	180.2	-6.8	-5.1075 ug/L	-5.1075 ppb	09:19:28
2	Pb 220.353†	-55.0	3.2	0.4903 ug/L	0.4903 ppb	09:19:28
2	S 181.975 Axial†	28.5	-1.6	-2.9431 ug/L	-2.9431 ppb	09:19:28
2	Sb 206.836†	34.7	11.1	4.6710 ug/L	4.6710 ppb	09:19:28
2	Se 196.026†	-15.5	1.4	1.1515 ug/L	1.1515 ppb	09:19:28
2	Si 251.611†	555.3	68.0	2.5719 ug/L	2.5719 ppb	09:19:28
2	Sn 189.927†	8.7	1.6	0.3569 ug/L	0.3569 ppb	09:19:28
2	Ti 334.940†	-1114.5	5.0	0.0047 ug/L	0.0047 ppb	09:19:08
2	Tl 190.801†	-19.5	9.5	3.6905 ug/L	3.6905 ppb	09:19:28
2	U 409.014†	-2170.8	30.1	0.9119 ug/L	0.9119 ppb	09:19:08
2	V 292.402†	-1366.1	-50.8	-0.3922 ug/L	-0.3922 ppb	09:19:08
2	Zn 213.857†	683.1	114.1	1.3864 ug/L	1.3864 ppb	09:19:28
2	SiO2†	541.1	42.6	3.4608 ug/L	3.4608 ppb	09:20:04
3	Sc Radial	4286.3	4286.3	97.5 %		09:18:36
3	Y RADIAL	4854.7	4854.7	102.0 %		09:18:16
3	Al 396.153Radial†	-90.4	-14.6	-14.360 ug/L	-14.360 ppb	09:18:36
3	Ca 317.933Radial†	24.9	9.9	18.648 ug/L	18.648 ppb	09:18:36
3	Fe 238.204 Radial†	7.6	-0.7	-7.7386 ug/L	-7.7386 ppb	09:18:36
3	K 766.490 Radial†	2787.2	259.2	49.398 ug/L	49.398 ppb	09:18:16
3	Mg 279.077 IEC†	3.8	2.3	96.474 ug/L	96.474 ppb	09:18:36
3	Na 589.592 Radial†	-957.9	-107.1	-37.767 ug/L	-37.767 ppb	09:18:16
3	Sr 421.552†	10.2	-10.4	-0.0832 ug/L	-0.0832 ppb	09:18:16
3	Sc 361.383	814846.7	814846.7	99.514 %		09:19:34
3	Y 371.029	688863.2	688863.2	99.598 %		09:19:34
3	Ag 328.068†	112.3	-72.3	-0.3809 ug/L	-0.3809 ppb	09:19:34
3	As 188.979†	-19.8	6.9	3.8016 ug/L	3.8016 ppb	09:19:54
3	B 249.677†	-11.6	525.7	14.748 ug/L	14.748 ppb	09:19:54
3	Ba 233.527†	13.2	14.0	0.1296 ug/L	0.1296 ppb	09:19:54
3	Be 313.107†	-3646.0	67.2	0.0286 ug/L	0.0286 ppb	09:19:34
3	Cd 226.502†	-174.8	-5.1	-0.0723 ug/L	-0.0723 ppb	09:19:54
3	Co 228.616†	-45.4	0.6	0.0137 ug/L	0.0137 ppb	09:19:54
3	Cr 267.716†	81.6	10.5	0.1380 ug/L	0.1380 ppb	09:19:54
3	Cu 324.752†	5635.8	111.3	0.3662 ug/L	0.3662 ppb	09:19:34
3	Mn 257.610†	399.2	12.1	0.0112 ug/L	0.0112 ppb	09:19:54
3	Mo 202.031†	4.4	-4.1	-0.3630 ug/L	-0.3630 ppb	09:19:54
3	Ni 231.604†	77.0	-6.7	-0.2117 ug/L	-0.2117 ppb	09:19:54
3	P 214.914†	186.2	-0.2	-0.1874 ug/L	-0.1874 ppb	09:19:54
3	Pb 220.353†	-67.8	-9.8	-1.5113 ug/L	-1.5113 ppb	09:19:54
3	S 181.975 Axial†	31.5	1.5	2.6801 ug/L	2.6801 ppb	09:19:54
3	Sb 206.836†	26.2	2.7	1.1279 ug/L	1.1279 ppb	09:19:54
3	Se 196.026†	-24.8	-7.9	-6.6490 ug/L	-6.6490 ppb	09:19:54
3	Si 251.611†	539.9	54.4	2.0696 ug/L	2.0696 ppb	09:19:54
3	Sn 189.927†	11.4	4.3	0.9890 ug/L	0.9890 ppb	09:19:54
3	Ti 334.940†	-1124.0	-8.2	-0.0205 ug/L	-0.0205 ppb	09:19:34
3	Tl 190.801†	-21.4	7.6	2.9459 ug/L	2.9459 ppb	09:19:54
3	U 409.014†	-2140.4	53.3	1.6188 ug/L	1.6188 ppb	09:19:34
3	V 292.402†	-1367.7	-56.9	-0.4537 ug/L	-0.4537 ppb	09:19:34
3	Zn 213.857†	679.6	112.8	1.3688 ug/L	1.3688 ppb	09:19:54
3	SiO2†	581.9	85.4	6.9819 ug/L	6.9819 ppb	09:20:09

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	815633.2	99.610 %		0.2061				0.21%
Sc Radial	4273.6	97.2 %		0.27				0.28%
Y 371.029	689064.1	99.627 %		0.2066				0.21%
Y RADIAL	4809.8	101.0 %		0.84				0.83%
Ag 328.068†	-8.5	-0.0502 ug/L		0.29315	-0.0502 ppb		0.29315	584.39%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-6.9	-6.8391 ug/L		6.55807	-6.8391 ppb		6.55807	95.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	5.2	2.8450 ug/L		2.93238	2.8450 ppb		2.93238	103.07%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	530.9	14.897 ug/L		0.1288	14.897 ppb		0.1288	0.86%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	17.1	0.1593 ug/L		0.08483	0.1593 ppb		0.08483	53.25%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	83.0	0.0353 ug/L		0.01733	0.0353 ppb		0.01733	49.14%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.2	11.716 ug/L		6.0069	11.716 ppb		6.0069	51.27%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	2.4	0.0364 ug/L	0.09492	0.0364 ppb	0.09492	260.66%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-3.6	-0.0930 ug/L	0.09311	-0.0930 ppb	0.09311	100.13%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	18.3	0.2428 ug/L	0.25864	0.2428 ppb	0.25864	106.54%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	101.7	0.3344 ug/L	0.04278	0.3344 ppb	0.04278	12.79%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.1	-13.213 ug/L	6.5433	-13.213 ppb	6.5433	49.52%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	246.6	46.983 ug/L	2.2993	46.983 ppb	2.2993	4.89%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.6	64.745 ug/L	28.2505	64.745 ppb	28.2505	43.63%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	16.1	0.0173 ug/L	0.00685	0.0173 ppb	0.00685	39.68%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	5.0	0.4392 ug/L	0.72693	0.4392 ppb	0.72693	165.51%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-20.4	-7.1939 ug/L	31.20291	-7.1939 ppb	31.20291	433.74%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-7.0	-0.2232 ug/L	0.22549	-0.2232 ppb	0.22549	101.04%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-1.8	-1.4062 ug/L	3.26718	-1.4062 ppb	3.26718	232.35%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-0.6	-0.0907 ug/L	1.23706	-0.0907 ppb	1.23706	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-1.0	-1.6999 ug/L	3.90961	-1.6999 ppb	3.90961	229.99%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	9.8	4.1048 ug/L	2.73805	4.1048 ppb	2.73805	66.70%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.6	-0.5750 ug/L	5.42099	-0.5750 ppb	5.42099	942.80%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	56.9	2.1537 ug/L	0.38312	2.1537 ppb	0.38312	17.79%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.5	0.5717 ug/L	0.36138	0.5717 ppb	0.36138	63.21%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-0.3	-0.0028 ug/L	0.09757	-0.0028 ppb	0.09757	>999.9%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-19.8	-0.0386 ug/L	0.05470	-0.0386 ppb	0.05470	141.60%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	5.8	2.2594 ug/L	1.87131	2.2594 ppb	1.87131	82.82%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	32.4	0.9826 ug/L	0.60400	0.9826 ppb	0.60400	61.47%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-27.8	-0.2109 ug/L	0.36853	-0.2109 ppb	0.36853	174.72%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	117.0	1.4205 ug/L	0.07489	1.4205 ppb	0.07489	5.27%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	57.7	4.6974 ug/L	1.98072	4.6974 ppb	1.98072	42.17%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 8

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 10:18:17

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	4308.1	4308.1	98.0 %		10:20:30
1	Y RADIAL	4796.2	4796.2	100.7 %		10:20:10
1	Al 396.153Radial†	5020.5	5200.0	5083.7 ug/L	5083.7 ppb	10:20:10
1	Ca 317.933Radial†	2703.2	2742.1	5188.6 ug/L	5188.6 ppb	10:20:30
1	Fe 238.204 Radial†	458.1	458.9	5332.4 ug/L	5332.4 ppb	10:20:30
1	K 766.490 Radial†	29265.8	27258.0	5186.8 ug/L	5186.8 ppb	10:20:10
1	Mg 279.077 IEC†	128.8	129.9	5357.8 ug/L	5357.8 ppb	10:20:30
1	Na 589.592 Radial†	28262.5	29708.3	10473 ug/L	10473 ppb	10:20:10
1	Sr 421.552†	64065.1	65338.0	523.69 ug/L	523.69 ppb	10:20:10
1	Sc 361.383	840877.0	840877.0	102.69 %		10:21:27
1	Y 371.029	700106.4	700106.4	101.22 %		10:21:27
1	Ag 328.068†	98277.1	95514.6	499.06 ug/L	499.06 ppb	10:21:32
1	As 188.979†	922.7	925.3	512.29 ug/L	512.29 ppb	10:21:52
1	B 249.677†	17605.6	17681.2	493.72 ug/L	493.72 ppb	10:21:32
1	Ba 233.527†	54539.2	53109.6	498.70 ug/L	498.70 ppb	10:21:32
1	Be 313.107†	1210018.3	1182016.3	504.42 ug/L	504.42 ppb	10:21:27
1	Cd 226.502†	35152.8	34401.5	499.02 ug/L	499.02 ppb	10:21:32
1	Co 228.616†	20041.6	19562.2	505.71 ug/L	505.71 ppb	10:21:32
1	Cr 267.716†	38225.6	37151.6	499.27 ug/L	499.27 ppb	10:21:32
1	Cu 324.752†	158350.9	148646.1	490.76 ug/L	490.76 ppb	10:21:32
1	Mn 257.610†	390746.5	380110.0	500.08 ug/L	500.08 ppb	10:21:27
1	Mo 202.031†	5748.3	5589.0	497.29 ug/L	497.29 ppb	10:21:52
1	Ni 231.604†	16393.2	15879.2	503.98 ug/L	503.98 ppb	10:21:32
1	P 214.914†	3610.4	3328.4	2383.6 ug/L	2383.6 ppb	10:21:52
1	Pb 220.353†	3267.4	3240.1	499.18 ug/L	499.18 ppb	10:21:52
1	S 181.975 Axial†	599.3	553.4	989.74 ug/L	989.74 ppb	10:21:52
1	Sb 206.836†	1241.7	1185.5	513.90 ug/L	513.90 ppb	10:21:52
1	Se 196.026†	601.0	602.2	520.13 ug/L	520.13 ppb	10:21:52
1	Si 251.611†	67756.7	65491.6	2480.1 ug/L	2480.1 ppb	10:21:32
1	Sn 189.927†	2265.7	2199.2	499.66 ug/L	499.66 ppb	10:21:52
1	Ti 334.940†	286425.2	280034.8	486.85 ug/L	486.85 ppb	10:21:32
1	Tl 190.801†	1289.6	1284.9	500.36 ug/L	500.36 ppb	10:21:52
1	U 409.014†	14815.8	16631.5	502.85 ug/L	502.85 ppb	10:21:32
1	V 292.402†	62323.9	62006.9	501.75 ug/L	501.75 ppb	10:21:32
1	Zn 213.857†	42998.2	41300.5	495.75 ug/L	495.75 ppb	10:21:32
1	SiO2†	68433.6	66139.6	5384.2 ug/L	5384.2 ppb	10:23:00
2	Sc Radial	4303.6	4303.6	97.9 %		10:20:55
2	Y RADIAL	4888.7	4888.7	102.7 %		10:20:35
2	Al 396.153Radial†	5077.0	5263.0	5145.6 ug/L	5145.6 ppb	10:20:35
2	Ca 317.933Radial†	2703.5	2745.3	5194.6 ug/L	5194.6 ppb	10:20:55
2	Fe 238.204 Radial†	454.5	455.7	5294.9 ug/L	5294.9 ppb	10:20:55
2	K 766.490 Radial†	29796.5	27831.0	5295.9 ug/L	5295.9 ppb	10:20:35
2	Mg 279.077 IEC†	129.3	130.5	5384.2 ug/L	5384.2 ppb	10:20:55
2	Na 589.592 Radial†	28793.9	30281.0	10675 ug/L	10675 ppb	10:20:35
2	Sr 421.552†	65177.3	66541.7	533.34 ug/L	533.34 ppb	10:20:35
2	Sc 361.383	841989.2	841989.2	102.83 %		10:21:58
2	Y 371.029	701176.2	701176.2	101.38 %		10:21:58
2	Ag 328.068†	98955.0	96047.5	501.82 ug/L	501.82 ppb	10:22:03
2	As 188.979†	911.1	912.8	505.43 ug/L	505.43 ppb	10:22:23
2	B 249.677†	17727.0	17776.7	496.40 ug/L	496.40 ppb	10:22:03
2	Ba 233.527†	54790.6	53284.0	500.33 ug/L	500.33 ppb	10:22:03
2	Be 313.107†	1215519.9	1185810.1	506.04 ug/L	506.04 ppb	10:21:58
2	Cd 226.502†	35405.2	34601.8	501.93 ug/L	501.93 ppb	10:22:03
2	Co 228.616†	20165.2	19656.6	508.15 ug/L	508.15 ppb	10:22:03
2	Cr 267.716†	38383.2	37255.7	500.66 ug/L	500.66 ppb	10:22:03
2	Cu 324.752†	159218.3	149285.9	492.87 ug/L	492.87 ppb	10:22:03
2	Mn 257.610†	392163.2	380985.2	501.23 ug/L	501.23 ppb	10:21:58
2	Mo 202.031†	5763.9	5596.8	497.98 ug/L	497.98 ppb	10:22:23
2	Ni 231.604†	16452.0	15915.3	505.12 ug/L	505.12 ppb	10:22:03

2	P 214.914†	3642.1	3354.6	2402.7 ug/L	2402.7 ppb	10:22:23
2	Pb 220.353†	3262.6	3231.1	497.83 ug/L	497.83 ppb	10:22:23
2	S 181.975 Axial†	607.5	560.6	1002.6 ug/L	1002.6 ppb	10:22:23
2	Sb 206.836†	1261.5	1203.1	521.27 ug/L	521.27 ppb	10:22:23
2	Se 196.026†	606.4	606.7	523.77 ug/L	523.77 ppb	10:22:23
2	Si 251.611†	68049.2	65688.9	2487.6 ug/L	2487.6 ppb	10:22:03
2	Sn 189.927†	2268.5	2198.9	499.61 ug/L	499.61 ppb	10:22:23
2	Ti 334.940†	288221.2	281413.1	489.25 ug/L	489.25 ppb	10:22:03
2	Tl 190.801†	1312.0	1305.0	508.15 ug/L	508.15 ppb	10:22:23
2	U 409.014†	14914.3	16708.1	505.18 ug/L	505.18 ppb	10:22:03
2	V 292.402†	62602.0	62197.1	503.29 ug/L	503.29 ppb	10:22:03
2	Zn 213.857†	43197.0	41438.5	497.42 ug/L	497.42 ppb	10:22:03
2	SiO2†	68330.5	65951.3	5368.8 ug/L	5368.8 ppb	10:23:05
3	Sc Radial	4308.5	4308.5	98.0 %		10:21:20
3	Y RADIAL	4759.8	4759.8	99.98 %		10:21:00
3	Al 396.153Radial†	4982.1	5160.3	5044.7 ug/L	5044.7 ppb	10:21:00
3	Ca 317.933Radial†	2717.2	2756.1	5215.0 ug/L	5215.0 ppb	10:21:20
3	Fe 238.204 Radial†	458.5	459.2	5336.0 ug/L	5336.0 ppb	10:21:20
3	K 766.490 Radial†	29151.9	27138.8	5164.1 ug/L	5164.1 ppb	10:21:00
3	Mg 279.077 IEC†	130.2	131.2	5413.8 ug/L	5413.8 ppb	10:21:20
3	Na 589.592 Radial†	27882.2	29317.5	10335 ug/L	10335 ppb	10:21:00
3	Sr 421.552†	63477.4	64731.9	518.84 ug/L	518.84 ppb	10:21:00
3	Sc 361.383	841584.9	841584.9	102.78 %		10:22:29
3	Y 371.029	700121.4	700121.4	101.23 %		10:22:29
3	Ag 328.068†	97908.8	95075.7	496.77 ug/L	496.77 ppb	10:22:34
3	As 188.979†	915.3	917.4	507.90 ug/L	507.90 ppb	10:22:54
3	B 249.677†	17549.2	17611.9	491.79 ug/L	491.79 ppb	10:22:34
3	Ba 233.527†	54162.2	52698.1	494.84 ug/L	494.84 ppb	10:22:34
3	Be 313.107†	1208532.2	1179579.3	503.37 ug/L	503.37 ppb	10:22:29
3	Cd 226.502†	34838.9	34067.3	494.17 ug/L	494.17 ppb	10:22:34
3	Co 228.616†	19861.8	19370.8	500.77 ug/L	500.77 ppb	10:22:34
3	Cr 267.716†	37945.5	36847.8	495.19 ug/L	495.19 ppb	10:22:34
3	Cu 324.752†	157797.9	147978.4	488.55 ug/L	488.55 ppb	10:22:34
3	Mn 257.610†	390735.5	379779.2	499.65 ug/L	499.65 ppb	10:22:29
3	Mo 202.031†	5752.3	5588.2	497.22 ug/L	497.22 ppb	10:22:54
3	Ni 231.604†	16284.0	15759.5	500.18 ug/L	500.18 ppb	10:22:34
3	P 214.914†	3613.2	3328.2	2383.8 ug/L	2383.8 ppb	10:22:54
3	Pb 220.353†	3273.8	3243.6	499.72 ug/L	499.72 ppb	10:22:54
3	S 181.975 Axial†	608.0	561.3	1004.0 ug/L	1004.0 ppb	10:22:54
3	Sb 206.836†	1261.0	1203.2	521.27 ug/L	521.27 ppb	10:22:54
3	Se 196.026†	609.0	609.5	526.24 ug/L	526.24 ppb	10:22:54
3	Si 251.611†	67209.5	64903.6	2457.8 ug/L	2457.8 ppb	10:22:34
3	Sn 189.927†	2261.1	2192.7	498.21 ug/L	498.21 ppb	10:22:54
3	Ti 334.940†	284900.4	278316.7	483.86 ug/L	483.86 ppb	10:22:34
3	Tl 190.801†	1308.4	1302.1	507.01 ug/L	507.01 ppb	10:22:54
3	U 409.014†	14819.6	16623.0	502.60 ug/L	502.60 ppb	10:22:34
3	V 292.402†	61893.7	61537.3	498.00 ug/L	498.00 ppb	10:22:34
3	Zn 213.857†	42671.0	40946.9	491.50 ug/L	491.50 ppb	10:22:34
3	SiO2†	68350.8	66003.0	5373.1 ug/L	5373.1 ppb	10:23:10

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	841483.7	102.77 %	0.069			0.07%
Sc Radial	4306.7	98.0 %	0.06			0.06%
Y 371.029	700468.0	101.28 %	0.089			0.09%
Y RADIAL	4814.9	101.1 %	1.40			1.38%
Ag 328.068†	95546.0	499.22 ug/L	2.529	499.22 ppb	2.529	0.51%
QC value within limits for Ag 328.068 Recovery = 99.84%						
Al 396.153Radial†	5207.8	5091.3 ug/L	50.85	5091.3 ppb	50.85	1.00%
QC value within limits for Al 396.153Radial Recovery = 101.83%						
As 188.979†	918.5	508.54 ug/L	3.473	508.54 ppb	3.473	0.68%
QC value within limits for As 188.979 Recovery = 101.71%						
B 249.677†	17689.9	493.97 ug/L	2.314	493.97 ppb	2.314	0.47%
QC value within limits for B 249.677 Recovery = 98.79%						
Ba 233.527†	53030.6	497.96 ug/L	2.823	497.96 ppb	2.823	0.57%
QC value within limits for Ba 233.527 Recovery = 99.59%						
Be 313.107†	1182468.6	504.61 ug/L	1.343	504.61 ppb	1.343	0.27%
QC value within limits for Be 313.107 Recovery = 100.92%						
Ca 317.933Radial†	2747.8	5199.4 ug/L	13.84	5199.4 ppb	13.84	0.27%

QC value within limits for Ca 317.933Radial Recovery = 103.99%					
Cd 226.502†	34356.9	498.37 ug/L	3.922	498.37 ppb	3.922 0.79%
QC value within limits for Cd 226.502 Recovery = 99.67%					
Co 228.616†	19529.9	504.88 ug/L	3.759	504.88 ppb	3.759 0.74%
QC value within limits for Co 228.616 Recovery = 100.98%					
Cr 267.716†	37085.1	498.38 ug/L	2.844	498.38 ppb	2.844 0.57%
QC value within limits for Cr 267.716 Recovery = 99.68%					
Cu 324.752†	148636.8	490.73 ug/L	2.157	490.73 ppb	2.157 0.44%
QC value within limits for Cu 324.752 Recovery = 98.15%					
Fe 238.204 Radial†	457.9	5321.1 ug/L	22.78	5321.1 ppb	22.78 0.43%
QC value within limits for Fe 238.204 Radial Recovery = 106.42%					
K 766.490 Radial†	27409.3	5215.6 ug/L	70.44	5215.6 ppb	70.44 1.35%
QC value within limits for K 766.490 Radial Recovery = 104.31%					
Mg 279.077 IEC†	130.6	5385.2 ug/L	28.03	5385.2 ppb	28.03 0.52%
QC value within limits for Mg 279.077 IEC Recovery = 107.70%					
Mn 257.610†	380291.5	500.32 ug/L	0.817	500.32 ppb	0.817 0.16%
QC value within limits for Mn 257.610 Recovery = 100.06%					
Mo 202.031†	5591.3	497.49 ug/L	0.422	497.49 ppb	0.422 0.08%
QC value within limits for Mo 202.031 Recovery = 99.50%					
Na 589.592 Radial†	29768.9	10494 ug/L	170.8	10494 ppb	170.8 1.63%
QC value within limits for Na 589.592 Radial Recovery = 104.94%					
Ni 231.604†	15851.3	503.09 ug/L	2.588	503.09 ppb	2.588 0.51%
QC value within limits for Ni 231.604 Recovery = 100.62%					
P 214.914†	3337.1	2390.0 ug/L	10.97	2390.0 ppb	10.97 0.46%
QC value within limits for P 214.914 Recovery = 95.60%					
Pb 220.353†	3238.3	498.91 ug/L	0.975	498.91 ppb	0.975 0.20%
QC value within limits for Pb 220.353 Recovery = 99.78%					
S 181.975 Axial†	558.4	998.75 ug/L	7.834	998.75 ppb	7.834 0.78%
QC value within limits for S 181.975 Axial Recovery = 99.88%					
Sb 206.836†	1197.3	518.82 ug/L	4.257	518.82 ppb	4.257 0.82%
QC value within limits for Sb 206.836 Recovery = 103.76%					
Se 196.026†	606.1	523.38 ug/L	3.070	523.38 ppb	3.070 0.59%
QC value within limits for Se 196.026 Recovery = 104.68%					
Si 251.611†	65361.4	2475.2 ug/L	15.50	2475.2 ppb	15.50 0.63%
QC value within limits for Si 251.611 Recovery = 99.01%					
Sn 189.927†	2196.9	499.16 ug/L	0.823	499.16 ppb	0.823 0.16%
QC value within limits for Sn 189.927 Recovery = 99.83%					
Sr 421.552†	65537.2	525.29 ug/L	7.384	525.29 ppb	7.384 1.41%
QC value within limits for Sr 421.552 Recovery = 105.06%					
Ti 334.940†	279921.5	486.65 ug/L	2.696	486.65 ppb	2.696 0.55%
QC value within limits for Ti 334.940 Recovery = 97.33%					
Tl 190.801†	1297.3	505.18 ug/L	4.211	505.18 ppb	4.211 0.83%
QC value within limits for Tl 190.801 Recovery = 101.04%					
U 409.014†	16654.2	503.54 ug/L	1.421	503.54 ppb	1.421 0.28%
QC value within limits for U 409.014 Recovery = 100.71%					
V 292.402†	61913.8	501.01 ug/L	2.717	501.01 ppb	2.717 0.54%
QC value within limits for V 292.402 Recovery = 100.20%					
Zn 213.857†	41228.6	494.89 ug/L	3.055	494.89 ppb	3.055 0.62%
QC value within limits for Zn 213.857 Recovery = 98.98%					
SiO2†	66031.3	5375.4 ug/L	7.95	5375.4 ppb	7.95 0.15%
QC value within limits for SiO2 Recovery = 100.52%					
All analyte(s) passed QC.					

Sequence No.: 9

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 3/19/2010 10:25:21

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	4401.9	4401.9	100 %		10:27:15
1	Y RADIAL	4788.6	4788.6	100.6 %		10:27:15
1	Al 396.153Radial†	146.5	224.3	219.87 ug/L	219.87 ppb	10:27:35
1	Ca 317.933Radial†	136.1	120.2	227.52 ug/L	227.52 ppb	10:27:35
1	Fe 238.204 Radial†	19.2	10.7	124.60 ug/L	124.60 ppb	10:27:35
1	K 766.490 Radial†	3512.0	907.8	172.76 ug/L	172.76 ppb	10:27:15
1	Mg 279.077 IEC†	10.2	8.7	357.89 ug/L	357.89 ppb	10:27:35
1	Na 589.592 Radial†	-57.8	817.4	288.14 ug/L	288.14 ppb	10:27:15
1	Sr 421.552†	647.2	625.4	5.0111 ug/L	5.0111 ppb	10:27:15
1	Sc 361.383	822284.0	822284.0	100.42 %		10:28:32
1	Y 371.029	695589.3	695589.3	100.57 %		10:28:32
1	Ag 328.068†	1144.7	954.7	4.9620 ug/L	4.9620 ppb	10:28:32
1	As 188.979†	36.5	63.1	34.698 ug/L	34.698 ppb	10:28:52
1	B 249.677†	1493.9	2025.0	56.772 ug/L	56.772 ppb	10:28:32
1	Ba 233.527†	582.9	581.2	5.4571 ug/L	5.4571 ppb	10:28:52
1	Be 313.107†	8407.8	12103.5	5.1650 ug/L	5.1650 ppb	10:28:32
1	Cd 226.502†	205.0	374.8	5.4403 ug/L	5.4403 ppb	10:28:52
1	Co 228.616†	171.5	216.9	5.6192 ug/L	5.6192 ppb	10:28:52
1	Cr 267.716†	442.0	368.7	4.9398 ug/L	4.9398 ppb	10:28:52
1	Cu 324.752†	8629.8	3041.5	10.015 ug/L	10.015 ppb	10:28:32
1	Mn 257.610†	8561.3	8136.2	10.695 ug/L	10.695 ppb	10:28:32
1	Mo 202.031†	123.8	114.8	10.213 ug/L	10.213 ppb	10:28:52
1	Ni 231.604†	263.1	177.9	5.6471 ug/L	5.6471 ppb	10:28:52
1	P 214.914†	398.2	209.3	153.94 ug/L	153.94 ppb	10:28:52
1	Pb 220.353†	22.2	80.4	12.408 ug/L	12.408 ppb	10:28:52
1	S 181.975 Axial†	91.1	60.5	108.34 ug/L	108.34 ppb	10:28:52
1	Sb 206.836†	52.8	28.9	12.468 ug/L	12.468 ppb	10:28:52
1	Se 196.026†	20.4	37.2	31.477 ug/L	31.477 ppb	10:28:52
1	Si 251.611†	3185.3	2683.8	101.76 ug/L	101.76 ppb	10:28:52
1	Sn 189.927†	52.1	44.7	10.174 ug/L	10.174 ppb	10:28:52
1	Ti 334.940†	1753.5	2867.3	4.9598 ug/L	4.9598 ppb	10:28:32
1	Tl 190.801†	14.1	43.1	16.750 ug/L	16.750 ppb	10:28:52
1	U 409.014†	-246.9	1958.4	59.388 ug/L	59.388 ppb	10:28:32
1	V 292.402†	-752.2	568.4	4.7786 ug/L	4.7786 ppb	10:28:32
1	Zn 213.857†	1728.5	1151.2	13.880 ug/L	13.880 ppb	10:28:52
1	SiO2†	3288.3	2775.2	226.21 ug/L	226.21 ppb	10:29:48
2	Sc Radial	4445.8	4445.8	101 %		10:27:40
2	Y RADIAL	4794.0	4794.0	100.7 %		10:27:40
2	Al 396.153Radial†	128.3	204.9	200.78 ug/L	200.78 ppb	10:28:00
2	Ca 317.933Radial†	134.8	117.6	222.53 ug/L	222.53 ppb	10:28:00
2	Fe 238.204 Radial†	17.2	8.5	99.164 ug/L	99.164 ppb	10:28:00
2	K 766.490 Radial†	3570.5	931.1	177.19 ug/L	177.19 ppb	10:27:40
2	Mg 279.077 IEC†	10.9	9.3	382.08 ug/L	382.08 ppb	10:28:00
2	Na 589.592 Radial†	-46.0	829.6	292.46 ug/L	292.46 ppb	10:27:40
2	Sr 421.552†	645.8	617.6	4.9488 ug/L	4.9488 ppb	10:27:40
2	Sc 361.383	837271.4	837271.4	102.25 %		10:28:57
2	Y 371.029	706698.5	706698.5	102.18 %		10:28:57
2	Ag 328.068†	1173.1	962.1	4.9980 ug/L	4.9980 ppb	10:28:57
2	As 188.979†	26.2	52.4	28.810 ug/L	28.810 ppb	10:29:17
2	B 249.677†	1558.8	2061.8	57.810 ug/L	57.810 ppb	10:28:57
2	Ba 233.527†	574.9	562.9	5.2872 ug/L	5.2872 ppb	10:29:17
2	Be 313.107†	8476.9	12021.1	5.1302 ug/L	5.1302 ppb	10:28:57
2	Cd 226.502†	192.3	358.7	5.2089 ug/L	5.2089 ppb	10:29:17
2	Co 228.616†	160.2	202.9	5.2573 ug/L	5.2573 ppb	10:29:17
2	Cr 267.716†	476.6	394.6	5.2868 ug/L	5.2868 ppb	10:29:17
2	Cu 324.752†	8870.3	3122.9	10.284 ug/L	10.284 ppb	10:28:57
2	Mn 257.610†	8683.2	8102.8	10.648 ug/L	10.648 ppb	10:28:57
2	Mo 202.031†	129.1	117.7	10.475 ug/L	10.475 ppb	10:29:17
2	Ni 231.604†	264.0	174.1	5.5251 ug/L	5.5251 ppb	10:29:17

2	P 214.914†	395.3	199.3	146.52 ug/L	146.52 ppb	10:29:17
2	Pb 220.353†	27.6	85.3	13.165 ug/L	13.165 ppb	10:29:17
2	S 181.975 Axial†	84.9	52.8	94.531 ug/L	94.531 ppb	10:29:17
2	Sb 206.836†	44.5	19.9	8.7098 ug/L	8.7098 ppb	10:29:17
2	Se 196.026†	19.1	35.7	30.097 ug/L	30.097 ppb	10:29:17
2	Si 251.611†	3158.6	2600.8	98.606 ug/L	98.606 ppb	10:29:17
2	Sn 189.927†	61.3	52.8	12.017 ug/L	12.017 ppb	10:29:17
2	Ti 334.940†	1832.6	2913.4	5.0386 ug/L	5.0386 ppb	10:28:57
2	Tl 190.801†	27.5	56.0	21.724 ug/L	21.724 ppb	10:29:17
2	U 409.014†	-357.4	1854.6	56.243 ug/L	56.243 ppb	10:28:57
2	V 292.402†	-677.4	654.9	5.4708 ug/L	5.4708 ppb	10:28:57
2	Zn 213.857†	1716.0	1108.1	13.363 ug/L	13.363 ppb	10:29:17
2	SiO2†	3289.2	2717.4	221.49 ug/L	221.49 ppb	10:29:53
3	Sc Radial	4483.3	4483.3	102 %		10:28:05
3	Y RADIAL	4841.5	4841.5	101.7 %		10:28:05
3	Al 396.153Radial†	141.9	217.2	212.85 ug/L	212.85 ppb	10:28:25
3	Ca 317.933Radial†	130.9	112.7	213.20 ug/L	213.20 ppb	10:28:25
3	Fe 238.204 Radial†	17.3	8.5	98.662 ug/L	98.662 ppb	10:28:25
3	K 766.490 Radial†	3517.4	849.4	161.64 ug/L	161.64 ppb	10:28:05
3	Mg 279.077 IEC†	11.7	10.0	411.68 ug/L	411.68 ppb	10:28:25
3	Na 589.592 Radial†	-82.3	794.4	280.04 ug/L	280.04 ppb	10:28:05
3	Sr 421.552†	670.9	636.9	5.1036 ug/L	5.1036 ppb	10:28:05
3	Sc 361.383	836240.4	836240.4	102.13 %		10:29:23
3	Y 371.029	705188.3	705188.3	101.96 %		10:29:23
3	Ag 328.068†	1229.5	1018.7	5.2884 ug/L	5.2884 ppb	10:29:23
3	As 188.979†	36.9	62.9	34.584 ug/L	34.584 ppb	10:29:43
3	B 249.677†	1533.7	2039.1	57.173 ug/L	57.173 ppb	10:29:23
3	Ba 233.527†	569.0	557.9	5.2383 ug/L	5.2383 ppb	10:29:43
3	Be 313.107†	8522.5	12076.1	5.1539 ug/L	5.1539 ppb	10:29:23
3	Cd 226.502†	187.5	354.2	5.1435 ug/L	5.1435 ppb	10:29:43
3	Co 228.616†	163.0	205.8	5.3306 ug/L	5.3306 ppb	10:29:43
3	Cr 267.716†	463.5	382.4	5.1218 ug/L	5.1218 ppb	10:29:43
3	Cu 324.752†	8786.4	3051.5	10.048 ug/L	10.048 ppb	10:29:23
3	Mn 257.610†	8625.6	8056.9	10.586 ug/L	10.586 ppb	10:29:23
3	Mo 202.031†	124.3	113.2	10.075 ug/L	10.075 ppb	10:29:43
3	Ni 231.604†	259.0	169.5	5.3803 ug/L	5.3803 ppb	10:29:43
3	P 214.914†	398.5	202.9	149.24 ug/L	149.24 ppb	10:29:43
3	Pb 220.353†	12.0	70.1	10.819 ug/L	10.819 ppb	10:29:43
3	S 181.975 Axial†	85.1	53.1	95.060 ug/L	95.060 ppb	10:29:43
3	Sb 206.836†	57.7	32.9	14.105 ug/L	14.105 ppb	10:29:43
3	Se 196.026†	20.8	37.3	31.498 ug/L	31.498 ppb	10:29:43
3	Si 251.611†	3182.8	2628.4	99.656 ug/L	99.656 ppb	10:29:43
3	Sn 189.927†	53.7	45.4	10.337 ug/L	10.337 ppb	10:29:43
3	Ti 334.940†	1907.5	2989.0	5.1660 ug/L	5.1660 ppb	10:29:23
3	Tl 190.801†	25.8	54.4	21.092 ug/L	21.092 ppb	10:29:43
3	U 409.014†	-327.0	1884.0	57.134 ug/L	57.134 ppb	10:29:23
3	V 292.402†	-763.5	569.9	4.7882 ug/L	4.7882 ppb	10:29:23
3	Zn 213.857†	1721.2	1115.3	13.451 ug/L	13.451 ppb	10:29:43
3	SiO2†	3260.7	2693.5	219.55 ug/L	219.55 ppb	10:29:58

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	831931.9	101.60 %	1.022			1.01%
Sc Radial	4443.7	101 %	0.9			0.92%
Y 371.029	702492.0	101.57 %	0.871			0.86%
Y RADIAL	4808.0	101.0 %	0.61			0.61%
Ag 328.068†	978.5	5.0828 ug/L	0.17895	5.0828 ppb	0.17895	3.52%
QC value within limits for Ag 328.068 Recovery = 101.66%						
Al 396.153Radial†	215.5	211.17 ug/L	9.660	211.17 ppb	9.660	4.57%
QC value within limits for Al 396.153Radial Recovery = 105.58%						
As 188.979†	59.5	32.697 ug/L	3.3670	32.697 ppb	3.3670	10.30%
QC value within limits for As 188.979 Recovery = 108.99%						
B 249.677†	2041.9	57.252 ug/L	0.5232	57.252 ppb	0.5232	0.91%
QC value within limits for B 249.677 Recovery = 114.50%						
Ba 233.527†	567.3	5.3275 ug/L	0.11484	5.3275 ppb	0.11484	2.16%
QC value within limits for Ba 233.527 Recovery = 106.55%						
Be 313.107†	12066.9	5.1497 ug/L	0.01781	5.1497 ppb	0.01781	0.35%
QC value within limits for Be 313.107 Recovery = 102.99%						
Ca 317.933Radial†	116.8	221.08 ug/L	7.270	221.08 ppb	7.270	3.29%

QC value within limits for Ca 317.933Radial Recovery = 110.54%							
Cd 226.502†	362.6	5.2642 ug/L	0.15594	5.2642 ppb	0.15594	2.96%	
QC value within limits for Cd 226.502 Recovery = 105.28%							
Co 228.616†	208.5	5.4024 ug/L	0.19132	5.4024 ppb	0.19132	3.54%	
QC value within limits for Co 228.616 Recovery = 108.05%							
Cr 267.716†	381.9	5.1161 ug/L	0.17357	5.1161 ppb	0.17357	3.39%	
QC value within limits for Cr 267.716 Recovery = 102.32%							
Cu 324.752†	3071.9	10.116 ug/L	0.1468	10.116 ppb	0.1468	1.45%	
QC value within limits for Cu 324.752 Recovery = 101.16%							
Fe 238.204 Radial†	9.3	107.47 ug/L	14.830	107.47 ppb	14.830	13.80%	
QC value within limits for Fe 238.204 Radial Recovery = 107.47%							
K 766.490 Radial†	896.1	170.53 ug/L	8.011	170.53 ppb	8.011	4.70%	
QC value within limits for K 766.490 Radial Recovery = 113.69%							
Mg 279.077 IEC†	9.3	383.89 ug/L	26.941	383.89 ppb	26.941	7.02%	
QC value within limits for Mg 279.077 IEC Recovery = 127.96%							
Mn 257.610†	8098.6	10.643 ug/L	0.0547	10.643 ppb	0.0547	0.51%	
QC value within limits for Mn 257.610 Recovery = 106.43%							
Mo 202.031†	115.2	10.254 ug/L	0.2030	10.254 ppb	0.2030	1.98%	
QC value within limits for Mo 202.031 Recovery = 102.54%							
Na 589.592 Radial†	813.8	286.88 ug/L	6.307	286.88 ppb	6.307	2.20%	
QC value within limits for Na 589.592 Radial Recovery = 95.63%							
Ni 231.604†	173.8	5.5175 ug/L	0.13352	5.5175 ppb	0.13352	2.42%	
QC value within limits for Ni 231.604 Recovery = 110.35%							
P 214.914†	203.8	149.90 ug/L	3.755	149.90 ppb	3.755	2.50%	
QC value within limits for P 214.914 Recovery = 99.93%							
Pb 220.353†	78.6	12.131 ug/L	1.1974	12.131 ppb	1.1974	9.87%	
QC value within limits for Pb 220.353 Recovery = 121.31%							
S 181.975 Axial†	55.5	99.309 ug/L	7.8229	99.309 ppb	7.8229	7.88%	
QC value within limits for S 181.975 Axial Recovery = 99.31%							
Sb 206.836†	27.2	11.761 ug/L	2.7662	11.761 ppb	2.7662	23.52%	
QC value within limits for Sb 206.836 Recovery = 117.61%							
Se 196.026†	36.8	31.024 ug/L	0.8032	31.024 ppb	0.8032	2.59%	
QC value within limits for Se 196.026 Recovery = 103.41%							
Si 251.611†	2637.7	100.01 ug/L	1.605	100.01 ppb	1.605	1.60%	
QC value within limits for Si 251.611 Recovery = 100.01%							
Sn 189.927†	47.6	10.843 ug/L	1.0204	10.843 ppb	1.0204	9.41%	
QC value within limits for Sn 189.927 Recovery = 108.43%							
Sr 421.552†	626.6	5.0212 ug/L	0.07790	5.0212 ppb	0.07790	1.55%	
QC value within limits for Sr 421.552 Recovery = 100.42%							
Ti 334.940†	2923.2	5.0548 ug/L	0.10406	5.0548 ppb	0.10406	2.06%	
QC value within limits for Ti 334.940 Recovery = 101.10%							
Tl 190.801†	51.2	19.855 ug/L	2.7075	19.855 ppb	2.7075	13.64%	
QC value within limits for Tl 190.801 Recovery = 99.28%							
U 409.014†	1899.0	57.588 ug/L	1.6212	57.588 ppb	1.6212	2.82%	
QC value within limits for U 409.014 Recovery = 115.18%							
V 292.402†	597.7	5.0125 ug/L	0.39690	5.0125 ppb	0.39690	7.92%	
QC value within limits for V 292.402 Recovery = 100.25%							
Zn 213.857†	1124.9	13.565 ug/L	0.2770	13.565 ppb	0.2770	2.04%	
QC value greater than the upper limit for Zn 213.857 Recovery = 135.65%							
SiO2†	2728.7	222.41 ug/L	3.427	222.41 ppb	3.427	1.54%	
QC value within limits for SiO2 Recovery = 104.42%							
QC Failed. Continue with analysis.							

Sequence No.: 10

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 10:32:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4467.1	4467.1	102 %		10:34:02
1	Y RADIAL	4880.5	4880.5	102.5 %		10:34:02
1	Al 396.153Radial†	-80.8	-1.4	-1.4230 ug/L	-1.4230 ppb	10:34:22
1	Ca 317.933Radial†	21.9	5.8	11.020 ug/L	11.020 ppb	10:34:22
1	Fe 238.204 Radial†	9.9	1.3	14.506 ug/L	14.506 ppb	10:34:22
1	K 766.490 Radial†	2657.3	15.7	2.9980 ug/L	2.9980 ppb	10:34:02
1	Mg 279.077 IEC†	0.7	-0.8	-34.124 ug/L	-34.124 ppb	10:34:22
1	Na 589.592 Radial†	-924.0	-34.0	-11.981 ug/L	-11.981 ppb	10:34:02
1	Sr 421.552†	21.1	-0.1	-0.0006 ug/L	-0.0006 ppb	10:34:02
1	Sc 361.383	815849.0	815849.0	99.637 %		10:35:19
1	Y 371.029	689649.4	689649.4	99.711 %		10:35:19
1	Ag 328.068†	248.9	64.7	0.3382 ug/L	0.3382 ppb	10:35:19
1	As 188.979†	-18.2	8.5	4.6577 ug/L	4.6577 ppb	10:35:39
1	B 249.677†	-318.6	217.6	6.1019 ug/L	6.1019 ppb	10:35:39
1	Ba 233.527†	7.9	8.6	0.0808 ug/L	0.0808 ppb	10:35:39
1	Be 313.107†	-3623.2	94.6	0.0402 ug/L	0.0402 ppb	10:35:19
1	Cd 226.502†	-173.7	-3.7	-0.0547 ug/L	-0.0547 ppb	10:35:39
1	Co 228.616†	-45.6	0.5	0.0135 ug/L	0.0135 ppb	10:35:39
1	Cr 267.716†	76.1	4.9	0.0662 ug/L	0.0662 ppb	10:35:39
1	Cu 324.752†	5630.0	98.6	0.3251 ug/L	0.3251 ppb	10:35:19
1	Mn 257.610†	436.1	48.7	0.0668 ug/L	0.0668 ppb	10:35:39
1	Mo 202.031†	13.8	5.3	0.4709 ug/L	0.4709 ppb	10:35:39
1	Ni 231.604†	78.0	-5.8	-0.1828 ug/L	-0.1828 ppb	10:35:39
1	P 214.914†	190.4	3.8	2.7615 ug/L	2.7615 ppb	10:35:39
1	Pb 220.353†	-44.4	13.7	2.1042 ug/L	2.1042 ppb	10:35:39
1	S 181.975 Axial†	28.0	-2.1	-3.6725 ug/L	-3.6725 ppb	10:35:39
1	Sb 206.836†	44.0	20.5	8.5973 ug/L	8.5973 ppb	10:35:39
1	Se 196.026†	-15.0	1.9	1.6296 ug/L	1.6296 ppb	10:35:39
1	Si 251.611†	543.0	56.8	2.1517 ug/L	2.1517 ppb	10:35:39
1	Sn 189.927†	11.5	4.4	0.9946 ug/L	0.9946 ppb	10:35:39
1	Ti 334.940†	-1142.7	-25.7	-0.0413 ug/L	-0.0413 ppb	10:35:19
1	Tl 190.801†	-30.9	-1.9	-0.7441 ug/L	-0.7441 ppb	10:35:39
1	U 409.014†	-2131.9	64.5	1.9553 ug/L	1.9553 ppb	10:35:19
1	V 292.402†	-1328.1	-15.5	-0.1162 ug/L	-0.1162 ppb	10:35:19
1	Zn 213.857†	714.3	146.8	1.7773 ug/L	1.7773 ppb	10:35:39
1	SiO2†	550.1	52.8	4.2972 ug/L	4.2972 ppb	10:36:35
2	Sc Radial	4480.4	4480.4	102 %		10:34:27
2	Y RADIAL	4876.8	4876.8	102.4 %		10:34:27
2	Al 396.153Radial†	-82.1	-2.5	-2.4574 ug/L	-2.4574 ppb	10:34:47
2	Ca 317.933Radial†	28.0	11.8	22.307 ug/L	22.307 ppb	10:34:47
2	Fe 238.204 Radial†	8.1	-0.5	-5.7454 ug/L	-5.7454 ppb	10:34:47
2	K 766.490 Radial†	2699.4	49.2	9.3714 ug/L	9.3714 ppb	10:34:27
2	Mg 279.077 IEC†	0.5	-1.0	-40.966 ug/L	-40.966 ppb	10:34:47
2	Na 589.592 Radial†	-910.7	-18.3	-6.4367 ug/L	-6.4367 ppb	10:34:27
2	Sr 421.552†	-14.0	-34.6	-0.2774 ug/L	-0.2774 ppb	10:34:27
2	Sc 361.383	818594.5	818594.5	99.972 %		10:35:44
2	Y 371.029	691573.4	691573.4	99.989 %		10:35:44
2	Ag 328.068†	183.2	-1.9	-0.0151 ug/L	-0.0151 ppb	10:35:44
2	As 188.979†	-18.7	8.1	4.4279 ug/L	4.4279 ppb	10:36:04
2	B 249.677†	-356.2	181.1	5.0804 ug/L	5.0804 ppb	10:36:04
2	Ba 233.527†	12.6	13.3	0.1235 ug/L	0.1235 ppb	10:36:04
2	Be 313.107†	-3656.6	73.3	0.0312 ug/L	0.0312 ppb	10:35:44
2	Cd 226.502†	-161.3	9.3	0.1357 ug/L	0.1357 ppb	10:36:04
2	Co 228.616†	-43.0	3.2	0.0842 ug/L	0.0842 ppb	10:36:04
2	Cr 267.716†	47.3	-24.2	-0.3265 ug/L	-0.3265 ppb	10:36:04
2	Cu 324.752†	5641.1	90.7	0.2980 ug/L	0.2980 ppb	10:35:44
2	Mn 257.610†	423.6	34.6	0.0466 ug/L	0.0466 ppb	10:36:04
2	Mo 202.031†	11.0	2.5	0.2183 ug/L	0.2183 ppb	10:36:04
2	Ni 231.604†	94.5	10.4	0.3309 ug/L	0.3309 ppb	10:36:04

2	P 214.914†	171.8	-15.5	-11.576 ug/L	-11.576 ppb	10:36:04
2	Pb 220.353†	-62.1	-3.8	-0.5818 ug/L	-0.5818 ppb	10:36:04
2	S 181.975 Axial†	28.6	-1.6	-2.8708 ug/L	-2.8708 ppb	10:36:04
2	Sb 206.836†	32.1	8.4	3.5319 ug/L	3.5319 ppb	10:36:04
2	Se 196.026†	-19.4	-2.4	-2.0415 ug/L	-2.0415 ppb	10:36:04
2	Si 251.611†	545.7	57.7	2.1873 ug/L	2.1873 ppb	10:36:04
2	Sn 189.927†	7.4	0.3	0.0664 ug/L	0.0664 ppb	10:36:04
2	Ti 334.940†	-1137.7	-16.8	-0.0238 ug/L	-0.0238 ppb	10:35:44
2	Tl 190.801†	-27.1	1.9	0.7540 ug/L	0.7540 ppb	10:36:04
2	U 409.014†	-2129.2	74.5	2.2602 ug/L	2.2602 ppb	10:35:44
2	V 292.402†	-1364.3	-47.2	-0.3696 ug/L	-0.3696 ppb	10:35:44
2	Zn 213.857†	727.3	157.4	1.9055 ug/L	1.9055 ppb	10:36:04
2	SiO2†	549.9	50.7	4.1340 ug/L	4.1340 ppb	10:36:40
3	Sc Radial	4415.9	4415.9	100 %		10:34:52
3	Y RADIAL	4804.7	4804.7	100.9 %		10:34:52
3	Al 396.153Radial†	-69.6	8.8	8.6302 ug/L	8.6302 ppb	10:35:12
3	Ca 317.933Radial†	26.4	10.6	19.996 ug/L	19.996 ppb	10:35:12
3	Fe 238.204 Radial†	7.2	-1.3	-14.518 ug/L	-14.518 ppb	10:35:12
3	K 766.490 Radial†	2636.1	25.0	4.7603 ug/L	4.7603 ppb	10:34:52
3	Mg 279.077 IEC†	1.4	-0.2	-6.9036 ug/L	-6.9036 ppb	10:35:12
3	Na 589.592 Radial†	-934.4	-54.9	-19.340 ug/L	-19.340 ppb	10:34:52
3	Sr 421.552†	23.2	2.2	0.0179 ug/L	0.0179 ppb	10:34:52
3	Sc 361.383	837815.6	837815.6	102.32 %		10:36:09
3	Y 371.029	707201.2	707201.2	102.25 %		10:36:09
3	Ag 328.068†	256.6	65.6	0.3313 ug/L	0.3313 ppb	10:36:09
3	As 188.979†	-21.0	6.2	3.4192 ug/L	3.4192 ppb	10:36:29
3	B 249.677†	-354.2	191.2	5.3659 ug/L	5.3659 ppb	10:36:29
3	Ba 233.527†	13.5	13.9	0.1289 ug/L	0.1289 ppb	10:36:29
3	Be 313.107†	-3751.0	65.0	0.0280 ug/L	0.0280 ppb	10:36:09
3	Cd 226.502†	-171.4	3.1	0.0472 ug/L	0.0472 ppb	10:36:29
3	Co 228.616†	-49.6	-2.3	-0.0579 ug/L	-0.0579 ppb	10:36:29
3	Cr 267.716†	79.9	6.6	0.0846 ug/L	0.0846 ppb	10:36:29
3	Cu 324.752†	5709.2	27.8	0.0887 ug/L	0.0887 ppb	10:36:09
3	Mn 257.610†	417.8	19.2	0.0241 ug/L	0.0241 ppb	10:36:29
3	Mo 202.031†	15.3	6.4	0.5693 ug/L	0.5693 ppb	10:36:29
3	Ni 231.604†	91.9	5.8	0.1838 ug/L	0.1838 ppb	10:36:29
3	P 214.914†	172.1	-19.0	-14.192 ug/L	-14.192 ppb	10:36:29
3	Pb 220.353†	-53.9	5.6	0.8719 ug/L	0.8719 ppb	10:36:29
3	S 181.975 Axial†	27.2	-3.6	-6.5009 ug/L	-6.5009 ppb	10:36:29
3	Sb 206.836†	31.6	7.2	3.0043 ug/L	3.0043 ppb	10:36:29
3	Se 196.026†	-18.2	-0.8	-0.7030 ug/L	-0.7030 ppb	10:36:29
3	Si 251.611†	521.0	21.0	0.7911 ug/L	0.7911 ppb	10:36:29
3	Sn 189.927†	4.8	-2.5	-0.5546 ug/L	-0.5546 ppb	10:36:29
3	Ti 334.940†	-1064.9	80.4	0.1412 ug/L	0.1412 ppb	10:36:09
3	Tl 190.801†	-27.7	2.1	0.7968 ug/L	0.7968 ppb	10:36:29
3	U 409.014†	-2109.5	142.5	4.3242 ug/L	4.3242 ppb	10:36:09
3	V 292.402†	-1381.1	-32.4	-0.2403 ug/L	-0.2403 ppb	10:36:09
3	Zn 213.857†	738.5	151.7	1.8389 ug/L	1.8389 ppb	10:36:29
3	SiO2†	535.3	23.8	1.9278 ug/L	1.9278 ppb	10:36:45

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	824086.4	100.64 %		1.462				1.45%
Sc Radial	4454.5	101 %		0.8				0.77%
Y 371.029	696141.3	100.65 %		1.392				1.38%
Y RADIAL	4854.0	102.0 %		0.90				0.88%
Ag 328.068†	42.8	0.2181 ug/L		0.20203	0.2181 ppb		0.20203	92.62%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.6	1.5833 ug/L		6.12472	1.5833 ppb		6.12472	386.84%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	7.6	4.1683 ug/L		0.65881	4.1683 ppb		0.65881	15.81%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	196.6	5.5161 ug/L		0.52706	5.5161 ppb		0.52706	9.56%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.9	0.1111 ug/L		0.02632	0.1111 ppb		0.02632	23.70%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	77.6	0.0331 ug/L		0.00631	0.0331 ppb		0.00631	19.05%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	9.4	17.774 ug/L		5.9625	17.774 ppb		5.9625	33.55%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	2.9	0.0427 ug/L	0.09529	0.0427 ppb	0.09529 222.93%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	0.5	0.0133 ug/L	0.07108	0.0133 ppb	0.07108 535.29%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	-4.2	-0.0586 ug/L	0.23221	-0.0586 ppb	0.23221 396.54%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	72.4	0.2373 ug/L	0.12938	0.2373 ppb	0.12938 54.53%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	-0.2	-1.9190 ug/L	14.88554	-1.9190 ppb	14.88554 775.71%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	30.0	5.7099 ug/L	3.29108	5.7099 ppb	3.29108 57.64%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	-0.7	-27.331 ug/L	18.0188	-27.331 ppb	18.0188 65.93%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	34.2	0.0459 ug/L	0.02135	0.0459 ppb	0.02135 46.54%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	4.7	0.4195 ug/L	0.18103	0.4195 ppb	0.18103 43.15%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-35.7	-12.586 ug/L	6.4730	-12.586 ppb	6.4730 51.43%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	3.5	0.1106 ug/L	0.26452	0.1106 ppb	0.26452 239.14%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	-10.2	-7.6690 ug/L	9.12731	-7.6690 ppb	9.12731 119.02%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	5.2	0.7981 ug/L	1.34456	0.7981 ppb	1.34456 168.47%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	-2.4	-4.3480 ug/L	1.90700	-4.3480 ppb	1.90700 43.86%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	12.0	5.0445 ug/L	3.08810	5.0445 ppb	3.08810 61.22%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-0.4	-0.3716 ug/L	1.85785	-0.3716 ppb	1.85785 499.98%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	45.2	1.7101 ug/L	0.79602	1.7101 ppb	0.79602 46.55%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	0.7	0.1688 ug/L	0.77966	0.1688 ppb	0.77966 461.89%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	-10.8	-0.0867 ug/L	0.16540	-0.0867 ppb	0.16540 190.77%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	12.7	0.0254 ug/L	0.10069	0.0254 ppb	0.10069 396.59%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	0.7	0.2689 ug/L	0.87754	0.2689 ppb	0.87754 326.36%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	93.8	2.8466 ug/L	1.28871	2.8466 ppb	1.28871 45.27%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-31.7	-0.2420 ug/L	0.12674	-0.2420 ppb	0.12674 52.37%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	152.0	1.8406 ug/L	0.06408	1.8406 ppb	0.06408 3.48%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	42.4	3.4530 ug/L	1.32338	3.4530 ppb	1.32338 38.33%
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: 3/19/2010 11:38:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4231.5	4231.5	96.3 %		11:40:31
1	Y RADIAL	4688.3	4688.3	98.48 %		11:40:11
1	Al 396.153Radial†	5078.5	5352.8	5233.5 ug/L	5233.5 ppb	11:40:11
1	Ca 317.933Radial†	2683.8	2771.8	5244.9 ug/L	5244.9 ppb	11:40:31
1	Fe 238.204 Radial†	447.0	455.9	5297.3 ug/L	5297.3 ppb	11:40:31
1	K 766.490 Radial†	29712.9	28262.5	5378.2 ug/L	5378.2 ppb	11:40:11
1	Mg 279.077 IEC†	125.8	129.1	5327.4 ug/L	5327.4 ppb	11:40:31
1	Na 589.592 Radial†	27281.4	29210.9	10297 ug/L	10297 ppb	11:40:11
1	Sr 421.552†	63681.7	66122.0	529.98 ug/L	529.98 ppb	11:40:11
1	Sc 361.383	836694.1	836694.1	102.18 %		11:41:28
1	Y 371.029	695496.4	695496.4	100.56 %		11:41:28
1	Ag 328.068†	99816.9	97499.9	509.39 ug/L	509.39 ppb	11:41:34
1	As 188.979†	930.2	937.1	518.83 ug/L	518.83 ppb	11:41:54
1	B 249.677†	17942.6	18096.7	505.35 ug/L	505.35 ppb	11:41:34
1	Ba 233.527†	55244.6	54065.5	507.67 ug/L	507.67 ppb	11:41:34
1	Be 313.107†	1219044.5	1196740.3	510.71 ug/L	510.71 ppb	11:41:28
1	Cd 226.502†	35788.8	35195.1	510.55 ug/L	510.55 ppb	11:41:34
1	Co 228.616†	20347.1	19958.7	515.95 ug/L	515.95 ppb	11:41:34
1	Cr 267.716†	38697.3	37799.4	507.96 ug/L	507.96 ppb	11:41:34
1	Cu 324.752†	160727.0	151742.3	500.97 ug/L	500.97 ppb	11:41:34
1	Mn 257.610†	387247.8	378588.3	498.08 ug/L	498.08 ppb	11:41:34
1	Mo 202.031†	5787.3	5655.2	503.17 ug/L	503.17 ppb	11:41:54
1	Ni 231.604†	16666.6	16226.6	515.00 ug/L	515.00 ppb	11:41:34
1	P 214.914†	3658.7	3393.2	2429.9 ug/L	2429.9 ppb	11:41:54
1	Pb 220.353†	3286.4	3274.5	504.53 ug/L	504.53 ppb	11:41:54
1	S 181.975 Axial†	609.8	566.5	1013.3 ug/L	1013.3 ppb	11:41:54
1	Sb 206.836†	1273.0	1222.2	529.40 ug/L	529.40 ppb	11:41:54
1	Se 196.026†	607.6	611.6	527.92 ug/L	527.92 ppb	11:41:54
1	Si 251.611†	69000.0	67038.2	2538.8 ug/L	2538.8 ppb	11:41:34
1	Sn 189.927†	2266.5	2210.9	502.34 ug/L	502.34 ppb	11:41:54
1	Ti 334.940†	290738.2	285650.1	496.62 ug/L	496.62 ppb	11:41:34
1	Tl 190.801†	1309.7	1310.8	510.40 ug/L	510.40 ppb	11:41:54
1	U 409.014†	15042.5	16925.4	511.75 ug/L	511.75 ppb	11:41:34
1	V 292.402†	63168.1	63136.4	510.86 ug/L	510.86 ppb	11:41:34
1	Zn 213.857†	43730.0	42225.9	506.89 ug/L	506.89 ppb	11:41:34
1	SiO2†	68926.3	66954.9	5450.6 ug/L	5450.6 ppb	11:43:01
2	Sc Radial	4265.7	4265.7	97.1 %		11:40:56
2	Y RADIAL	4839.5	4839.5	101.7 %		11:40:36
2	Al 396.153Radial†	5150.2	5384.5	5265.0 ug/L	5265.0 ppb	11:40:36
2	Ca 317.933Radial†	2698.8	2764.9	5231.8 ug/L	5231.8 ppb	11:40:56
2	Fe 238.204 Radial†	449.8	455.0	5286.7 ug/L	5286.7 ppb	11:40:56
2	K 766.490 Radial†	29893.9	28201.7	5366.7 ug/L	5366.7 ppb	11:40:36
2	Mg 279.077 IEC†	131.2	133.7	5513.6 ug/L	5513.6 ppb	11:40:56
2	Na 589.592 Radial†	27374.6	29079.9	10251 ug/L	10251 ppb	11:40:36
2	Sr 421.552†	64071.5	65993.7	528.95 ug/L	528.95 ppb	11:40:36
2	Sc 361.383	848819.8	848819.8	103.66 %		11:41:59
2	Y 371.029	706333.9	706333.9	102.12 %		11:41:59
2	Ag 328.068†	99812.0	96099.8	502.10 ug/L	502.10 ppb	11:42:04
2	As 188.979†	913.1	907.6	502.60 ug/L	502.60 ppb	11:42:25
2	B 249.677†	17949.1	17852.2	498.51 ug/L	498.51 ppb	11:42:04
2	Ba 233.527†	55297.9	53344.6	500.90 ug/L	500.90 ppb	11:42:04
2	Be 313.107†	1237185.8	1197198.0	510.89 ug/L	510.89 ppb	11:41:59
2	Cd 226.502†	35790.9	34696.8	503.31 ug/L	503.31 ppb	11:42:04
2	Co 228.616†	20379.5	19705.5	509.40 ug/L	509.40 ppb	11:42:04
2	Cr 267.716†	38754.5	37313.5	501.44 ug/L	501.44 ppb	11:42:04
2	Cu 324.752†	160790.4	149556.5	493.76 ug/L	493.76 ppb	11:42:04
2	Mn 257.610†	386901.3	372840.2	490.51 ug/L	490.51 ppb	11:42:04
2	Mo 202.031†	5780.9	5568.1	495.43 ug/L	495.43 ppb	11:42:25
2	Ni 231.604†	16669.3	15996.2	507.69 ug/L	507.69 ppb	11:42:04

2	P 214.914†	3643.5	3327.5	2382.3 ug/L	2382.3 ppb	11:42:25
2	Pb 220.353†	3274.7	3217.3	495.73 ug/L	495.73 ppb	11:42:25
2	S 181.975 Axial†	602.1	550.6	984.78 ug/L	984.78 ppb	11:42:25
2	Sb 206.836†	1250.5	1182.6	512.53 ug/L	512.53 ppb	11:42:25
2	Se 196.026†	602.0	597.7	516.28 ug/L	516.28 ppb	11:42:25
2	Si 251.611†	69005.4	66078.7	2502.5 ug/L	2502.5 ppb	11:42:04
2	Sn 189.927†	2253.2	2166.4	492.23 ug/L	492.23 ppb	11:42:25
2	Ti 334.940†	291171.1	282003.1	490.27 ug/L	490.27 ppb	11:42:04
2	Tl 190.801†	1306.3	1289.2	502.00 ug/L	502.00 ppb	11:42:25
2	U 409.014†	15074.6	16746.1	506.33 ug/L	506.33 ppb	11:42:04
2	V 292.402†	63254.1	62336.3	504.37 ug/L	504.37 ppb	11:42:04
2	Zn 213.857†	43730.3	41614.9	499.54 ug/L	499.54 ppb	11:42:04
2	SiO2†	68517.6	65597.0	5340.0 ug/L	5340.0 ppb	11:43:06
3	Sc Radial	4269.7	4269.7	97.1 %		11:41:22
3	Y RADIAL	4809.0	4809.0	101.0 %		11:41:01
3	Al 396.153Radial†	5136.6	5365.6	5246.2 ug/L	5246.2 ppb	11:41:01
3	Ca 317.933Radial†	2697.3	2760.8	5224.0 ug/L	5224.0 ppb	11:41:22
3	Fe 238.204 Radial†	445.9	450.6	5236.1 ug/L	5236.1 ppb	11:41:22
3	K 766.490 Radial†	29946.0	28226.7	5371.5 ug/L	5371.5 ppb	11:41:01
3	Mg 279.077 IEC†	122.8	124.9	5152.6 ug/L	5152.6 ppb	11:41:22
3	Na 589.592 Radial†	27228.5	28903.2	10189 ug/L	10189 ppb	11:41:01
3	Sr 421.552†	63894.3	65749.9	527.00 ug/L	527.00 ppb	11:41:01
3	Sc 361.383	838817.3	838817.3	102.44 %		11:42:30
3	Y 371.029	698716.9	698716.9	101.02 %		11:42:30
3	Ag 328.068†	99235.4	96685.1	505.14 ug/L	505.14 ppb	11:42:35
3	As 188.979†	918.9	923.8	511.49 ug/L	511.49 ppb	11:42:55
3	B 249.677†	17901.0	18011.7	502.99 ug/L	502.99 ppb	11:42:35
3	Ba 233.527†	55002.2	53691.9	504.16 ug/L	504.16 ppb	11:42:35
3	Be 313.107†	1222413.8	1197009.5	510.81 ug/L	510.81 ppb	11:42:30
3	Cd 226.502†	35634.8	34956.1	507.08 ug/L	507.08 ppb	11:42:35
3	Co 228.616†	20235.0	19798.9	511.82 ug/L	511.82 ppb	11:42:35
3	Cr 267.716†	38586.2	37595.0	505.22 ug/L	505.22 ppb	11:42:35
3	Cu 324.752†	160008.7	150643.0	497.34 ug/L	497.34 ppb	11:42:35
3	Mn 257.610†	385207.0	375636.8	494.20 ug/L	494.20 ppb	11:42:35
3	Mo 202.031†	5767.3	5621.3	500.15 ug/L	500.15 ppb	11:42:55
3	Ni 231.604†	16538.7	16060.4	509.73 ug/L	509.73 ppb	11:42:35
3	P 214.914†	3658.9	3384.4	2424.1 ug/L	2424.1 ppb	11:42:55
3	Pb 220.353†	3276.9	3257.1	501.86 ug/L	501.86 ppb	11:42:55
3	S 181.975 Axial†	611.1	566.4	1013.0 ug/L	1013.0 ppb	11:42:55
3	Sb 206.836†	1263.9	1210.1	524.31 ug/L	524.31 ppb	11:42:55
3	Se 196.026†	606.1	608.6	525.28 ug/L	525.28 ppb	11:42:55
3	Si 251.611†	68566.9	66444.5	2516.3 ug/L	2516.3 ppb	11:42:35
3	Sn 189.927†	2275.7	2214.3	503.11 ug/L	503.11 ppb	11:42:55
3	Ti 334.940†	289344.8	283569.7	493.02 ug/L	493.02 ppb	11:42:35
3	Tl 190.801†	1294.0	1292.3	503.22 ug/L	503.22 ppb	11:42:55
3	U 409.014†	14750.9	16603.5	502.00 ug/L	502.00 ppb	11:42:35
3	V 292.402†	62942.9	62760.1	507.80 ug/L	507.80 ppb	11:42:35
3	Zn 213.857†	43510.6	41903.4	503.03 ug/L	503.03 ppb	11:42:35
3	SiO2†	67364.1	65259.2	5312.3 ug/L	5312.3 ppb	11:43:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	841443.7	102.76 %	0.791			0.77%
Sc Radial	4255.6	96.8 %	0.48			0.49%
Y 371.029	700182.4	101.23 %	0.805			0.79%
Y RADIAL	4778.9	100.4 %	1.68			1.67%
Ag 328.068†	96761.6	505.54 ug/L	3.664	505.54 ppb	3.664	0.72%
QC value within limits for Ag 328.068 Recovery = 101.11%						
Al 396.153Radial†	5367.6	5248.3 ug/L	15.85	5248.3 ppb	15.85	0.30%
QC value within limits for Al 396.153Radial Recovery = 104.97%						
As 188.979†	922.8	510.97 ug/L	8.127	510.97 ppb	8.127	1.59%
QC value within limits for As 188.979 Recovery = 102.19%						
B 249.677†	17986.9	502.29 ug/L	3.474	502.29 ppb	3.474	0.69%
QC value within limits for B 249.677 Recovery = 100.46%						
Ba 233.527†	53700.7	504.25 ug/L	3.384	504.25 ppb	3.384	0.67%
QC value within limits for Ba 233.527 Recovery = 100.85%						
Be 313.107†	1196982.6	510.80 ug/L	0.091	510.80 ppb	0.091	0.02%
QC value within limits for Be 313.107 Recovery = 102.16%						
Ca 317.933Radial†	2765.8	5233.6 ug/L	10.57	5233.6 ppb	10.57	0.20%

QC value within limits for Ca 317.933Radial Recovery = 104.67%							
Cd 226.502†	34949.3	506.98 ug/L	3.619	506.98 ppb	3.619	0.71%	
QC value within limits for Cd 226.502 Recovery = 101.40%							
Co 228.616†	19821.0	512.39 ug/L	3.312	512.39 ppb	3.312	0.65%	
QC value within limits for Co 228.616 Recovery = 102.48%							
Cr 267.716†	37569.3	504.87 ug/L	3.275	504.87 ppb	3.275	0.65%	
QC value within limits for Cr 267.716 Recovery = 100.97%							
Cu 324.752†	150647.3	497.36 ug/L	3.607	497.36 ppb	3.607	0.73%	
QC value within limits for Cu 324.752 Recovery = 99.47%							
Fe 238.204 Radial†	453.8	5273.4 ug/L	32.71	5273.4 ppb	32.71	0.62%	
QC value within limits for Fe 238.204 Radial Recovery = 105.47%							
K 766.490 Radial†	28230.3	5372.1 ug/L	5.80	5372.1 ppb	5.80	0.11%	
QC value within limits for K 766.490 Radial Recovery = 107.44%							
Mg 279.077 IEC†	129.2	5331.2 ug/L	180.50	5331.2 ppb	180.50	3.39%	
QC value within limits for Mg 279.077 IEC Recovery = 106.62%							
Mn 257.610†	375688.4	494.26 ug/L	3.784	494.26 ppb	3.784	0.77%	
QC value within limits for Mn 257.610 Recovery = 98.85%							
Mo 202.031†	5614.9	499.58 ug/L	3.902	499.58 ppb	3.902	0.78%	
QC value within limits for Mo 202.031 Recovery = 99.92%							
Na 589.592 Radial†	29064.7	10246 ug/L	54.4	10246 ppb	54.4	0.53%	
QC value within limits for Na 589.592 Radial Recovery = 102.46%							
Ni 231.604†	16094.4	510.81 ug/L	3.773	510.81 ppb	3.773	0.74%	
QC value within limits for Ni 231.604 Recovery = 102.16%							
P 214.914†	3368.4	2412.1 ug/L	25.99	2412.1 ppb	25.99	1.08%	
QC value within limits for P 214.914 Recovery = 96.48%							
Pb 220.353†	3249.7	500.70 ug/L	4.513	500.70 ppb	4.513	0.90%	
QC value within limits for Pb 220.353 Recovery = 100.14%							
S 181.975 Axial†	561.2	1003.7 ug/L	16.36	1003.7 ppb	16.36	1.63%	
QC value within limits for S 181.975 Axial Recovery = 100.37%							
Sb 206.836†	1205.0	522.08 ug/L	8.656	522.08 ppb	8.656	1.66%	
QC value within limits for Sb 206.836 Recovery = 104.42%							
Se 196.026†	606.0	523.16 ug/L	6.101	523.16 ppb	6.101	1.17%	
QC value within limits for Se 196.026 Recovery = 104.63%							
Si 251.611†	66520.5	2519.2 ug/L	18.34	2519.2 ppb	18.34	0.73%	
QC value within limits for Si 251.611 Recovery = 100.77%							
Sn 189.927†	2197.2	499.23 ug/L	6.070	499.23 ppb	6.070	1.22%	
QC value within limits for Sn 189.927 Recovery = 99.85%							
Sr 421.552†	65955.2	528.64 ug/L	1.515	528.64 ppb	1.515	0.29%	
QC value within limits for Sr 421.552 Recovery = 105.73%							
Ti 334.940†	283741.0	493.30 ug/L	3.187	493.30 ppb	3.187	0.65%	
QC value within limits for Ti 334.940 Recovery = 98.66%							
Tl 190.801†	1297.4	505.20 ug/L	4.539	505.20 ppb	4.539	0.90%	
QC value within limits for Tl 190.801 Recovery = 101.04%							
U 409.014†	16758.3	506.69 ug/L	4.887	506.69 ppb	4.887	0.96%	
QC value within limits for U 409.014 Recovery = 101.34%							
V 292.402†	62744.3	507.68 ug/L	3.249	507.68 ppb	3.249	0.64%	
QC value within limits for V 292.402 Recovery = 101.54%							
Zn 213.857†	41914.8	503.15 ug/L	3.675	503.15 ppb	3.675	0.73%	
QC value within limits for Zn 213.857 Recovery = 100.63%							
SiO2†	65937.0	5367.6 ug/L	73.18	5367.6 ppb	73.18	1.36%	
QC value within limits for SiO2 Recovery = 100.38%							
All analyte(s) passed QC.							

Sequence No.: 10

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 11:45:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4343.7	4343.7	98.8 %		11:47:14
1	Y RADIAL	4752.6	4752.6	99.83 %		11:47:14
1	Al 396.153Radial†	-72.3	4.9	4.8133 ug/L	4.8133 ppb	11:47:34
1	Ca 317.933Radial†	26.1	10.7	20.319 ug/L	20.319 ppb	11:47:34
1	Fe 238.204 Radial†	7.8	-0.6	-6.4728 ug/L	-6.4728 ppb	11:47:34
1	K 766.490 Radial†	2857.2	292.2	55.678 ug/L	55.678 ppb	11:47:14
1	Mg 279.077 IEC†	3.4	1.9	79.741 ug/L	79.741 ppb	11:47:34
1	Na 589.592 Radial†	-927.8	-63.7	-22.449 ug/L	-22.449 ppb	11:47:14
1	Sr 421.552†	28.1	7.6	0.0605 ug/L	0.0605 ppb	11:47:14
1	Sc 361.383	828290.0	828290.0	101.16 %		11:48:31
1	Y 371.029	698408.7	698408.7	100.98 %		11:48:31
1	Ag 328.068†	104.7	-81.6	-0.4271 ug/L	-0.4271 ppb	11:48:31
1	As 188.979†	-31.6	-4.5	-2.4585 ug/L	-2.4585 ppb	11:48:51
1	B 249.677†	-193.4	346.2	9.7120 ug/L	9.7120 ppb	11:48:51
1	Ba 233.527†	14.1	14.7	0.1368 ug/L	0.1368 ppb	11:48:51
1	Be 313.107†	-3650.4	122.4	0.0523 ug/L	0.0523 ppb	11:48:31
1	Cd 226.502†	-158.0	14.5	0.2110 ug/L	0.2110 ppb	11:48:51
1	Co 228.616†	-45.0	1.8	0.0456 ug/L	0.0456 ppb	11:48:51
1	Cr 267.716†	83.6	11.2	0.1488 ug/L	0.1488 ppb	11:48:51
1	Cu 324.752†	5611.4	-4.7	-0.0160 ug/L	-0.0160 ppb	11:48:31
1	Mn 257.610†	476.0	81.5	0.1032 ug/L	0.1032 ppb	11:48:51
1	Mo 202.031†	9.0	0.3	0.0289 ug/L	0.0289 ppb	11:48:51
1	Ni 231.604†	93.0	7.8	0.2484 ug/L	0.2484 ppb	11:48:51
1	P 214.914†	189.1	-0.4	-0.2430 ug/L	-0.2430 ppb	11:48:51
1	Pb 220.353†	-55.8	3.1	0.4814 ug/L	0.4814 ppb	11:48:51
1	S 181.975 Axial†	32.8	2.2	3.9603 ug/L	3.9603 ppb	11:48:51
1	Sb 206.836†	25.8	1.8	0.7907 ug/L	0.7907 ppb	11:48:51
1	Se 196.026†	-13.3	3.9	3.1912 ug/L	3.1912 ppb	11:48:51
1	Si 251.611†	646.0	150.5	5.7129 ug/L	5.7129 ppb	11:48:51
1	Sn 189.927†	15.0	7.7	1.7470 ug/L	1.7470 ppb	11:48:51
1	Ti 334.940†	-1081.0	52.5	0.0874 ug/L	0.0874 ppb	11:48:31
1	Tl 190.801†	-17.1	12.2	4.7325 ug/L	4.7325 ppb	11:48:51
1	U 409.014†	-2223.2	6.4	0.1952 ug/L	0.1952 ppb	11:48:31
1	V 292.402†	-1356.9	-23.9	-0.1879 ug/L	-0.1879 ppb	11:48:31
1	Zn 213.857†	920.4	339.8	4.1165 ug/L	4.1165 ppb	11:48:51
1	SiO2†	681.4	174.2	14.218 ug/L	14.218 ppb	11:50:02
2	Sc Radial	4441.9	4441.9	101 %		11:47:39
2	Y RADIAL	4833.4	4833.4	101.5 %		11:47:39
2	Al 396.153Radial†	-89.0	-10.0	-9.8127 ug/L	-9.8127 ppb	11:47:59
2	Ca 317.933Radial†	25.8	9.9	18.681 ug/L	18.681 ppb	11:47:59
2	Fe 238.204 Radial†	8.3	-0.3	-3.2666 ug/L	-3.2666 ppb	11:47:59
2	K 766.490 Radial†	2698.1	70.9	13.499 ug/L	13.499 ppb	11:47:39
2	Mg 279.077 IEC†	4.0	2.4	99.388 ug/L	99.388 ppb	11:47:59
2	Na 589.592 Radial†	-871.7	12.7	4.4605 ug/L	4.4605 ppb	11:47:39
2	Sr 421.552†	31.8	10.7	0.0855 ug/L	0.0855 ppb	11:47:39
2	Sc 361.383	822220.7	822220.7	100.41 %		11:48:56
2	Y 371.029	694053.4	694053.4	100.35 %		11:48:56
2	Ag 328.068†	97.9	-87.6	-0.4532 ug/L	-0.4532 ppb	11:48:56
2	As 188.979†	-18.2	8.7	4.7808 ug/L	4.7808 ppb	11:49:16
2	B 249.677†	-207.3	330.9	9.2829 ug/L	9.2829 ppb	11:49:16
2	Ba 233.527†	8.6	9.2	0.0863 ug/L	0.0863 ppb	11:49:16
2	Be 313.107†	-3738.2	8.3	0.0032 ug/L	0.0032 ppb	11:48:56
2	Cd 226.502†	-172.2	-0.9	-0.0129 ug/L	-0.0129 ppb	11:49:16
2	Co 228.616†	-48.8	-2.4	-0.0611 ug/L	-0.0611 ppb	11:49:16
2	Cr 267.716†	62.0	-9.8	-0.1300 ug/L	-0.1300 ppb	11:49:16
2	Cu 324.752†	5614.1	38.9	0.1304 ug/L	0.1304 ppb	11:48:56
2	Mn 257.610†	501.3	110.2	0.1405 ug/L	0.1405 ppb	11:49:16
2	Mo 202.031†	10.8	2.2	0.1973 ug/L	0.1973 ppb	11:49:16
2	Ni 231.604†	90.3	5.9	0.1874 ug/L	0.1874 ppb	11:49:16

2	P 214.914†	180.7	-7.3	-5.4650 ug/L	-5.4650 ppb	11:49:16
2	Pb 220.353†	-39.7	18.7	2.8759 ug/L	2.8759 ppb	11:49:16
2	S 181.975 Axial†	29.8	-0.5	-0.8807 ug/L	-0.8807 ppb	11:49:16
2	Sb 206.836†	23.8	0.1	0.0562 ug/L	0.0562 ppb	11:49:16
2	Se 196.026†	-17.5	-0.5	-0.3920 ug/L	-0.3920 ppb	11:49:16
2	Si 251.611†	640.6	149.7	5.6822 ug/L	5.6822 ppb	11:49:16
2	Sn 189.927†	13.4	6.2	1.4045 ug/L	1.4045 ppb	11:49:16
2	Ti 334.940†	-1200.9	-74.7	-0.1338 ug/L	-0.1338 ppb	11:48:56
2	Tl 190.801†	-29.2	0.0	0.0028 ug/L	0.0028 ppb	11:49:16
2	U 409.014†	-2336.4	-122.6	-3.7174 ug/L	-3.7174 ppb	11:48:56
2	V 292.402†	-1326.4	-3.5	-0.0295 ug/L	-0.0295 ppb	11:48:56
2	Zn 213.857†	929.9	356.0	4.3122 ug/L	4.3122 ppb	11:49:16
2	SiO2†	659.8	157.7	12.866 ug/L	12.866 ppb	11:50:22
3	Sc Radial	4304.4	4304.4	97.9 %		11:48:04
3	Y RADIAL	4703.3	4703.3	98.80 %		11:48:04
3	Al 396.153Radial†	-76.9	-0.5	-0.4680 ug/L	-0.4680 ppb	11:48:24
3	Ca 317.933Radial†	24.4	9.2	17.441 ug/L	17.441 ppb	11:48:24
3	Fe 238.204 Radial†	8.1	-0.2	-2.3264 ug/L	-2.3264 ppb	11:48:24
3	K 766.490 Radial†	2757.5	216.8	41.316 ug/L	41.316 ppb	11:48:04
3	Mg 279.077 IEC†	-1.8	-3.4	-138.98 ug/L	-138.98 ppb	11:48:24
3	Na 589.592 Radial†	-956.3	-101.3	-35.712 ug/L	-35.712 ppb	11:48:04
3	Sr 421.552†	17.2	-3.2	-0.0261 ug/L	-0.0261 ppb	11:48:04
3	Sc 361.383	833215.2	833215.2	101.76 %		11:49:21
3	Y 371.029	704277.1	704277.1	101.83 %		11:49:21
3	Ag 328.068†	241.3	52.0	0.2686 ug/L	0.2686 ppb	11:49:21
3	As 188.979†	-21.5	5.7	3.1078 ug/L	3.1078 ppb	11:49:41
3	B 249.677†	-197.2	343.6	9.6384 ug/L	9.6384 ppb	11:49:41
3	Ba 233.527†	18.2	18.6	0.1741 ug/L	0.1741 ppb	11:49:41
3	Be 313.107†	-3699.6	95.4	0.0407 ug/L	0.0407 ppb	11:49:21
3	Cd 226.502†	-179.9	-6.1	-0.0885 ug/L	-0.0885 ppb	11:49:41
3	Co 228.616†	-44.9	2.1	0.0532 ug/L	0.0532 ppb	11:49:41
3	Cr 267.716†	100.4	27.1	0.3634 ug/L	0.3634 ppb	11:49:41
3	Cu 324.752†	5718.7	67.9	0.2234 ug/L	0.2234 ppb	11:49:21
3	Mn 257.610†	479.2	81.9	0.1131 ug/L	0.1131 ppb	11:49:41
3	Mo 202.031†	10.6	1.9	0.1659 ug/L	0.1659 ppb	11:49:41
3	Ni 231.604†	99.0	13.2	0.4195 ug/L	0.4195 ppb	11:49:41
3	P 214.914†	193.1	2.5	1.8356 ug/L	1.8356 ppb	11:49:41
3	Pb 220.353†	-58.2	1.1	0.1647 ug/L	0.1647 ppb	11:49:41
3	S 181.975 Axial†	28.0	-2.6	-4.7374 ug/L	-4.7374 ppb	11:49:41
3	Sb 206.836†	29.2	5.0	2.1114 ug/L	2.1114 ppb	11:49:41
3	Se 196.026†	-18.5	-1.2	-1.0177 ug/L	-1.0177 ppb	11:49:41
3	Si 251.611†	635.3	136.2	5.1683 ug/L	5.1683 ppb	11:49:41
3	Sn 189.927†	11.5	4.1	0.9329 ug/L	0.9329 ppb	11:49:41
3	Ti 334.940†	-1105.7	34.6	0.0732 ug/L	0.0732 ppb	11:49:21
3	Tl 190.801†	-32.3	-2.6	-1.0229 ug/L	-1.0229 ppb	11:49:41
3	U 409.014†	-2206.7	35.6	1.0801 ug/L	1.0801 ppb	11:49:21
3	V 292.402†	-1323.5	16.7	0.1356 ug/L	0.1356 ppb	11:49:21
3	Zn 213.857†	913.1	327.3	3.9630 ug/L	3.9630 ppb	11:49:41
3	SiO2†	667.1	156.3	12.748 ug/L	12.748 ppb	11:50:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	827908.6	101.11 %		0.673			0.67%
Sc Radial	4363.4	99.3 %		1.61			1.62%
Y 371.029	698913.0	101.05 %		0.742			0.73%
Y RADIAL	4763.1	100.1 %		1.38			1.38%
Ag 328.068†	-39.1	-0.2039 ug/L		0.40937	-0.2039 ppb	0.40937	200.79%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-1.8	-1.8225 ug/L		7.40648	-1.8225 ppb	7.40648	406.40%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	3.3	1.8100 ug/L		3.79014	1.8100 ppb	3.79014	209.40%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	340.2	9.5444 ug/L		0.22946	9.5444 ppb	0.22946	2.40%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	14.2	0.1324 ug/L		0.04406	0.1324 ppb	0.04406	33.28%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	75.3	0.0321 ug/L		0.02566	0.0321 ppb	0.02566	79.97%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	9.9	18.814 ug/L		1.4439	18.814 ppb	1.4439	7.67%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd	226.502†	2.5	0.0365 ug/L	0.15575	0.0365 ppb	0.15575 426.34%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co	228.616†	0.5	0.0126 ug/L	0.06393	0.0126 ppb	0.06393 508.85%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr	267.716†	9.5	0.1274 ug/L	0.24741	0.1274 ppb	0.24741 194.22%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu	324.752†	34.0	0.1126 ug/L	0.12073	0.1126 ppb	0.12073 107.22%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe	238.204 Radial†	-0.3	-4.0220 ug/L	2.17392	-4.0220 ppb	2.17392 54.05%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K	766.490 Radial†	193.3	36.831 ug/L	21.4438	36.831 ppb	21.4438 58.22%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg	279.077 IEC†	0.3	13.382 ug/L	132.3172	13.382 ppb	132.3172 988.75%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn	257.610†	91.2	0.1189 ug/L	0.01931	0.1189 ppb	0.01931 16.23%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo	202.031†	1.5	0.1307 ug/L	0.08959	0.1307 ppb	0.08959 68.54%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na	589.592 Radial†	-50.8	-17.900 ug/L	20.4690	-17.900 ppb	20.4690 114.35%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni	231.604†	9.0	0.2851 ug/L	0.12032	0.2851 ppb	0.12032 42.20%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P	214.914†	-1.7	-1.2908 ug/L	3.76140	-1.2908 ppb	3.76140 291.40%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb	220.353†	7.6	1.1740 ug/L	1.48236	1.1740 ppb	1.48236 126.27%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S	181.975 Axial†	-0.3	-0.5526 ug/L	4.35816	-0.5526 ppb	4.35816 788.67%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb	206.836†	2.3	0.9861 ug/L	1.04143	0.9861 ppb	1.04143 105.61%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se	196.026†	0.7	0.5938 ug/L	2.27102	0.5938 ppb	2.27102 382.45%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si	251.611†	145.5	5.5211 ug/L	0.30596	5.5211 ppb	0.30596 5.54%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn	189.927†	6.0	1.3615 ug/L	0.40877	1.3615 ppb	0.40877 30.02%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr	421.552†	5.0	0.0400 ug/L	0.05856	0.0400 ppb	0.05856 146.55%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti	334.940†	4.1	0.0089 ug/L	0.12382	0.0089 ppb	0.12382 >999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl	190.801†	3.2	1.2375 ug/L	3.06995	1.2375 ppb	3.06995 248.08%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U	409.014†	-26.8	-0.8140 ug/L	2.55300	-0.8140 ppb	2.55300 313.63%
QC value within limits for U 409.014 Recovery = Not calculated						
V	292.402†	-3.5	-0.0273 ug/L	0.16176	-0.0273 ppb	0.16176 593.25%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn	213.857†	341.0	4.1306 ug/L	0.17503	4.1306 ppb	0.17503 4.24%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	162.7	13.278 ug/L	0.8169	13.278 ppb	0.8169	6.15%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 19

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 12:49:40

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4261.9	4261.9	97.0 %		12:51:52
1	Y RADIAL	4786.4	4786.4	100.5 %		12:51:32
1	Al 396.153Radial†	5093.9	5331.2	5212.3 ug/L	5212.3 ppb	12:51:32
1	Ca 317.933Radial†	2683.5	2751.7	5206.8 ug/L	5206.8 ppb	12:51:52
1	Fe 238.204 Radial†	446.8	452.3	5256.6 ug/L	5256.6 ppb	12:51:52
1	K 766.490 Radial†	29720.1	28050.1	5337.7 ug/L	5337.7 ppb	12:51:32
1	Mg 279.077 IEC†	127.0	129.4	5338.2 ug/L	5338.2 ppb	12:51:52
1	Na 589.592 Radial†	28222.6	29979.7	10568 ug/L	10568 ppb	12:51:32
1	Sr 421.552†	64501.3	66496.3	532.98 ug/L	532.98 ppb	12:51:32
1	Sc 361.383	828749.8	828749.8	101.21 %		12:52:49
1	Y 371.029	689872.4	689872.4	99.743 %		12:52:49
1	Ag 328.068†	99303.8	97929.4	511.61 ug/L	511.61 ppb	12:52:54
1	As 188.979†	907.6	923.5	511.35 ug/L	511.35 ppb	12:53:14
1	B 249.677†	17583.9	17910.7	500.15 ug/L	500.15 ppb	12:52:54
1	Ba 233.527†	54830.6	54174.7	508.70 ug/L	508.70 ppb	12:52:54
1	Be 313.107†	1202781.6	1192108.2	508.74 ug/L	508.74 ppb	12:52:49
1	Cd 226.502†	35321.1	35068.8	508.72 ug/L	508.72 ppb	12:52:54
1	Co 228.616†	20083.2	19888.9	514.15 ug/L	514.15 ppb	12:52:54
1	Cr 267.716†	38399.6	37868.2	508.88 ug/L	508.88 ppb	12:52:54
1	Cu 324.752†	159658.3	152194.2	502.46 ug/L	502.46 ppb	12:52:54
1	Mn 257.610†	384664.4	379668.6	499.50 ug/L	499.50 ppb	12:52:54
1	Mo 202.031†	5739.0	5661.7	503.75 ug/L	503.75 ppb	12:53:14
1	Ni 231.604†	16468.1	16186.9	513.74 ug/L	513.74 ppb	12:52:54
1	P 214.914†	3605.0	3374.5	2415.7 ug/L	2415.7 ppb	12:53:14
1	Pb 220.353†	3261.4	3280.6	505.46 ug/L	505.46 ppb	12:53:14
1	S 181.975 Axial†	600.7	563.3	1007.5 ug/L	1007.5 ppb	12:53:14
1	Sb 206.836†	1234.1	1195.7	518.37 ug/L	518.37 ppb	12:53:14
1	Se 196.026†	590.6	600.5	518.57 ug/L	518.57 ppb	12:53:14
1	Si 251.611†	68245.0	66939.6	2535.0 ug/L	2535.0 ppb	12:52:54
1	Sn 189.927†	2253.1	2219.0	504.17 ug/L	504.17 ppb	12:53:14
1	Ti 334.940†	288608.1	286273.0	497.70 ug/L	497.70 ppb	12:52:54
1	Tl 190.801†	1286.6	1300.3	506.37 ug/L	506.37 ppb	12:53:14
1	U 409.014†	14990.3	17015.0	514.47 ug/L	514.47 ppb	12:52:54
1	V 292.402†	62830.4	63395.4	512.95 ug/L	512.95 ppb	12:52:54
1	Zn 213.857†	43245.4	42157.4	506.07 ug/L	506.07 ppb	12:52:54
1	SiO2†	68507.2	67187.4	5469.6 ug/L	5469.6 ppb	12:54:21
2	Sc Radial	4304.5	4304.5	97.9 %		12:52:17
2	Y RADIAL	4714.5	4714.5	99.03 %		12:51:57
2	Al 396.153Radial†	4972.9	5155.6	5039.8 ug/L	5039.8 ppb	12:51:57
2	Ca 317.933Radial†	2695.0	2736.0	5177.2 ug/L	5177.2 ppb	12:52:17
2	Fe 238.204 Radial†	451.1	452.1	5254.2 ug/L	5254.2 ppb	12:52:17
2	K 766.490 Radial†	29193.9	27209.2	5177.6 ug/L	5177.6 ppb	12:51:57
2	Mg 279.077 IEC†	128.3	129.4	5339.6 ug/L	5339.6 ppb	12:52:17
2	Na 589.592 Radial†	27372.0	28822.9	10161 ug/L	10161 ppb	12:51:57
2	Sr 421.552†	62671.0	63968.4	512.72 ug/L	512.72 ppb	12:51:57
2	Sc 361.383	832371.4	832371.4	101.65 %		12:53:20
2	Y 371.029	695164.8	695164.8	100.51 %		12:53:20
2	Ag 328.068†	99890.0	98079.2	512.40 ug/L	512.40 ppb	12:53:25
2	As 188.979†	910.5	922.5	510.80 ug/L	510.80 ppb	12:53:45
2	B 249.677†	17865.0	18111.6	505.77 ug/L	505.77 ppb	12:53:25
2	Ba 233.527†	55189.0	54291.6	509.80 ug/L	509.80 ppb	12:53:25
2	Be 313.107†	1218747.3	1202643.5	513.23 ug/L	513.23 ppb	12:53:20
2	Cd 226.502†	35688.8	35278.6	511.76 ug/L	511.76 ppb	12:53:25
2	Co 228.616†	20324.8	20040.3	518.06 ug/L	518.06 ppb	12:53:25
2	Cr 267.716†	38700.7	37999.3	510.64 ug/L	510.64 ppb	12:53:25
2	Cu 324.752†	160866.7	152696.7	504.12 ug/L	504.12 ppb	12:53:25
2	Mn 257.610†	387332.0	380639.2	500.77 ug/L	500.77 ppb	12:53:25
2	Mo 202.031†	5751.8	5649.6	502.67 ug/L	502.67 ppb	12:53:45
2	Ni 231.604†	16569.9	16216.2	514.67 ug/L	514.67 ppb	12:53:25

2	P 214.914†	3628.3	3381.9	2420.9 ug/L	2420.9 ppb	12:53:45
2	Pb 220.353†	3281.8	3286.7	506.36 ug/L	506.36 ppb	12:53:45
2	S 181.975 Axial†	602.5	562.5	1006.1 ug/L	1006.1 ppb	12:53:45
2	Sb 206.836†	1262.4	1218.2	527.79 ug/L	527.79 ppb	12:53:45
2	Se 196.026†	608.2	615.3	530.79 ug/L	530.79 ppb	12:53:45
2	Si 251.611†	68655.1	67049.6	2539.2 ug/L	2539.2 ppb	12:53:25
2	Sn 189.927†	2273.0	2228.8	506.39 ug/L	506.39 ppb	12:53:45
2	Ti 334.940†	290598.2	286990.0	498.94 ug/L	498.94 ppb	12:53:25
2	Tl 190.801†	1294.9	1302.9	507.38 ug/L	507.38 ppb	12:53:45
2	U 409.014†	15118.1	17076.2	516.32 ug/L	516.32 ppb	12:53:25
2	V 292.402†	63417.0	63702.4	515.38 ug/L	515.38 ppb	12:53:25
2	Zn 213.857†	43539.1	42260.5	507.31 ug/L	507.31 ppb	12:53:25
2	SiO2†	68156.5	66548.0	5417.4 ug/L	5417.4 ppb	12:54:27
3	Sc Radial	4246.7	4246.7	96.6 %		12:52:42
3	Y RADIAL	4814.1	4814.1	101.1 %		12:52:22
3	Al 396.153Radial†	5061.9	5316.9	5198.5 ug/L	5198.5 ppb	12:52:22
3	Ca 317.933Radial†	2688.3	2766.6	5234.9 ug/L	5234.9 ppb	12:52:42
3	Fe 238.204 Radial†	454.8	462.2	5370.5 ug/L	5370.5 ppb	12:52:42
3	K 766.490 Radial†	29670.6	28108.9	5348.9 ug/L	5348.9 ppb	12:52:22
3	Mg 279.077 IEC†	125.5	128.4	5294.8 ug/L	5294.8 ppb	12:52:42
3	Na 589.592 Radial†	28072.0	29928.3	10550 ug/L	10550 ppb	12:52:22
3	Sr 421.552†	64332.8	66560.5	533.49 ug/L	533.49 ppb	12:52:22
3	Sc 361.383	837178.6	837178.6	102.24 %		12:53:51
3	Y 371.029	698029.1	698029.1	100.92 %		12:53:51
3	Ag 328.068†	98356.8	96015.3	501.68 ug/L	501.68 ppb	12:53:56
3	As 188.979†	909.8	916.6	507.54 ug/L	507.54 ppb	12:54:16
3	B 249.677†	17499.0	17652.8	492.92 ug/L	492.92 ppb	12:53:56
3	Ba 233.527†	54300.7	53110.9	498.72 ug/L	498.72 ppb	12:53:56
3	Be 313.107†	1209735.4	1186944.8	506.52 ug/L	506.52 ppb	12:53:51
3	Cd 226.502†	35124.3	34524.9	500.81 ug/L	500.81 ppb	12:53:56
3	Co 228.616†	19951.5	19560.3	505.66 ug/L	505.66 ppb	12:53:56
3	Cr 267.716†	38093.5	37186.8	499.75 ug/L	499.75 ppb	12:53:56
3	Cu 324.752†	157873.2	148860.1	491.46 ug/L	491.46 ppb	12:53:56
3	Mn 257.610†	381533.0	372779.4	490.45 ug/L	490.45 ppb	12:53:56
3	Mo 202.031†	5739.4	5605.0	498.72 ug/L	498.72 ppb	12:54:16
3	Ni 231.604†	16305.4	15863.9	503.49 ug/L	503.49 ppb	12:53:56
3	P 214.914†	3597.0	3330.9	2385.2 ug/L	2385.2 ppb	12:54:16
3	Pb 220.353†	3275.3	3261.8	502.55 ug/L	502.55 ppb	12:54:16
3	S 181.975 Axial†	599.8	556.4	995.14 ug/L	995.14 ppb	12:54:16
3	Sb 206.836†	1256.7	1205.4	522.26 ug/L	522.26 ppb	12:54:16
3	Se 196.026†	602.6	606.3	523.72 ug/L	523.72 ppb	12:54:16
3	Si 251.611†	67639.5	65668.4	2486.8 ug/L	2486.8 ppb	12:53:56
3	Sn 189.927†	2253.0	2196.4	499.04 ug/L	499.04 ppb	12:54:16
3	Ti 334.940†	285965.2	280817.1	488.22 ug/L	488.22 ppb	12:53:56
3	Tl 190.801†	1292.6	1293.3	503.60 ug/L	503.60 ppb	12:54:16
3	U 409.014†	14765.8	16646.3	503.29 ug/L	503.29 ppb	12:53:56
3	V 292.402†	62348.1	62298.6	504.09 ug/L	504.09 ppb	12:53:56
3	Zn 213.857†	42944.7	41433.1	497.36 ug/L	497.36 ppb	12:53:56
3	SiO2†	68149.5	66156.1	5385.5 ug/L	5385.5 ppb	12:54:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	832766.6	101.70 %	0.516			0.51%
Sc Radial	4271.0	97.2 %	0.68			0.70%
Y 371.029	694355.4	100.39 %	0.598			0.60%
Y RADIAL	4771.7	100.2 %	1.08			1.08%
Ag 328.068†	97341.3	508.57 ug/L	5.972	508.57 ppb	5.972	1.17%
QC value within limits for Ag 328.068 Recovery = 101.71%						
Al 396.153Radial†	5267.9	5150.2 ug/L	95.84	5150.2 ppb	95.84	1.86%
QC value within limits for Al 396.153Radial Recovery = 103.00%						
As 188.979†	920.9	509.90 ug/L	2.058	509.90 ppb	2.058	0.40%
QC value within limits for As 188.979 Recovery = 101.98%						
B 249.677†	17891.7	499.61 ug/L	6.445	499.61 ppb	6.445	1.29%
QC value within limits for B 249.677 Recovery = 99.92%						
Ba 233.527†	53859.0	505.74 ug/L	6.104	505.74 ppb	6.104	1.21%
QC value within limits for Ba 233.527 Recovery = 101.15%						
Be 313.107†	1193898.8	509.49 ug/L	3.418	509.49 ppb	3.418	0.67%
QC value within limits for Be 313.107 Recovery = 101.90%						
Ca 317.933Radial†	2751.4	5206.3 ug/L	28.88	5206.3 ppb	28.88	0.55%

QC value within limits for Ca 317.933 Radial Recovery = 104.13%							
Cd 226.502†	34957.4	507.10 ug/L	5.656	507.10 ppb	5.656	1.12%	
QC value within limits for Cd 226.502 Recovery = 101.42%							
Co 228.616†	19829.8	512.62 ug/L	6.337	512.62 ppb	6.337	1.24%	
QC value within limits for Co 228.616 Recovery = 102.52%							
Cr 267.716†	37684.8	506.43 ug/L	5.848	506.43 ppb	5.848	1.15%	
QC value within limits for Cr 267.716 Recovery = 101.29%							
Cu 324.752†	151250.3	499.35 ug/L	6.877	499.35 ppb	6.877	1.38%	
QC value within limits for Cu 324.752 Recovery = 99.87%							
Fe 238.204 Radial†	455.6	5293.8 ug/L	66.47	5293.8 ppb	66.47	1.26%	
QC value within limits for Fe 238.204 Radial Recovery = 105.88%							
K 766.490 Radial†	27789.4	5288.1 ug/L	95.80	5288.1 ppb	95.80	1.81%	
QC value within limits for K 766.490 Radial Recovery = 105.76%							
Mg 279.077 IEC†	129.1	5324.2 ug/L	25.49	5324.2 ppb	25.49	0.48%	
QC value within limits for Mg 279.077 IEC Recovery = 106.48%							
Mn 257.610†	377695.8	496.91 ug/L	5.627	496.91 ppb	5.627	1.13%	
QC value within limits for Mn 257.610 Recovery = 99.38%							
Mo 202.031†	5638.8	501.71 ug/L	2.649	501.71 ppb	2.649	0.53%	
QC value within limits for Mo 202.031 Recovery = 100.34%							
Na 589.592 Radial†	29576.9	10427 ug/L	230.4	10427 ppb	230.4	2.21%	
QC value within limits for Na 589.592 Radial Recovery = 104.27%							
Ni 231.604†	16089.0	510.63 ug/L	6.204	510.63 ppb	6.204	1.21%	
QC value within limits for Ni 231.604 Recovery = 102.13%							
P 214.914†	3362.4	2407.3 ug/L	19.27	2407.3 ppb	19.27	0.80%	
QC value within limits for P 214.914 Recovery = 96.29%							
Pb 220.353†	3276.4	504.79 ug/L	1.993	504.79 ppb	1.993	0.39%	
QC value within limits for Pb 220.353 Recovery = 100.96%							
S 181.975 Axial†	560.8	1002.9 ug/L	6.76	1002.9 ppb	6.76	0.67%	
QC value within limits for S 181.975 Axial Recovery = 100.29%							
Sb 206.836†	1206.4	522.80 ug/L	4.735	522.80 ppb	4.735	0.91%	
QC value within limits for Sb 206.836 Recovery = 104.56%							
Se 196.026†	607.4	524.36 ug/L	6.133	524.36 ppb	6.133	1.17%	
QC value within limits for Se 196.026 Recovery = 104.87%							
Si 251.611†	66552.5	2520.4 ug/L	29.11	2520.4 ppb	29.11	1.15%	
QC value within limits for Si 251.611 Recovery = 100.81%							
Sn 189.927†	2214.7	503.20 ug/L	3.770	503.20 ppb	3.770	0.75%	
QC value within limits for Sn 189.927 Recovery = 100.64%							
Sr 421.552†	65675.1	526.40 ug/L	11.850	526.40 ppb	11.850	2.25%	
QC value within limits for Sr 421.552 Recovery = 105.28%							
Ti 334.940†	284693.4	494.95 ug/L	5.860	494.95 ppb	5.860	1.18%	
QC value within limits for Ti 334.940 Recovery = 98.99%							
Tl 190.801†	1298.9	505.78 ug/L	1.953	505.78 ppb	1.953	0.39%	
QC value within limits for Tl 190.801 Recovery = 101.16%							
U 409.014†	16912.5	511.36 ug/L	7.050	511.36 ppb	7.050	1.38%	
QC value within limits for U 409.014 Recovery = 102.27%							
V 292.402†	63132.1	510.81 ug/L	5.942	510.81 ppb	5.942	1.16%	
QC value within limits for V 292.402 Recovery = 102.16%							
Zn 213.857†	41950.3	503.58 ug/L	5.424	503.58 ppb	5.424	1.08%	
QC value within limits for Zn 213.857 Recovery = 100.72%							
SiO2†	66630.5	5424.2 ug/L	42.42	5424.2 ppb	42.42	0.78%	
QC value within limits for SiO2 Recovery = 101.43%							
All analyte(s) passed QC.							

Sequence No.: 20

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 12:56:41

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	4122.8	4122.8	93.8 %		12:58:54
1	Y RADIAL	4237.6	4237.6	89.01 %		12:58:34
1	Al 396.153Radial†	-72.2	1.1	1.0140 ug/L	1.0140 ppb	12:58:54
1	Ca 317.933Radial†	19.5	5.1	9.5949 ug/L	9.5949 ppb	12:58:54
1	Fe 238.204 Radial†	6.3	-1.8	-20.749 ug/L	-20.749 ppb	12:58:54
1	K 766.490 Radial†	2742.0	324.3	61.784 ug/L	61.784 ppb	12:58:34
1	Mg 279.077 IEC†	1.8	0.4	16.217 ug/L	16.217 ppb	12:58:54
1	Na 589.592 Radial†	-841.8	-22.3	-7.8636 ug/L	-7.8636 ppb	12:58:34
1	Sr 421.552†	22.9	3.5	0.0283 ug/L	0.0283 ppb	12:58:34
1	Sc 361.383	820286.5	820286.5	100.18 %		12:59:51
1	Y 371.029	693929.7	693929.7	100.33 %		12:59:51
1	Ag 328.068†	165.9	-19.6	-0.1098 ug/L	-0.1098 ppb	12:59:51
1	As 188.979†	-22.3	4.5	2.4690 ug/L	2.4690 ppb	13:00:11
1	B 249.677†	-310.7	227.2	6.3770 ug/L	6.3770 ppb	13:00:11
1	Ba 233.527†	3.2	3.9	0.0347 ug/L	0.0347 ppb	13:00:11
1	Be 313.107†	-3607.0	130.5	0.0559 ug/L	0.0559 ppb	12:59:51
1	Cd 226.502†	-163.0	7.9	0.1166 ug/L	0.1166 ppb	13:00:11
1	Co 228.616†	-31.6	14.7	0.3824 ug/L	0.3824 ppb	13:00:11
1	Cr 267.716†	71.5	-0.2	-0.0048 ug/L	-0.0048 ppb	13:00:11
1	Cu 324.752†	5624.1	62.1	0.2040 ug/L	0.2040 ppb	12:59:51
1	Mn 257.610†	486.4	96.5	0.1241 ug/L	0.1241 ppb	13:00:11
1	Mo 202.031†	19.0	10.5	0.9285 ug/L	0.9285 ppb	13:00:11
1	Ni 231.604†	92.7	8.4	0.2679 ug/L	0.2679 ppb	13:00:11
1	P 214.914†	184.0	-3.6	-2.7086 ug/L	-2.7086 ppb	13:00:11
1	Pb 220.353†	-51.3	7.1	1.0952 ug/L	1.0952 ppb	13:00:11
1	S 181.975 Axial†	27.2	-3.0	-5.4258 ug/L	-5.4258 ppb	13:00:11
1	Sb 206.836†	23.9	0.2	0.0873 ug/L	0.0873 ppb	13:00:11
1	Se 196.026†	-13.7	3.3	2.6542 ug/L	2.6542 ppb	13:00:11
1	Si 251.611†	636.7	147.4	5.5832 ug/L	5.5832 ppb	13:00:11
1	Sn 189.927†	6.6	-0.6	-0.1354 ug/L	-0.1354 ppb	13:00:11
1	Ti 334.940†	-1033.3	89.8	0.1561 ug/L	0.1561 ppb	12:59:51
1	Tl 190.801†	-27.9	1.2	0.4639 ug/L	0.4639 ppb	13:00:11
1	U 409.014†	-2215.6	-7.5	-0.2238 ug/L	-0.2238 ppb	12:59:51
1	V 292.402†	-1375.0	-55.2	-0.4246 ug/L	-0.4246 ppb	12:59:51
1	Zn 213.857†	851.6	280.0	3.3939 ug/L	3.3939 ppb	13:00:11
1	SiO2†	638.6	138.1	11.247 ug/L	11.247 ppb	13:01:22
2	Sc Radial	4186.6	4186.6	95.3 %		12:59:19
2	Y RADIAL	4679.1	4679.1	98.29 %		12:58:59
2	Al 396.153Radial†	-87.4	-13.7	-13.461 ug/L	-13.461 ppb	12:59:19
2	Ca 317.933Radial†	22.7	8.1	15.366 ug/L	15.366 ppb	12:59:19
2	Fe 238.204 Radial†	7.5	-0.6	-6.4238 ug/L	-6.4238 ppb	12:59:19
2	K 766.490 Radial†	2754.6	293.0	55.823 ug/L	55.823 ppb	12:58:59
2	Mg 279.077 IEC†	0.8	-0.7	-27.119 ug/L	-27.119 ppb	12:59:19
2	Na 589.592 Radial†	-886.4	-55.5	-19.549 ug/L	-19.549 ppb	12:58:59
2	Sr 421.552†	21.0	1.2	0.0097 ug/L	0.0097 ppb	12:58:59
2	Sc 361.383	820591.8	820591.8	100.22 %		13:00:16
2	Y 371.029	693619.7	693619.7	100.29 %		13:00:16
2	Ag 328.068†	137.4	-48.0	-0.2526 ug/L	-0.2526 ppb	13:00:16
2	As 188.979†	-25.6	1.3	0.6986 ug/L	0.6986 ppb	13:00:36
2	B 249.677†	-293.6	244.4	6.8564 ug/L	6.8564 ppb	13:00:36
2	Ba 233.527†	9.0	9.7	0.0893 ug/L	0.0893 ppb	13:00:36
2	Be 313.107†	-3652.3	86.6	0.0372 ug/L	0.0372 ppb	13:00:16
2	Cd 226.502†	-166.4	4.6	0.0669 ug/L	0.0669 ppb	13:00:36
2	Co 228.616†	-41.3	5.0	0.1287 ug/L	0.1287 ppb	13:00:36
2	Cr 267.716†	79.9	8.2	0.1090 ug/L	0.1090 ppb	13:00:36
2	Cu 324.752†	5675.4	111.2	0.3674 ug/L	0.3674 ppb	13:00:16
2	Mn 257.610†	483.2	93.1	0.1229 ug/L	0.1229 ppb	13:00:36
2	Mo 202.031†	10.6	2.1	0.1845 ug/L	0.1845 ppb	13:00:36
2	Ni 231.604†	97.8	13.5	0.4294 ug/L	0.4294 ppb	13:00:36

2	P 214.914†	186.5	-1.2	-0.9377 ug/L	-0.9377 ppb	13:00:36
2	Pb 220.353†	-61.1	-2.6	-0.4083 ug/L	-0.4083 ppb	13:00:36
2	S 181.975 Axial†	29.3	-0.9	-1.6210 ug/L	-1.6210 ppb	13:00:36
2	Sb 206.836†	26.0	2.3	0.9839 ug/L	0.9839 ppb	13:00:36
2	Se 196.026†	-13.8	3.2	2.6731 ug/L	2.6731 ppb	13:00:36
2	Si 251.611†	652.9	163.3	6.1968 ug/L	6.1968 ppb	13:00:36
2	Sn 189.927†	12.5	5.3	1.2124 ug/L	1.2124 ppb	13:00:36
2	Ti 334.940†	-1036.2	87.3	0.1565 ug/L	0.1565 ppb	13:00:16
2	Tl 190.801†	-29.8	-0.7	-0.2529 ug/L	-0.2529 ppb	13:00:36
2	U 409.014†	-2247.7	-38.6	-1.1711 ug/L	-1.1711 ppb	13:00:16
2	V 292.402†	-1381.9	-61.5	-0.4908 ug/L	-0.4908 ppb	13:00:16
2	Zn 213.857†	850.6	278.7	3.3742 ug/L	3.3742 ppb	13:00:36
2	SiO2†	638.7	138.0	11.256 ug/L	11.256 ppb	13:01:42
3	Sc Radial	4228.2	4228.2	96.2 %		12:59:44
3	Y RADIAL	4655.5	4655.5	97.79 %		12:59:24
3	Al 396.153Radial†	-73.3	1.9	1.8952 ug/L	1.8952 ppb	12:59:44
3	Ca 317.933Radial†	27.0	12.4	23.461 ug/L	23.461 ppb	12:59:44
3	Fe 238.204 Radial†	6.2	-2.0	-23.574 ug/L	-23.574 ppb	12:59:44
3	K 766.490 Radial†	2678.8	185.7	35.373 ug/L	35.373 ppb	12:59:24
3	Mg 279.077 IEC†	3.6	2.2	90.892 ug/L	90.892 ppb	12:59:44
3	Na 589.592 Radial†	-859.2	-18.0	-6.3412 ug/L	-6.3412 ppb	12:59:24
3	Sr 421.552†	27.4	7.6	0.0609 ug/L	0.0609 ppb	12:59:24
3	Sc 361.383	819441.0	819441.0	100.08 %		13:00:41
3	Y 371.029	693279.0	693279.0	100.24 %		13:00:41
3	Ag 328.068†	227.2	41.9	0.2062 ug/L	0.2062 ppb	13:00:41
3	As 188.979†	-19.4	7.4	4.0824 ug/L	4.0824 ppb	13:01:01
3	B 249.677†	-335.2	202.4	5.6818 ug/L	5.6818 ppb	13:01:01
3	Ba 233.527†	13.3	14.0	0.1308 ug/L	0.1308 ppb	13:01:01
3	Be 313.107†	-3646.0	87.7	0.0377 ug/L	0.0377 ppb	13:00:41
3	Cd 226.502†	-169.5	1.3	0.0222 ug/L	0.0222 ppb	13:01:01
3	Co 228.616†	-41.7	4.6	0.1177 ug/L	0.1177 ppb	13:01:01
3	Cr 267.716†	71.9	0.3	0.0001 ug/L	0.0001 ppb	13:01:01
3	Cu 324.752†	5660.5	104.2	0.3398 ug/L	0.3398 ppb	13:00:41
3	Mn 257.610†	483.4	94.0	0.1175 ug/L	0.1175 ppb	13:01:01
3	Mo 202.031†	5.8	-2.7	-0.2418 ug/L	-0.2418 ppb	13:01:01
3	Ni 231.604†	81.9	-2.2	-0.0710 ug/L	-0.0710 ppb	13:01:01
3	P 214.914†	187.3	-0.1	-0.1132 ug/L	-0.1132 ppb	13:01:01
3	Pb 220.353†	-50.0	8.3	1.2784 ug/L	1.2784 ppb	13:01:01
3	S 181.975 Axial†	34.3	4.0	7.2446 ug/L	7.2446 ppb	13:01:01
3	Sb 206.836†	28.6	4.9	2.0605 ug/L	2.0605 ppb	13:01:01
3	Se 196.026†	-21.1	-4.1	-3.4948 ug/L	-3.4948 ppb	13:01:01
3	Si 251.611†	646.5	157.9	5.9962 ug/L	5.9962 ppb	13:01:01
3	Sn 189.927†	12.3	5.1	1.1633 ug/L	1.1633 ppb	13:01:01
3	Ti 334.940†	-1046.5	75.5	0.1245 ug/L	0.1245 ppb	13:00:41
3	Tl 190.801†	-30.8	-1.7	-0.6569 ug/L	-0.6569 ppb	13:01:01
3	U 409.014†	-2022.8	183.0	5.5531 ug/L	5.5531 ppb	13:00:41
3	V 292.402†	-1297.7	20.7	0.1779 ug/L	0.1779 ppb	13:00:41
3	Zn 213.857†	843.6	272.9	3.3102 ug/L	3.3102 ppb	13:01:01
3	SiO2†	641.2	141.4	11.549 ug/L	11.549 ppb	13:02:02

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	820106.4	100.16 %	0.073			0.07%
Sc Radial	4179.2	95.1 %	1.21			1.27%
Y 371.029	693609.5	100.28 %	0.047			0.05%
Y RADIAL	4524.1	95.03 %	5.217			5.49%
Ag 328.068†	-8.6	-0.0521 ug/L	0.23480	-0.0521 ppb	0.23480	450.92%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-3.6	-3.5172 ug/L	8.62256	-3.5172 ppb	8.62256	245.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	4.4	2.4167 ug/L	1.69248	2.4167 ppb	1.69248	70.03%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	224.7	6.3051 ug/L	0.59056	6.3051 ppb	0.59056	9.37%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.2	0.0849 ug/L	0.04816	0.0849 ppb	0.04816	56.71%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	101.6	0.0436 ug/L	0.01067	0.0436 ppb	0.01067	24.49%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	8.5	16.141 ug/L	6.9654	16.141 ppb	6.9654	43.15%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	4.6	0.0686 ug/L	0.04722	0.0686 ppb	0.04722	68.89%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	8.1	0.2096 ug/L	0.14974	0.2096 ppb	0.14974	71.44%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	2.8	0.0347 ug/L	0.06433	0.0347 ppb	0.06433	185.23%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	92.5	0.3037 ug/L	0.08749	0.3037 ppb	0.08749	28.81%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-1.5	-16.916 ug/L	9.1955	-16.916 ppb	9.1955	54.36%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	267.6	50.993 ug/L	13.8523	50.993 ppb	13.8523	27.17%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.6	26.663 ug/L	59.6950	26.663 ppb	59.6950	223.88%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	94.5	0.1215 ug/L	0.00352	0.1215 ppb	0.00352	2.90%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.3	0.2904 ug/L	0.59228	0.2904 ppb	0.59228	203.93%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-31.9	-11.251 ug/L	7.2261	-11.251 ppb	7.2261	64.23%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	6.6	0.2088 ug/L	0.25541	0.2088 ppb	0.25541	122.34%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-1.6	-1.2532 ug/L	1.32612	-1.2532 ppb	1.32612	105.82%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	4.2	0.6551 ug/L	0.92549	0.6551 ppb	0.92549	141.28%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	0.0	0.0660 ug/L	6.50146	0.0660 ppb	6.50146	>999.9%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	2.5	1.0439 ug/L	0.98794	1.0439 ppb	0.98794	94.64%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	0.8	0.6108 ug/L	3.55557	0.6108 ppb	3.55557	582.11%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	156.2	5.9254 ug/L	0.31285	5.9254 ppb	0.31285	5.28%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	3.3	0.7467 ug/L	0.76437	0.7467 ppb	0.76437	102.36%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	4.1	0.0330 ug/L	0.02594	0.0330 ppb	0.02594	78.72%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	84.2	0.1457 ug/L	0.01835	0.1457 ppb	0.01835	12.59%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-0.4	-0.1486 ug/L	0.56763	-0.1486 ppb	0.56763	381.86%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	45.6	1.3860 ug/L	3.63969	1.3860 ppb	3.63969	262.60%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-32.0	-0.2458 ug/L	0.36848	-0.2458 ppb	0.36848	149.89%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	277.2	3.3594 ug/L	0.04376	3.3594 ppb	0.04376	1.30%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	139.2	11.351 ug/L	0.1715	11.351 ppb	0.1715	1.51%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

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Analysis Begun

Start Time: 3/19/2010 13:15:22

Plasma On Time: 3/15/2010 06:51:19

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\031910.sif

Batch ID:

Results Data Set: 031910

Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/19/2010 13:15:23

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:
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Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4422.0	4422.0	101 %		13:17:15
1	Y RADIAL	4780.1	4780.1	100.4 %		13:17:15
1	Al 396.153Radial†	4976.3	5024.0	4910.8 ug/L	4910.8 ppb	13:17:15
1	Ca 317.933Radial†	2700.5	2668.4	5049.1 ug/L	5049.1 ppb	13:17:35
1	Fe 238.204 Radial†	452.2	441.0	5124.8 ug/L	5124.8 ppb	13:17:35
1	K 766.490 Radial†	28954.1	26178.8	4981.5 ug/L	4981.5 ppb	13:17:15
1	Mg 279.077 IEC†	127.2	124.9	5152.1 ug/L	5152.1 ppb	13:17:35
1	Na 589.592 Radial†	27030.2	27740.5	9779.1 ug/L	9779.1 ppb	13:17:15
1	Sr 421.552†	62430.7	62029.2	497.17 ug/L	497.17 ppb	13:17:15
1	Sc 361.383	836041.4	836041.4	102.10 %		13:18:32
1	Y 371.029	695666.9	695666.9	100.58 %		13:18:32
1	Ag 328.068†	99741.5	97502.4	509.35 ug/L	509.35 ppb	13:18:37
1	As 188.979†	902.8	911.0	504.45 ug/L	504.45 ppb	13:18:57
1	B 249.677†	17798.3	17969.1	501.80 ug/L	501.80 ppb	13:18:37
1	Ba 233.527†	55289.1	54151.2	508.47 ug/L	508.47 ppb	13:18:37
1	Be 313.107†	1212462.2	1191224.9	508.36 ug/L	508.36 ppb	13:18:32
1	Cd 226.502†	35617.7	35054.9	508.53 ug/L	508.53 ppb	13:18:37
1	Co 228.616†	20302.2	19930.3	515.21 ug/L	515.21 ppb	13:18:37
1	Cr 267.716†	38592.6	37726.3	506.96 ug/L	506.96 ppb	13:18:37
1	Cu 324.752†	160977.9	152110.9	502.18 ug/L	502.18 ppb	13:18:37
1	Mn 257.610†	392889.1	384409.3	505.72 ug/L	505.72 ppb	13:18:32
1	Mo 202.031†	5733.6	5606.9	498.87 ug/L	498.87 ppb	13:18:57
1	Ni 231.604†	16562.6	16137.5	512.17 ug/L	512.17 ppb	13:18:37
1	P 214.914†	3592.6	3331.3	2383.6 ug/L	2383.6 ppb	13:18:57
1	Pb 220.353†	3245.5	3237.0	498.70 ug/L	498.70 ppb	13:18:57
1	S 181.975 Axial†	595.4	552.9	988.90 ug/L	988.90 ppb	13:18:57
1	Sb 206.836†	1246.1	1196.8	518.64 ug/L	518.64 ppb	13:18:57
1	Se 196.026†	605.1	609.6	525.69 ug/L	525.69 ppb	13:18:57
1	Si 251.611†	68974.5	67066.0	2539.9 ug/L	2539.9 ppb	13:18:37
1	Sn 189.927†	2249.7	2196.2	498.98 ug/L	498.98 ppb	13:18:57
1	Ti 334.940†	291047.8	286175.5	497.52 ug/L	497.52 ppb	13:18:37
1	Tl 190.801†	1279.6	1282.3	499.44 ug/L	499.44 ppb	13:18:57
1	U 409.014†	15153.6	17045.7	515.42 ug/L	515.42 ppb	13:18:37
1	V 292.402†	63088.1	63106.3	510.59 ug/L	510.59 ppb	13:18:37
1	Zn 213.857†	43547.5	42080.7	505.17 ug/L	505.17 ppb	13:18:37
1	SiO2†	69192.6	67268.3	5476.3 ug/L	5476.3 ppb	13:20:05
2	Sc Radial	4371.3	4371.3	99.5 %		13:17:40
2	Y RADIAL	4764.2	4764.2	100.1 %		13:17:40
2	Al 396.153Radial†	5013.3	5118.7	5001.8 ug/L	5001.8 ppb	13:17:40
2	Ca 317.933Radial†	2726.3	2725.5	5157.2 ug/L	5157.2 ppb	13:18:00
2	Fe 238.204 Radial†	455.1	449.1	5219.7 ug/L	5219.7 ppb	13:18:00
2	K 766.490 Radial†	29490.7	27052.7	5147.8 ug/L	5147.8 ppb	13:17:40
2	Mg 279.077 IEC†	130.5	129.7	5350.0 ug/L	5350.0 ppb	13:18:00
2	Na 589.592 Radial†	27159.9	28183.1	9935.1 ug/L	9935.1 ppb	13:17:40
2	Sr 421.552†	63189.5	63513.1	509.07 ug/L	509.07 ppb	13:17:40
2	Sc 361.383	780265.1	780265.1	95.291 %		13:19:03
2	Y 371.029	650259.2	650259.2	94.016 %		13:19:03

2	Ag 328.068†	98573.2	103259.4	539.38 ug/L	539.38 ppb	13:19:08
2	As 188.979†	919.2	991.5	548.84 ug/L	548.84 ppb	13:19:28
2	B 249.677†	17450.0	18849.7	526.40 ug/L	526.40 ppb	13:19:08
2	Ba 233.527†	54777.2	57485.0	539.77 ug/L	539.77 ppb	13:19:08
2	Be 313.107†	1214795.0	1278559.6	545.62 ug/L	545.62 ppb	13:19:03
2	Cd 226.502†	35129.2	37035.9	537.29 ug/L	537.29 ppb	13:19:08
2	Co 228.616†	20097.6	21137.0	546.43 ug/L	546.43 ppb	13:19:08
2	Cr 267.716†	38463.9	40293.3	541.43 ug/L	541.43 ppb	13:19:08
2	Cu 324.752†	159071.0	161380.1	532.77 ug/L	532.77 ppb	13:19:08
2	Mn 257.610†	393681.2	412747.3	542.98 ug/L	542.98 ppb	13:19:03
2	Mo 202.031†	5788.9	6066.5	539.72 ug/L	539.72 ppb	13:19:28
2	Ni 231.604†	16444.8	17173.4	545.05 ug/L	545.05 ppb	13:19:08
2	P 214.914†	3636.2	3628.6	2599.3 ug/L	2599.3 ppb	13:19:28
2	Pb 220.353†	3292.1	3513.1	541.22 ug/L	541.22 ppb	13:19:28
2	S 181.975 Axial†	596.4	595.7	1065.5 ug/L	1065.5 ppb	13:19:28
2	Sb 206.836†	1259.5	1298.0	562.53 ug/L	562.53 ppb	13:19:28
2	Se 196.026†	593.8	640.1	551.52 ug/L	551.52 ppb	13:19:28
2	Si 251.611†	67834.1	70698.2	2677.3 ug/L	2677.3 ppb	13:19:08
2	Sn 189.927†	2279.1	2384.6	541.74 ug/L	541.74 ppb	13:19:28
2	Ti 334.940†	288492.3	303870.4	528.27 ug/L	528.27 ppb	13:19:08
2	Tl 190.801†	1298.1	1391.4	541.85 ug/L	541.85 ppb	13:19:28
2	U 409.014†	15019.8	17966.3	543.26 ug/L	543.26 ppb	13:19:08
2	V 292.402†	62992.3	67422.8	545.63 ug/L	545.63 ppb	13:19:08
2	Zn 213.857†	42669.0	44207.5	530.68 ug/L	530.68 ppb	13:19:08
2	SiO2†	67938.2	70796.3	5763.1 ug/L	5763.1 ppb	13:20:10
3	Sc Radial	4235.6	4235.6	96.4 %		13:18:05
3	Y RADIAL	4578.7	4578.7	96.18 %		13:18:05
3	Al 396.153Radial†	5061.7	5330.3	5211.5 ug/L	5211.5 ppb	13:18:05
3	Ca 317.933Radial†	2685.3	2770.7	5242.7 ug/L	5242.7 ppb	13:18:25
3	Fe 238.204 Radial†	451.0	459.5	5339.8 ug/L	5339.8 ppb	13:18:25
3	K 766.490 Radial†	29654.4	28171.8	5360.9 ug/L	5360.9 ppb	13:18:05
3	Mg 279.077 IEC†	126.6	129.9	5356.3 ug/L	5356.3 ppb	13:18:25
3	Na 589.592 Radial†	27458.7	29367.4	10353 ug/L	10353 ppb	13:18:05
3	Sr 421.552†	63431.8	65798.5	527.38 ug/L	527.38 ppb	13:18:05
3	Sc 361.383	836309.7	836309.7	102.14 %		13:19:34
3	Y 371.029	697379.0	697379.0	100.83 %		13:19:34
3	Ag 328.068†	98803.2	96552.4	504.47 ug/L	504.47 ppb	13:19:39
3	As 188.979†	902.8	910.7	504.29 ug/L	504.29 ppb	13:19:59
3	B 249.677†	17576.7	17746.6	495.54 ug/L	495.54 ppb	13:19:39
3	Ba 233.527†	54612.1	53471.0	502.09 ug/L	502.09 ppb	13:19:39
3	Be 313.107†	1217346.2	1195625.9	510.22 ug/L	510.22 ppb	13:19:34
3	Cd 226.502†	35283.2	34716.1	503.59 ug/L	503.59 ppb	13:19:39
3	Co 228.616†	20062.5	19689.2	508.99 ug/L	508.99 ppb	13:19:39
3	Cr 267.716†	38307.3	37434.9	503.08 ug/L	503.08 ppb	13:19:39
3	Cu 324.752†	158684.0	149814.3	494.61 ug/L	494.61 ppb	13:19:39
3	Mn 257.610†	392833.1	384231.0	505.50 ug/L	505.50 ppb	13:19:34
3	Mo 202.031†	5772.3	5643.1	502.10 ug/L	502.10 ppb	13:19:59
3	Ni 231.604†	16433.1	16005.4	507.98 ug/L	507.98 ppb	13:19:39
3	P 214.914†	3637.4	3374.1	2416.9 ug/L	2416.9 ppb	13:19:59
3	Pb 220.353†	3275.8	3265.6	503.14 ug/L	503.14 ppb	13:19:59
3	S 181.975 Axial†	595.7	553.1	989.20 ug/L	989.20 ppb	13:19:59
3	Sb 206.836†	1259.7	1209.7	524.15 ug/L	524.15 ppb	13:19:59
3	Se 196.026†	604.4	608.7	525.65 ug/L	525.65 ppb	13:19:59
3	Si 251.611†	67839.7	65933.2	2496.8 ug/L	2496.8 ppb	13:19:39
3	Sn 189.927†	2259.5	2205.1	501.02 ug/L	501.02 ppb	13:19:59
3	Ti 334.940†	287629.2	282736.9	491.56 ug/L	491.56 ppb	13:19:39
3	Tl 190.801†	1293.5	1295.6	504.55 ug/L	504.55 ppb	13:19:59
3	U 409.014†	14827.1	16721.4	505.57 ug/L	505.57 ppb	13:19:39
3	V 292.402†	62590.7	62599.5	506.55 ug/L	506.55 ppb	13:19:39
3	Zn 213.857†	43091.5	41620.4	499.60 ug/L	499.60 ppb	13:19:39
3	SiO2†	68658.1	66723.3	5431.7 ug/L	5431.7 ppb	13:20:15

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	817538.8	99.843 %	3.9423			3.95%
Sc Radial	4343.0	98.8 %	2.19			2.22%
Y 371.029	681101.7	98.475 %	3.8638			3.92%
Y RADIAL	4707.7	98.89 %	2.352			2.38%
Ag 328.068†	99104.7	517.73 ug/L	18.906	517.73 ppb	18.906	3.65%

QC value within limits for Ag 328.068 Recovery = 103.55%							
Al 396.153Radial†	5157.7	5041.4 ug/L	154.20	5041.4 ppb	154.20	3.06%	
QC value within limits for Al 396.153Radial Recovery = 100.83%							
As 188.979†	937.7	519.19 ug/L	25.673	519.19 ppb	25.673	4.94%	
QC value within limits for As 188.979 Recovery = 103.84%							
B 249.677†	18188.5	507.92 ug/L	16.313	507.92 ppb	16.313	3.21%	
QC value within limits for B 249.677 Recovery = 101.58%							
Ba 233.527†	55035.7	516.78 ug/L	20.167	516.78 ppb	20.167	3.90%	
QC value within limits for Ba 233.527 Recovery = 103.36%							
Be 313.107†	1221803.4	521.40 ug/L	20.994	521.40 ppb	20.994	4.03%	
QC value within limits for Be 313.107 Recovery = 104.28%							
Ca 317.933Radial†	2721.5	5149.7 ug/L	97.02	5149.7 ppb	97.02	1.88%	
QC value within limits for Ca 317.933Radial Recovery = 102.99%							
Cd 226.502†	35602.3	516.47 ug/L	18.200	516.47 ppb	18.200	3.52%	
QC value within limits for Cd 226.502 Recovery = 103.29%							
Co 228.616†	20252.2	523.54 ug/L	20.061	523.54 ppb	20.061	3.83%	
QC value within limits for Co 228.616 Recovery = 104.71%							
Cr 267.716†	38484.8	517.16 ug/L	21.113	517.16 ppb	21.113	4.08%	
QC value within limits for Cr 267.716 Recovery = 103.43%							
Cu 324.752†	154435.1	509.85 ug/L	20.203	509.85 ppb	20.203	3.96%	
QC value within limits for Cu 324.752 Recovery = 101.97%							
Fe 238.204 Radial†	449.9	5228.1 ug/L	107.73	5228.1 ppb	107.73	2.06%	
QC value within limits for Fe 238.204 Radial Recovery = 104.56%							
K 766.490 Radial†	27134.5	5163.4 ug/L	190.20	5163.4 ppb	190.20	3.68%	
QC value within limits for K 766.490 Radial Recovery = 103.27%							
Mg 279.077 IEC†	128.1	5286.1 ug/L	116.14	5286.1 ppb	116.14	2.20%	
QC value within limits for Mg 279.077 IEC Recovery = 105.72%							
Mn 257.610†	393795.9	518.07 ug/L	21.577	518.07 ppb	21.577	4.16%	
QC value within limits for Mn 257.610 Recovery = 103.61%							
Mo 202.031†	5772.2	513.56 ug/L	22.713	513.56 ppb	22.713	4.42%	
QC value within limits for Mo 202.031 Recovery = 102.71%							
Na 589.592 Radial†	28430.3	10022 ug/L	296.5	10022 ppb	296.5	2.96%	
QC value within limits for Na 589.592 Radial Recovery = 100.22%							
Ni 231.604†	16438.8	521.74 ug/L	20.300	521.74 ppb	20.300	3.89%	
QC value within limits for Ni 231.604 Recovery = 104.35%							
P 214.914†	3444.7	2466.6 ug/L	116.16	2466.6 ppb	116.16	4.71%	
QC value within limits for P 214.914 Recovery = 98.66%							
Pb 220.353†	3338.6	514.35 ug/L	23.371	514.35 ppb	23.371	4.54%	
QC value within limits for Pb 220.353 Recovery = 102.87%							
S 181.975 Axial†	567.2	1014.5 ug/L	44.16	1014.5 ppb	44.16	4.35%	
QC value within limits for S 181.975 Axial Recovery = 101.45%							
Sb 206.836†	1234.8	535.11 ug/L	23.909	535.11 ppb	23.909	4.47%	
QC value within limits for Sb 206.836 Recovery = 107.02%							
Se 196.026†	619.5	534.29 ug/L	14.922	534.29 ppb	14.922	2.79%	
QC value within limits for Se 196.026 Recovery = 106.86%							
Si 251.611†	67899.1	2571.3 ug/L	94.24	2571.3 ppb	94.24	3.66%	
QC value within limits for Si 251.611 Recovery = 102.85%							
Sn 189.927†	2262.0	513.91 ug/L	24.123	513.91 ppb	24.123	4.69%	
QC value within limits for Sn 189.927 Recovery = 102.78%							
Sr 421.552†	63780.3	511.21 ug/L	15.220	511.21 ppb	15.220	2.98%	
QC value within limits for Sr 421.552 Recovery = 102.24%							
Ti 334.940†	290927.6	505.78 ug/L	19.700	505.78 ppb	19.700	3.90%	
QC value within limits for Ti 334.940 Recovery = 101.16%							
Tl 190.801†	1323.1	515.28 ug/L	23.152	515.28 ppb	23.152	4.49%	
QC value within limits for Tl 190.801 Recovery = 103.06%							
U 409.014†	17244.4	521.42 ug/L	19.550	521.42 ppb	19.550	3.75%	
QC value within limits for U 409.014 Recovery = 104.28%							
V 292.402†	64376.2	520.92 ug/L	21.493	520.92 ppb	21.493	4.13%	
QC value within limits for V 292.402 Recovery = 104.18%							
Zn 213.857†	42636.2	511.81 ug/L	16.570	511.81 ppb	16.570	3.24%	
QC value within limits for Zn 213.857 Recovery = 102.36%							
SiO2†	68262.6	5557.1 ug/L	179.84	5557.1 ppb	179.84	3.24%	
QC value within limits for SiO2 Recovery = 103.92%							
All analyte(s) passed QC.							

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 13:22:26

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	4214.0	4214.0	95.9 %		13:24:38
1	Y RADIAL	4617.8	4617.8	97.00 %		13:24:18
1	Al 396.153Radial†	-78.0	-3.3	-3.2278 ug/L	-3.2278 ppb	13:24:38
1	Ca 317.933Radial†	25.8	11.2	21.266 ug/L	21.266 ppb	13:24:38
1	Fe 238.204 Radial†	6.9	-1.3	-14.901 ug/L	-14.901 ppb	13:24:38
1	K 766.490 Radial†	2560.2	71.4	13.599 ug/L	13.599 ppb	13:24:18
1	Mg 279.077 IEC†	2.3	0.9	37.080 ug/L	37.080 ppb	13:24:38
1	Na 589.592 Radial†	-866.0	-28.1	-9.9122 ug/L	-9.9122 ppb	13:24:18
1	Sr 421.552†	25.6	5.9	0.0470 ug/L	0.0470 ppb	13:24:18
1	Sc 361.383	828827.6	828827.6	101.22 %		13:25:35
1	Y 371.029	700055.9	700055.9	101.22 %		13:25:35
1	Ag 328.068†	206.7	19.1	0.0888 ug/L	0.0888 ppb	13:25:35
1	As 188.979†	-29.4	-2.3	-1.2633 ug/L	-1.2633 ppb	13:25:55
1	B 249.677†	-290.5	250.3	7.0258 ug/L	7.0258 ppb	13:25:55
1	Ba 233.527†	1.9	2.6	0.0237 ug/L	0.0237 ppb	13:25:55
1	Be 313.107†	-3640.9	134.1	0.0571 ug/L	0.0571 ppb	13:25:35
1	Cd 226.502†	-168.1	4.6	0.0690 ug/L	0.0690 ppb	13:25:55
1	Co 228.616†	-49.5	-2.7	-0.0682 ug/L	-0.0682 ppb	13:25:55
1	Cr 267.716†	72.4	0.0	-0.0036 ug/L	-0.0036 ppb	13:25:55
1	Cu 324.752†	5691.7	71.0	0.2304 ug/L	0.2304 ppb	13:25:35
1	Mn 257.610†	475.1	80.3	0.1026 ug/L	0.1026 ppb	13:25:55
1	Mo 202.031†	16.0	7.2	0.6416 ug/L	0.6416 ppb	13:25:55
1	Ni 231.604†	93.4	8.3	0.2620 ug/L	0.2620 ppb	13:25:55
1	P 214.914†	183.1	-6.4	-4.8145 ug/L	-4.8145 ppb	13:25:55
1	Pb 220.353†	-56.0	3.0	0.4595 ug/L	0.4595 ppb	13:25:55
1	S 181.975 Axial†	32.6	2.0	3.5771 ug/L	3.5771 ppb	13:25:55
1	Sb 206.836†	30.2	6.2	2.6171 ug/L	2.6171 ppb	13:25:55
1	Se 196.026†	-6.0	11.1	9.1807 ug/L	9.1807 ppb	13:25:55
1	Si 251.611†	640.7	144.8	5.4888 ug/L	5.4888 ppb	13:25:55
1	Sn 189.927†	10.5	3.2	0.7280 ug/L	0.7280 ppb	13:25:55
1	Ti 334.940†	-1118.9	15.8	0.0248 ug/L	0.0248 ppb	13:25:35
1	Tl 190.801†	-30.5	-1.0	-0.3917 ug/L	-0.3917 ppb	13:25:55
1	U 409.014†	-2040.5	188.3	5.7146 ug/L	5.7146 ppb	13:25:35
1	V 292.402†	-1357.2	-23.4	-0.1643 ug/L	-0.1643 ppb	13:25:35
1	Zn 213.857†	824.2	244.1	2.9585 ug/L	2.9585 ppb	13:25:55
1	SiO2†	614.0	107.2	8.7346 ug/L	8.7346 ppb	13:26:51
2	Sc Radial	4287.6	4287.6	97.6 %		13:25:03
2	Y RADIAL	4853.5	4853.5	102.0 %		13:24:43
2	Al 396.153Radial†	-79.3	-3.2	-3.2285 ug/L	-3.2285 ppb	13:25:03
2	Ca 317.933Radial†	28.5	13.5	25.522 ug/L	25.522 ppb	13:25:03
2	Fe 238.204 Radial†	7.8	-0.5	-5.6203 ug/L	-5.6203 ppb	13:25:03
2	K 766.490 Radial†	2708.7	177.8	33.882 ug/L	33.882 ppb	13:24:43
2	Mg 279.077 IEC†	1.9	0.4	15.487 ug/L	15.487 ppb	13:25:03
2	Na 589.592 Radial†	-956.7	-105.6	-37.211 ug/L	-37.211 ppb	13:24:43
2	Sr 421.552†	37.2	17.3	0.1382 ug/L	0.1382 ppb	13:24:43
2	Sc 361.383	836907.6	836907.6	102.21 %		13:26:00
2	Y 371.029	707095.7	707095.7	102.23 %		13:26:00
2	Ag 328.068†	124.8	-63.0	-0.3304 ug/L	-0.3304 ppb	13:26:00
2	As 188.979†	-22.0	5.3	2.8864 ug/L	2.8864 ppb	13:26:20
2	B 249.677†	-270.3	272.9	7.6575 ug/L	7.6575 ppb	13:26:20
2	Ba 233.527†	16.9	17.3	0.1616 ug/L	0.1616 ppb	13:26:20
2	Be 313.107†	-3628.8	180.7	0.0773 ug/L	0.0773 ppb	13:26:00
2	Cd 226.502†	-169.9	4.4	0.0656 ug/L	0.0656 ppb	13:26:20
2	Co 228.616†	-50.5	-3.2	-0.0794 ug/L	-0.0794 ppb	13:26:20
2	Cr 267.716†	64.1	-8.8	-0.1196 ug/L	-0.1196 ppb	13:26:20
2	Cu 324.752†	5653.3	-20.8	-0.0701 ug/L	-0.0701 ppb	13:26:00
2	Mn 257.610†	476.1	76.8	0.0998 ug/L	0.0998 ppb	13:26:20
2	Mo 202.031†	21.7	12.7	1.1268 ug/L	1.1268 ppb	13:26:20
2	Ni 231.604†	91.6	5.5	0.1758 ug/L	0.1758 ppb	13:26:20

2	P 214.914†	183.5	-7.7	-5.7343 ug/L	-5.7343 ppb	13:26:20
2	Pb 220.353†	-52.7	6.8	1.0466 ug/L	1.0466 ppb	13:26:20
2	S 181.975 Axial†	36.4	5.4	9.6328 ug/L	9.6328 ppb	13:26:20
2	Sb 206.836†	20.4	-3.7	-1.5352 ug/L	-1.5352 ppb	13:26:20
2	Se 196.026†	-17.9	-0.6	-0.4926 ug/L	-0.4926 ppb	13:26:20
2	Si 251.611†	636.7	134.8	5.1028 ug/L	5.1028 ppb	13:26:20
2	Sn 189.927†	9.4	2.0	0.4691 ug/L	0.4691 ppb	13:26:20
2	Ti 334.940†	-1040.5	103.2	0.1808 ug/L	0.1808 ppb	13:26:00
2	Tl 190.801†	-17.0	12.4	4.8149 ug/L	4.8149 ppb	13:26:20
2	U 409.014†	-2187.0	64.5	1.9568 ug/L	1.9568 ppb	13:26:00
2	V 292.402†	-1336.3	10.0	0.1004 ug/L	0.1004 ppb	13:26:00
2	Zn 213.857†	847.0	258.7	3.1339 ug/L	3.1339 ppb	13:26:20
2	SiO2†	672.8	159.0	12.943 ug/L	12.943 ppb	13:26:56
3	Sc Radial	4223.8	4223.8	96.1 %		13:25:29
3	Y RADIAL	4787.5	4787.5	100.6 %		13:25:08
3	Al 396.153Radial†	-68.0	7.3	7.1801 ug/L	7.1801 ppb	13:25:29
3	Ca 317.933Radial†	26.0	11.4	21.587 ug/L	21.587 ppb	13:25:29
3	Fe 238.204 Radial†	10.4	2.3	27.019 ug/L	27.019 ppb	13:25:29
3	K 766.490 Radial†	2761.7	274.9	52.379 ug/L	52.379 ppb	13:25:08
3	Mg 279.077 IEC†	3.9	2.5	103.77 ug/L	103.77 ppb	13:25:29
3	Na 589.592 Radial†	-913.7	-75.6	-26.662 ug/L	-26.662 ppb	13:25:08
3	Sr 421.552†	26.1	6.3	0.0504 ug/L	0.0504 ppb	13:25:08
3	Sc 361.383	826019.3	826019.3	100.88 %		13:26:26
3	Y 371.029	699154.6	699154.6	101.09 %		13:26:26
3	Ag 328.068†	254.0	66.6	0.3502 ug/L	0.3502 ppb	13:26:26
3	As 188.979†	-18.3	8.7	4.7742 ug/L	4.7742 ppb	13:26:46
3	B 249.677†	-276.0	263.7	7.3939 ug/L	7.3939 ppb	13:26:46
3	Ba 233.527†	2.5	3.1	0.0295 ug/L	0.0295 ppb	13:26:46
3	Be 313.107†	-3722.1	41.4	0.0180 ug/L	0.0180 ppb	13:26:26
3	Cd 226.502†	-167.3	4.8	0.0667 ug/L	0.0667 ppb	13:26:46
3	Co 228.616†	-48.2	-1.5	-0.0409 ug/L	-0.0409 ppb	13:26:46
3	Cr 267.716†	91.7	19.4	0.2616 ug/L	0.2616 ppb	13:26:46
3	Cu 324.752†	5709.6	107.9	0.3559 ug/L	0.3559 ppb	13:26:26
3	Mn 257.610†	484.6	91.3	0.1185 ug/L	0.1185 ppb	13:26:46
3	Mo 202.031†	5.8	-2.7	-0.2411 ug/L	-0.2411 ppb	13:26:46
3	Ni 231.604†	81.5	-3.3	-0.1050 ug/L	-0.1050 ppb	13:26:46
3	P 214.914†	185.3	-3.6	-2.7581 ug/L	-2.7581 ppb	13:26:46
3	Pb 220.353†	-51.2	7.5	1.1535 ug/L	1.1535 ppb	13:26:46
3	S 181.975 Axial†	29.6	-0.8	-1.4364 ug/L	-1.4364 ppb	13:26:46
3	Sb 206.836†	21.4	-2.5	-0.9971 ug/L	-0.9971 ppb	13:26:46
3	Se 196.026†	-25.5	-8.3	-6.8747 ug/L	-6.8747 ppb	13:26:46
3	Si 251.611†	640.1	146.4	5.5592 ug/L	5.5592 ppb	13:26:46
3	Sn 189.927†	19.1	11.8	2.6769 ug/L	2.6769 ppb	13:26:46
3	Ti 334.940†	-1044.7	85.7	0.1419 ug/L	0.1419 ppb	13:26:26
3	Tl 190.801†	-23.1	6.2	2.3838 ug/L	2.3838 ppb	13:26:46
3	U 409.014†	-2122.7	99.9	3.0285 ug/L	3.0285 ppb	13:26:26
3	V 292.402†	-1369.3	-39.9	-0.3187 ug/L	-0.3187 ppb	13:26:26
3	Zn 213.857†	853.0	275.4	3.3336 ug/L	3.3336 ppb	13:26:46
3	SiO2†	645.5	140.5	11.476 ug/L	11.476 ppb	13:27:01

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	830584.8	101.44 %	0.690			0.68%
Sc Radial	4241.8	96.5 %	0.91			0.94%
Y 371.029	702102.1	101.51 %	0.629			0.62%
Y RADIAL	4753.0	99.84 %	2.554			2.56%
Ag 328.068†	7.6	0.0362 ug/L	0.34331	0.0362 ppb	0.34331	948.38%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	0.3	0.2413 ug/L	6.00919	0.2413 ppb	6.00919	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	3.9	2.1324 ug/L	3.08859	2.1324 ppb	3.08859	144.84%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	262.3	7.3591 ug/L	0.31728	7.3591 ppb	0.31728	4.31%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.7	0.0716 ug/L	0.07804	0.0716 ppb	0.07804	108.99%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	118.7	0.0508 ug/L	0.03019	0.0508 ppb	0.03019	59.42%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	12.0	22.792 ug/L	2.3703	22.792 ppb	2.3703	10.40%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	4.6	0.0671 ug/L	0.00174	0.0671 ppb	0.00174	2.59%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	-2.5	-0.0628 ug/L	0.01978	-0.0628 ppb	0.01978	31.48%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	3.5	0.0461 ug/L	0.19542	0.0461 ppb	0.19542	423.60%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	52.7	0.1720 ug/L	0.21892	0.1720 ppb	0.21892	127.26%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	0.2	2.1660 ug/L	22.01818	2.1660 ppb	22.01818	>999.9%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	174.7	33.287 ug/L	19.3971	33.287 ppb	19.3971	58.27%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	1.3	52.114 ug/L	46.0235	52.114 ppb	46.0235	88.31%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	82.8	0.1069 ug/L	0.01008	0.1069 ppb	0.01008	9.43%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	5.7	0.5091 ug/L	0.69348	0.5091 ppb	0.69348	136.22%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	-69.8	-24.595 ug/L	13.7661	-24.595 ppb	13.7661	55.97%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	3.5	0.1110 ug/L	0.19193	0.1110 ppb	0.19193	172.99%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-5.9	-4.4357 ug/L	1.52384	-4.4357 ppb	1.52384	34.35%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	5.8	0.8865 ug/L	0.37365	0.8865 ppb	0.37365	42.15%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	2.2	3.9245 ug/L	5.54276	3.9245 ppb	5.54276	141.24%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	-0.0	0.0283 ug/L	2.25812	0.0283 ppb	2.25812	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	0.7	0.6045 ug/L	8.08370	0.6045 ppb	8.08370	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	142.0	5.3836 ug/L	0.24572	5.3836 ppb	0.24572	4.56%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	5.7	1.2913 ug/L	1.20690	1.2913 ppb	1.20690	93.46%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	9.8	0.0785 ug/L	0.05168	0.0785 ppb	0.05168	65.82%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	68.2	0.1159 ug/L	0.08122	0.1159 ppb	0.08122	70.10%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	5.9	2.2690 ug/L	2.60522	2.2690 ppb	2.60522	114.82%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	117.6	3.5666 ug/L	1.93587	3.5666 ppb	1.93587	54.28%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-17.8	-0.1275 ug/L	0.21193	-0.1275 ppb	0.21193	166.18%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	259.4	3.1420 ug/L	0.18772	3.1420 ppb	0.18772	5.97%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	135.6	11.051 ug/L	2.1364	11.051 ppb	2.1364	19.33%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 3
 Sample ID: 1202053053|957492|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 25
 Date Collected: 3/19/2010 13:29:12
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202053053|957492|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4515.5	4515.5	103 %		13:31:05
1	Y RADIAL	4933.1	4933.1	103.6 %		13:31:05
1	Al 396.153Radial†	-66.6	13.3	13.010 ug/L	13.010 ppb	13:31:25
1	Ca 317.933Radial†	18.6	2.4	4.5265 ug/L	4.5265 ppb	13:31:25
1	Fe 238.204 Radial†	6.8	-1.9	-21.763 ug/L	-21.763 ppb	13:31:25
1	K 766.490 Radial†	2615.3	-53.3	-10.149 ug/L	-10.149 ppb	13:31:05
1	Mg 279.077 IEC†	0.4	-1.2	-48.357 ug/L	-48.357 ppb	13:31:25
1	Na 589.592 Radial†	-911.0	-11.5	-4.0694 ug/L	-4.0694 ppb	13:31:05
1	Sr 421.552†	19.8	-1.5	-0.0124 ug/L	-0.0124 ppb	13:31:05
1	Sc 361.383	862414.2	862414.2	105.32 %		13:32:22
1	Y 371.029	725447.2	725447.2	104.89 %		13:32:22
1	Ag 328.068†	209.8	14.0	0.0656 ug/L	0.0656 ppb	13:32:27
1	As 188.979†	-19.5	8.2	4.5231 ug/L	4.5231 ppb	13:32:47
1	B 249.677†	-317.4	236.0	6.6239 ug/L	6.6239 ppb	13:32:47
1	Ba 233.527†	-0.9	-0.1	-0.0006 ug/L	-0.0006 ppb	13:32:47
1	Be 313.107†	-3822.4	101.8	0.0441 ug/L	0.0441 ppb	13:32:27
1	Cd 226.502†	-170.1	9.1	0.1353 ug/L	0.1353 ppb	13:32:47
1	Co 228.616†	-51.9	-3.1	-0.0795 ug/L	-0.0795 ppb	13:32:47
1	Cr 267.716†	206.8	124.8	1.6713 ug/L	1.6713 ppb	13:32:47
1	Cu 324.752†	5644.7	-192.6	-0.6391 ug/L	-0.6391 ppb	13:32:27
1	Mn 257.610†	526.8	111.1	0.1460 ug/L	0.1460 ppb	13:32:47
1	Mo 202.031†	11.5	2.4	0.2096 ug/L	0.2096 ppb	13:32:47
1	Ni 231.604†	99.1	10.0	0.3172 ug/L	0.3172 ppb	13:32:47
1	P 214.914†	192.5	-4.5	-3.2064 ug/L	-3.2064 ppb	13:32:47
1	Pb 220.353†	-53.9	7.2	1.1057 ug/L	1.1057 ppb	13:32:47
1	S 181.975 Axial†	27.5	-4.0	-7.2143 ug/L	-7.2143 ppb	13:32:47
1	Sb 206.836†	40.8	15.1	6.3302 ug/L	6.3302 ppb	13:32:47
1	Se 196.026†	-15.6	2.1	1.7184 ug/L	1.7184 ppb	13:32:47
1	Si 251.611†	771.3	244.1	9.2652 ug/L	9.2652 ppb	13:32:47
1	Sn 189.927†	9.9	2.2	0.5107 ug/L	0.5107 ppb	13:32:47
1	Ti 334.940†	-989.0	182.2	0.3193 ug/L	0.3193 ppb	13:32:27
1	Tl 190.801†	-23.0	7.2	2.7929 ug/L	2.7929 ppb	13:32:47
1	U 409.014†	-2195.1	120.1	3.6421 ug/L	3.6421 ppb	13:32:22
1	V 292.402†	-1306.4	77.0	0.6264 ug/L	0.6264 ppb	13:32:27
1	Zn 213.857†	629.4	27.5	0.3357 ug/L	0.3357 ppb	13:32:47
1	SiO2†	779.0	240.3	19.602 ug/L	19.602 ppb	13:33:53
2	Sc Radial	4390.3	4390.3	99.9 %		13:31:30
2	Y RADIAL	4775.4	4775.4	100.3 %		13:31:30
2	Al 396.153Radial†	-78.8	-0.8	-0.7772 ug/L	-0.7772 ppb	13:31:50
2	Ca 317.933Radial†	19.0	3.4	6.3777 ug/L	6.3777 ppb	13:31:50
2	Fe 238.204 Radial†	10.0	1.6	18.409 ug/L	18.409 ppb	13:31:50
2	K 766.490 Radial†	2686.8	91.0	17.349 ug/L	17.349 ppb	13:31:30
2	Mg 279.077 IEC†	2.3	0.7	30.442 ug/L	30.442 ppb	13:31:50
2	Na 589.592 Radial†	-951.4	-77.4	-27.273 ug/L	-27.273 ppb	13:31:30
2	Sr 421.552†	-13.3	-34.1	-0.2735 ug/L	-0.2735 ppb	13:31:30
2	Sc 361.383	847113.5	847113.5	103.45 %		13:32:52
2	Y 371.029	713152.6	713152.6	103.11 %		13:32:52
2	Ag 328.068†	128.9	-60.5	-0.3152 ug/L	-0.3152 ppb	13:32:57
2	As 188.979†	-26.5	1.2	0.6638 ug/L	0.6638 ppb	13:33:17
2	B 249.677†	-333.7	214.8	6.0219 ug/L	6.0219 ppb	13:33:17
2	Ba 233.527†	17.9	18.0	0.1687 ug/L	0.1687 ppb	13:33:17
2	Be 313.107†	-3748.9	107.3	0.0468 ug/L	0.0468 ppb	13:32:57
2	Cd 226.502†	-164.5	11.7	0.1690 ug/L	0.1690 ppb	13:33:17
2	Co 228.616†	-50.4	-2.5	-0.0685 ug/L	-0.0685 ppb	13:33:17
2	Cr 267.716†	214.4	135.7	1.8187 ug/L	1.8187 ppb	13:33:17
2	Cu 324.752†	5685.0	-56.8	-0.1903 ug/L	-0.1903 ppb	13:32:57
2	Mn 257.610†	533.8	126.9	0.1674 ug/L	0.1674 ppb	13:33:17
2	Mo 202.031†	0.8	-7.8	-0.6891 ug/L	-0.6891 ppb	13:33:17
2	Ni 231.604†	110.0	22.3	0.7084 ug/L	0.7084 ppb	13:33:17

2	P 214.914†	199.6	5.6	4.2220 ug/L	4.2220 ppb	13:33:17
2	Pb 220.353†	-59.5	0.8	0.1128 ug/L	0.1128 ppb	13:33:17
2	S 181.975 Axial†	28.6	-2.5	-4.4755 ug/L	-4.4755 ppb	13:33:17
2	Sb 206.836†	33.0	8.3	3.4353 ug/L	3.4353 ppb	13:33:17
2	Se 196.026†	-21.1	-3.4	-2.7904 ug/L	-2.7904 ppb	13:33:17
2	Si 251.611†	768.5	254.7	9.6764 ug/L	9.6764 ppb	13:33:17
2	Sn 189.927†	5.0	-2.3	-0.5294 ug/L	-0.5294 ppb	13:33:17
2	Ti 334.940†	-874.1	276.3	0.4753 ug/L	0.4753 ppb	13:32:57
2	Tl 190.801†	-28.8	1.3	0.5068 ug/L	0.5068 ppb	13:33:17
2	U 409.014†	-2056.3	216.6	6.5643 ug/L	6.5643 ppb	13:32:52
2	V 292.402†	-1405.6	-41.2	-0.3295 ug/L	-0.3295 ppb	13:32:57
2	Zn 213.857†	648.5	56.7	0.6805 ug/L	0.6805 ppb	13:33:17
2	SiO2†	870.3	341.9	27.919 ug/L	27.919 ppb	13:33:58
3	Sc Radial	4597.0	4597.0	105 %		13:31:55
3	Y RADIAL	4965.0	4965.0	104.3 %		13:31:55
3	Al 396.153Radial†	-75.4	6.0	5.9048 ug/L	5.9048 ppb	13:32:15
3	Ca 317.933Radial†	22.1	5.4	10.245 ug/L	10.245 ppb	13:32:15
3	Fe 238.204 Radial†	10.9	1.9	22.188 ug/L	22.188 ppb	13:32:15
3	K 766.490 Radial†	2523.3	-186.4	-35.508 ug/L	-35.508 ppb	13:31:55
3	Mg 279.077 IEC†	2.0	0.3	14.253 ug/L	14.253 ppb	13:32:15
3	Na 589.592 Radial†	-920.8	-5.2	-1.8381 ug/L	-1.8381 ppb	13:31:55
3	Sr 421.552†	42.3	19.6	0.1572 ug/L	0.1572 ppb	13:31:55
3	Sc 361.383	842923.8	842923.8	102.94 %		13:33:23
3	Y 371.029	710046.3	710046.3	102.66 %		13:33:23
3	Ag 328.068†	142.7	-46.5	-0.2397 ug/L	-0.2397 ppb	13:33:28
3	As 188.979†	-19.5	7.9	4.3329 ug/L	4.3329 ppb	13:33:48
3	B 249.677†	-349.8	197.5	5.5373 ug/L	5.5373 ppb	13:33:48
3	Ba 233.527†	11.2	11.5	0.1093 ug/L	0.1093 ppb	13:33:48
3	Be 313.107†	-3769.5	69.3	0.0301 ug/L	0.0301 ppb	13:33:28
3	Cd 226.502†	-163.4	11.9	0.1725 ug/L	0.1725 ppb	13:33:48
3	Co 228.616†	-43.7	3.8	0.0971 ug/L	0.0971 ppb	13:33:48
3	Cr 267.716†	197.3	120.2	1.6116 ug/L	1.6116 ppb	13:33:48
3	Cu 324.752†	5642.6	-70.7	-0.2362 ug/L	-0.2362 ppb	13:33:28
3	Mn 257.610†	558.4	153.4	0.2033 ug/L	0.2033 ppb	13:33:48
3	Mo 202.031†	12.5	3.6	0.3197 ug/L	0.3197 ppb	13:33:48
3	Ni 231.604†	106.1	19.0	0.6041 ug/L	0.6041 ppb	13:33:48
3	P 214.914†	207.0	13.8	10.340 ug/L	10.340 ppb	13:33:48
3	Pb 220.353†	-64.8	-4.7	-0.7161 ug/L	-0.7161 ppb	13:33:48
3	S 181.975 Axial†	26.8	-4.2	-7.4943 ug/L	-7.4943 ppb	13:33:48
3	Sb 206.836†	42.7	17.8	7.4570 ug/L	7.4570 ppb	13:33:48
3	Se 196.026†	-15.5	1.9	1.6596 ug/L	1.6596 ppb	13:33:48
3	Si 251.611†	783.6	273.0	10.360 ug/L	10.360 ppb	13:33:48
3	Sn 189.927†	10.3	2.8	0.6419 ug/L	0.6419 ppb	13:33:48
3	Ti 334.940†	-1015.1	135.1	0.2314 ug/L	0.2314 ppb	13:33:28
3	Tl 190.801†	-32.9	-2.9	-1.1116 ug/L	-1.1116 ppb	13:33:48
3	U 409.014†	-2021.8	240.2	7.2817 ug/L	7.2817 ppb	13:33:23
3	V 292.402†	-1322.8	32.5	0.2741 ug/L	0.2741 ppb	13:33:28
3	Zn 213.857†	654.4	65.6	0.7880 ug/L	0.7880 ppb	13:33:48
3	SiO2†	786.0	264.2	21.556 ug/L	21.556 ppb	13:34:03

Mean Data: 1202053053|957492|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	850817.2	103.91 %		1.253			1.21%
Sc Radial	4500.9	102 %		2.4			2.31%
Y 371.029	716215.4	103.55 %		1.178			1.14%
Y RADIAL	4891.1	102.7 %		2.13			2.08%
Ag 328.068†	-31.0	-0.1631 ug/L		0.20166	-0.1631 ppb	0.20166	123.64%
Al 396.153Radial†	6.2	6.0459 ug/L		6.89476	6.0459 ppb	6.89476	114.04%
As 188.979†	5.8	3.1733 ug/L		2.17537	3.1733 ppb	2.17537	68.55%
B 249.677†	216.1	6.0610 ug/L		0.54437	6.0610 ppb	0.54437	8.98%
Ba 233.527†	9.8	0.0925 ug/L		0.08590	0.0925 ppb	0.08590	92.91%
Be 313.107†	92.8	0.0403 ug/L		0.00898	0.0403 ppb	0.00898	22.29%
Ca 317.933Radial†	3.7	7.0498 ug/L		2.91808	7.0498 ppb	2.91808	41.39%
Cd 226.502†	10.9	0.1589 ug/L		0.02052	0.1589 ppb	0.02052	12.91%
Co 228.616†	-0.6	-0.0170 ug/L		0.09896	-0.0170 ppb	0.09896	583.55%
Cr 267.716†	126.9	1.7005 ug/L		0.10662	1.7005 ppb	0.10662	6.27%
Cu 324.752†	-106.7	-0.3552 ug/L		0.24692	-0.3552 ppb	0.24692	69.52%
Fe 238.204 Radial†	0.5	6.2782 ug/L		24.35746	6.2782 ppb	24.35746	387.97%
K 766.490 Radial†	-49.5	-9.4361 ug/L		26.43592	-9.4361 ppb	26.43592	280.16%

Mg 279.077 IEC†	-0.0	-1.2209 ug/L	41.61616	-1.2209 ppb	41.61616	>999.9%
Mn 257.610†	130.5	0.1722 ug/L	0.02896	0.1722 ppb	0.02896	16.82%
Mo 202.031†	-0.6	-0.0533 ug/L	0.55341	-0.0533 ppb	0.55341	>999.9%
Na 589.592 Radial†	-31.4	-11.060 ug/L	14.0850	-11.060 ppb	14.0850	127.35%
Ni 231.604†	17.1	0.5432 ug/L	0.20257	0.5432 ppb	0.20257	37.29%
P 214.914†	5.0	3.7850 ug/L	6.78357	3.7850 ppb	6.78357	179.22%
Pb 220.353†	1.1	0.1675 ug/L	0.91210	0.1675 ppb	0.91210	544.65%
S 181.975 Axial†	-3.6	-6.3947 ug/L	1.66796	-6.3947 ppb	1.66796	26.08%
Sb 206.836†	13.7	5.7408 ug/L	2.07462	5.7408 ppb	2.07462	36.14%
Se 196.026†	0.2	0.1959 ug/L	2.58632	0.1959 ppb	2.58632	>999.9%
Si 251.611†	257.3	9.7673 ug/L	0.55320	9.7673 ppb	0.55320	5.66%
Sn 189.927†	0.9	0.2077 ug/L	0.64172	0.2077 ppb	0.64172	308.93%
Sr 421.552†	-5.3	-0.0429 ug/L	0.21699	-0.0429 ppb	0.21699	506.00%
Ti 334.940†	197.9	0.3420 ug/L	0.12354	0.3420 ppb	0.12354	36.12%
Tl 190.801†	1.9	0.7294 ug/L	1.96172	0.7294 ppb	1.96172	268.96%
U 409.014†	192.3	5.8294 ug/L	1.92791	5.8294 ppb	1.92791	33.07%
V 292.402†	22.8	0.1903 ug/L	0.48345	0.1903 ppb	0.48345	254.02%
Zn 213.857†	50.0	0.6014 ug/L	0.23628	0.6014 ppb	0.23628	39.29%
SiO2†	282.1	23.026 ug/L	4.3488	23.026 ppb	4.3488	18.89%

Sequence No.: 4

Sample ID: 1202053054|957492|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 26

Date Collected: 3/19/2010 13:36:16

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202053054|957492|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4509.0	4509.0	103 %		13:38:08
1	Y RADIAL	4819.0	4819.0	101.2 %		13:38:08
1	Al 396.153Radial†	5240.1	5185.8	5069.5 ug/L	5069.5 ppb	13:38:08
1	Ca 317.933Radial†	2777.3	2691.4	5092.7 ug/L	5092.7 ppb	13:38:28
1	Fe 238.204 Radial†	460.7	440.6	5120.5 ug/L	5120.5 ppb	13:38:28
1	K 766.490 Radial†	30534.2	27163.9	5171.0 ug/L	5171.0 ppb	13:38:08
1	Mg 279.077 IEC†	132.0	127.1	5243.3 ug/L	5243.3 ppb	13:38:28
1	Na 589.592 Radial†	14108.1	14626.7	5156.2 ug/L	5156.2 ppb	13:38:08
1	Sr 421.552†	66714.3	65007.7	521.05 ug/L	521.05 ppb	13:38:08
1	Sc 361.383	847506.8	847506.8	103.50 %		13:39:26
1	Y 371.029	706016.9	706016.9	102.08 %		13:39:26
1	Ag 328.068†	99200.8	95658.5	499.77 ug/L	499.77 ppb	13:39:31
1	As 188.979†	945.7	940.5	520.68 ug/L	520.68 ppb	13:39:51
1	B 249.677†	18253.1	18172.7	507.53 ug/L	507.53 ppb	13:39:31
1	Ba 233.527†	57205.4	55270.1	518.96 ug/L	518.96 ppb	13:39:31
1	Be 313.107†	1251684.3	1213054.7	517.66 ug/L	517.66 ppb	13:39:26
1	Cd 226.502†	35918.6	34873.6	505.91 ug/L	505.91 ppb	13:39:31
1	Co 228.616†	20333.6	19691.6	509.05 ug/L	509.05 ppb	13:39:31
1	Cr 267.716†	39049.5	37656.5	506.03 ug/L	506.03 ppb	13:39:31
1	Cu 324.752†	166168.4	154992.8	511.68 ug/L	511.68 ppb	13:39:31
1	Mn 257.610†	401474.7	387498.6	509.78 ug/L	509.78 ppb	13:39:26
1	Mo 202.031†	5857.4	5650.7	502.75 ug/L	502.75 ppb	13:39:51
1	Ni 231.604†	16917.2	16260.6	516.08 ug/L	516.08 ppb	13:39:31
1	P 214.914†	995.6	774.6	477.35 ug/L	477.35 ppb	13:39:51
1	Pb 220.353†	3385.2	3329.0	512.87 ug/L	512.87 ppb	13:39:51
1	S 181.975 Axial†	3002.7	2870.8	5138.5 ug/L	5138.5 ppb	13:39:51
1	Sb 206.836†	1334.6	1265.8	547.81 ug/L	547.81 ppb	13:39:51
1	Se 196.026†	606.8	603.2	520.38 ug/L	520.38 ppb	13:39:51
1	Si 251.611†	136679.8	131566.0	4988.4 ug/L	4988.4 ppb	13:39:31
1	Sn 189.927†	2341.9	2255.5	512.44 ug/L	512.44 ppb	13:39:51
1	Ti 334.940†	296430.9	287520.1	499.85 ug/L	499.85 ppb	13:39:31
1	Tl 190.801†	1327.0	1311.1	510.64 ug/L	510.64 ppb	13:39:51
1	U 409.014†	16162.7	17819.9	538.91 ug/L	538.91 ppb	13:39:31
1	V 292.402†	64659.4	63788.5	516.14 ug/L	516.14 ppb	13:39:31
1	Zn 213.857†	43565.6	41521.1	498.35 ug/L	498.35 ppb	13:39:31
1	SiO2†	136942.4	131808.6	10743 ug/L	10743 ppb	13:40:58
2	Sc Radial	4401.5	4401.5	100 %		13:38:33
2	Y RADIAL	4718.4	4718.4	99.11 %		13:38:33
2	Al 396.153Radial†	5149.9	5220.5	5103.3 ug/L	5103.3 ppb	13:38:33
2	Ca 317.933Radial†	2806.0	2786.2	5272.2 ug/L	5272.2 ppb	13:38:53
2	Fe 238.204 Radial†	466.0	456.8	5308.5 ug/L	5308.5 ppb	13:38:53
2	K 766.490 Radial†	30139.6	27497.0	5234.4 ug/L	5234.4 ppb	13:38:33
2	Mg 279.077 IEC†	134.0	132.3	5456.3 ug/L	5456.3 ppb	13:38:53
2	Na 589.592 Radial†	13675.5	14530.8	5122.4 ug/L	5122.4 ppb	13:38:33
2	Sr 421.552†	65121.4	65006.0	521.03 ug/L	521.03 ppb	13:38:33
2	Sc 361.383	842532.2	842532.2	102.90 %		13:39:57
2	Y 371.029	703197.5	703197.5	101.67 %		13:39:57
2	Ag 328.068†	99243.3	96265.6	503.00 ug/L	503.00 ppb	13:40:02
2	As 188.979†	930.2	930.8	515.41 ug/L	515.41 ppb	13:40:22
2	B 249.677†	18252.4	18276.1	510.39 ug/L	510.39 ppb	13:40:02
2	Ba 233.527†	57362.7	55749.3	523.46 ug/L	523.46 ppb	13:40:02
2	Be 313.107†	1245530.7	1214214.6	518.16 ug/L	518.16 ppb	13:39:57
2	Cd 226.502†	36053.3	35209.5	510.76 ug/L	510.76 ppb	13:40:02
2	Co 228.616†	20364.3	19837.5	512.82 ug/L	512.82 ppb	13:40:02
2	Cr 267.716†	39174.9	38001.1	510.67 ug/L	510.67 ppb	13:40:02
2	Cu 324.752†	166410.4	156175.9	515.59 ug/L	515.59 ppb	13:40:02
2	Mn 257.610†	397846.0	386262.2	508.17 ug/L	508.17 ppb	13:39:57
2	Mo 202.031†	5886.9	5712.7	508.29 ug/L	508.29 ppb	13:40:22
2	Ni 231.604†	16933.8	16373.2	519.66 ug/L	519.66 ppb	13:40:02

2	P 214.914†	986.0	771.0	473.77 ug/L	473.77 ppb	13:40:22
2	Pb 220.353†	3379.7	3343.0	515.01 ug/L	515.01 ppb	13:40:22
2	S 181.975 Axial†	3016.1	2901.1	5192.6 ug/L	5192.6 ppb	13:40:22
2	Sb 206.836†	1352.0	1290.2	558.26 ug/L	558.26 ppb	13:40:22
2	Se 196.026†	613.3	613.0	529.07 ug/L	529.07 ppb	13:40:22
2	Si 251.611†	136857.5	132518.4	5024.5 ug/L	5024.5 ppb	13:40:02
2	Sn 189.927†	2360.6	2287.0	519.61 ug/L	519.61 ppb	13:40:22
2	Ti 334.940†	297281.5	290037.7	504.23 ug/L	504.23 ppb	13:40:02
2	Tl 190.801†	1321.6	1313.5	511.54 ug/L	511.54 ppb	13:40:22
2	U 409.014†	16245.2	17992.3	544.11 ug/L	544.11 ppb	13:40:02
2	V 292.402†	64940.3	64430.5	521.32 ug/L	521.32 ppb	13:40:02
2	Zn 213.857†	43622.9	41825.3	501.98 ug/L	501.98 ppb	13:40:02
2	SiO2†	138090.8	133705.9	10898 ug/L	10898 ppb	13:41:03
3	Sc Radial	4599.2	4599.2	105 %		13:38:58
3	Y RADIAL	4934.0	4934.0	103.6 %		13:38:58
3	Al 396.153Radial†	5384.4	5223.5	5106.3 ug/L	5106.3 ppb	13:38:58
3	Ca 317.933Radial†	2784.7	2645.4	5005.7 ug/L	5005.7 ppb	13:39:18
3	Fe 238.204 Radial†	458.7	429.9	4996.0 ug/L	4996.0 ppb	13:39:18
3	K 766.490 Radial†	31206.9	27223.1	5182.3 ug/L	5182.3 ppb	13:38:58
3	Mg 279.077 IEC†	131.6	124.3	5126.2 ug/L	5126.2 ppb	13:39:18
3	Na 589.592 Radial†	14449.2	14683.0	5176.1 ug/L	5176.1 ppb	13:38:58
3	Sr 421.552†	68284.4	65233.0	522.85 ug/L	522.85 ppb	13:38:58
3	Sc 361.383	846910.8	846910.8	103.43 %		13:40:28
3	Y 371.029	705809.0	705809.0	102.05 %		13:40:28
3	Ag 328.068†	99243.0	95766.7	500.32 ug/L	500.32 ppb	13:40:33
3	As 188.979†	940.9	936.5	518.44 ug/L	518.44 ppb	13:40:53
3	B 249.677†	18320.6	18250.4	509.73 ug/L	509.73 ppb	13:40:33
3	Ba 233.527†	57500.8	55594.6	522.00 ug/L	522.00 ppb	13:40:33
3	Be 313.107†	1255338.7	1217439.0	519.53 ug/L	519.53 ppb	13:40:28
3	Cd 226.502†	36194.3	35164.6	510.14 ug/L	510.14 ppb	13:40:33
3	Co 228.616†	20408.0	19777.4	511.27 ug/L	511.27 ppb	13:40:33
3	Cr 267.716†	39350.8	37974.3	510.28 ug/L	510.28 ppb	13:40:33
3	Cu 324.752†	165925.5	154870.9	511.27 ug/L	511.27 ppb	13:40:33
3	Mn 257.610†	401854.7	388139.0	510.62 ug/L	510.62 ppb	13:40:28
3	Mo 202.031†	5899.3	5695.1	506.69 ug/L	506.69 ppb	13:40:53
3	Ni 231.604†	17008.9	16360.8	519.27 ug/L	519.27 ppb	13:40:33
3	P 214.914†	1001.4	780.9	482.24 ug/L	482.24 ppb	13:40:53
3	Pb 220.353†	3371.7	3318.2	511.26 ug/L	511.26 ppb	13:40:53
3	S 181.975 Axial†	3008.9	2879.0	5153.0 ug/L	5153.0 ppb	13:40:53
3	Sb 206.836†	1346.0	1277.7	552.94 ug/L	552.94 ppb	13:40:53
3	Se 196.026†	617.3	613.8	528.87 ug/L	528.87 ppb	13:40:53
3	Si 251.611†	136963.2	131932.9	5002.3 ug/L	5002.3 ppb	13:40:33
3	Sn 189.927†	2361.2	2275.8	517.03 ug/L	517.03 ppb	13:40:53
3	Ti 334.940†	297783.4	289029.3	502.47 ug/L	502.47 ppb	13:40:33
3	Tl 190.801†	1324.1	1309.3	509.93 ug/L	509.93 ppb	13:40:53
3	U 409.014†	16002.5	17676.1	534.55 ug/L	534.55 ppb	13:40:33
3	V 292.402†	65020.9	64182.1	519.34 ug/L	519.34 ppb	13:40:33
3	Zn 213.857†	43757.5	41736.3	500.96 ug/L	500.96 ppb	13:40:33
3	SiO2†	138532.7	133439.2	10876 ug/L	10876 ppb	13:41:09

Mean Data: 1202053054|957492|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	845649.9	103.28 %	0.332			0.32%
Sc Radial	4503.2	102 %	2.3			2.20%
Y 371.029	705007.8	101.93 %	0.227			0.22%
Y RADIAL	4823.8	101.3 %	2.27			2.24%
Ag 328.068†	95896.9	501.03 ug/L	1.727	501.03 ppb	1.727	0.34%
Al 396.153Radial†	5209.9	5093.0 ug/L	20.47	5093.0 ppb	20.47	0.40%
As 188.979†	935.9	518.18 ug/L	2.646	518.18 ppb	2.646	0.51%
B 249.677†	18233.1	509.22 ug/L	1.496	509.22 ppb	1.496	0.29%
Ba 233.527†	55538.0	521.48 ug/L	2.299	521.48 ppb	2.299	0.44%
Be 313.107†	1214902.8	518.45 ug/L	0.969	518.45 ppb	0.969	0.19%
Ca 317.933Radial†	2707.7	5123.5 ug/L	135.89	5123.5 ppb	135.89	2.65%
Cd 226.502†	35082.6	508.94 ug/L	2.643	508.94 ppb	2.643	0.52%
Co 228.616†	19768.8	511.05 ug/L	1.896	511.05 ppb	1.896	0.37%
Cr 267.716†	37877.3	508.99 ug/L	2.577	508.99 ppb	2.577	0.51%
Cu 324.752†	155346.5	512.85 ug/L	2.385	512.85 ppb	2.385	0.47%
Fe 238.204 Radial†	442.4	5141.6 ug/L	157.32	5141.6 ppb	157.32	3.06%
K 766.490 Radial†	27294.7	5195.9 ug/L	33.83	5195.9 ppb	33.83	0.65%

Mg 279.077 IEC†	127.9	5275.3 ug/L	167.38	5275.3 ppb	167.38	3.17%
Mn 257.610†	387299.9	509.52 ug/L	1.246	509.52 ppb	1.246	0.24%
Mo 202.031†	5686.2	505.91 ug/L	2.849	505.91 ppb	2.849	0.56%
Na 589.592 Radial†	14613.5	5151.6 ug/L	27.14	5151.6 ppb	27.14	0.53%
Ni 231.604†	16331.5	518.34 ug/L	1.960	518.34 ppb	1.960	0.38%
P 214.914†	775.5	477.79 ug/L	4.253	477.79 ppb	4.253	0.89%
Pb 220.353†	3330.0	513.05 ug/L	1.885	513.05 ppb	1.885	0.37%
S 181.975 Axial†	2883.6	5161.4 ug/L	27.99	5161.4 ppb	27.99	0.54%
Sb 206.836†	1277.9	553.00 ug/L	5.226	553.00 ppb	5.226	0.95%
Se 196.026†	610.0	526.11 ug/L	4.964	526.11 ppb	4.964	0.94%
Si 251.611†	132005.8	5005.1 ug/L	18.20	5005.1 ppb	18.20	0.36%
Sn 189.927†	2272.7	516.36 ug/L	3.630	516.36 ppb	3.630	0.70%
Sr 421.552†	65082.3	521.64 ug/L	1.047	521.64 ppb	1.047	0.20%
Ti 334.940†	288862.3	502.18 ug/L	2.205	502.18 ppb	2.205	0.44%
Tl 190.801†	1311.3	510.70 ug/L	0.804	510.70 ppb	0.804	0.16%
U 409.014†	17829.4	539.19 ug/L	4.785	539.19 ppb	4.785	0.89%
V 292.402†	64133.7	518.93 ug/L	2.616	518.93 ppb	2.616	0.50%
Zn 213.857†	41694.2	500.43 ug/L	1.871	500.43 ppb	1.871	0.37%
SiO2†	132984.5	10839 ug/L	83.7	10839 ppb	83.7	0.77%

Sequence No.: 6

Sample ID: 247793001|957492|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 28

Date Collected: 3/19/2010 13:50:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247793001|957492|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4507.3	4507.3	103 %		13:51:57
1	Y RADIAL	4879.8	4879.8	102.5 %		13:51:57
1	Al 396.153Radial†	-74.5	5.4	5.3369 ug/L	5.3369 ppb	13:52:17
1	Ca 317.933Radial†	40.2	23.5	44.537 ug/L	44.537 ppb	13:52:17
1	Fe 238.204 Radial†	8.2	-0.5	-5.2481 ug/L	-5.2481 ppb	13:52:17
1	K 766.490 Radial†	4577.5	1864.7	355.19 ug/L	355.19 ppb	13:51:57
1	Mg 279.077 IEC†	0.7	-0.9	-36.424 ug/L	-36.424 ppb	13:52:17
1	Na 589.592 Radial†	-312.4	570.5	201.11 ug/L	201.11 ppb	13:51:57
1	Sr 421.552†	53.7	31.5	0.2522 ug/L	0.2522 ppb	13:51:57
1	Sc 361.383	839779.0	839779.0	102.56 %		13:53:14
1	Y 371.029	706345.7	706345.7	102.13 %		13:53:14
1	Ag 328.068†	184.4	-5.3	-0.0362 ug/L	-0.0362 ppb	13:53:14
1	As 188.979†	-23.3	4.1	2.2584 ug/L	2.2584 ppb	13:53:34
1	B 249.677†	397.7	925.1	25.953 ug/L	25.953 ppb	13:53:34
1	Ba 233.527†	35.4	35.2	0.3292 ug/L	0.3292 ppb	13:53:34
1	Be 313.107†	-3789.1	36.4	0.0159 ug/L	0.0159 ppb	13:53:14
1	Cd 226.502†	-180.3	-5.2	-0.0734 ug/L	-0.0734 ppb	13:53:34
1	Co 228.616†	-42.1	5.1	0.1320 ug/L	0.1320 ppb	13:53:34
1	Cr 267.716†	96.9	22.9	0.3039 ug/L	0.3039 ppb	13:53:34
1	Cu 324.752†	5902.2	202.9	0.6655 ug/L	0.6655 ppb	13:53:14
1	Mn 257.610†	693.8	287.4	0.3788 ug/L	0.3788 ppb	13:53:34
1	Mo 202.031†	6.0	-2.7	-0.2408 ug/L	-0.2408 ppb	13:53:34
1	Ni 231.604†	77.9	-8.1	-0.2569 ug/L	-0.2569 ppb	13:53:34
1	P 214.914†	200.5	8.2	5.9550 ug/L	5.9550 ppb	13:53:34
1	Pb 220.353†	-46.7	12.8	1.9659 ug/L	1.9659 ppb	13:53:34
1	S 181.975 Axial†	53.5	21.9	39.290 ug/L	39.290 ppb	13:53:34
1	Sb 206.836†	33.0	8.5	3.5399 ug/L	3.5399 ppb	13:53:34
1	Se 196.026†	-22.9	-5.3	-4.4543 ug/L	-4.4543 ppb	13:53:34
1	Si 251.611†	42913.5	41354.5	1569.9 ug/L	1569.9 ppb	13:53:14
1	Sn 189.927†	4.2	-3.1	-0.6847 ug/L	-0.6847 ppb	13:53:34
1	Ti 334.940†	-1036.6	110.5	0.1978 ug/L	0.1978 ppb	13:53:14
1	Tl 190.801†	-32.9	-3.0	-1.1424 ug/L	-1.1424 ppb	13:53:34
1	U 409.014†	-2011.8	242.6	7.3610 ug/L	7.3610 ppb	13:53:14
1	V 292.402†	-1365.8	-14.2	-0.1033 ug/L	-0.1033 ppb	13:53:14
1	Zn 213.857†	721.7	133.6	1.6207 ug/L	1.6207 ppb	13:53:34
1	SiO2†	42453.9	40895.2	3337.5 ug/L	3337.5 ppb	13:54:30
2	Sc Radial	4792.8	4792.8	109 %		13:52:22
2	Y RADIAL	5182.4	5182.4	108.9 %		13:52:22
2	Al 396.153Radial†	-68.1	15.6	15.394 ug/L	15.394 ppb	13:52:42
2	Ca 317.933Radial†	39.2	20.3	38.386 ug/L	38.386 ppb	13:52:42
2	Fe 238.204 Radial†	9.1	-0.1	-1.6351 ug/L	-1.6351 ppb	13:52:42
2	K 766.490 Radial†	4461.1	1492.1	284.20 ug/L	284.20 ppb	13:52:22
2	Mg 279.077 IEC†	2.5	0.7	30.527 ug/L	30.527 ppb	13:52:42
2	Na 589.592 Radial†	-323.7	578.3	203.85 ug/L	203.85 ppb	13:52:22
2	Sr 421.552†	22.0	-0.7	-0.0056 ug/L	-0.0056 ppb	13:52:22
2	Sc 361.383	848767.8	848767.8	103.66 %		13:53:39
2	Y 371.029	715068.5	715068.5	103.39 %		13:53:39
2	Ag 328.068†	113.5	-75.7	-0.3936 ug/L	-0.3936 ppb	13:53:39
2	As 188.979†	-23.3	4.3	2.3842 ug/L	2.3842 ppb	13:53:59
2	B 249.677†	374.3	898.4	25.205 ug/L	25.205 ppb	13:53:59
2	Ba 233.527†	25.4	25.2	0.2367 ug/L	0.2367 ppb	13:53:59
2	Be 313.107†	-3782.7	81.7	0.0356 ug/L	0.0356 ppb	13:53:39
2	Cd 226.502†	-174.5	2.3	0.0336 ug/L	0.0336 ppb	13:53:59
2	Co 228.616†	-51.0	-3.0	-0.0793 ug/L	-0.0793 ppb	13:53:59
2	Cr 267.716†	92.4	17.6	0.2362 ug/L	0.2362 ppb	13:53:59
2	Cu 324.752†	6011.1	247.1	0.8150 ug/L	0.8150 ppb	13:53:39
2	Mn 257.610†	721.6	307.1	0.4024 ug/L	0.4024 ppb	13:53:59
2	Mo 202.031†	-0.7	-9.2	-0.8169 ug/L	-0.8169 ppb	13:53:59
2	Ni 231.604†	93.4	6.0	0.1917 ug/L	0.1917 ppb	13:53:59

2	P 214.914†	199.3	5.0	3.5468 ug/L	3.5468 ppb	13:53:59
2	Pb 220.353†	-54.1	6.1	0.9381 ug/L	0.9381 ppb	13:53:59
2	S 181.975 Axial†	52.6	20.6	36.856 ug/L	36.856 ppb	13:53:59
2	Sb 206.836†	32.3	7.5	3.1162 ug/L	3.1162 ppb	13:53:59
2	Se 196.026†	-23.2	-5.4	-4.5027 ug/L	-4.5027 ppb	13:53:59
2	Si 251.611†	43124.6	41115.1	1560.9 ug/L	1560.9 ppb	13:53:39
2	Sn 189.927†	4.9	-2.4	-0.5425 ug/L	-0.5425 ppb	13:53:59
2	Ti 334.940†	-964.8	190.4	0.3332 ug/L	0.3332 ppb	13:53:39
2	Tl 190.801†	-24.7	5.2	2.0313 ug/L	2.0313 ppb	13:53:59
2	U 409.014†	-2246.2	37.2	1.1297 ug/L	1.1297 ppb	13:53:39
2	V 292.402†	-1328.2	36.1	0.2789 ug/L	0.2789 ppb	13:53:39
2	Zn 213.857†	723.9	128.3	1.5526 ug/L	1.5526 ppb	13:53:59
2	SiO2†	43204.0	41180.5	3360.8 ug/L	3360.8 ppb	13:54:35
3	Sc Radial	4558.7	4558.7	104 %		13:52:47
3	Y RADIAL	4961.4	4961.4	104.2 %		13:52:47
3	Al 396.153Radial†	-67.4	13.1	12.893 ug/L	12.893 ppb	13:53:07
3	Ca 317.933Radial†	38.3	21.3	40.235 ug/L	40.235 ppb	13:53:07
3	Fe 238.204 Radial†	10.2	1.4	16.360 ug/L	16.360 ppb	13:53:07
3	K 766.490 Radial†	4592.8	1829.2	348.43 ug/L	348.43 ppb	13:52:47
3	Mg 279.077 IEC†	-0.4	-1.9	-80.092 ug/L	-80.092 ppb	13:53:07
3	Na 589.592 Radial†	-317.8	568.8	200.50 ug/L	200.50 ppb	13:52:47
3	Sr 421.552†	57.5	34.6	0.2768 ug/L	0.2768 ppb	13:52:47
3	Sc 361.383	843297.7	843297.7	102.99 %		13:54:05
3	Y 371.029	712010.0	712010.0	102.94 %		13:54:05
3	Ag 328.068†	230.0	38.1	0.1990 ug/L	0.1990 ppb	13:54:05
3	As 188.979†	-24.0	3.5	1.9117 ug/L	1.9117 ppb	13:54:25
3	B 249.677†	359.3	886.2	24.859 ug/L	24.859 ppb	13:54:25
3	Ba 233.527†	30.0	29.8	0.2796 ug/L	0.2796 ppb	13:54:25
3	Be 313.107†	-3762.8	77.4	0.0336 ug/L	0.0336 ppb	13:54:05
3	Cd 226.502†	-170.1	5.5	0.0790 ug/L	0.0790 ppb	13:54:25
3	Co 228.616†	-38.4	8.9	0.2309 ug/L	0.2309 ppb	13:54:25
3	Cr 267.716†	73.8	0.2	0.0024 ug/L	0.0024 ppb	13:54:25
3	Cu 324.752†	5888.0	165.2	0.5437 ug/L	0.5437 ppb	13:54:05
3	Mn 257.610†	700.1	290.7	0.3871 ug/L	0.3871 ppb	13:54:25
3	Mo 202.031†	12.5	3.6	0.3180 ug/L	0.3180 ppb	13:54:25
3	Ni 231.604†	85.7	-0.9	-0.0275 ug/L	-0.0275 ppb	13:54:25
3	P 214.914†	202.8	9.6	7.0264 ug/L	7.0264 ppb	13:54:25
3	Pb 220.353†	-62.0	-1.9	-0.2858 ug/L	-0.2858 ppb	13:54:25
3	S 181.975 Axial†	51.2	19.5	34.937 ug/L	34.937 ppb	13:54:25
3	Sb 206.836†	26.5	2.0	0.8491 ug/L	0.8491 ppb	13:54:25
3	Se 196.026†	-17.9	-0.5	-0.3364 ug/L	-0.3364 ppb	13:54:25
3	Si 251.611†	42918.5	41184.8	1563.5 ug/L	1563.5 ppb	13:54:05
3	Sn 189.927†	3.8	-3.5	-0.7818 ug/L	-0.7818 ppb	13:54:25
3	Ti 334.940†	-991.7	158.3	0.2852 ug/L	0.2852 ppb	13:54:05
3	Tl 190.801†	-27.3	2.6	0.9977 ug/L	0.9977 ppb	13:54:25
3	U 409.014†	-2119.8	145.9	4.4239 ug/L	4.4239 ppb	13:54:05
3	V 292.402†	-1354.6	2.1	0.0257 ug/L	0.0257 ppb	13:54:05
3	Zn 213.857†	727.4	136.2	1.6479 ug/L	1.6479 ppb	13:54:25
3	SiO2†	43127.1	41376.1	3376.8 ug/L	3376.8 ppb	13:54:40

Mean Data: 247793001|957492|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	843948.2	103.07 %		0.553			0.54%
Sc Radial	4619.6	105 %		3.5			3.29%
Y 371.029	711141.4	102.82 %		0.640			0.62%
Y RADIAL	5007.9	105.2 %		3.29			3.13%
Ag 328.068†	-14.3	-0.0769 ug/L		0.29839	-0.0769 ppb	0.29839	387.88%
Al 396.153Radial†	11.4	11.208 ug/L		5.2361	11.208 ppb	5.2361	46.72%
As 188.979†	4.0	2.1847 ug/L		0.24471	2.1847 ppb	0.24471	11.20%
B 249.677†	903.2	25.339 ug/L		0.5592	25.339 ppb	0.5592	2.21%
Ba 233.527†	30.1	0.2818 ug/L		0.04629	0.2818 ppb	0.04629	16.43%
Be 313.107†	65.2	0.0284 ug/L		0.01080	0.0284 ppb	0.01080	38.08%
Ca 317.933Radial†	21.7	41.053 ug/L		3.1561	41.053 ppb	3.1561	7.69%
Cd 226.502†	0.9	0.0131 ug/L		0.07823	0.0131 ppb	0.07823	597.55%
Co 228.616†	3.7	0.0945 ug/L		0.15843	0.0945 ppb	0.15843	167.58%
Cr 267.716†	13.6	0.1808 ug/L		0.15814	0.1808 ppb	0.15814	87.46%
Cu 324.752†	205.0	0.6747 ug/L		0.13591	0.6747 ppb	0.13591	20.14%
Fe 238.204 Radial†	0.3	3.1589 ug/L		11.57418	3.1589 ppb	11.57418	366.40%
K 766.490 Radial†	1728.7	329.27 ug/L		39.180	329.27 ppb	39.180	11.90%

Mg 279.077 IEC†	-0.7	-28.663 ug/L	55.7165	-28.663 ppb	55.7165	194.38%
Mn 257.610†	295.1	0.3894 ug/L	0.01196	0.3894 ppb	0.01196	3.07%
Mo 202.031†	-2.8	-0.2466 ug/L	0.56750	-0.2466 ppb	0.56750	230.15%
Na 589.592 Radial†	572.5	201.82 ug/L	1.784	201.82 ppb	1.784	0.88%
Ni 231.604†	-1.0	-0.0309 ug/L	0.22430	-0.0309 ppb	0.22430	726.01%
P 214.914†	7.6	5.5094 ug/L	1.78204	5.5094 ppb	1.78204	32.35%
Pb 220.353†	5.7	0.8727 ug/L	1.12727	0.8727 ppb	1.12727	129.16%
S 181.975 Axial†	20.7	37.027 ug/L	2.1815	37.027 ppb	2.1815	5.89%
Sb 206.836†	6.0	2.5018 ug/L	1.44682	2.5018 ppb	1.44682	57.83%
Se 196.026†	-3.7	-3.0978 ug/L	2.39155	-3.0978 ppb	2.39155	77.20%
Si 251.611†	41218.1	1564.8 ug/L	4.67	1564.8 ppb	4.67	0.30%
Sn 189.927†	-3.0	-0.6697 ug/L	0.12037	-0.6697 ppb	0.12037	17.97%
Sr 421.552†	21.8	0.1745 ug/L	0.15645	0.1745 ppb	0.15645	89.68%
Ti 334.940†	153.1	0.2721 ug/L	0.06867	0.2721 ppb	0.06867	25.24%
Tl 190.801†	1.6	0.6289 ug/L	1.61872	0.6289 ppb	1.61872	257.40%
U 409.014†	141.9	4.3048 ug/L	3.11734	4.3048 ppb	3.11734	72.41%
V 292.402†	8.0	0.0671 ug/L	0.19444	0.0671 ppb	0.19444	289.93%
Zn 213.857†	132.7	1.6071 ug/L	0.04905	1.6071 ppb	0.04905	3.05%
SiO2†	41150.6	3358.4 ug/L	19.73	3358.4 ppb	19.73	0.59%

Sequence No.: 10

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 14:17:09

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	4286.6	4286.6	97.5 %		14:19:21
1	Y RADIAL	4712.3	4712.3	98.99 %		14:19:01
1	Al 396.153Radial†	4948.0	5151.3	5035.7 ug/L	5035.7 ppb	14:19:01
1	Ca 317.933Radial†	2681.9	2734.1	5173.4 ug/L	5173.4 ppb	14:19:21
1	Fe 238.204 Radial†	445.8	448.7	5213.7 ug/L	5213.7 ppb	14:19:21
1	K 766.490 Radial†	29143.9	27282.4	5191.6 ug/L	5191.6 ppb	14:19:01
1	Mg 279.077 IEC†	128.4	130.2	5369.0 ug/L	5369.0 ppb	14:19:21
1	Na 589.592 Radial†	27278.3	28843.5	10168 ug/L	10168 ppb	14:19:01
1	Sr 421.552†	62479.4	64039.2	513.28 ug/L	513.28 ppb	14:19:01
1	Sc 361.383	831477.9	831477.9	101.55 %		14:20:18
1	Y 371.029	692747.3	692747.3	100.16 %		14:20:18
1	Ag 328.068†	98324.6	96643.2	504.90 ug/L	504.90 ppb	14:20:24
1	As 188.979†	905.4	918.4	508.54 ug/L	508.54 ppb	14:20:44
1	B 249.677†	17422.4	17694.6	494.10 ug/L	494.10 ppb	14:20:24
1	Ba 233.527†	54391.7	53564.7	502.96 ug/L	502.96 ppb	14:20:24
1	Be 313.107†	1194858.5	1180406.6	503.74 ug/L	503.74 ppb	14:20:18
1	Cd 226.502†	35200.5	34835.4	505.33 ug/L	505.33 ppb	14:20:24
1	Co 228.616†	20048.9	19790.0	511.60 ug/L	511.60 ppb	14:20:24
1	Cr 267.716†	37955.7	37306.6	501.34 ug/L	501.34 ppb	14:20:24
1	Cu 324.752†	157713.0	149761.0	494.43 ug/L	494.43 ppb	14:20:24
1	Mn 257.610†	381470.8	375276.7	493.72 ug/L	493.72 ppb	14:20:24
1	Mo 202.031†	5726.4	5630.7	500.99 ug/L	500.99 ppb	14:20:44
1	Ni 231.604†	16346.0	16013.1	508.23 ug/L	508.23 ppb	14:20:24
1	P 214.914†	3603.1	3360.9	2407.2 ug/L	2407.2 ppb	14:20:44
1	Pb 220.353†	3243.2	3252.2	501.06 ug/L	501.06 ppb	14:20:44
1	S 181.975 Axial†	604.1	564.7	1010.0 ug/L	1010.0 ppb	14:20:44
1	Sb 206.836†	1248.8	1206.2	522.61 ug/L	522.61 ppb	14:20:44
1	Se 196.026†	598.5	606.4	523.26 ug/L	523.26 ppb	14:20:44
1	Si 251.611†	68567.2	67035.6	2538.7 ug/L	2538.7 ppb	14:20:24
1	Sn 189.927†	2241.0	2199.7	499.80 ug/L	499.80 ppb	14:20:44
1	Ti 334.940†	287050.0	283803.0	493.40 ug/L	493.40 ppb	14:20:24
1	Tl 190.801†	1277.2	1286.9	501.13 ug/L	501.13 ppb	14:20:44
1	U 409.014†	14715.7	16695.9	504.81 ug/L	504.81 ppb	14:20:24
1	V 292.402†	61985.5	62359.7	504.63 ug/L	504.63 ppb	14:20:24
1	Zn 213.857†	42736.7	41516.3	498.35 ug/L	498.35 ppb	14:20:24
1	SiO2†	68779.3	67233.3	5473.4 ug/L	5473.4 ppb	14:21:51
2	Sc Radial	4298.9	4298.9	97.8 %		14:19:46
2	Y RADIAL	4801.9	4801.9	100.9 %		14:19:26
2	Al 396.153Radial†	5052.3	5243.4	5126.5 ug/L	5126.5 ppb	14:19:26
2	Ca 317.933Radial†	2690.8	2735.3	5175.8 ug/L	5175.8 ppb	14:19:46
2	Fe 238.204 Radial†	448.2	449.8	5226.7 ug/L	5226.7 ppb	14:19:46
2	K 766.490 Radial†	29575.8	27638.4	5259.4 ug/L	5259.4 ppb	14:19:26
2	Mg 279.077 IEC†	124.6	125.8	5189.8 ug/L	5189.8 ppb	14:19:46
2	Na 589.592 Radial†	27711.8	29206.6	10296 ug/L	10296 ppb	14:19:26
2	Sr 421.552†	63721.4	65125.5	521.99 ug/L	521.99 ppb	14:19:26
2	Sc 361.383	838934.0	838934.0	102.46 %		14:20:49
2	Y 371.029	696901.9	696901.9	100.76 %		14:20:49
2	Ag 328.068†	98089.8	95553.4	499.22 ug/L	499.22 ppb	14:20:54
2	As 188.979†	897.0	902.3	499.63 ug/L	499.63 ppb	14:21:15
2	B 249.677†	17432.6	17552.1	490.12 ug/L	490.12 ppb	14:20:54
2	Ba 233.527†	54141.6	52844.5	496.20 ug/L	496.20 ppb	14:20:54
2	Be 313.107†	1207828.3	1182607.7	504.67 ug/L	504.67 ppb	14:20:49
2	Cd 226.502†	34973.2	34305.6	497.64 ug/L	497.64 ppb	14:20:54
2	Co 228.616†	19965.7	19533.3	504.96 ug/L	504.96 ppb	14:20:54
2	Cr 267.716†	37713.6	36738.1	493.71 ug/L	493.71 ppb	14:20:54
2	Cu 324.752†	157185.6	147865.8	488.18 ug/L	488.18 ppb	14:20:54
2	Mn 257.610†	379619.5	370131.0	486.96 ug/L	486.96 ppb	14:20:54
2	Mo 202.031†	5693.9	5548.9	493.72 ug/L	493.72 ppb	14:21:15
2	Ni 231.604†	16251.4	15777.8	500.76 ug/L	500.76 ppb	14:20:54

2	P 214.914†	3594.4	3321.0	2378.6 ug/L	2378.6 ppb	14:21:15
2	Pb 220.353†	3259.7	3239.8	499.16 ug/L	499.16 ppb	14:21:15
2	S 181.975 Axial†	605.2	560.5	1002.5 ug/L	1002.5 ppb	14:21:15
2	Sb 206.836†	1248.3	1194.7	517.64 ug/L	517.64 ppb	14:21:15
2	Se 196.026†	589.8	592.6	511.83 ug/L	511.83 ppb	14:21:15
2	Si 251.611†	68173.9	66051.6	2501.4 ug/L	2501.4 ppb	14:20:54
2	Sn 189.927†	2257.8	2196.6	499.08 ug/L	499.08 ppb	14:21:15
2	Ti 334.940†	285541.1	279817.9	486.49 ug/L	486.49 ppb	14:20:54
2	Tl 190.801†	1275.8	1274.3	496.22 ug/L	496.22 ppb	14:21:15
2	U 409.014†	14699.2	16551.0	500.43 ug/L	500.43 ppb	14:20:54
2	V 292.402†	61693.6	61532.2	497.92 ug/L	497.92 ppb	14:20:54
2	Zn 213.857†	42687.0	41093.7	493.29 ug/L	493.29 ppb	14:20:54
2	SiO2†	69054.8	66900.2	5446.4 ug/L	5446.4 ppb	14:21:56
3	Sc Radial	4285.5	4285.5	97.5 %		14:20:11
3	Y RADIAL	4880.2	4880.2	102.5 %		14:19:51
3	Al 396.153Radial†	5069.9	5277.6	5159.6 ug/L	5159.6 ppb	14:19:51
3	Ca 317.933Radial†	2697.6	2750.8	5205.1 ug/L	5205.1 ppb	14:20:11
3	Fe 238.204 Radial†	454.8	458.0	5322.0 ug/L	5322.0 ppb	14:20:11
3	K 766.490 Radial†	29958.4	28125.4	5352.1 ug/L	5352.1 ppb	14:19:51
3	Mg 279.077 IEC†	131.4	133.2	5495.5 ug/L	5495.5 ppb	14:20:11
3	Na 589.592 Radial†	27959.3	29549.0	10417 ug/L	10417 ppb	14:19:51
3	Sr 421.552†	64362.6	65986.8	528.89 ug/L	528.89 ppb	14:19:51
3	Sc 361.383	825187.1	825187.1	100.78 %		14:21:20
3	Y 371.029	686685.7	686685.7	99.283 %		14:21:20
3	Ag 328.068†	97337.1	96401.4	503.67 ug/L	503.67 ppb	14:21:25
3	As 188.979†	913.9	933.6	516.86 ug/L	516.86 ppb	14:21:45
3	B 249.677†	17209.9	17614.5	491.84 ug/L	491.84 ppb	14:21:25
3	Ba 233.527†	53489.1	53077.4	498.40 ug/L	498.40 ppb	14:21:25
3	Be 313.107†	1185936.7	1180523.9	503.79 ug/L	503.79 ppb	14:21:20
3	Cd 226.502†	34609.4	34513.2	500.64 ug/L	500.64 ppb	14:21:25
3	Co 228.616†	19749.9	19643.9	507.83 ug/L	507.83 ppb	14:21:25
3	Cr 267.716†	37555.4	37194.3	499.84 ug/L	499.84 ppb	14:21:25
3	Cu 324.752†	155986.3	149231.7	492.69 ug/L	492.69 ppb	14:21:25
3	Mn 257.610†	376330.0	373039.4	490.78 ug/L	490.78 ppb	14:21:25
3	Mo 202.031†	5723.8	5671.2	504.59 ug/L	504.59 ppb	14:21:45
3	Ni 231.604†	16186.7	15977.8	507.11 ug/L	507.11 ppb	14:21:25
3	P 214.914†	3581.7	3366.8	2411.9 ug/L	2411.9 ppb	14:21:45
3	Pb 220.353†	3250.7	3283.9	505.96 ug/L	505.96 ppb	14:21:45
3	S 181.975 Axial†	603.6	568.8	1017.3 ug/L	1017.3 ppb	14:21:45
3	Sb 206.836†	1251.1	1217.8	527.67 ug/L	527.67 ppb	14:21:45
3	Se 196.026†	597.0	609.3	526.11 ug/L	526.11 ppb	14:21:45
3	Si 251.611†	67487.4	66478.9	2517.5 ug/L	2517.5 ppb	14:21:25
3	Sn 189.927†	2258.7	2234.1	507.59 ug/L	507.59 ppb	14:21:45
3	Ti 334.940†	283433.1	282369.0	490.90 ug/L	490.90 ppb	14:21:25
3	Tl 190.801†	1286.7	1305.8	508.45 ug/L	508.45 ppb	14:21:45
3	U 409.014†	14522.6	16614.8	502.34 ug/L	502.34 ppb	14:21:25
3	V 292.402†	61245.5	62090.7	502.52 ug/L	502.52 ppb	14:21:25
3	Zn 213.857†	42292.7	41396.5	496.90 ug/L	496.90 ppb	14:21:25
3	SiO2†	68089.2	67064.8	5459.5 ug/L	5459.5 ppb	14:22:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	831866.4	101.59 %	0.840			0.83%
Sc Radial	4290.4	97.6 %	0.17			0.17%
Y 371.029	692111.7	100.07 %	0.743			0.74%
Y RADIAL	4798.1	100.8 %	1.76			1.75%
Ag 328.068†	96199.3	502.60 ug/L	2.987	502.60 ppb	2.987	0.59%
QC value within limits for Ag 328.068 Recovery = 100.52%						
Al 396.153Radial†	5224.1	5107.2 ug/L	64.17	5107.2 ppb	64.17	1.26%
QC value within limits for Al 396.153Radial Recovery = 102.14%						
As 188.979†	918.1	508.34 ug/L	8.615	508.34 ppb	8.615	1.69%
QC value within limits for As 188.979 Recovery = 101.67%						
B 249.677†	17620.4	492.02 ug/L	1.996	492.02 ppb	1.996	0.41%
QC value within limits for B 249.677 Recovery = 98.40%						
Ba 233.527†	53162.2	499.19 ug/L	3.449	499.19 ppb	3.449	0.69%
QC value within limits for Ba 233.527 Recovery = 99.84%						
Be 313.107†	1181179.4	504.07 ug/L	0.520	504.07 ppb	0.520	0.10%
QC value within limits for Be 313.107 Recovery = 100.81%						
Ca 317.933Radial†	2740.1	5184.8 ug/L	17.64	5184.8 ppb	17.64	0.34%

QC value within limits for Ca 317.933 Radial Recovery = 103.70%						
Cd 226.502†	34551.4	501.20 ug/L	3.878	501.20 ppb	3.878	0.77%
QC value within limits for Cd 226.502 Recovery = 100.24%						
Co 228.616†	19655.7	508.13 ug/L	3.329	508.13 ppb	3.329	0.66%
QC value within limits for Co 228.616 Recovery = 101.63%						
Cr 267.716†	37079.7	498.30 ug/L	4.043	498.30 ppb	4.043	0.81%
QC value within limits for Cr 267.716 Recovery = 99.66%						
Cu 324.752†	148952.8	491.77 ug/L	3.228	491.77 ppb	3.228	0.66%
QC value within limits for Cu 324.752 Recovery = 98.35%						
Fe 238.204 Radial†	452.2	5254.2 ug/L	59.13	5254.2 ppb	59.13	1.13%
QC value within limits for Fe 238.204 Radial Recovery = 105.08%						
K 766.490 Radial†	27682.1	5267.7 ug/L	80.57	5267.7 ppb	80.57	1.53%
QC value within limits for K 766.490 Radial Recovery = 105.35%						
Mg 279.077 IEC†	129.7	5351.4 ug/L	153.62	5351.4 ppb	153.62	2.87%
QC value within limits for Mg 279.077 IEC Recovery = 107.03%						
Mn 257.610†	372815.7	490.48 ug/L	3.388	490.48 ppb	3.388	0.69%
QC value within limits for Mn 257.610 Recovery = 98.10%						
Mo 202.031†	5616.9	499.77 ug/L	5.539	499.77 ppb	5.539	1.11%
QC value within limits for Mo 202.031 Recovery = 99.95%						
Na 589.592 Radial†	29199.7	10294 ug/L	124.4	10294 ppb	124.4	1.21%
QC value within limits for Na 589.592 Radial Recovery = 102.94%						
Ni 231.604†	15922.9	505.36 ug/L	4.029	505.36 ppb	4.029	0.80%
QC value within limits for Ni 231.604 Recovery = 101.07%						
P 214.914†	3349.6	2399.2 ug/L	17.98	2399.2 ppb	17.98	0.75%
QC value within limits for P 214.914 Recovery = 95.97%						
Pb 220.353†	3258.6	502.06 ug/L	3.508	502.06 ppb	3.508	0.70%
QC value within limits for Pb 220.353 Recovery = 100.41%						
S 181.975 Axial†	564.7	1009.9 ug/L	7.41	1009.9 ppb	7.41	0.73%
QC value within limits for S 181.975 Axial Recovery = 100.99%						
Sb 206.836†	1206.2	522.64 ug/L	5.013	522.64 ppb	5.013	0.96%
QC value within limits for Sb 206.836 Recovery = 104.53%						
Se 196.026†	602.8	520.40 ug/L	7.558	520.40 ppb	7.558	1.45%
QC value within limits for Se 196.026 Recovery = 104.08%						
Si 251.611†	66522.0	2519.2 ug/L	18.69	2519.2 ppb	18.69	0.74%
QC value within limits for Si 251.611 Recovery = 100.77%						
Sn 189.927†	2210.1	502.15 ug/L	4.722	502.15 ppb	4.722	0.94%
QC value within limits for Sn 189.927 Recovery = 100.43%						
Sr 421.552†	65050.5	521.39 ug/L	7.823	521.39 ppb	7.823	1.50%
QC value within limits for Sr 421.552 Recovery = 104.28%						
Ti 334.940†	281996.6	490.26 ug/L	3.499	490.26 ppb	3.499	0.71%
QC value within limits for Ti 334.940 Recovery = 98.05%						
Tl 190.801†	1289.0	501.94 ug/L	6.156	501.94 ppb	6.156	1.23%
QC value within limits for Tl 190.801 Recovery = 100.39%						
U 409.014†	16620.6	502.53 ug/L	2.197	502.53 ppb	2.197	0.44%
QC value within limits for U 409.014 Recovery = 100.51%						
V 292.402†	61994.2	501.69 ug/L	3.433	501.69 ppb	3.433	0.68%
QC value within limits for V 292.402 Recovery = 100.34%						
Zn 213.857†	41335.5	496.18 ug/L	2.608	496.18 ppb	2.608	0.53%
QC value within limits for Zn 213.857 Recovery = 99.24%						
SiO2†	67066.1	5459.8 ug/L	13.50	5459.8 ppb	13.50	0.25%
QC value within limits for SiO2 Recovery = 102.10%						
All analyte(s) passed QC.						

Sequence No.: 11

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 14:24:11

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4205.6	4205.6	95.7 %		14:26:24
1	Y RADIAL	4674.8	4674.8	98.20 %		14:26:04
1	Al 396.153Radial†	-79.0	-4.5	-4.4237 ug/L	-4.4237 ppb	14:26:24
1	Ca 317.933Radial†	19.5	4.7	8.8716 ug/L	8.8716 ppb	14:26:24
1	Fe 238.204 Radial†	6.8	-1.3	-15.152 ug/L	-15.152 ppb	14:26:24
1	K 766.490 Radial†	2657.1	178.0	33.925 ug/L	33.925 ppb	14:26:04
1	Mg 279.077 IEC†	2.1	0.7	28.443 ug/L	28.443 ppb	14:26:24
1	Na 589.592 Radial†	-889.3	-54.3	-19.138 ug/L	-19.138 ppb	14:26:04
1	Sr 421.552†	24.1	4.3	0.0345 ug/L	0.0345 ppb	14:26:04
1	Sc 361.383	823769.2	823769.2	100.60 %		14:27:21
1	Y 371.029	695270.5	695270.5	100.52 %		14:27:21
1	Ag 328.068†	239.9	53.4	0.2721 ug/L	0.2721 ppb	14:27:21
1	As 188.979†	-22.7	4.3	2.3396 ug/L	2.3396 ppb	14:27:41
1	B 249.677†	-326.0	213.3	5.9855 ug/L	5.9855 ppb	14:27:41
1	Ba 233.527†	2.4	3.1	0.0279 ug/L	0.0279 ppb	14:27:41
1	Be 313.107†	-3704.2	49.1	0.0210 ug/L	0.0210 ppb	14:27:21
1	Cd 226.502†	-181.7	-10.0	-0.1442 ug/L	-0.1442 ppb	14:27:41
1	Co 228.616†	-39.1	7.3	0.1900 ug/L	0.1900 ppb	14:27:41
1	Cr 267.716†	76.1	4.1	0.0536 ug/L	0.0536 ppb	14:27:41
1	Cu 324.752†	5545.9	-39.4	-0.1306 ug/L	-0.1306 ppb	14:27:21
1	Mn 257.610†	381.1	-10.3	-0.0162 ug/L	-0.0162 ppb	14:27:41
1	Mo 202.031†	14.0	5.4	0.4818 ug/L	0.4818 ppb	14:27:41
1	Ni 231.604†	72.9	-11.6	-0.3696 ug/L	-0.3696 ppb	14:27:41
1	P 214.914†	183.4	-5.0	-3.6798 ug/L	-3.6798 ppb	14:27:41
1	Pb 220.353†	-46.8	11.8	1.8119 ug/L	1.8119 ppb	14:27:41
1	S 181.975 Axial†	32.0	1.6	2.8912 ug/L	2.8912 ppb	14:27:41
1	Sb 206.836†	43.9	20.0	8.3742 ug/L	8.3742 ppb	14:27:41
1	Se 196.026†	-22.6	-5.5	-4.6659 ug/L	-4.6659 ppb	14:27:41
1	Si 251.611†	500.4	9.2	0.3440 ug/L	0.3440 ppb	14:27:41
1	Sn 189.927†	7.2	0.0	0.0045 ug/L	0.0045 ppb	14:27:41
1	Ti 334.940†	-1115.0	12.9	0.0215 ug/L	0.0215 ppb	14:27:21
1	Tl 190.801†	-27.7	1.5	0.5959 ug/L	0.5959 ppb	14:27:41
1	U 409.014†	-2231.3	-13.8	-0.4157 ug/L	-0.4157 ppb	14:27:21
1	V 292.402†	-1342.4	-17.0	-0.1266 ug/L	-0.1266 ppb	14:27:21
1	Zn 213.857†	544.5	-28.8	-0.3443 ug/L	-0.3443 ppb	14:27:41
1	SiO2†	528.6	26.1	2.1191 ug/L	2.1191 ppb	14:28:52
2	Sc Radial	4264.1	4264.1	97.0 %		14:26:49
2	Y RADIAL	4759.1	4759.1	99.97 %		14:26:29
2	Al 396.153Radial†	-70.3	5.6	5.5009 ug/L	5.5009 ppb	14:26:49
2	Ca 317.933Radial†	18.4	3.2	6.0968 ug/L	6.0968 ppb	14:26:49
2	Fe 238.204 Radial†	5.2	-3.1	-35.431 ug/L	-35.431 ppb	14:26:49
2	K 766.490 Radial†	2765.0	251.1	47.845 ug/L	47.845 ppb	14:26:29
2	Mg 279.077 IEC†	0.2	-1.3	-52.606 ug/L	-52.606 ppb	14:26:49
2	Na 589.592 Radial†	-846.1	3.0	1.0656 ug/L	1.0656 ppb	14:26:29
2	Sr 421.552†	8.3	-12.3	-0.0986 ug/L	-0.0986 ppb	14:26:29
2	Sc 361.383	820046.7	820046.7	100.15 %		14:27:46
2	Y 371.029	692570.4	692570.4	100.13 %		14:27:46
2	Ag 328.068†	155.7	-29.7	-0.1663 ug/L	-0.1663 ppb	14:27:46
2	As 188.979†	-21.4	5.4	2.9797 ug/L	2.9797 ppb	14:28:06
2	B 249.677†	-341.2	196.7	5.5226 ug/L	5.5226 ppb	14:28:06
2	Ba 233.527†	10.9	11.6	0.1074 ug/L	0.1074 ppb	14:28:06
2	Be 313.107†	-3692.5	44.0	0.0186 ug/L	0.0186 ppb	14:27:46
2	Cd 226.502†	-177.9	-7.0	-0.0978 ug/L	-0.0978 ppb	14:28:06
2	Co 228.616†	-34.2	12.0	0.3131 ug/L	0.3131 ppb	14:28:06
2	Cr 267.716†	63.7	-7.9	-0.1096 ug/L	-0.1096 ppb	14:28:06
2	Cu 324.752†	5570.5	10.2	0.0316 ug/L	0.0316 ppb	14:27:46
2	Mn 257.610†	410.2	20.5	0.0256 ug/L	0.0256 ppb	14:28:06
2	Mo 202.031†	16.5	7.9	0.7010 ug/L	0.7010 ppb	14:28:06
2	Ni 231.604†	72.9	-11.2	-0.3570 ug/L	-0.3570 ppb	14:28:06

2	P 214.914†	186.8	-0.8	-0.5492 ug/L	-0.5492 ppb	14:28:06
2	Pb 220.353†	-58.2	0.2	0.0395 ug/L	0.0395 ppb	14:28:06
2	S 181.975 Axial†	27.1	-3.1	-5.5952 ug/L	-5.5952 ppb	14:28:06
2	Sb 206.836†	28.8	5.1	2.1640 ug/L	2.1640 ppb	14:28:06
2	Se 196.026†	-18.2	-1.2	-1.1286 ug/L	-1.1286 ppb	14:28:06
2	Si 251.611†	504.7	15.7	0.5887 ug/L	0.5887 ppb	14:28:06
2	Sn 189.927†	9.4	2.2	0.4997 ug/L	0.4997 ppb	14:28:06
2	Ti 334.940†	-1163.2	-40.2	-0.0649 ug/L	-0.0649 ppb	14:27:46
2	Tl 190.801†	-24.2	5.0	1.9222 ug/L	1.9222 ppb	14:28:06
2	U 409.014†	-2198.7	8.8	0.2707 ug/L	0.2707 ppb	14:27:46
2	V 292.402†	-1351.3	-31.9	-0.2400 ug/L	-0.2400 ppb	14:27:46
2	Zn 213.857†	568.5	-2.4	-0.0213 ug/L	-0.0213 ppb	14:28:06
2	SiO2†	525.9	25.8	2.0856 ug/L	2.0856 ppb	14:29:12
3	Sc Radial	4260.5	4260.5	96.9 %		14:27:14
3	Y RADIAL	4745.0	4745.0	99.67 %		14:26:54
3	Al 396.153Radial†	-75.0	0.8	0.7173 ug/L	0.7173 ppb	14:27:14
3	Ca 317.933Radial†	17.2	2.0	3.8392 ug/L	3.8392 ppb	14:27:14
3	Fe 238.204 Radial†	9.8	1.6	18.570 ug/L	18.570 ppb	14:27:14
3	K 766.490 Radial†	2583.2	66.1	12.593 ug/L	12.593 ppb	14:26:54
3	Mg 279.077 IEC†	4.2	2.8	116.12 ug/L	116.12 ppb	14:27:14
3	Na 589.592 Radial†	-905.2	-58.7	-20.689 ug/L	-20.689 ppb	14:26:54
3	Sr 421.552†	51.1	31.9	0.2554 ug/L	0.2554 ppb	14:26:54
3	Sc 361.383	830623.4	830623.4	101.44 %		14:28:11
3	Y 371.029	700309.7	700309.7	101.25 %		14:28:11
3	Ag 328.068†	154.3	-33.0	-0.1667 ug/L	-0.1667 ppb	14:28:11
3	As 188.979†	-19.3	7.8	4.2894 ug/L	4.2894 ppb	14:28:31
3	B 249.677†	-338.5	203.7	5.7097 ug/L	5.7097 ppb	14:28:31
3	Ba 233.527†	3.3	4.0	0.0384 ug/L	0.0384 ppb	14:28:31
3	Be 313.107†	-3793.1	-8.2	-0.0031 ug/L	-0.0031 ppb	14:28:11
3	Cd 226.502†	-163.4	9.5	0.1367 ug/L	0.1367 ppb	14:28:31
3	Co 228.616†	-38.1	8.6	0.2236 ug/L	0.2236 ppb	14:28:31
3	Cr 267.716†	71.6	-1.0	-0.0114 ug/L	-0.0114 ppb	14:28:31
3	Cu 324.752†	5605.6	-26.0	-0.0864 ug/L	-0.0864 ppb	14:28:11
3	Mn 257.610†	397.9	3.2	0.0012 ug/L	0.0012 ppb	14:28:31
3	Mo 202.031†	14.3	5.6	0.4998 ug/L	0.4998 ppb	14:28:31
3	Ni 231.604†	66.4	-18.6	-0.5896 ug/L	-0.5896 ppb	14:28:31
3	P 214.914†	183.4	-6.5	-4.8409 ug/L	-4.8409 ppb	14:28:31
3	Pb 220.353†	-56.2	2.9	0.4381 ug/L	0.4381 ppb	14:28:31
3	S 181.975 Axial†	30.1	-0.5	-0.8845 ug/L	-0.8845 ppb	14:28:31
3	Sb 206.836†	25.6	1.6	0.6614 ug/L	0.6614 ppb	14:28:31
3	Se 196.026†	-20.1	-2.8	-2.3008 ug/L	-2.3008 ppb	14:28:31
3	Si 251.611†	507.2	11.8	0.4437 ug/L	0.4437 ppb	14:28:31
3	Sn 189.927†	3.8	-3.4	-0.7653 ug/L	-0.7653 ppb	14:28:31
3	Ti 334.940†	-1039.1	96.9	0.1583 ug/L	0.1583 ppb	14:28:11
3	Tl 190.801†	-26.5	2.9	1.1346 ug/L	1.1346 ppb	14:28:31
3	U 409.014†	-2141.1	93.5	2.8347 ug/L	2.8347 ppb	14:28:11
3	V 292.402†	-1290.2	45.6	0.3759 ug/L	0.3759 ppb	14:28:11
3	Zn 213.857†	545.0	-32.8	-0.3965 ug/L	-0.3965 ppb	14:28:31
3	SiO2†	528.5	21.6	1.7513 ug/L	1.7513 ppb	14:29:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	824813.1	100.73 %		0.655			0.65%
Sc Radial	4243.4	96.5 %		0.75			0.77%
Y 371.029	696050.2	100.64 %		0.568			0.56%
Y RADIAL	4726.3	99.28 %		0.949			0.96%
Ag 328.068†	-3.1	-0.0203 ug/L		0.25322	-0.0203 ppb	0.25322	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	0.6	0.5982 ug/L		4.96338	0.5982 ppb	4.96338	829.76%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	5.8	3.2029 ug/L		0.99385	3.2029 ppb	0.99385	31.03%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	204.5	5.7393 ug/L		0.23288	5.7393 ppb	0.23288	4.06%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	6.2	0.0579 ug/L		0.04318	0.0579 ppb	0.04318	74.57%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	28.3	0.0121 ug/L		0.01325	0.0121 ppb	0.01325	109.09%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	3.3	6.2692 ug/L		2.52066	6.2692 ppb	2.52066	40.21%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	-2.5	-0.0351 ug/L	0.15058	-0.0351 ppb	0.15058 429.43%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	9.3	0.2423 ug/L	0.06365	0.2423 ppb	0.06365 26.27%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	-1.6	-0.0225 ug/L	0.08221	-0.0225 ppb	0.08221 365.69%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-18.4	-0.0618 ug/L	0.08382	-0.0618 ppb	0.08382 135.61%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	-0.9	-10.671 ug/L	27.2781	-10.671 ppb	27.2781 255.63%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	165.1	31.454 ug/L	17.7553	31.454 ppb	17.7553 56.45%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	0.7	30.653 ug/L	84.3857	30.653 ppb	84.3857 275.29%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	4.5	0.0036 ug/L	0.02100	0.0036 ppb	0.02100 589.65%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	6.3	0.5609 ug/L	0.12168	0.5609 ppb	0.12168 21.69%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-36.7	-12.921 ug/L	12.1373	-12.921 ppb	12.1373 93.94%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-13.8	-0.4387 ug/L	0.13079	-0.4387 ppb	0.13079 29.81%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	-4.1	-3.0233 ug/L	2.21992	-3.0233 ppb	2.21992 73.43%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	4.9	0.7632 ug/L	0.92984	0.7632 ppb	0.92984 121.84%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	-0.7	-1.1962 ug/L	4.25178	-1.1962 ppb	4.25178 355.45%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	8.9	3.7332 ug/L	4.08887	3.7332 ppb	4.08887 109.53%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-3.2	-2.6985 ug/L	1.80185	-2.6985 ppb	1.80185 66.77%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	12.3	0.4588 ug/L	0.12302	0.4588 ppb	0.12302 26.81%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	-0.4	-0.0870 ug/L	0.63746	-0.0870 ppb	0.63746 732.63%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	8.0	0.0638 ug/L	0.17881	0.0638 ppb	0.17881 280.39%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	23.2	0.0383 ug/L	0.11258	0.0383 ppb	0.11258 294.02%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	3.1	1.2176 ug/L	0.66700	1.2176 ppb	0.66700 54.78%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	29.5	0.8966 ug/L	1.71320	0.8966 ppb	1.71320 191.08%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-1.1	0.0031 ug/L	0.32780	0.0031 ppb	0.32780 >999.9%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	-21.3	-0.2541 ug/L	0.20321	-0.2541 ppb	0.20321 79.99%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	24.5	1.9853 ug/L	0.20340	1.9853 ppb	0.20340 10.25%
QC value within limits for SiO2 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 14

Sample ID: 1202053055|957492|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 34

Date Collected: 3/19/2010 14:45:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202053055|957492|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4430.4	4430.4	101 %		14:47:12
1	Y RADIAL	4932.5	4932.5	103.6 %		14:47:12
1	Al 396.153Radial†	5401.9	5437.0	5340.7 ug/L	5340.7 ppb	14:47:12
1	Ca 317.933Radial†	14647.9	14515.5	27466 ug/L	27466 ppb	14:47:12
1	Fe 238.204 Radial†	4878.7	4831.4	55983 ug/L	55983 ppb	14:47:12
1	K 766.490 Radial†	26682.5	23871.2	4530.5 ug/L	4530.5 ppb	14:47:12
1	Mg 279.077 IEC†	161.5	158.7	6487.6 ug/L	6487.6 ppb	14:47:32
1	Na 589.592 Radial†	57625.2	58041.4	20461 ug/L	20461 ppb	14:47:12
1	Sr 421.552†	18664.3	18494.8	148.04 ug/L	148.04 ppb	14:47:12
1	Sc 361.383	822874.2	822874.2	100.49 %		14:48:29
1	Y 371.029	706417.4	706417.4	102.14 %		14:48:29
1	Ag 328.068†	-2942.0	-3112.6	0.9024 ug/L	0.9024 ppb	14:48:29
1	As 188.979†	-37.7	-10.7	7.5330 ug/L	7.5330 ppb	14:48:49
1	B 249.677†	1499.2	2029.2	47.598 ug/L	47.598 ppb	14:48:29
1	Ba 233.527†	39668.3	39473.8	371.49 ug/L	371.49 ppb	14:48:29
1	Be 313.107†	-2413.5	1329.4	0.6408 ug/L	0.6408 ppb	14:48:29
1	Cd 226.502†	250.7	420.1	0.3389 ug/L	0.3389 ppb	14:48:49
1	Co 228.616†	3183.0	3213.5	82.348 ug/L	82.348 ppb	14:48:49
1	Cr 267.716†	1765.4	1685.2	28.576 ug/L	28.576 ppb	14:48:49
1	Cu 324.752†	15937.6	10307.2	37.006 ug/L	37.006 ppb	14:48:29
1	Mn 257.610†	999390.1	994082.9	1312.3 ug/L	1312.3 ppb	14:48:29
1	Mo 202.031†	-13.8	-22.2	2.6962 ug/L	2.6962 ppb	14:48:49
1	Ni 231.604†	1590.1	1498.2	47.530 ug/L	47.530 ppb	14:48:49
1	P 214.914†	1369.6	1175.6	824.82 ug/L	824.82 ppb	14:48:49
1	Pb 220.353†	7.4	65.7	3.6649 ug/L	3.6649 ppb	14:48:49
1	S 181.975 Axial†	450.2	417.8	747.02 ug/L	747.02 ppb	14:48:49
1	Sb 206.836†	30.6	6.8	1.3972 ug/L	1.3972 ppb	14:48:49
1	Se 196.026†	-235.6	-217.5	-18.568 ug/L	-18.568 ppb	14:48:49
1	Si 251.611†	858425.0	853712.4	32409 ug/L	32409 ppb	14:48:29
1	Sn 189.927†	-177.5	-183.8	-40.047 ug/L	-40.047 ppb	14:48:49
1	Ti 334.940†	17885.1	18918.3	36.052 ug/L	36.052 ppb	14:48:29
1	Tl 190.801†	-60.2	-30.8	-5.8186 ug/L	-5.8186 ppb	14:48:49
1	U 409.014†	-3020.7	-801.6	-30.753 ug/L	-30.753 ppb	14:48:29
1	V 292.402†	1930.0	3237.9	17.711 ug/L	17.711 ppb	14:48:49
1	Zn 213.857†	288381.8	286392.6	3461.4 ug/L	3461.4 ppb	14:48:29
1	SiO2†	869266.8	864489.7	70553 ug/L	70553 ppb	14:49:47
2	Sc Radial	4422.5	4422.5	101 %		14:47:37
2	Y RADIAL	4906.3	4906.3	103.1 %		14:47:37
2	Al 396.153Radial†	5382.9	5427.5	5331.4 ug/L	5331.4 ppb	14:47:37
2	Ca 317.933Radial†	14682.3	14575.4	27580 ug/L	27580 ppb	14:47:37
2	Fe 238.204 Radial†	4863.3	4824.6	55904 ug/L	55904 ppb	14:47:37
2	K 766.490 Radial†	26723.3	23958.6	4547.0 ug/L	4547.0 ppb	14:47:37
2	Mg 279.077 IEC†	165.3	162.8	6656.4 ug/L	6656.4 ppb	14:47:57
2	Na 589.592 Radial†	57650.0	58167.1	20505 ug/L	20505 ppb	14:47:37
2	Sr 421.552†	18630.2	18493.7	148.03 ug/L	148.03 ppb	14:47:37
2	Sc 361.383	827257.8	827257.8	101.03 %		14:48:55
2	Y 371.029	710073.7	710073.7	102.66 %		14:48:55
2	Ag 328.068†	-3029.6	-3183.9	0.5077 ug/L	0.5077 ppb	14:48:55
2	As 188.979†	-34.7	-7.6	9.2254 ug/L	9.2254 ppb	14:49:15
2	B 249.677†	1498.1	2020.2	47.359 ug/L	47.359 ppb	14:48:55
2	Ba 233.527†	39709.7	39305.6	369.91 ug/L	369.91 ppb	14:48:55
2	Be 313.107†	-2411.6	1344.0	0.6474 ug/L	0.6474 ppb	14:48:55
2	Cd 226.502†	235.3	403.6	0.1064 ug/L	0.1064 ppb	14:49:15
2	Co 228.616†	3193.2	3206.9	82.177 ug/L	82.177 ppb	14:49:15
2	Cr 267.716†	1759.7	1670.3	28.368 ug/L	28.368 ppb	14:49:15
2	Cu 324.752†	16049.3	10333.7	37.090 ug/L	37.090 ppb	14:48:55
2	Mn 257.610†	999227.4	988652.3	1305.1 ug/L	1305.1 ppb	14:48:55
2	Mo 202.031†	-4.4	-12.9	3.5240 ug/L	3.5240 ppb	14:49:15
2	Ni 231.604†	1594.1	1493.8	47.388 ug/L	47.388 ppb	14:49:15

2	P 214.914†	1369.7	1168.4	819.53 ug/L	819.53 ppb	14:49:15
2	Pb 220.353†	5.6	63.9	3.3966 ug/L	3.3966 ppb	14:49:15
2	S 181.975 Axial†	451.9	417.1	745.69 ug/L	745.69 ppb	14:49:15
2	Sb 206.836†	35.2	11.1	3.2575 ug/L	3.2575 ppb	14:49:15
2	Se 196.026†	-241.1	-221.7	-22.255 ug/L	-22.255 ppb	14:49:15
2	Si 251.611†	860895.4	851631.3	32330 ug/L	32330 ppb	14:48:55
2	Sn 189.927†	-170.9	-176.3	-38.318 ug/L	-38.318 ppb	14:49:15
2	Ti 334.940†	18074.6	19011.5	36.216 ug/L	36.216 ppb	14:48:55
2	Tl 190.801†	-57.2	-27.6	-4.5939 ug/L	-4.5939 ppb	14:49:15
2	U 409.014†	-3099.7	-863.9	-32.633 ug/L	-32.633 ppb	14:48:55
2	V 292.402†	1926.3	3224.1	17.623 ug/L	17.623 ppb	14:49:15
2	Zn 213.857†	288654.7	285142.1	3446.3 ug/L	3446.3 ppb	14:48:55
2	SiO2†	859633.8	850371.5	69400 ug/L	69400 ppb	14:49:53
3	Sc Radial	4404.7	4404.7	100 %		14:48:02
3	Y RADIAL	4921.8	4921.8	103.4 %		14:48:02
3	Al 396.153Radial†	5383.9	5450.2	5353.6 ug/L	5353.6 ppb	14:48:02
3	Ca 317.933Radial†	14546.9	14499.3	27436 ug/L	27436 ppb	14:48:02
3	Fe 238.204 Radial†	4809.0	4790.0	55503 ug/L	55503 ppb	14:48:02
3	K 766.490 Radial†	26576.9	23919.9	4539.8 ug/L	4539.8 ppb	14:48:02
3	Mg 279.077 IEC†	163.1	161.2	6592.7 ug/L	6592.7 ppb	14:48:22
3	Na 589.592 Radial†	57045.2	57795.2	20374 ug/L	20374 ppb	14:48:02
3	Sr 421.552†	18502.0	18440.6	147.61 ug/L	147.61 ppb	14:48:02
3	Sc 361.383	829791.2	829791.2	101.34 %		14:49:21
3	Y 371.029	711638.2	711638.2	102.89 %		14:49:21
3	Ag 328.068†	-3014.2	-3159.5	0.5148 ug/L	0.5148 ppb	14:49:21
3	As 188.979†	-42.5	-15.1	4.9773 ug/L	4.9773 ppb	14:49:41
3	B 249.677†	1400.0	1918.9	44.582 ug/L	44.582 ppb	14:49:21
3	Ba 233.527†	39895.7	39369.1	370.49 ug/L	370.49 ppb	14:49:21
3	Be 313.107†	-2422.7	1340.4	0.6453 ug/L	0.6453 ppb	14:49:21
3	Cd 226.502†	229.8	397.4	0.0580 ug/L	0.0580 ppb	14:49:41
3	Co 228.616†	3213.1	3216.9	82.442 ug/L	82.442 ppb	14:49:41
3	Cr 267.716†	1792.1	1696.9	28.684 ug/L	28.684 ppb	14:49:41
3	Cu 324.752†	16000.5	10237.0	36.751 ug/L	36.751 ppb	14:49:21
3	Mn 257.610†	1005048.7	991377.1	1308.7 ug/L	1308.7 ppb	14:49:21
3	Mo 202.031†	-6.2	-14.7	3.3321 ug/L	3.3321 ppb	14:49:41
3	Ni 231.604†	1610.4	1505.1	47.746 ug/L	47.746 ppb	14:49:41
3	P 214.914†	1370.0	1164.6	817.07 ug/L	817.07 ppb	14:49:41
3	Pb 220.353†	14.4	72.6	4.7941 ug/L	4.7941 ppb	14:49:41
3	S 181.975 Axial†	439.9	403.9	722.10 ug/L	722.10 ppb	14:49:41
3	Sb 206.836†	31.9	7.8	1.8045 ug/L	1.8045 ppb	14:49:41
3	Se 196.026†	-231.0	-211.0	-14.479 ug/L	-14.479 ppb	14:49:41
3	Si 251.611†	863327.5	851429.7	32323 ug/L	32323 ppb	14:49:21
3	Sn 189.927†	-184.6	-189.3	-41.267 ug/L	-41.267 ppb	14:49:41
3	Ti 334.940†	18010.0	18893.2	35.997 ug/L	35.997 ppb	14:49:21
3	Tl 190.801†	-60.1	-30.3	-5.6165 ug/L	-5.6165 ppb	14:49:41
3	U 409.014†	-3184.5	-938.2	-34.841 ug/L	-34.841 ppb	14:49:21
3	V 292.402†	1949.6	3241.2	17.811 ug/L	17.811 ppb	14:49:41
3	Zn 213.857†	289707.6	285308.8	3448.3 ug/L	3448.3 ppb	14:49:21
3	SiO2†	872534.0	860503.4	70227 ug/L	70227 ppb	14:49:59

Mean Data: 1202053055|957492|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Conc.	Sample	Std.Dev.	RSD
Sc 361.383	826641.1	100.95 %		0.427				0.42%
Sc Radial	4419.2	101 %		0.3				0.30%
Y 371.029	709376.4	102.56 %		0.387				0.38%
Y RADIAL	4920.2	103.4 %		0.28				0.27%
Ag 328.068†	-3152.0	0.6416 ug/L		0.22587	0.6416 ppb		0.22587	35.20%
Al 396.153Radial†	5438.2	5341.9 ug/L		11.19	5341.9 ppb		11.19	0.21%
As 188.979†	-11.1	7.2452 ug/L		2.13862	7.2452 ppb		2.13862	29.52%
B 249.677†	1989.4	46.513 ug/L		1.6769	46.513 ppb		1.6769	3.61%
Ba 233.527†	39382.9	370.63 ug/L		0.798	370.63 ppb		0.798	0.22%
Be 313.107†	1337.9	0.6445 ug/L		0.00338	0.6445 ppb		0.00338	0.52%
Ca 317.933Radial†	14530.1	27494 ug/L		75.9	27494 ppb		75.9	0.28%
Cd 226.502†	407.0	0.1678 ug/L		0.15014	0.1678 ppb		0.15014	89.50%
Co 228.616†	3212.4	82.322 ug/L		0.1340	82.322 ppb		0.1340	0.16%
Cr 267.716†	1684.1	28.542 ug/L		0.1606	28.542 ppb		0.1606	0.56%
Cu 324.752†	10292.6	36.949 ug/L		0.1765	36.949 ppb		0.1765	0.48%
Fe 238.204 Radial†	4815.4	55797 ug/L		257.0	55797 ppb		257.0	0.46%
K 766.490 Radial†	23916.6	4539.1 ug/L		8.32	4539.1 ppb		8.32	0.18%

Mg 279.077 IEC†	160.9	6578.9 ug/L	85.25	6578.9 ppb	85.25	1.30%
Mn 257.610†	991370.8	1308.7 ug/L	3.58	1308.7 ppb	3.58	0.27%
Mo 202.031†	-16.6	3.1841 ug/L	0.43328	3.1841 ppb	0.43328	13.61%
Na 589.592 Radial†	58001.2	20447 ug/L	66.7	20447 ppb	66.7	0.33%
Ni 231.604†	1499.0	47.555 ug/L	0.1804	47.555 ppb	0.1804	0.38%
P 214.914†	1169.6	820.47 ug/L	3.958	820.47 ppb	3.958	0.48%
Pb 220.353†	67.4	3.9519 ug/L	0.74159	3.9519 ppb	0.74159	18.77%
S 181.975 Axial†	412.9	738.27 ug/L	14.018	738.27 ppb	14.018	1.90%
Sb 206.836†	8.6	2.1531 ug/L	0.97793	2.1531 ppb	0.97793	45.42%
Se 196.026†	-216.7	-18.434 ug/L	3.8898	-18.434 ppb	3.8898	21.10%
Si 251.611†	852257.8	32354 ug/L	48.0	32354 ppb	48.0	0.15%
Sn 189.927†	-183.1	-39.877 ug/L	1.4817	-39.877 ppb	1.4817	3.72%
Sr 421.552†	18476.4	147.90 ug/L	0.248	147.90 ppb	0.248	0.17%
Ti 334.940†	18941.0	36.088 ug/L	0.1140	36.088 ppb	0.1140	0.32%
Tl 190.801†	-29.6	-5.3430 ug/L	0.65656	-5.3430 ppb	0.65656	12.29%
U 409.014†	-867.9	-32.742 ug/L	2.0465	-32.742 ppb	2.0465	6.25%
V 292.402†	3234.4	17.715 ug/L	0.0939	17.715 ppb	0.0939	0.53%
Zn 213.857†	285614.5	3452.0 ug/L	8.21	3452.0 ppb	8.21	0.24%
SiO2†	858454.9	70060 ug/L	594.0	70060 ppb	594.0	0.85%

Sequence No.: 15

Sample ID: 1202053056|957492|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 35

Date Collected: 3/19/2010 14:52:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202053056|957492|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4264.5	4264.5	97.0 %		14:54:24
1	Y RADIAL	4862.7	4862.7	102.1 %		14:54:04
1	Al 396.153Radial†	10780.5	11188.6	10966 ug/L	10966 ppb	14:54:04
1	Ca 317.933Radial†	17244.1	17756.2	33598 ug/L	33598 ppb	14:54:04
1	Fe 238.204 Radial†	5369.3	5525.2	64036 ug/L	64036 ppb	14:54:04
1	K 766.490 Radial†	54276.1	53338.7	10140 ug/L	10140 ppb	14:54:04
1	Mg 279.077 IEC†	289.4	296.8	12180 ug/L	12180 ppb	14:54:24
1	Na 589.592 Radial†	71002.1	74050.6	26104 ug/L	26104 ppb	14:54:04
1	Sr 421.552†	82367.2	84867.6	680.03 ug/L	680.03 ppb	14:54:04
1	Sc 361.383	822292.7	822292.7	100.42 %		14:55:22
1	Y 371.029	704435.6	704435.6	101.85 %		14:55:22
1	Ag 328.068†	93578.7	92998.9	503.96 ug/L	503.96 ppb	14:55:22
1	As 188.979†	919.0	941.9	535.65 ug/L	535.65 ppb	14:55:42
1	B 249.677†	19640.9	20095.4	551.70 ug/L	551.70 ppb	14:55:22
1	Ba 233.527†	94578.5	94180.4	885.26 ug/L	885.26 ppb	14:55:22
1	Be 313.107†	1215878.2	1214481.4	518.38 ug/L	518.38 ppb	14:55:22
1	Cd 226.502†	34676.8	34701.2	497.33 ug/L	497.33 ppb	14:55:42
1	Co 228.616†	22487.3	22438.6	579.28 ug/L	579.28 ppb	14:55:42
1	Cr 267.716†	39039.1	38802.9	527.70 ug/L	527.70 ppb	14:55:22
1	Cu 324.752†	175539.8	169247.5	561.90 ug/L	561.90 ppb	14:55:22
1	Mn 257.610†	1384513.3	1378285.2	1818.0 ug/L	1818.0 ppb	14:55:22
1	Mo 202.031†	5752.2	5719.4	513.78 ug/L	513.78 ppb	14:55:42
1	Ni 231.604†	17535.2	17377.2	551.50 ug/L	551.50 ppb	14:55:42
1	P 214.914†	2196.9	2000.3	1334.8 ug/L	1334.8 ppb	14:55:42
1	Pb 220.353†	3292.5	3337.0	507.40 ug/L	507.40 ppb	14:55:42
1	S 181.975 Axial†	3396.1	3351.6	5998.1 ug/L	5998.1 ppb	14:55:42
1	Sb 206.836†	1301.6	1272.4	549.43 ug/L	549.43 ppb	14:55:42
1	Se 196.026†	376.0	391.3	515.15 ug/L	515.15 ppb	14:55:42
1	Si 251.611†	999132.7	994430.8	37745 ug/L	37745 ppb	14:55:22
1	Sn 189.927†	2156.1	2139.8	487.88 ug/L	487.88 ppb	14:55:42
1	Ti 334.940†	315389.7	315180.8	551.23 ug/L	551.23 ppb	14:55:22
1	Tl 190.801†	1245.8	1269.6	500.84 ug/L	500.84 ppb	14:55:42
1	U 409.014†	13509.8	15657.0	466.54 ug/L	466.54 ppb	14:55:22
1	V 292.402†	66069.8	67108.6	534.11 ug/L	534.11 ppb	14:55:22
1	Zn 213.857†	327721.9	325769.7	3933.4 ug/L	3933.4 ppb	14:55:22
1	SiO2†	999290.0	994576.3	81155 ug/L	81155 ppb	14:56:43
2	Sc Radial	4251.8	4251.8	96.7 %		14:54:49
2	Y RADIAL	4842.8	4842.8	101.7 %		14:54:29
2	Al 396.153Radial†	10756.6	11197.1	10974 ug/L	10974 ppb	14:54:29
2	Ca 317.933Radial†	17174.2	17737.1	33562 ug/L	33562 ppb	14:54:29
2	Fe 238.204 Radial†	5309.3	5479.7	63509 ug/L	63509 ppb	14:54:29
2	K 766.490 Radial†	54005.6	53226.3	10118 ug/L	10118 ppb	14:54:29
2	Mg 279.077 IEC†	283.9	291.9	11982 ug/L	11982 ppb	14:54:49
2	Na 589.592 Radial†	70589.9	73843.1	26031 ug/L	26031 ppb	14:54:29
2	Sr 421.552†	82231.2	84980.8	680.93 ug/L	680.93 ppb	14:54:29
2	Sc 361.383	830182.8	830182.8	101.39 %		14:55:50
2	Y 371.029	709694.9	709694.9	102.61 %		14:55:50
2	Ag 328.068†	94208.2	92734.1	502.43 ug/L	502.43 ppb	14:55:50
2	As 188.979†	905.1	919.5	523.26 ug/L	523.26 ppb	14:56:10
2	B 249.677†	19904.4	20169.5	553.89 ug/L	553.89 ppb	14:55:50
2	Ba 233.527†	95659.1	94351.0	886.84 ug/L	886.84 ppb	14:55:50
2	Be 313.107†	1226314.4	1213267.8	517.86 ug/L	517.86 ppb	14:55:50
2	Cd 226.502†	34593.6	34290.9	491.43 ug/L	491.43 ppb	14:56:10
2	Co 228.616†	22432.1	22171.4	572.37 ug/L	572.37 ppb	14:56:10
2	Cr 267.716†	39482.4	38870.7	528.56 ug/L	528.56 ppb	14:55:50
2	Cu 324.752†	176828.4	168857.1	560.58 ug/L	560.58 ppb	14:55:50
2	Mn 257.610†	1399663.1	1380124.7	1820.4 ug/L	1820.4 ppb	14:55:50
2	Mo 202.031†	5746.9	5659.7	508.43 ug/L	508.43 ppb	14:56:10
2	Ni 231.604†	17455.3	17132.4	543.73 ug/L	543.73 ppb	14:56:10

2	P 214.914†	2197.9	1980.5	1320.7 ug/L	1320.7 ppb	14:56:10
2	Pb 220.353†	3271.6	3285.2	499.51 ug/L	499.51 ppb	14:56:10
2	S 181.975 Axial†	3389.2	3312.6	5928.2 ug/L	5928.2 ppb	14:56:10
2	Sb 206.836†	1314.0	1272.3	549.18 ug/L	549.18 ppb	14:56:10
2	Se 196.026†	383.0	394.7	516.42 ug/L	516.42 ppb	14:56:10
2	Si 251.611†	1009394.6	995096.6	37771 ug/L	37771 ppb	14:55:50
2	Sn 189.927†	2148.8	2112.3	481.65 ug/L	481.65 ppb	14:56:10
2	Ti 334.940†	318601.1	315363.4	551.56 ug/L	551.56 ppb	14:55:50
2	Tl 190.801†	1245.8	1257.8	496.33 ug/L	496.33 ppb	14:56:10
2	U 409.014†	13514.0	15533.3	462.85 ug/L	462.85 ppb	14:55:50
2	V 292.402†	66798.1	67201.7	534.84 ug/L	534.84 ppb	14:55:50
2	Zn 213.857†	331008.7	325909.9	3935.2 ug/L	3935.2 ppb	14:55:50
2	SiO2†	1009076.9	994772.0	81171 ug/L	81171 ppb	14:56:49
3	Sc Radial	4239.7	4239.7	96.5 %		14:55:14
3	Y RADIAL	4820.0	4820.0	101.2 %		14:54:54
3	Al 396.153Radial†	10665.0	11134.0	10912 ug/L	10912 ppb	14:54:54
3	Ca 317.933Radial†	17065.6	17675.3	33445 ug/L	33445 ppb	14:54:54
3	Fe 238.204 Radial†	5287.5	5472.8	63429 ug/L	63429 ppb	14:54:54
3	K 766.490 Radial†	53650.8	53018.2	10079 ug/L	10079 ppb	14:54:54
3	Mg 279.077 IEC†	285.6	294.5	12088 ug/L	12088 ppb	14:55:14
3	Na 589.592 Radial†	69684.0	73112.8	25774 ug/L	25774 ppb	14:54:54
3	Sr 421.552†	81157.3	84110.6	673.96 ug/L	673.96 ppb	14:54:54
3	Sc 361.383	827089.3	827089.3	101.01 %		14:56:17
3	Y 371.029	707093.0	707093.0	102.23 %		14:56:17
3	Ag 328.068†	94056.6	92931.6	503.43 ug/L	503.43 ppb	14:56:17
3	As 188.979†	900.6	918.4	522.61 ug/L	522.61 ppb	14:56:37
3	B 249.677†	19810.4	20149.8	553.34 ug/L	553.34 ppb	14:56:17
3	Ba 233.527†	95138.4	94188.5	885.32 ug/L	885.32 ppb	14:56:17
3	Be 313.107†	1220609.6	1212144.0	517.38 ug/L	517.38 ppb	14:56:17
3	Cd 226.502†	34544.3	34369.8	492.58 ug/L	492.58 ppb	14:56:37
3	Co 228.616†	22409.7	22231.9	573.94 ug/L	573.94 ppb	14:56:37
3	Cr 267.716†	39276.7	38812.8	527.78 ug/L	527.78 ppb	14:56:17
3	Cu 324.752†	176498.5	169182.9	561.65 ug/L	561.65 ppb	14:56:17
3	Mn 257.610†	1393561.3	1379247.4	1819.2 ug/L	1819.2 ppb	14:56:17
3	Mo 202.031†	5740.2	5674.3	509.72 ug/L	509.72 ppb	14:56:37
3	Ni 231.604†	17440.2	17181.9	545.30 ug/L	545.30 ppb	14:56:37
3	P 214.914†	2196.7	1987.5	1325.7 ug/L	1325.7 ppb	14:56:37
3	Pb 220.353†	3282.9	3308.4	503.07 ug/L	503.07 ppb	14:56:37
3	S 181.975 Axial†	3382.1	3318.1	5938.1 ug/L	5938.1 ppb	14:56:37
3	Sb 206.836†	1303.9	1267.2	547.08 ug/L	547.08 ppb	14:56:37
3	Se 196.026†	372.0	385.2	508.25 ug/L	508.25 ppb	14:56:37
3	Si 251.611†	1004665.5	994138.5	37734 ug/L	37734 ppb	14:56:17
3	Sn 189.927†	2139.9	2111.3	481.41 ug/L	481.41 ppb	14:56:37
3	Ti 334.940†	317462.6	315411.7	551.62 ug/L	551.62 ppb	14:56:17
3	Tl 190.801†	1240.5	1257.2	496.05 ug/L	496.05 ppb	14:56:37
3	U 409.014†	13393.9	15464.3	460.76 ug/L	460.76 ppb	14:56:17
3	V 292.402†	66570.2	67222.4	535.03 ug/L	535.03 ppb	14:56:17
3	Zn 213.857†	329263.7	325403.5	3929.1 ug/L	3929.1 ppb	14:56:17
3	SiO2†	1002377.8	991862.5	80934 ug/L	80934 ppb	14:56:55

Mean Data: 1202053056|957492|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	826521.6	100.94 %	0.486			0.48%
Sc Radial	4252.0	96.7 %	0.28			0.29%
Y 371.029	707074.5	102.23 %	0.380			0.37%
Y RADIAL	4841.8	101.7 %	0.45			0.44%
Ag 328.068†	92888.2	503.27 ug/L	0.778	503.27 ppb	0.778	0.15%
Al 396.153Radial†	11173.2	10951 ug/L	33.6	10951 ppb	33.6	0.31%
As 188.979†	926.6	527.17 ug/L	7.348	527.17 ppb	7.348	1.39%
B 249.677†	20138.2	552.98 ug/L	1.136	552.98 ppb	1.136	0.21%
Ba 233.527†	94240.0	885.81 ug/L	0.898	885.81 ppb	0.898	0.10%
Be 313.107†	1213297.8	517.87 ug/L	0.497	517.87 ppb	0.497	0.10%
Ca 317.933Radial†	17722.9	33535 ug/L	80.0	33535 ppb	80.0	0.24%
Cd 226.502†	34454.0	493.78 ug/L	3.130	493.78 ppb	3.130	0.63%
Co 228.616†	22280.7	575.20 ug/L	3.624	575.20 ppb	3.624	0.63%
Cr 267.716†	38828.8	528.01 ug/L	0.475	528.01 ppb	0.475	0.09%
Cu 324.752†	169095.9	561.38 ug/L	0.700	561.38 ppb	0.700	0.12%
Fe 238.204 Radial†	5492.6	63658 ug/L	330.2	63658 ppb	330.2	0.52%
K 766.490 Radial†	53194.4	10112 ug/L	30.9	10112 ppb	30.9	0.31%

Mg 279.077 IEC†	294.4	12084 ug/L	99.3	12084 ppb	99.3	0.82%
Mn 257.610†	1379219.1	1819.2 ug/L	1.19	1819.2 ppb	1.19	0.07%
Mo 202.031†	5684.5	510.64 ug/L	2.791	510.64 ppb	2.791	0.55%
Na 589.592 Radial†	73668.8	25970 ug/L	173.7	25970 ppb	173.7	0.67%
Ni 231.604†	17230.5	546.85 ug/L	4.108	546.85 ppb	4.108	0.75%
P 214.914†	1989.4	1327.1 ug/L	7.16	1327.1 ppb	7.16	0.54%
Pb 220.353†	3310.2	503.33 ug/L	3.952	503.33 ppb	3.952	0.79%
S 181.975 Axial†	3327.4	5954.8 ug/L	37.80	5954.8 ppb	37.80	0.63%
Sb 206.836†	1270.7	548.56 ug/L	1.288	548.56 ppb	1.288	0.23%
Se 196.026†	390.4	513.27 ug/L	4.396	513.27 ppb	4.396	0.86%
Si 251.611†	994555.3	37750 ug/L	18.7	37750 ppb	18.7	0.05%
Sn 189.927†	2121.1	483.65 ug/L	3.667	483.65 ppb	3.667	0.76%
Sr 421.552†	84653.0	678.31 ug/L	3.792	678.31 ppb	3.792	0.56%
Ti 334.940†	315318.6	551.47 ug/L	0.210	551.47 ppb	0.210	0.04%
Tl 190.801†	1261.5	497.74 ug/L	2.688	497.74 ppb	2.688	0.54%
U 409.014†	15551.5	463.39 ug/L	2.927	463.39 ppb	2.927	0.63%
V 292.402†	67177.6	534.66 ug/L	0.489	534.66 ppb	0.489	0.09%
Zn 213.857†	325694.4	3932.6 ug/L	3.15	3932.6 ppb	3.15	0.08%
SiO2†	993736.9	81087 ug/L	132.7	81087 ppb	132.7	0.16%

Sequence No.: 16
 Sample ID: 1202053057|957492|5
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 36
 Date Collected: 3/19/2010 14:59:06
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202053057|957492|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4481.7	4481.7	102 %		15:01:00
1	Y RADIAL	4829.0	4829.0	101.4 %		15:01:00
1	Al 396.153Radial†	910.1	970.6	953.44 ug/L	953.44 ppb	15:01:00
1	Ca 317.933Radial†	2878.5	2807.2	5311.7 ug/L	5311.7 ppb	15:01:20
1	Fe 238.204 Radial†	917.0	890.8	10322 ug/L	10322 ppb	15:01:20
1	K 766.490 Radial†	7470.7	4727.5	897.21 ug/L	897.21 ppb	15:01:00
1	Mg 279.077 IEC†	33.8	31.6	1293.6 ug/L	1293.6 ppb	15:01:20
1	Na 589.592 Radial†	11309.4	11965.8	4218.2 ug/L	4218.2 ppb	15:01:00
1	Sr 421.552†	3695.0	3602.7	28.839 ug/L	28.839 ppb	15:01:00
1	Sc 361.383	833152.3	833152.3	101.75 %		15:02:17
1	Y 371.029	701529.7	701529.7	101.43 %		15:02:17
1	Ag 328.068†	-437.9	-615.5	-0.0559 ug/L	-0.0559 ppb	15:02:17
1	As 188.979†	-22.7	4.5	4.9463 ug/L	4.9463 ppb	15:02:37
1	B 249.677†	-26.3	511.5	12.628 ug/L	12.628 ppb	15:02:17
1	Ba 233.527†	7676.0	7544.7	70.991 ug/L	70.991 ppb	15:02:17
1	Be 313.107†	-3468.7	322.0	0.1495 ug/L	0.1495 ppb	15:02:17
1	Cd 226.502†	-107.9	64.6	-0.1240 ug/L	-0.1240 ppb	15:02:37
1	Co 228.616†	582.9	619.1	15.874 ug/L	15.874 ppb	15:02:37
1	Cr 267.716†	370.2	292.3	5.0212 ug/L	5.0212 ppb	15:02:37
1	Cu 324.752†	7440.8	1760.8	6.3608 ug/L	6.3608 ppb	15:02:17
1	Mn 257.610†	196247.0	192483.1	254.05 ug/L	254.05 ppb	15:02:17
1	Mo 202.031†	7.3	-1.4	0.7424 ug/L	0.7424 ppb	15:02:37
1	Ni 231.604†	356.6	266.4	8.4521 ug/L	8.4521 ppb	15:02:37
1	P 214.914†	404.3	210.1	147.15 ug/L	147.15 ppb	15:02:37
1	Pb 220.353†	-39.3	19.7	1.8407 ug/L	1.8407 ppb	15:02:37
1	S 181.975 Axial†	113.6	81.4	145.61 ug/L	145.61 ppb	15:02:37
1	Sb 206.836†	30.7	6.5	2.3860 ug/L	2.3860 ppb	15:02:37
1	Se 196.026†	-60.4	-42.4	-5.3702 ug/L	-5.3702 ppb	15:02:37
1	Si 251.611†	170066.7	166653.9	6326.7 ug/L	6326.7 ppb	15:02:17
1	Sn 189.927†	-51.1	-57.4	-12.681 ug/L	-12.681 ppb	15:02:37
1	Ti 334.940†	2044.5	3130.5	6.0495 ug/L	6.0495 ppb	15:02:17
1	Tl 190.801†	-41.9	-12.1	-3.5149 ug/L	-3.5149 ppb	15:02:37
1	U 409.014†	-2308.7	-64.8	-3.1514 ug/L	-3.1514 ppb	15:02:17
1	V 292.402†	-751.6	578.8	3.1309 ug/L	3.1309 ppb	15:02:17
1	Zn 213.857†	57674.9	56113.0	678.30 ug/L	678.30 ppb	15:02:17
1	SiO2†	166696.3	163330.3	13330 ug/L	13330 ppb	15:03:33
2	Sc Radial	4489.0	4489.0	102 %		15:01:25
2	Y RADIAL	4861.5	4861.5	102.1 %		15:01:25
2	Al 396.153Radial†	913.1	972.1	954.84 ug/L	954.84 ppb	15:01:25
2	Ca 317.933Radial†	2824.3	2749.5	5202.7 ug/L	5202.7 ppb	15:01:45
2	Fe 238.204 Radial†	900.6	873.3	10119 ug/L	10119 ppb	15:01:45
2	K 766.490 Radial†	7429.0	4674.9	887.23 ug/L	887.23 ppb	15:01:25
2	Mg 279.077 IEC†	37.0	34.7	1419.3 ug/L	1419.3 ppb	15:01:45
2	Na 589.592 Radial†	11193.8	11834.9	4172.0 ug/L	4172.0 ppb	15:01:25
2	Sr 421.552†	3709.6	3611.2	28.907 ug/L	28.907 ppb	15:01:25
2	Sc 361.383	817813.6	817813.6	99.877 %		15:02:42
2	Y 371.029	688158.5	688158.5	99.496 %		15:02:42
2	Ag 328.068†	-455.5	-641.2	-0.2458 ug/L	-0.2458 ppb	15:02:42
2	As 188.979†	-31.0	-4.3	0.0821 ug/L	0.0821 ppb	15:03:02
2	B 249.677†	-30.5	506.8	12.528 ug/L	12.528 ppb	15:02:42
2	Ba 233.527†	7571.4	7581.5	71.330 ug/L	71.330 ppb	15:02:42
2	Be 313.107†	-3439.6	287.2	0.1348 ug/L	0.1348 ppb	15:02:42
2	Cd 226.502†	-110.5	60.0	-0.1710 ug/L	-0.1710 ppb	15:03:02
2	Co 228.616†	586.7	633.6	16.252 ug/L	16.252 ppb	15:03:02
2	Cr 267.716†	360.4	289.3	4.9615 ug/L	4.9615 ppb	15:03:02
2	Cu 324.752†	7346.8	1803.9	6.4947 ug/L	6.4947 ppb	15:02:42
2	Mn 257.610†	193491.7	193341.9	255.15 ug/L	255.15 ppb	15:02:42
2	Mo 202.031†	11.4	2.9	1.1073 ug/L	1.1073 ppb	15:03:02
2	Ni 231.604†	360.6	277.0	8.7867 ug/L	8.7867 ppb	15:03:02

2	P 214.914†	416.0	229.3	161.57 ug/L	161.57 ppb	15:03:02
2	Pb 220.353†	-39.3	19.0	1.7579 ug/L	1.7579 ppb	15:03:02
2	S 181.975 Axial†	116.5	86.4	154.53 ug/L	154.53 ppb	15:03:02
2	Sb 206.836†	32.6	9.0	3.4357 ug/L	3.4357 ppb	15:03:02
2	Se 196.026†	-57.4	-40.5	-4.3765 ug/L	-4.3765 ppb	15:03:02
2	Si 251.611†	167138.3	166856.8	6334.4 ug/L	6334.4 ppb	15:02:42
2	Sn 189.927†	-47.5	-54.8	-12.083 ug/L	-12.083 ppb	15:03:02
2	Ti 334.940†	2052.6	3176.4	6.1063 ug/L	6.1063 ppb	15:02:42
2	Tl 190.801†	-28.6	0.4	1.3404 ug/L	1.3404 ppb	15:03:02
2	U 409.014†	-2413.6	-212.4	-7.6062 ug/L	-7.6062 ppb	15:02:42
2	V 292.402†	-718.3	598.3	3.3152 ug/L	3.3152 ppb	15:02:42
2	Zn 213.857†	56723.6	56223.7	679.67 ug/L	679.67 ppb	15:02:42
2	SiO2†	168968.7	168678.3	13766 ug/L	13766 ppb	15:03:39
3	Sc Radial	4419.3	4419.3	101 %		15:01:50
3	Y RADIAL	4813.1	4813.1	101.1 %		15:01:50
3	Al 396.153Radial†	891.5	964.7	947.63 ug/L	947.63 ppb	15:01:50
3	Ca 317.933Radial†	2869.9	2838.5	5371.0 ug/L	5371.0 ppb	15:02:10
3	Fe 238.204 Radial†	917.5	904.0	10475 ug/L	10475 ppb	15:02:10
3	K 766.490 Radial†	7253.3	4614.8	875.72 ug/L	875.72 ppb	15:01:50
3	Mg 279.077 IEC†	34.2	32.5	1329.3 ug/L	1329.3 ppb	15:02:10
3	Na 589.592 Radial†	11030.4	11845.0	4175.6 ug/L	4175.6 ppb	15:01:50
3	Sr 421.552†	3644.5	3603.7	28.846 ug/L	28.846 ppb	15:01:50
3	Sc 361.383	827425.7	827425.7	101.05 %		15:03:08
3	Y 371.029	696870.1	696870.1	100.76 %		15:03:08
3	Ag 328.068†	-375.8	-557.0	0.2936 ug/L	0.2936 ppb	15:03:08
3	As 188.979†	-27.9	-0.9	2.0283 ug/L	2.0283 ppb	15:03:28
3	B 249.677†	22.9	560.0	13.964 ug/L	13.964 ppb	15:03:08
3	Ba 233.527†	7657.5	7578.6	71.312 ug/L	71.312 ppb	15:03:08
3	Be 313.107†	-3538.3	229.5	0.1102 ug/L	0.1102 ppb	15:03:08
3	Cd 226.502†	-91.5	80.1	0.0854 ug/L	0.0854 ppb	15:03:28
3	Co 228.616†	577.6	617.8	15.837 ug/L	15.837 ppb	15:03:28
3	Cr 267.716†	372.1	296.7	5.0954 ug/L	5.0954 ppb	15:03:28
3	Cu 324.752†	7508.8	1878.8	6.7588 ug/L	6.7588 ppb	15:03:08
3	Mn 257.610†	195141.8	192724.2	254.38 ug/L	254.38 ppb	15:03:08
3	Mo 202.031†	5.0	-3.6	0.5570 ug/L	0.5570 ppb	15:03:28
3	Ni 231.604†	373.9	286.0	9.0727 ug/L	9.0727 ppb	15:03:28
3	P 214.914†	409.4	217.8	152.72 ug/L	152.72 ppb	15:03:28
3	Pb 220.353†	-47.8	11.0	0.4738 ug/L	0.4738 ppb	15:03:28
3	S 181.975 Axial†	108.3	77.0	137.67 ug/L	137.67 ppb	15:03:28
3	Sb 206.836†	27.3	3.3	1.0398 ug/L	1.0398 ppb	15:03:28
3	Se 196.026†	-64.2	-46.5	-8.3535 ug/L	-8.3535 ppb	15:03:28
3	Si 251.611†	169128.1	166881.9	6335.3 ug/L	6335.3 ppb	15:03:08
3	Sn 189.927†	-50.1	-56.7	-12.522 ug/L	-12.522 ppb	15:03:28
3	Ti 334.940†	2059.3	3159.1	6.1045 ug/L	6.1045 ppb	15:03:08
3	Tl 190.801†	-28.4	1.0	1.5536 ug/L	1.5536 ppb	15:03:28
3	U 409.014†	-2320.2	-91.9	-3.9907 ug/L	-3.9907 ppb	15:03:08
3	V 292.402†	-803.6	522.2	2.6532 ug/L	2.6532 ppb	15:03:08
3	Zn 213.857†	57261.9	56096.6	678.07 ug/L	678.07 ppb	15:03:08
3	SiO2†	168796.7	166542.8	13592 ug/L	13592 ppb	15:03:44

Mean Data: 1202053057|957492|5

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	826130.5	100.89 %		0.947			0.94%
Sc Radial	4463.3	102 %		0.9			0.86%
Y 371.029	695519.4	100.56 %		0.981			0.98%
Y RADIAL	4834.5	101.6 %		0.52			0.51%
Ag 328.068†	-604.6	-0.0027 ug/L		0.27361	-0.0027 ppb	0.27361	>999.9%
Al 396.153Radial†	969.1	951.97 ug/L		3.822	951.97 ppb	3.822	0.40%
As 188.979†	-0.2	2.3522 ug/L		2.44820	2.3522 ppb	2.44820	104.08%
B 249.677†	526.1	13.040 ug/L		0.8014	13.040 ppb	0.8014	6.15%
Ba 233.527†	7568.3	71.211 ug/L		0.1907	71.211 ppb	0.1907	0.27%
Be 313.107†	279.5	0.1315 ug/L		0.01986	0.1315 ppb	0.01986	15.10%
Ca 317.933Radial†	2798.4	5295.1 ug/L		85.38	5295.1 ppb	85.38	1.61%
Cd 226.502†	68.2	-0.0698 ug/L		0.13649	-0.0698 ppb	0.13649	195.42%
Co 228.616†	623.5	15.988 ug/L		0.2298	15.988 ppb	0.2298	1.44%
Cr 267.716†	292.8	5.0260 ug/L		0.06706	5.0260 ppb	0.06706	1.33%
Cu 324.752†	1814.5	6.5381 ug/L		0.20253	6.5381 ppb	0.20253	3.10%
Fe 238.204 Radial†	889.4	10305 ug/L		178.7	10305 ppb	178.7	1.73%
K 766.490 Radial†	4672.4	886.72 ug/L		10.756	886.72 ppb	10.756	1.21%

Mg 279.077 IEC†	32.9	1347.4 ug/L	64.73	1347.4 ppb	64.73	4.80%
Mn 257.610†	192849.8	254.53 ug/L	0.567	254.53 ppb	0.567	0.22%
Mo 202.031†	-0.7	0.8022 ug/L	0.27998	0.8022 ppb	0.27998	34.90%
Na 589.592 Radial†	11881.9	4188.6 ug/L	25.69	4188.6 ppb	25.69	0.61%
Ni 231.604†	276.5	8.7705 ug/L	0.31063	8.7705 ppb	0.31063	3.54%
P 214.914†	219.1	153.82 ug/L	7.271	153.82 ppb	7.271	4.73%
Pb 220.353†	16.6	1.3575 ug/L	0.76638	1.3575 ppb	0.76638	56.46%
S 181.975 Axial†	81.6	145.93 ug/L	8.435	145.93 ppb	8.435	5.78%
Sb 206.836†	6.3	2.2872 ug/L	1.20102	2.2872 ppb	1.20102	52.51%
Se 196.026†	-43.2	-6.0334 ug/L	2.06976	-6.0334 ppb	2.06976	34.30%
Si 251.611†	166797.5	6332.1 ug/L	4.74	6332.1 ppb	4.74	0.07%
Sn 189.927†	-56.3	-12.428 ug/L	0.3099	-12.428 ppb	0.3099	2.49%
Sr 421.552†	3605.9	28.864 ug/L	0.0375	28.864 ppb	0.0375	0.13%
Ti 334.940†	3155.3	6.0868 ug/L	0.03229	6.0868 ppb	0.03229	0.53%
Tl 190.801†	-3.6	-0.2070 ug/L	2.86675	-0.2070 ppb	2.86675	>999.9%
U 409.014†	-123.0	-4.9161 ug/L	2.36716	-4.9161 ppb	2.36716	48.15%
V 292.402†	566.4	3.0331 ug/L	0.34166	3.0331 ppb	0.34166	11.26%
Zn 213.857†	56144.4	678.68 ug/L	0.863	678.68 ppb	0.863	0.13%
SiO2†	166183.8	13563 ug/L	219.7	13563 ppb	219.7	1.62%

Sequence No.: 18

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 15:12:45

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4404.0	4404.0	100 %		15:14:37
1	Y RADIAL	4730.6	4730.6	99.37 %		15:14:37
1	Al 396.153Radial†	5002.3	5070.3	4955.5 ug/L	4955.5 ppb	15:14:37
1	Ca 317.933Radial†	2665.0	2643.9	5002.8 ug/L	5002.8 ppb	15:14:57
1	Fe 238.204 Radial†	445.1	435.7	5064.4 ug/L	5064.4 ppb	15:14:57
1	K 766.490 Radial†	29328.0	26670.1	5075.1 ug/L	5075.1 ppb	15:14:37
1	Mg 279.077 IEC†	128.1	126.4	5212.2 ug/L	5212.2 ppb	15:14:57
1	Na 589.592 Radial†	26896.2	27717.1	9770.9 ug/L	9770.9 ppb	15:14:37
1	Sr 421.552†	62531.5	62384.5	500.02 ug/L	500.02 ppb	15:14:37
1	Sc 361.383	815981.5	815981.5	99.653 %		15:15:54
1	Y 371.029	678972.4	678972.4	98.168 %		15:15:54
1	Ag 328.068†	99323.4	99484.4	519.65 ug/L	519.65 ppb	15:15:59
1	As 188.979†	916.3	946.3	523.88 ug/L	523.88 ppb	15:16:19
1	B 249.677†	17665.7	18264.6	510.08 ug/L	510.08 ppb	15:15:59
1	Ba 233.527†	54677.6	54868.8	515.21 ug/L	515.21 ppb	15:15:59
1	Be 313.107†	1198712.4	1206620.3	514.94 ug/L	514.94 ppb	15:15:54
1	Cd 226.502†	35251.0	35544.4	515.65 ug/L	515.65 ppb	15:15:59
1	Co 228.616†	20174.1	20290.6	524.53 ug/L	524.53 ppb	15:15:59
1	Cr 267.716†	38269.8	38331.7	515.08 ug/L	515.08 ppb	15:15:59
1	Cu 324.752†	159857.8	154862.8	511.26 ug/L	511.26 ppb	15:15:59
1	Mn 257.610†	387826.8	388789.1	511.47 ug/L	511.47 ppb	15:15:54
1	Mo 202.031†	5749.0	5760.5	512.51 ug/L	512.51 ppb	15:16:19
1	Ni 231.604†	16400.6	16373.6	519.67 ug/L	519.67 ppb	15:15:59
1	P 214.914†	3631.4	3456.8	2475.4 ug/L	2475.4 ppb	15:16:19
1	Pb 220.353†	3246.5	3316.2	510.91 ug/L	510.91 ppb	15:16:19
1	S 181.975 Axial†	607.6	579.5	1036.6 ug/L	1036.6 ppb	15:16:19
1	Sb 206.836†	1250.0	1230.7	533.32 ug/L	533.32 ppb	15:16:19
1	Se 196.026†	594.8	613.8	529.04 ug/L	529.04 ppb	15:16:19
1	Si 251.611†	69143.7	68896.5	2609.2 ug/L	2609.2 ppb	15:15:59
1	Sn 189.927†	2261.0	2261.7	513.83 ug/L	513.83 ppb	15:16:19
1	Ti 334.940†	289769.3	291900.3	507.46 ug/L	507.46 ppb	15:15:59
1	Tl 190.801†	1279.6	1313.1	511.41 ug/L	511.41 ppb	15:16:19
1	U 409.014†	14956.9	17213.2	520.49 ug/L	520.49 ppb	15:15:59
1	V 292.402†	62622.7	64158.3	519.19 ug/L	519.19 ppb	15:15:59
1	Zn 213.857†	43109.4	42689.5	512.50 ug/L	512.50 ppb	15:15:59
1	SiO2†	68460.8	68200.0	5552.0 ug/L	5552.0 ppb	15:17:27
2	Sc Radial	4392.0	4392.0	99.9 %		15:15:02
2	Y RADIAL	4731.1	4731.1	99.38 %		15:15:02
2	Al 396.153Radial†	4974.3	5055.8	4942.1 ug/L	4942.1 ppb	15:15:02
2	Ca 317.933Radial†	2657.5	2643.6	5002.3 ug/L	5002.3 ppb	15:15:22
2	Fe 238.204 Radial†	442.7	434.5	5050.3 ug/L	5050.3 ppb	15:15:22
2	K 766.490 Radial†	29402.7	26824.3	5104.5 ug/L	5104.5 ppb	15:15:02
2	Mg 279.077 IEC†	126.8	125.3	5170.3 ug/L	5170.3 ppb	15:15:22
2	Na 589.592 Radial†	26914.6	27808.3	9803.0 ug/L	9803.0 ppb	15:15:02
2	Sr 421.552†	62368.6	62390.9	500.07 ug/L	500.07 ppb	15:15:02
2	Sc 361.383	834394.9	834394.9	101.90 %		15:16:25
2	Y 371.029	694397.6	694397.6	100.40 %		15:16:25
2	Ag 328.068†	99525.8	97483.5	509.22 ug/L	509.22 ppb	15:16:30
2	As 188.979†	888.4	898.6	497.66 ug/L	497.66 ppb	15:16:50
2	B 249.677†	17654.2	17862.1	498.82 ug/L	498.82 ppb	15:16:30
2	Ba 233.527†	54672.4	53652.9	503.79 ug/L	503.79 ppb	15:16:30
2	Be 313.107†	1208362.9	1189545.5	507.64 ug/L	507.64 ppb	15:16:25
2	Cd 226.502†	35289.2	34801.3	504.86 ug/L	504.86 ppb	15:16:30
2	Co 228.616†	20123.5	19794.2	511.69 ug/L	511.69 ppb	15:16:30
2	Cr 267.716†	38179.5	37395.5	502.52 ug/L	502.52 ppb	15:16:30
2	Cu 324.752†	159882.0	151346.5	499.65 ug/L	499.65 ppb	15:16:30
2	Mn 257.610†	391166.3	383477.9	504.49 ug/L	504.49 ppb	15:16:25
2	Mo 202.031†	5685.1	5570.5	495.62 ug/L	495.62 ppb	15:16:50
2	Ni 231.604†	16441.2	16050.3	509.41 ug/L	509.41 ppb	15:16:30

2	P 214.914†	3569.9	3316.0	2372.7 ug/L	2372.7 ppb	15:16:50
2	Pb 220.353†	3236.1	3234.0	498.25 ug/L	498.25 ppb	15:16:50
2	S 181.975 Axial†	595.9	554.6	991.99 ug/L	991.99 ppb	15:16:50
2	Sb 206.836†	1237.5	1190.8	516.03 ug/L	516.03 ppb	15:16:50
2	Se 196.026†	584.8	590.9	509.84 ug/L	509.84 ppb	15:16:50
2	Si 251.611†	69211.5	67431.8	2553.8 ug/L	2553.8 ppb	15:16:30
2	Sn 189.927†	2235.2	2186.3	496.74 ug/L	496.74 ppb	15:16:50
2	Ti 334.940†	289447.9	285167.9	495.76 ug/L	495.76 ppb	15:16:30
2	Tl 190.801†	1270.6	1276.0	496.99 ug/L	496.99 ppb	15:16:50
2	U 409.014†	15111.0	17033.2	515.06 ug/L	515.06 ppb	15:16:30
2	V 292.402†	62576.2	62725.9	507.52 ug/L	507.52 ppb	15:16:30
2	Zn 213.857†	43153.1	41777.8	501.53 ug/L	501.53 ppb	15:16:30
2	SiO2†	68493.7	66716.3	5431.3 ug/L	5431.3 ppb	15:17:32
3	Sc Radial	4459.3	4459.3	101 %		15:15:27
3	Y RADIAL	4814.6	4814.6	101.1 %		15:15:27
3	Al 396.153Radial†	4993.1	4999.3	4886.3 ug/L	4886.3 ppb	15:15:27
3	Ca 317.933Radial†	2664.6	2610.6	4939.8 ug/L	4939.8 ppb	15:15:47
3	Fe 238.204 Radial†	446.8	431.9	5019.7 ug/L	5019.7 ppb	15:15:47
3	K 766.490 Radial†	29415.5	26393.2	5022.4 ug/L	5022.4 ppb	15:15:27
3	Mg 279.077 IEC†	128.2	124.8	5148.6 ug/L	5148.6 ppb	15:15:47
3	Na 589.592 Radial†	27038.4	27524.2	9702.9 ug/L	9702.9 ppb	15:15:27
3	Sr 421.552†	62826.9	61901.4	496.15 ug/L	496.15 ppb	15:15:27
3	Sc 361.383	833630.7	833630.7	101.81 %		15:16:56
3	Y 371.029	692553.2	692553.2	100.13 %		15:16:56
3	Ag 328.068†	97710.7	95790.2	500.40 ug/L	500.40 ppb	15:17:01
3	As 188.979†	899.6	910.4	504.02 ug/L	504.02 ppb	15:17:21
3	B 249.677†	17246.9	17477.9	488.07 ug/L	488.07 ppb	15:17:01
3	Ba 233.527†	53738.1	52784.4	495.64 ug/L	495.64 ppb	15:17:01
3	Be 313.107†	1192189.2	1174746.1	501.32 ug/L	501.32 ppb	15:16:56
3	Cd 226.502†	34796.6	34349.3	498.29 ug/L	498.29 ppb	15:17:01
3	Co 228.616†	19805.2	19499.7	504.11 ug/L	504.11 ppb	15:17:01
3	Cr 267.716†	37606.7	36867.3	495.42 ug/L	495.42 ppb	15:17:01
3	Cu 324.752†	156722.8	148387.3	489.89 ug/L	489.89 ppb	15:17:01
3	Mn 257.610†	387453.6	380183.1	500.16 ug/L	500.16 ppb	15:16:56
3	Mo 202.031†	5766.5	5655.5	503.17 ug/L	503.17 ppb	15:17:21
3	Ni 231.604†	16153.9	15783.0	500.92 ug/L	500.92 ppb	15:17:01
3	P 214.914†	3634.3	3382.5	2424.3 ug/L	2424.3 ppb	15:17:21
3	Pb 220.353†	3285.2	3285.1	506.12 ug/L	506.12 ppb	15:17:21
3	S 181.975 Axial†	600.0	559.2	1000.1 ug/L	1000.1 ppb	15:17:21
3	Sb 206.836†	1263.4	1217.3	527.40 ug/L	527.40 ppb	15:17:21
3	Se 196.026†	606.3	612.5	527.75 ug/L	527.75 ppb	15:17:21
3	Si 251.611†	67911.9	66217.5	2507.6 ug/L	2507.6 ppb	15:17:01
3	Sn 189.927†	2271.2	2223.7	505.20 ug/L	505.20 ppb	15:17:21
3	Ti 334.940†	284631.4	280697.4	487.99 ug/L	487.99 ppb	15:17:01
3	Tl 190.801†	1292.7	1298.8	505.78 ug/L	505.78 ppb	15:17:21
3	U 409.014†	14495.0	16441.7	497.14 ug/L	497.14 ppb	15:17:01
3	V 292.402†	61439.3	61665.5	499.14 ug/L	499.14 ppb	15:17:01
3	Zn 213.857†	42394.5	41071.4	493.05 ug/L	493.05 ppb	15:17:01
3	SiO2†	69769.2	68030.7	5538.4 ug/L	5538.4 ppb	15:17:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	828002.3	101.12 %	1.272			1.26%
Sc Radial	4418.4	101 %	0.8			0.81%
Y 371.029	688641.1	99.565 %	1.2179			1.22%
Y RADIAL	4758.8	99.96 %	1.015			1.02%
Ag 328.068†	97586.0	509.75 ug/L	9.638	509.75 ppb	9.638	1.89%
QC value within limits for Ag 328.068 Recovery = 101.95%						
Al 396.153Radial†	5041.8	4928.0 ug/L	36.71	4928.0 ppb	36.71	0.74%
QC value within limits for Al 396.153Radial Recovery = 98.56%						
As 188.979†	918.4	508.52 ug/L	13.678	508.52 ppb	13.678	2.69%
QC value within limits for As 188.979 Recovery = 101.70%						
B 249.677†	17868.2	498.99 ug/L	11.003	498.99 ppb	11.003	2.21%
QC value within limits for B 249.677 Recovery = 99.80%						
Ba 233.527†	53768.7	504.88 ug/L	9.830	504.88 ppb	9.830	1.95%
QC value within limits for Ba 233.527 Recovery = 100.98%						
Be 313.107†	1190304.0	507.97 ug/L	6.814	507.97 ppb	6.814	1.34%
QC value within limits for Be 313.107 Recovery = 101.59%						
Ca 317.933Radial†	2632.7	4981.6 ug/L	36.27	4981.6 ppb	36.27	0.73%

QC value within limits for Ca 317.933 Radial Recovery = 99.63%							
Cd 226.502†	34898.3	506.26 ug/L	8.762	506.26 ppb	8.762	1.73%	
QC value within limits for Cd 226.502 Recovery = 101.25%							
Co 228.616†	19861.5	513.44 ug/L	10.324	513.44 ppb	10.324	2.01%	
QC value within limits for Co 228.616 Recovery = 102.69%							
Cr 267.716†	37531.5	504.34 ug/L	9.957	504.34 ppb	9.957	1.97%	
QC value within limits for Cr 267.716 Recovery = 100.87%							
Cu 324.752†	151532.2	500.27 ug/L	10.697	500.27 ppb	10.697	2.14%	
QC value within limits for Cu 324.752 Recovery = 100.05%							
Fe 238.204 Radial†	434.1	5044.8 ug/L	22.84	5044.8 ppb	22.84	0.45%	
QC value within limits for Fe 238.204 Radial Recovery = 100.90%							
K 766.490 Radial†	26629.2	5067.3 ug/L	41.59	5067.3 ppb	41.59	0.82%	
QC value within limits for K 766.490 Radial Recovery = 101.35%							
Mg 279.077 IEC†	125.5	5177.0 ug/L	32.36	5177.0 ppb	32.36	0.63%	
QC value within limits for Mg 279.077 IEC Recovery = 103.54%							
Mn 257.610†	384150.0	505.37 ug/L	5.710	505.37 ppb	5.710	1.13%	
QC value within limits for Mn 257.610 Recovery = 101.07%							
Mo 202.031†	5662.2	503.77 ug/L	8.461	503.77 ppb	8.461	1.68%	
QC value within limits for Mo 202.031 Recovery = 100.75%							
Na 589.592 Radial†	27683.2	9758.9 ug/L	51.14	9758.9 ppb	51.14	0.52%	
QC value within limits for Na 589.592 Radial Recovery = 97.59%							
Ni 231.604†	16069.0	510.00 ug/L	9.387	510.00 ppb	9.387	1.84%	
QC value within limits for Ni 231.604 Recovery = 102.00%							
P 214.914†	3385.1	2424.1 ug/L	51.37	2424.1 ppb	51.37	2.12%	
QC value within limits for P 214.914 Recovery = 96.96%							
Pb 220.353†	3278.4	505.09 ug/L	6.393	505.09 ppb	6.393	1.27%	
QC value within limits for Pb 220.353 Recovery = 101.02%							
S 181.975 Axial†	564.4	1009.6 ug/L	23.75	1009.6 ppb	23.75	2.35%	
QC value within limits for S 181.975 Axial Recovery = 100.96%							
Sb 206.836†	1212.9	525.58 ug/L	8.789	525.58 ppb	8.789	1.67%	
QC value within limits for Sb 206.836 Recovery = 105.12%							
Se 196.026†	605.7	522.21 ug/L	10.735	522.21 ppb	10.735	2.06%	
QC value within limits for Se 196.026 Recovery = 104.44%							
Si 251.611†	67515.3	2556.9 ug/L	50.86	2556.9 ppb	50.86	1.99%	
QC value within limits for Si 251.611 Recovery = 102.28%							
Sn 189.927†	2223.9	505.26 ug/L	8.547	505.26 ppb	8.547	1.69%	
QC value within limits for Sn 189.927 Recovery = 101.05%							
Sr 421.552†	62225.6	498.75 ug/L	2.251	498.75 ppb	2.251	0.45%	
QC value within limits for Sr 421.552 Recovery = 99.75%							
Ti 334.940†	285921.8	497.07 ug/L	9.800	497.07 ppb	9.800	1.97%	
QC value within limits for Ti 334.940 Recovery = 99.41%							
Tl 190.801†	1296.0	504.73 ug/L	7.266	504.73 ppb	7.266	1.44%	
QC value within limits for Tl 190.801 Recovery = 100.95%							
U 409.014†	16896.0	510.90 ug/L	12.223	510.90 ppb	12.223	2.39%	
QC value within limits for U 409.014 Recovery = 102.18%							
V 292.402†	62849.9	508.61 ug/L	10.069	508.61 ppb	10.069	1.98%	
QC value within limits for V 292.402 Recovery = 101.72%							
Zn 213.857†	41846.3	502.36 ug/L	9.752	502.36 ppb	9.752	1.94%	
QC value within limits for Zn 213.857 Recovery = 100.47%							
SiO2†	67649.0	5507.2 ug/L	66.08	5507.2 ppb	66.08	1.20%	
QC value within limits for SiO2 Recovery = 102.99%							
All analyte(s) passed QC.							

Sequence No.: 19

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 15:19:47

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	4561.2	4561.2	104 %		15:21:39
1	Y RADIAL	4943.3	4943.3	103.8 %		15:21:39
1	Al 396.153Radial†	-82.3	-1.3	-1.2627 ug/L	-1.2627 ppb	15:21:59
1	Ca 317.933Radial†	20.9	4.4	8.3378 ug/L	8.3378 ppb	15:21:59
1	Fe 238.204 Radial†	7.8	-0.9	-10.521 ug/L	-10.521 ppb	15:21:59
1	K 766.490 Radial†	2758.8	59.5	11.332 ug/L	11.332 ppb	15:21:39
1	Mg 279.077 IEC†	2.6	1.0	39.950 ug/L	39.950 ppb	15:21:59
1	Na 589.592 Radial†	-843.2	62.6	22.070 ug/L	22.070 ppb	15:21:39
1	Sr 421.552†	26.0	4.2	0.0335 ug/L	0.0335 ppb	15:21:39
1	Sc 361.383	812531.2	812531.2	99.231 %		15:22:56
1	Y 371.029	687107.4	687107.4	99.344 %		15:22:56
1	Ag 328.068†	225.0	41.6	0.2104 ug/L	0.2104 ppb	15:22:56
1	As 188.979†	-22.2	4.5	2.4473 ug/L	2.4473 ppb	15:23:16
1	B 249.677†	-303.9	231.1	6.4852 ug/L	6.4852 ppb	15:23:16
1	Ba 233.527†	3.7	4.4	0.0400 ug/L	0.0400 ppb	15:23:16
1	Be 313.107†	-3705.1	-2.7	-0.0013 ug/L	-0.0013 ppb	15:22:56
1	Cd 226.502†	-168.8	0.5	0.0088 ug/L	0.0088 ppb	15:23:16
1	Co 228.616†	-45.5	0.4	0.0116 ug/L	0.0116 ppb	15:23:16
1	Cr 267.716†	74.3	3.4	0.0438 ug/L	0.0438 ppb	15:23:16
1	Cu 324.752†	5446.3	-63.5	-0.2108 ug/L	-0.2108 ppb	15:22:56
1	Mn 257.610†	438.5	52.9	0.0668 ug/L	0.0668 ppb	15:23:16
1	Mo 202.031†	15.7	7.3	0.6438 ug/L	0.6438 ppb	15:23:16
1	Ni 231.604†	66.2	-17.3	-0.5503 ug/L	-0.5503 ppb	15:23:16
1	P 214.914†	186.1	0.3	0.2556 ug/L	0.2556 ppb	15:23:16
1	Pb 220.353†	-59.8	-2.0	-0.3012 ug/L	-0.3012 ppb	15:23:16
1	S 181.975 Axial†	32.2	2.2	4.0167 ug/L	4.0167 ppb	15:23:16
1	Sb 206.836†	42.0	18.7	7.7890 ug/L	7.7890 ppb	15:23:16
1	Se 196.026†	-9.1	7.8	6.4898 ug/L	6.4898 ppb	15:23:16
1	Si 251.611†	517.9	33.8	1.2738 ug/L	1.2738 ppb	15:23:16
1	Sn 189.927†	-0.6	-7.7	-1.7537 ug/L	-1.7537 ppb	15:23:16
1	Ti 334.940†	-1144.0	-31.6	-0.0576 ug/L	-0.0576 ppb	15:22:56
1	Tl 190.801†	-20.8	8.1	3.1394 ug/L	3.1394 ppb	15:23:16
1	U 409.014†	-2158.3	29.2	0.8862 ug/L	0.8862 ppb	15:22:56
1	V 292.402†	-1354.7	-47.7	-0.3679 ug/L	-0.3679 ppb	15:22:56
1	Zn 213.857†	584.1	18.5	0.2295 ug/L	0.2295 ppb	15:23:16
1	SiO2†	515.7	20.4	1.6444 ug/L	1.6444 ppb	15:24:27
2	Sc Radial	4315.7	4315.7	98.2 %		15:22:05
2	Y RADIAL	4683.2	4683.2	98.37 %		15:22:05
2	Al 396.153Radial†	-77.4	-0.7	-0.6792 ug/L	-0.6792 ppb	15:22:25
2	Ca 317.933Radial†	16.9	1.6	2.9400 ug/L	2.9400 ppb	15:22:25
2	Fe 238.204 Radial†	12.0	3.8	43.926 ug/L	43.926 ppb	15:22:25
2	K 766.490 Radial†	2745.9	197.6	37.644 ug/L	37.644 ppb	15:22:05
2	Mg 279.077 IEC†	0.9	-0.6	-24.744 ug/L	-24.744 ppb	15:22:25
2	Na 589.592 Radial†	-812.0	48.1	16.974 ug/L	16.974 ppb	15:22:05
2	Sr 421.552†	39.4	19.4	0.1551 ug/L	0.1551 ppb	15:22:05
2	Sc 361.383	830170.6	830170.6	101.39 %		15:23:22
2	Y 371.029	701100.0	701100.0	101.37 %		15:23:22
2	Ag 328.068†	161.1	-26.3	-0.1273 ug/L	-0.1273 ppb	15:23:22
2	As 188.979†	-26.5	0.7	0.3885 ug/L	0.3885 ppb	15:23:42
2	B 249.677†	-305.1	236.5	6.6262 ug/L	6.6262 ppb	15:23:42
2	Ba 233.527†	0.3	1.0	0.0108 ug/L	0.0108 ppb	15:23:42
2	Be 313.107†	-3685.3	96.1	0.0413 ug/L	0.0413 ppb	15:23:22
2	Cd 226.502†	-165.1	7.8	0.1093 ug/L	0.1093 ppb	15:23:42
2	Co 228.616†	-36.9	9.8	0.2516 ug/L	0.2516 ppb	15:23:42
2	Cr 267.716†	87.9	15.2	0.2059 ug/L	0.2059 ppb	15:23:42
2	Cu 324.752†	5508.2	-119.1	-0.3942 ug/L	-0.3942 ppb	15:23:22
2	Mn 257.610†	409.3	14.6	0.0246 ug/L	0.0246 ppb	15:23:42
2	Mo 202.031†	7.6	-1.1	-0.0920 ug/L	-0.0920 ppb	15:23:42
2	Ni 231.604†	72.4	-12.6	-0.4018 ug/L	-0.4018 ppb	15:23:42

2	P 214.914†	194.2	4.3	3.2216 ug/L	3.2216 ppb	15:23:42
2	Pb 220.353†	-59.1	0.0	-0.0005 ug/L	-0.0005 ppb	15:23:42
2	S 181.975 Axial†	32.1	1.4	2.5716 ug/L	2.5716 ppb	15:23:42
2	Sb 206.836†	28.8	4.7	1.9615 ug/L	1.9615 ppb	15:23:42
2	Se 196.026†	-20.5	-3.3	-2.6269 ug/L	-2.6269 ppb	15:23:42
2	Si 251.611†	502.8	7.7	0.2951 ug/L	0.2951 ppb	15:23:42
2	Sn 189.927†	3.6	-3.6	-0.8238 ug/L	-0.8238 ppb	15:23:42
2	Ti 334.940†	-1041.5	93.9	0.1629 ug/L	0.1629 ppb	15:23:22
2	Tl 190.801†	-31.4	-1.9	-0.7308 ug/L	-0.7308 ppb	15:23:42
2	U 409.014†	-2028.3	203.6	6.1723 ug/L	6.1723 ppb	15:23:22
2	V 292.402†	-1316.9	18.5	0.1514 ug/L	0.1514 ppb	15:23:22
2	Zn 213.857†	587.0	8.9	0.1045 ug/L	0.1045 ppb	15:23:42
2	SiO2†	533.5	26.8	2.1935 ug/L	2.1935 ppb	15:24:47
3	Sc Radial	4508.6	4508.6	103 %		15:22:30
3	Y RADIAL	4909.7	4909.7	103.1 %		15:22:30
3	Al 396.153Radial†	-70.5	9.3	9.1260 ug/L	9.1260 ppb	15:22:50
3	Ca 317.933Radial†	15.7	-0.3	-0.6519 ug/L	-0.6519 ppb	15:22:50
3	Fe 238.204 Radial†	8.7	0.1	0.5782 ug/L	0.5782 ppb	15:22:50
3	K 766.490 Radial†	2587.6	-76.3	-14.548 ug/L	-14.548 ppb	15:22:30
3	Mg 279.077 IEC†	1.4	-0.2	-7.9990 ug/L	-7.9990 ppb	15:22:50
3	Na 589.592 Radial†	-873.2	23.9	8.4342 ug/L	8.4342 ppb	15:22:30
3	Sr 421.552†	25.7	4.2	0.0337 ug/L	0.0337 ppb	15:22:30
3	Sc 361.383	814827.9	814827.9	99.512 %		15:23:47
3	Y 371.029	686828.7	686828.7	99.303 %		15:23:47
3	Ag 328.068†	97.6	-87.1	-0.4563 ug/L	-0.4563 ppb	15:23:47
3	As 188.979†	-25.2	1.5	0.8026 ug/L	0.8026 ppb	15:24:07
3	B 249.677†	-327.7	208.0	5.8359 ug/L	5.8359 ppb	15:24:07
3	Ba 233.527†	-5.0	-4.3	-0.0411 ug/L	-0.0411 ppb	15:24:07
3	Be 313.107†	-3699.6	13.2	0.0055 ug/L	0.0055 ppb	15:23:47
3	Cd 226.502†	-177.6	-7.8	-0.1132 ug/L	-0.1132 ppb	15:24:07
3	Co 228.616†	-50.0	-4.0	-0.1022 ug/L	-0.1022 ppb	15:24:07
3	Cr 267.716†	68.5	-2.6	-0.0370 ug/L	-0.0370 ppb	15:24:07
3	Cu 324.752†	5513.3	-11.7	-0.0402 ug/L	-0.0402 ppb	15:23:47
3	Mn 257.610†	419.8	32.8	0.0435 ug/L	0.0435 ppb	15:24:07
3	Mo 202.031†	17.2	8.8	0.7797 ug/L	0.7797 ppb	15:24:07
3	Ni 231.604†	63.2	-20.6	-0.6526 ug/L	-0.6526 ppb	15:24:07
3	P 214.914†	191.3	4.9	3.6842 ug/L	3.6842 ppb	15:24:07
3	Pb 220.353†	-45.4	12.7	1.9561 ug/L	1.9561 ppb	15:24:07
3	S 181.975 Axial†	30.9	0.9	1.5220 ug/L	1.5220 ppb	15:24:07
3	Sb 206.836†	21.1	-2.5	-1.0139 ug/L	-1.0139 ppb	15:24:07
3	Se 196.026†	-17.9	-1.0	-0.8526 ug/L	-0.8526 ppb	15:24:07
3	Si 251.611†	522.0	36.3	1.3701 ug/L	1.3701 ppb	15:24:07
3	Sn 189.927†	9.5	2.4	0.5431 ug/L	0.5431 ppb	15:24:07
3	Ti 334.940†	-1157.4	-41.8	-0.0736 ug/L	-0.0736 ppb	15:23:47
3	Tl 190.801†	-26.3	2.6	1.0117 ug/L	1.0117 ppb	15:24:07
3	U 409.014†	-2090.9	103.0	3.1251 ug/L	3.1251 ppb	15:23:47
3	V 292.402†	-1369.2	-58.5	-0.4501 ug/L	-0.4501 ppb	15:23:47
3	Zn 213.857†	584.1	16.9	0.2084 ug/L	0.2084 ppb	15:24:07
3	SiO2†	531.2	34.5	2.7955 ug/L	2.7955 ppb	15:25:07

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	819176.6	100.04 %		1.171			1.17%
Sc Radial	4461.8	102 %		2.9			2.90%
Y 371.029	691678.7	100.00 %		1.180			1.18%
Y RADIAL	4845.4	101.8 %		2.97			2.92%
Ag 328.068†	-23.9	-0.1244 ug/L		0.33336	-0.1244 ppb	0.33336	267.92%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	2.5	2.3947 ug/L		5.83674	2.3947 ppb	5.83674	243.73%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	2.2	1.2128 ug/L		1.08894	1.2128 ppb	1.08894	89.79%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	225.2	6.3158 ug/L		0.42150	6.3158 ppb	0.42150	6.67%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	0.4	0.0032 ug/L		0.04111	0.0032 ppb	0.04111	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	35.5	0.0152 ug/L		0.02288	0.0152 ppb	0.02288	150.99%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	1.9	3.5420 ug/L		4.52499	3.5420 ppb	4.52499	127.75%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	0.2	0.0016 ug/L	0.11138	0.0016 ppb	0.11138 >999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	2.0	0.0537 ug/L	0.18063	0.0537 ppb	0.18063 336.65%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	5.3	0.0709 ug/L	0.12370	0.0709 ppb	0.12370 174.51%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-64.8	-0.2151 ug/L	0.17704	-0.2151 ppb	0.17704 82.32%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	1.0	11.328 ug/L	28.7716	11.328 ppb	28.7716 253.99%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	60.3	11.476 ug/L	26.0963	11.476 ppb	26.0963 227.40%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	0.1	2.4023 ug/L	33.57814	2.4023 ppb	33.57814 >999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	33.4	0.0450 ug/L	0.02116	0.0450 ppb	0.02116 47.05%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	5.0	0.4438 ug/L	0.46896	0.4438 ppb	0.46896 105.66%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	44.9	15.826 ug/L	6.8900	15.826 ppb	6.8900 43.54%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-16.8	-0.5349 ug/L	0.12613	-0.5349 ppb	0.12613 23.58%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	3.2	2.3871 ug/L	1.86043	2.3871 ppb	1.86043 77.94%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	3.6	0.5514 ug/L	1.22574	0.5514 ppb	1.22574 222.28%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	1.5	2.7034 ug/L	1.25258	2.7034 ppb	1.25258 46.33%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	7.0	2.9122 ug/L	4.47781	2.9122 ppb	4.47781 153.76%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	1.2	1.0034 ug/L	4.83345	1.0034 ppb	4.83345 481.70%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	25.9	0.9797 ug/L	0.59481	0.9797 ppb	0.59481 60.72%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	-3.0	-0.6781 ug/L	1.15533	-0.6781 ppb	1.15533 170.37%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	9.2	0.0741 ug/L	0.07015	0.0741 ppb	0.07015 94.68%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	6.8	0.0106 ug/L	0.13217	0.0106 ppb	0.13217 >999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	2.9	1.1401 ug/L	1.93830	1.1401 ppb	1.93830 170.01%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	111.9	3.3945 ug/L	2.65336	3.3945 ppb	2.65336 78.17%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-29.2	-0.2222 ug/L	0.32618	-0.2222 ppb	0.32618 146.79%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	14.8	0.1808 ug/L	0.06693	0.1808 ppb	0.06693 37.01%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	27.2	2.2111 ug/L	0.57579	2.2111 ppb	0.57579 26.04%
QC value within limits for SiO2 Recovery = Not calculated					

All analyte(s) passed QC.

ICPMS#3 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Tuesday, April 20, 2010 12:50:55

Sample Description:

Method File: c:\elandata\Method\daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.8297

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		1055.0		1055.039		35.527		3.4
Mg	24.0		7070.3		7070.350		158.540		2.2
Co	58.9		22832.0		22832.034		306.240		1.3
Rh	102.9		69087.3		69087.262		551.509		0.8
In	114.9		97980.1		97980.085		1034.898		1.1
Pb	208.0		80634.1		80634.132		522.676		0.6
[> Ba	137.9		79714.1		79714.135		934.401		1.2
[Ba++	69.0		1297.2		0.016		0.000		1.4
[> Ce	139.9		103461.7		103461.706		487.799		0.5
[CeO	155.9		2503.6		0.024		0.001		3.0
Bkgd	220.0		3.5		3.500		0.791		22.6

Current Optimization File Data

Current Value	Description
1.09	Nebulizer Gas Flow
6.00	Lens Voltage
1450.00	ICP RF Power
-1975.00	Analog Stage Voltage
1400.00	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	5.8	950.4
Co	59	13	6.5	21779.6
In	115	13	7.3	124445.3

ICPMS#3 Instrument Tuning Report

File Name: 100420.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	588	2060	0.636
Be	9.0	9.0	2069	2040	0.656
Mg	24.0	24.0	5708	2110	0.605
Mg	25.0	24.9	5883	2020	0.672
Mg	26.0	26.0	6215	2140	0.643
Co	58.9	59.0	14208	2115	0.633
Rh	102.9	102.9	24900	2165	0.657
In	114.9	114.9	27825	2180	0.652
Ce	139.9	139.9	33913	2220	0.615
Pb	206.0	206.0	49991	2280	0.624
Pb	207.0	206.9	50272	2310	0.626
Pb	208.0	208.0	50486	2300	0.631
U	238.1	238.0	57839	2340	0.658

Report Date/Time: Tuesday, April 20, 2010 12:50:31

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ICPMS#3 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, April 20, 2010 13:33:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: C:\elandata\Dataset\100420\Blank.010

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9		ug/L		4	
> Sc	45		ug/L		181124	
| V	51		ug/L		3584	
[Ni	60		ug/L		34	
[Zn	66		ug/L		306	
| Zn	67		ug/L		2723	
| Zn	68		ug/L		449	
> Ge	74		ug/L		136986	
| As	75		ug/L		138	
| Se	77		ug/L		973	
| Se	82		ug/L		-0	
[Kr	83		ug/L		34	
> Lu	175		ug/L		216975	
| Tl	205		ug/L		2616	
[U	238		ug/L		120	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	
Ni	60	Linear Thru Zero	
Zn	66	Linear Thru Zero	
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	
U	238	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[Be	9					
> Sc	45					
| V	51					
[Ni	60					
[Zn	66					
| Zn	67					
| Zn	68					
> Ge	74					
As	75					
Se	77					

Sample ID: Blank
Report Date/Time: Tuesday, April 20, 2010 13:34:26
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	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: Tuesday, April 20, 2010 13:36:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\Standard 1.011

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	10.830	720	0.004
> Sc	45		ug/L		182727	182727.487
V	51	10.000	ug/L	3.811	21388	0.097
Ni	60	10.000	ug/L	3.329	3379	0.018
Zn	66	10.000	ug/L	4.277	3232	0.021
Zn	67		ug/L		3454	0.005
Zn	68		ug/L		3118	0.019
> Ge	74		ug/L		139302	139301.666
As	75	10.000	ug/L	1.372	4077	0.028
Se	77		ug/L		1389	0.003
Se	82	10.000	ug/L	1.186	390	0.003
Kr	83		ug/L		23	-0.000
> Lu	175		ug/L		219168	219167.744
Tl	205	10.000	ug/L	1.357	107679	0.479
U	238	10.000	ug/L	0.522	153997	0.702

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45					
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74					
As	75					
Se	77					

Sample ID: Standard 1

Report Date/Time: Tuesday, April 20, 2010 13:37:44

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	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: Tuesday, April 20, 2010 13:40:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\Standard 2.012

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	99.933	ug/L	7.836	6470	0.037
> Sc	45		ug/L		176300	176300.162
V	51	100.017	ug/L	2.910	177962	0.990
Ni	60	99.953	ug/L	0.572	30835	0.175
Zn	66	100.018	ug/L	0.442	28517	0.213
Zn	67		ug/L		8200	0.042
Zn	68		ug/L		24922	0.185
> Ge	74		ug/L		132216	132215.584
As	75	100.060	ug/L	0.910	39915	0.301
Se	77		ug/L		4374	0.026
Se	82	100.080	ug/L	1.439	4032	0.031
Kr	83		ug/L		26	-0.000
> Lu	175		ug/L		213822	213821.892
Tl	205	99.985	ug/L	0.801	1011920	4.721
U	238	99.977	ug/L	0.600	1467886	6.865

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45					
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74					
As	75					
Se	77					

Sample ID: Standard 2

Report Date/Time: Tuesday, April 20, 2010 13:41:02

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	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: Tuesday, April 20, 2010 13:43:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 1.013

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	50.432	ug/L	8.966	3338	0.018
> Sc	45		ug/L		180259	180259.466
V	51	48.853	ug/L	2.522	90729	0.484
Ni	60	52.210	ug/L	1.674	16485	0.091
Zn	66	50.651	ug/L	3.547	14976	0.108
Zn	67		ug/L		5706	0.022
Zn	68		ug/L		13047	0.093
> Ge	74		ug/L		135744	135743.556
As	75	50.717	ug/L	0.453	20842	0.153
Se	77		ug/L		2687	0.013
Se	82	49.632	ug/L	4.296	2053	0.015
Kr	83		ug/L		20	-0.000
> Lu	175		ug/L		217492	217492.056
Tl	205	49.890	ug/L	1.050	514898	2.356
U	238	51.723	ug/L	1.000	772468	3.551

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9	100.865				
> Sc	45		99.5			
V	51	97.706				
Ni	60	104.420				
Zn	66	101.303				
Zn	67					
Zn	68					
> Ge	74		99.1			
As	75	101.434				
Se	77					

Sample ID: QC Std 1

Report Date/Time: Tuesday, April 20, 2010 13:44:22

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	Se	82	99.264	
	Kr	83		
[>	Lu	175		100.2
	Tl	205	99.781	
	U	238	103.446	

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: Tuesday, April 20, 2010 13:46:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 2.014

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.016	ug/L	152.736	3	-0.000
> Sc	45		ug/L		182699	182699.227
V	51	-0.122	ug/L	190.084	3386	-0.001
Ni	60	-0.023	ug/L	56.484	27	-0.000
Zn	66	-0.048	ug/L	189.265	289	-0.000
Zn	67		ug/L		2816	0.001
Zn	68		ug/L		466	0.000
> Ge	74		ug/L		135290	135290.394
As	75	0.016	ug/L	798.046	143	0.000
Se	77		ug/L		1036	0.001
Se	82	0.691	ug/L	14.418	28	0.000
Kr	83		ug/L		15	-0.000
> Lu	175		ug/L		216138	216137.824
Tl	205	-0.009	ug/L	423.740	2520	-0.000
U	238	-0.001	ug/L	48.432	112	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		100.9			
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		98.8			
As	75					
Se	77					

Sample ID: QC Std 2

Report Date/Time: Tuesday, April 20, 2010 13:47:46

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	Se	82	
	Kr	83	
>	Lu	175	99.6
	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 3

Sample Date/Time: Tuesday, April 20, 2010 13:50:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 3.015

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.674	ug/L	7.749	50	0.000
> Sc	45		ug/L		184617	184617.098
V	51	11.389	ug/L	8.724	24438	0.113
Ni	60	2.398	ug/L	2.126	808	0.004
Zn	66	11.973	ug/L	1.355	3808	0.026
Zn	67		ug/L		3577	0.006
Zn	68		ug/L		3469	0.022
> Ge	74		ug/L		137075	137074.554
As	75	6.111	ug/L	10.292	2657	0.018
Se	77		ug/L		1261	0.002
Se	82	5.851	ug/L	5.070	244	0.002
Kr	83		ug/L		18	-0.000
> Lu	175		ug/L		217855	217854.611
Tl	205	1.032	ug/L	0.492	13241	0.049
U	238	0.291	ug/L	1.140	4472	0.020

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9	134.802				
> Sc	45		101.9			
V	51	113.893				
Ni	60	119.907				
Zn	66	119.726				
Zn	67					
Zn	68					
> Ge	74		100.1			
As	75	122.224				
Se	77					

Sample ID: QC Std 3

Report Date/Time: Tuesday, April 20, 2010 13:51:06

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	Se	82	117.027	
	Kr	83		
>	Lu	175		100.4
	Tl	205	103.198	
	U	238	145.442	

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 3	Be	9CRDL is out of limits
QC Std 3	U	238CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, April 20, 2010 13:53:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 4.016

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.096	ug/L	108.017	8	0.000
> Sc	45		ug/L		146033	146033.064
V	51	-1.905	ug/L	22.162	137	-0.019
Ni	60	3.036	ug/L	4.019	802	0.005
Zn	66	2.872	ug/L	5.119	955	0.006
Zn	67		ug/L		1962	-0.003
Zn	68		ug/L		484	0.001
> Ge	74		ug/L		114234	114233.716
As	75	0.502	ug/L	131.692	288	0.002
Se	77		ug/L		1361	0.005
Se	82	-0.173	ug/L	235.710	-6	-0.000
Kr	83		ug/L		72	0.000
> Lu	175		ug/L		173870	173870.092
Tl	205	-0.178	ug/L	2.554	633	-0.008
U	238	-0.004	ug/L	11.885	44	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Ni	60Linear 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	
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		80.6			
V	51					
Ni	60	91.729				
Zn	66	76.396				
Zn	67					
Zn	68					
> Ge	74		83.4			
As	75					
Se	77					

Sample ID: QC Std 4

Report Date/Time: Tuesday, April 20, 2010 13:54:26

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	Se	82	
	Kr	83	
[>	Lu	175	80.1
	Tl	205	
	U	238	

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, April 20, 2010 13:56:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 5.017

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	19.389	ug/L	4.639	1315	0.007
> Sc	45		ug/L		184321	184320.743
V	51	18.936	ug/L	5.961	38161	0.187
Ni	60	19.960	ug/L	2.502	6467	0.035
Zn	66	20.444	ug/L	1.966	6237	0.044
Zn	67		ug/L		4051	0.010
Zn	68		ug/L		5562	0.038
> Ge	74		ug/L		135985	135984.583
As	75	19.400	ug/L	1.233	8072	0.058
Se	77		ug/L		1620	0.005
Se	82	18.899	ug/L	5.890	783	0.006
Kr	83		ug/L		23	-0.000
> Lu	175		ug/L		220515	220515.148
Tl	205	19.638	ug/L	0.841	207115	0.927
U	238	19.676	ug/L	0.965	298029	1.351

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9	96.945				
> Sc	45		101.8			
V	51	94.678				
Ni	60	85.630				
Zn	66	86.045				
Zn	67					
Zn	68					
> Ge	74		99.3			
As	75	97.001				
Se	77					

Sample ID: QC Std 5

Report Date/Time: Tuesday, April 20, 2010 13:57:48

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	Se	82	94.494	
	Kr	83		
[>	Lu	175		101.6
	Tl	205	98.188	
	U	238	98.381	

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: Tuesday, April 20, 2010 14:00:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 6.018

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	48.844	ug/L	6.470	3282	0.018
> Sc	45		ug/L		183015	183014.911
V	51	49.482	ug/L	2.283	93255	0.490
Ni	60	51.421	ug/L	0.535	16483	0.090
Zn	66	51.145	ug/L	1.272	14968	0.109
Zn	67		ug/L		5845	0.024
Zn	68		ug/L		13203	0.095
> Ge	74		ug/L		134382	134382.483
As	75	50.755	ug/L	1.251	20648	0.153
Se	77		ug/L		2798	0.014
Se	82	51.554	ug/L	3.613	2111	0.016
Kr	83		ug/L		22	-0.000
> Lu	175		ug/L		216548	216548.097
Tl	205	49.968	ug/L	1.580	513461	2.359
U	238	52.297	ug/L	1.451	777696	3.591

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9	97.688				
> Sc	45		101.0			
V	51	98.965				
Ni	60	102.841				
Zn	66	102.291				
Zn	67					
Zn	68					
> Ge	74		98.1			
As	75	101.510				
Se	77					

Sample ID: QC Std 6

Report Date/Time: Tuesday, April 20, 2010 14:01:09

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	Se	82	103.107	
	Kr	83		
[>	Lu	175		99.8
	Tl	205	99.935	
	U	238	104.596	

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: Tuesday, April 20, 2010 14:03:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 7.019

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.013	ug/L	209.553	5	0.000
> Sc	45		ug/L		187970	187970.345
V	51	-0.407	ug/L	39.083	2968	-0.004
Ni	60	-0.019	ug/L	97.466	29	-0.000
Zn	66	0.077	ug/L	71.325	331	0.000
Zn	67		ug/L		3083	0.002
Zn	68		ug/L		486	0.000
> Ge	74		ug/L		138003	138003.435
As	75	-0.033	ug/L	1090.234	125	-0.000
Se	77		ug/L		1049	0.000
Se	82	0.692	ug/L	12.928	29	0.000
Kr	83		ug/L		22	-0.000
> Lu	175		ug/L		218730	218730.358
Tl	205	0.022	ug/L	167.989	2870	0.001
U	238	0.000	ug/L	499.983	124	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		103.8			
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		100.7			
As	75					
Se	77					

Sample ID: QC Std 7

Report Date/Time: Tuesday, April 20, 2010 14:04:33

Page 1

|	Se	82	
|	Kr	83	
|>	Lu	175	100.8
|	Tl	205	
	U	238	

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, April 20, 2010 14:30:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 6.027

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	47.584	ug/L	7.879	3313	0.017
> Sc	45		ug/L		189531	189531.043
V	51	48.478	ug/L	2.705	94672	0.480
Ni	60	50.814	ug/L	1.206	16866	0.089
Zn	66	51.080	ug/L	1.420	15344	0.109
Zn	67		ug/L		5916	0.023
Zn	68		ug/L		13604	0.095
> Ge	74		ug/L		137938	137937.530
As	75	50.196	ug/L	0.723	20961	0.151
Se	77		ug/L		2766	0.013
Se	82	48.395	ug/L	2.797	2034	0.015
Kr	83		ug/L		24	-0.000
> Lu	175		ug/L		219488	219487.858
Tl	205	49.751	ug/L	1.304	518175	2.349
U	238	52.119	ug/L	0.984	785545	3.579

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9	95.167				
> Sc	45		104.6			
V	51	96.956				
Ni	60	101.628				
Zn	66	102.160				
Zn	67					
Zn	68					
> Ge	74		100.7			
As	75	100.392				
Se	77					

Sample ID: QC Std 6

Report Date/Time: Tuesday, April 20, 2010 14:31:28

Page 1

|	Se	82	96.790	
|	Kr	83		
|>	Lu	175		101.2
|	Tl	205	99.501	
|	U	238	104.237	

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: Tuesday, April 20, 2010 14:33:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 7.028

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.001	ug/L	5243.308	4	0.000
>	Sc 45		ug/L		192429	192428.706
|	V 51	0.294	ug/L	108.369	4359	0.003
[	Ni 60	-0.024	ug/L	71.557	28	-0.000
[	Zn 66	0.250	ug/L	59.824	380	0.001
|	Zn 67		ug/L		2990	0.002
|	Zn 68		ug/L		507	0.000
>	Ge 74		ug/L		137232	137232.084
|	As 75	0.219	ug/L	119.381	229	0.001
|	Se 77		ug/L		1098	0.001
|	Se 82	0.561	ug/L	11.137	23	0.000
[	Kr 83		ug/L		23	-0.000
>	Lu 175		ug/L		220497	220496.897
|	Tl 205	-0.053	ug/L	57.762	2108	-0.002
[	U 238	-0.002	ug/L	10.479	96	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Ni	60Linear 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	
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		106.2		
|	V 51				
[	Ni 60				
[	Zn 66				
|	Zn 67				
|	Zn 68				
>	Ge 74		100.2		
|	As 75				
|	Se 77				

Sample ID: QC Std 7

Report Date/Time: Tuesday, April 20, 2010 14:34:52

Page 1

|	Se	82	
|	Kr	83	
[>	Lu	175	101.6
|	Tl	205	
	U	238	

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, April 20, 2010 14:57:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 6.035

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	47.371	ug/L	9.491	3286	0.017
> Sc	45		ug/L		188810	188810.075
V	51	46.430	ug/L	3.285	90486	0.460
Ni	60	49.428	ug/L	1.072	16349	0.086
Zn	66	52.694	ug/L	3.179	15201	0.112
Zn	67		ug/L		5646	0.023
Zn	68		ug/L		13275	0.097
> Ge	74		ug/L		132557	132557.190
As	75	50.320	ug/L	3.476	20190	0.151
Se	77		ug/L		2594	0.012
Se	82	47.879	ug/L	2.943	1934	0.015
Kr	83		ug/L		22	-0.000
> Lu	175		ug/L		216622	216621.663
Tl	205	49.973	ug/L	1.851	513645	2.359
U	238	52.081	ug/L	1.430	774662	3.576

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9	94.742				
> Sc	45		104.2			
V	51	92.860				
Ni	60	98.856				
Zn	66	105.389				
Zn	67					
Zn	68					
> Ge	74		96.8			
As	75	100.641				
Se	77					

Sample ID: QC Std 6

Report Date/Time: Tuesday, April 20, 2010 14:58:27

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	Se	82	95.757	
	Kr	83		
[>	Lu	175		99.8
	Tl	205	99.945	
	U	238	104.161	

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: Tuesday, April 20, 2010 15:00:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 7.036

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.011	ug/L	394.889	5	0.000
> Sc	45		ug/L		191719	191718.561
V	51	0.320	ug/L	56.695	4399	0.003
Ni	60	-0.030	ug/L	54.744	26	-0.000
Zn	66	0.400	ug/L	13.432	417	0.001
Zn	67		ug/L		2961	0.002
Zn	68		ug/L		574	0.001
> Ge	74		ug/L		135207	135207.221
As	75	0.298	ug/L	129.202	258	0.001
Se	77		ug/L		1041	0.001
Se	82	0.673	ug/L	20.512	27	0.000
Kr	83		ug/L		20	-0.000
> Lu	175		ug/L		216522	216522.342
Tl	205	-0.039	ug/L	97.167	2211	-0.002
U	238	-0.001	ug/L	11.825	102	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		105.8			
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		98.7			
As	75					
Se	77					

Sample ID: QC Std 7

Report Date/Time: Tuesday, April 20, 2010 15:01:51

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	Se	82	
	Kr	83	
>	Lu	175	99.8
	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: 1202053058

Sample Date/Time: Tuesday, April 20, 2010 15:04:10

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 957494|1|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\1202053058.037

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.014	ug/L	11.971	5	0.000
> Sc	45		ug/L		184586	184586.089
V	51	3.904	ug/L	18.109	10798	0.039
Ni	60	0.037	ug/L	77.023	46	0.000
Zn	66	2.189	ug/L	8.176	914	0.005
Zn	67		ug/L		14540	0.090
Zn	68		ug/L		1381	0.007
> Ge	74		ug/L		132342	132342.166
As	75	0.945	ug/L	28.226	510	0.003
Se	77		ug/L		3764	0.021
Se	82	0.531	ug/L	35.651	21	0.000
Kr	83		ug/L		22	-0.000
> Lu	175		ug/L		209014	209014.107
Tl	205	-0.180	ug/L	3.062	747	-0.008
U	238	0.045	ug/L	3.634	767	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Ni	60Linear 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	
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		101.9			
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		96.6			
As	75					
Se	77					

Sample ID: 1202053058

Report Date/Time: Tuesday, April 20, 2010 15:05:11

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	Se	82	
	Kr	83	
>	Lu	175	96.3
	Tl	205	
	U	238	

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202053059

Sample Date/Time: Tuesday, April 20, 2010 15:07:30

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 957494|1|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\1202053059.038

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	55.207	ug/L	5.873	3784	0.020
> Sc	45		ug/L		186632	186631.816
V	51	51.764	ug/L	2.951	99292	0.512
Ni	60	51.214	ug/L	0.712	16742	0.090
Zn	66	56.031	ug/L	3.619	16494	0.120
Zn	67		ug/L		19039	0.121
Zn	68		ug/L		15002	0.108
> Ge	74		ug/L		135423	135423.212
As	75	52.263	ug/L	2.153	21421	0.157
Se	77		ug/L		5640	0.035
Se	82	51.542	ug/L	4.570	2127	0.016
Kr	83		ug/L		20	-0.000
> Lu	175		ug/L		215053	215053.151
Tl	205	50.379	ug/L	1.410	514075	2.379
U	238	55.058	ug/L	0.368	813080	3.780

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Ni	60Linear 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	
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		103.0			
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		98.9			
As	75					
Se	77					

Sample ID: 1202053059

Report Date/Time: Tuesday, April 20, 2010 15:08:31

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	Se	82	
	Kr	83	
[>	Lu	175	99.1
	Tl	205	
	U	238	

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 247793001

Sample Date/Time: Tuesday, April 20, 2010 15:10:51

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957494|1|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\247793001.039

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.004	ug/L	960.456	4	0.000
Sc	45		ug/L		183397	183397.126
V	51	4.713	ug/L	19.790	12177	0.047
Ni	60	0.178	ug/L	4.440	91	0.000
Zn	66	2.351	ug/L	2.296	959	0.005
Zn	67		ug/L		16773	0.107
Zn	68		ug/L		1441	0.008
Ge	74		ug/L		132193	132192.813
As	75	0.926	ug/L	18.280	501	0.003
Se	77		ug/L		3786	0.022
Se	82	0.657	ug/L	22.961	26	0.000
Kr	83		ug/L		19	-0.000
Lu	175		ug/L		206578	206578.428
Tl	205	0.242	ug/L	28.558	4852	0.011
U	238	0.007	ug/L	29.244	218	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Ni	60Linear 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	
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			
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
Ge	74		96.5			
As	75					
Se	77					

Sample ID: 247793001

Report Date/Time: Tuesday, April 20, 2010 15:11:53

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	Se	82	
	Kr	83	
[>	Lu	175	95.2
	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: 1202053060

Sample Date/Time: Tuesday, April 20, 2010 15:17:35

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 957494|1|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\1202053060.041

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
|	Be 9	0.524	ug/L	11.349	40	0.000
|>	Sc 45		ug/L		186507	186507.363
|	V 51	14.745	ug/L	4.581	30900	0.146
|	Ni 60	39.459	ug/L	1.567	12897	0.069
|	Zn 66	3009.925	ug/L	1.950	837871	6.423
|	Zn 67		ug/L		166033	1.253
|	Zn 68		ug/L		750891	5.755
|>	Ge 74		ug/L		130398	130398.394
|	As 75	1.860	ug/L	11.723	861	0.006
|	Se 77		ug/L		4256	0.026
|	Se 82	0.494	ug/L	43.217	19	0.000
|	Kr 83		ug/L		33	0.000
|>	Lu 175		ug/L		201853	201853.450
|	Tl 205	-0.100	ug/L	4.720	1476	-0.005
|	U 238	1.845	ug/L	0.540	25684	0.127

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Ni	60Linear 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	
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		103.0		
|	V 51				
|	Ni 60				
|	Zn 66				
|	Zn 67				
|	Zn 68				
|>	Ge 74		95.2		
|	As 75				
	Se 77				

Sample ID: 1202053060

Report Date/Time: Tuesday, April 20, 2010 15:18:37

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	Se	82	
	Kr	83	
>	Lu	175	93.0
	Tl	205	
	U	238	

QC Out Of Limits

Measurement Type Analyte
Zn 66 Upper, S, EEEZn

MassOut of Limits Message
66Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 1202053061

Sample Date/Time: Tuesday, April 20, 2010 15:20:58

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 957494|1|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\1202053061.042

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	44.862	ug/L	3.695	3059	0.016
> Sc	45		ug/L		185762	185761.566
V	51	60.789	ug/L	2.847	115458	0.602
Ni	60	87.822	ug/L	0.513	28547	0.153
Zn	66	3145.076	ug/L	1.105	870032	6.711
Zn	67		ug/L		170616	1.297
Zn	68		ug/L		783069	6.040
> Ge	74		ug/L		129586	129585.717
As	75	83.431	ug/L	0.980	32645	0.251
Se	77		ug/L		4968	0.031
Se	82	20.398	ug/L	1.963	805	0.006
Kr	83		ug/L		38	0.000
> Lu	175		ug/L		201593	201593.124
Tl	205	98.841	ug/L	1.033	943202	4.667
U	238	58.613	ug/L	0.917	811387	4.024

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		102.6			
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		94.6			
As	75					
Se	77					

Sample ID: 1202053061

Report Date/Time: Tuesday, April 20, 2010 15:22:00

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	Se	82	
	Kr	83	
[>	Lu	175	92.9
	Tl	205	
	U	238	

QC Out Of Limits

Measurement Type Analyte
Zn 66 Upper, S, EEZn

MassOut of Limits Message
66Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 1202053062

Sample Date/Time: Tuesday, April 20, 2010 15:24:22

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 957494|5|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\1202053062.043

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	0.114	ug/L	42.989	12	0.000
> Sc 45		ug/L		187626	187626.474
V 51	3.504	ug/L	8.906	10212	0.035
Ni 60	7.734	ug/L	3.626	2572	0.014
Zn 66	656.241	ug/L	3.085	176093	1.400
Zn 67		ug/L		36597	0.272
Zn 68		ug/L		149687	1.189
> Ge 74		ug/L		125512	125512.281
As 75	0.348	ug/L	90.754	257	0.001
Se 77		ug/L		1718	0.007
Se 82	0.333	ug/L	40.172	12	0.000
Kr 83		ug/L		25	-0.000
> Lu 175		ug/L		208697	208696.905
Tl 205	0.586	ug/L	18.258	8307	0.028
U 238	0.979	ug/L	1.923	14136	0.067

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Ni	60Linear 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	
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		103.6			
V 51					
Ni 60					
Zn 66					
Zn 67					
Zn 68					
> Ge 74		91.6			
As 75					
Se 77					

Sample ID: 1202053062

Report Date/Time: Tuesday, April 20, 2010 15:25:24

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	Se	82	
	Kr	83	
>	Lu	175	96.2
	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 6

Sample Date/Time: Tuesday, April 20, 2010 15:27:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 6.044

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	47.113	ug/L	7.818	3168	0.017
> Sc	45		ug/L		183033	183032.560
V	51	45.076	ug/L	3.962	85255	0.446
Ni	60	47.936	ug/L	1.348	15370	0.084
Zn	66	54.577	ug/L	3.037	14739	0.116
Zn	67		ug/L		6124	0.029
Zn	68		ug/L		12841	0.100
> Ge	74		ug/L		124168	124167.861
As	75	50.400	ug/L	1.931	18945	0.152
Se	77		ug/L		2586	0.014
Se	82	48.270	ug/L	3.808	1826	0.015
Kr	83		ug/L		18	-0.000
> Lu	175		ug/L		208788	208788.181
Tl	205	49.639	ug/L	0.495	491834	2.344
U	238	52.106	ug/L	1.881	746994	3.578

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9	94.227				
> Sc	45		101.1			
V	51	90.151				
Ni	60	95.872				
Zn	66	109.154				
Zn	67					
Zn	68					
> Ge	74		90.6			
As	75	100.800				
Se	77					

Sample ID: QC Std 6

Report Date/Time: Tuesday, April 20, 2010 15:28:46

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	Se	82	96.540	
	Kr	83		
[>	Lu	175		96.2
	Tl	205	99.278	
	U	238	104.211	

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: Tuesday, April 20, 2010 15:31:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 7.045

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.018	ug/L	206.063	5	0.000
> Sc	45		ug/L		185757	185756.649
V	51	0.466	ug/L	112.601	4524	0.005
Ni	60	-0.039	ug/L	18.079	22	-0.000
Zn	66	0.215	ug/L	38.659	332	0.000
Zn	67		ug/L		3062	0.005
Zn	68		ug/L		507	0.001
> Ge	74		ug/L		123214	123214.323
As	75	0.365	ug/L	87.642	259	0.001
Se	77		ug/L		984	0.001
Se	82	0.589	ug/L	45.109	22	0.000
Kr	83		ug/L		21	-0.000
> Lu	175		ug/L		208935	208934.592
Tl	205	0.122	ug/L	28.574	3720	0.006
U	238	0.000	ug/L	493.521	120	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Ni	60Linear 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	
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		102.6			
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		89.9			
As	75					
Se	77					

Sample ID: QC Std 7

Report Date/Time: Tuesday, April 20, 2010 15:32:10

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	Se	82	
	Kr	83	
[>	Lu	175	96.3
	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 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Tuesday, April 20, 2010 12:13:09

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.1112

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		2313.0		2312.987		14.187		0.6
Mg	24.0		31900.2		31900.180		303.025		0.9
Co	58.9		67855.0		67854.979		618.654		0.9
Rh	102.9		133570.6		133570.581		1318.743		1.0
In	114.9		189135.9		189135.864		1537.568		0.8
Pb	208.0		201237.1		201237.076		778.547		0.4
[> Ba	137.9		179976.5		179976.475		1603.323		0.9
[Ba++	69.0		2756.0		0.015		0.000		2.5
[> Ce	139.9		219223.1		219223.131		1727.246		0.8
[CeO	155.9		4598.3		0.021		0.000		1.1
Bkgd	220.0		28.2		28.200		4.222		15.0

Current Optimization File Data

Current Value	Description
0.95	Nebulizer Gas Flow
6.75	Lens Voltage
1450.00	ICP RF Power
-1812.50	Analog Stage Voltage
1300.00	Pulse Stage Voltage
200.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	8.3	2874.6
Co	59	21	9.3	60162.1
In	115	21	10.3	173624.0

ICPMS #5 Instrument Tuning Report

File Name: 100420.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	608	2072	0.545
Be	9.0	9.1	2061	2088	0.565
Mg	24.0	24.0	5697	2085	0.569
Mg	25.0	25.0	5925	2085	0.541
Mg	26.0	26.0	6187	2100	0.550
Co	58.9	58.9	14191	2125	0.541
Rh	102.9	102.9	24879	2180	0.553
In	114.9	114.9	27795	2200	0.545
Ce	139.9	139.9	33877	2220	0.559
Pb	206.0	206.0	49948	2305	0.557
Pb	207.0	207.0	50183	2240	0.641
Pb	208.0	208.0	50451	2280	0.666
U	238.1	238.1	57736	2295	0.660

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Tuesday, April 20, 2010 12:30:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl ilq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\Blank.001

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L		24	
> Sc	45		ug/L		616965	
Mn	55		ug/L		888	
> In	115		ug/L		224502	
Sb	121		ug/L		148	
Sb	123		ug/L		124	
> Lu	175		ug/L		393559	
Tl	205		ug/L		2331	
U	238		ug/L		154	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Simple Linear	
Sc	45	Simple Linear	
Mn	55	Simple Linear	
In	115	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Lu	175	Simple Linear	
Tl	205	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9								
> Sc	45								
Mn	55								
> In	115								
Sb	121								
Sb	123								
> Lu	175								
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

Sample ID: Blank

Report Date/Time: Tuesday, April 20, 2010 12:31:17

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ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Tuesday, April 20, 2010 12:33:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\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	6.547	2607	0.004
[> Sc	45		ug/L		600985	600984.794
[Mn	55	10.000	ug/L	0.407	76809	0.126
[> In	115		ug/L		220573	220573.400
[Sb	121	10.000	ug/L	1.508	52044	0.235
[Sb	123		ug/L		40663	0.184
[> Lu	175		ug/L		386251	386251.248
[Tl	205	10.000	ug/L	1.909	190785	0.488
[U	238	10.000	ug/L	1.125	437996	1.134

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear 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 % Di	Duplicate Rel. % Difference
[Be	9					
[> Sc	45					
[Mn	55					
[> In	115					
[Sb	121					
[Sb	123					
[> 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

Sample ID: Standard 1

Report Date/Time: Tuesday, April 20, 2010 12:34:22

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Tuesday, April 20, 2010 12:36:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\Standard 2.003

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	100.007	ug/L	2.189	25258	0.043
> Sc	45		ug/L		582798	582798.392
Mn	55	99.981	ug/L	1.977	723305	1.240
> In	115		ug/L		215719	215718.695
Sb	121	99.989	ug/L	1.779	502185	2.328
Sb	123		ug/L		391489	1.814
> Lu	175		ug/L		379544	379543.528
Tl	205	99.912	ug/L	1.170	1703568	4.483
U	238	99.911	ug/L	0.937	3947088	10.399

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike %	Recov	Dilution %	Dil	Duplicate	Rel. % Difference
Be	9										
> Sc	45										
Mn	55										
> In	115										
Sb	121										
Sb	123										
> Lu	175										
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

Sample ID: Standard 2

Report Date/Time: Tuesday, April 20, 2010 12:37:27

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Tuesday, April 20, 2010 12:39:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 1.004

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	49.216	ug/L	3.871	12695	0.021
Sc	45		ug/L		594723	594723.463
Mn	55	50.400	ug/L	0.922	372544	0.625
In	115		ug/L		217775	217775.349
Sb	121	49.064	ug/L	0.784	248866	1.142
Sb	123		ug/L		192649	0.884
Lu	175		ug/L		386411	386411.460
Tl	205	49.950	ug/L	0.459	868240	2.241
U	238	50.043	ug/L	1.294	2012926	5.209

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	98.433					
Sc	45		96.4				
Mn	55	100.801					
In	115		97.0				
Sb	121	98.127					
Sb	123						
Lu	175		98.2				
Tl	205	99.900					
U	238	100.085					

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: Tuesday, April 20, 2010 12:40:32

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Tuesday, April 20, 2010 12:43:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 2.005

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.010	ug/L	55.963	20	-0.000
> Sc	45		ug/L		580059	580058.954
[Mn	55	0.012	ug/L	14.190	924	0.000
> In	115		ug/L		214827	214826.950
| Sb	121	0.071	ug/L	8.753	495	0.002
[Sb	123		ug/L		397	0.001
> Lu	175		ug/L		377313	377312.899
| Tl	205	0.051	ug/L	5.124	3105	0.002
[U	238	0.007	ug/L	11.816	421	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution %	Duplicate Rel.	% Difference
Be	9						
> Sc	45		94.0				
[Mn	55						
> In	115		95.7				
| Sb	121						
[Sb	123						
> Lu	175		95.9				
| 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

Sample ID: QC Std 2

Report Date/Time: Tuesday, April 20, 2010 12:43:42

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Tuesday, April 20, 2010 12:46:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 3.006

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.640	ug/L	9.386	185	0.000
> Sc	45		ug/L		584136	584136.001
[Mn	55	6.171	ug/L	1.537	45536	0.077
> In	115		ug/L		215962	215961.905
[Sb	121	2.847	ug/L	2.352	14455	0.066
[Sb	123		ug/L		11447	0.052
> Lu	175		ug/L		380044	380043.614
[Tl	205	1.225	ug/L	2.577	23127	0.055
[U	238	0.302	ug/L	2.442	12095	0.031

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear 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	127.901					
> Sc	45		94.7				
[Mn	55	123.423					
> In	115		96.2				
[Sb	121	94.908					
[Sb	123						
> Lu	175		96.6				
[Tl	205	122.451					
[U	238	151.030					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 3	U	238CRDL is out of limits

QC Action

QC Action Line: Continue

Sample ID: QC Std 3

Report Date/Time: Tuesday, April 20, 2010 12:46:48

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, April 20, 2010 12:49:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Vanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 4.007

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.125	ug/L	22.859	54	0.000
> Sc	45		ug/L		576339	576338.616
Mn	55	5.627	ug/L	0.658	41045	0.070
> In	115		ug/L		206904	206904.254
Sb	121	0.108	ug/L	1.920	655	0.003
Sb	123		ug/L		513	0.002
> Lu	175		ug/L		366872	366872.234
Tl	205	-0.014	ug/L	15.101	1938	-0.001
U	238	0.001	ug/L	2.507	189	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		93.4				
Mn	55	97.021					
> In	115		92.2				
Sb	121						
Sb	123						
> 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

Sample ID: QC Std 4

Report Date/Time: Tuesday, April 20, 2010 12:49:55

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, April 20, 2010 12:52:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 5.008

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	19.767	ug/L	2.055	4964	0.009
> Sc	45		ug/L		577312	577311.635
Mn	55	25.187	ug/L	1.177	181133	0.312
> In	115		ug/L		211090	211090.117
Sb	121	18.820	ug/L	1.684	92608	0.438
Sb	123		ug/L		71640	0.339
> Lu	175		ug/L		371057	371057.186
Tl	205	19.498	ug/L	0.058	326793	0.875
U	238	21.353	ug/L	0.382	824815	2.223

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	98.836					
> Sc	45		93.6				
Mn	55	97.624					
> In	115		94.0				
Sb	121	94.102					
Sb	123						
> Lu	175		94.3				
Tl	205	97.490					
U	238	106.763					

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, April 20, 2010 12:53:02

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, April 20, 2010 12:55:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 6.009

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.424	ug/L	1.562	13143	0.022
> Sc	45		ug/L		589218	589218.106
[Mn	55	51.088	ug/L	0.411	374121	0.633
> In	115		ug/L		217571	217571.351
[Sb	121	49.961	ug/L	1.281	253159	1.163
[Sb	123		ug/L		196432	0.902
> Lu	175		ug/L		382898	382897.908
[Tl	205	50.945	ug/L	1.504	877361	2.286
[U	238	51.441	ug/L	1.932	2050112	5.354

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Be	9	102.848				
> Sc	45		95.5			
[Mn	55	102.175				
> In	115		96.9			
[Sb	121	99.923				
[Sb	123					
> Lu	175		97.3			
[Tl	205	101.889				
[U	238	102.882				

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, April 20, 2010 12:56:09

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, April 20, 2010 12:58:39

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 7.010

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.007	ug/L	156.137	22	-0.000
> Sc	45		ug/L		595800	595800.175
[Mn	55	0.008	ug/L	37.397	918	0.000
> In	115		ug/L		219459	219458.744
[Sb	121	0.087	ug/L	7.307	590	0.002
[Sb	123		ug/L		463	0.002
> Lu	175		ug/L		386087	386087.013
[Tl	205	0.031	ug/L	17.020	2827	0.001
[U	238	0.006	ug/L	16.246	380	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		96.6			
[Mn	55					
> In	115		97.8			
[Sb	121					
[Sb	123					
> Lu	175		98.1			
[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

Sample ID: QC Std 7

Report Date/Time: Tuesday, April 20, 2010 12:59:19

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ICPMS#5 - Summary Report

Sample ID: QC Std 10

Sample Date/Time: Tuesday, April 20, 2010 13:01:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 10.011

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1009.076	ug/L	1.797	245342	0.437
> Sc	45		ug/L		561466	561465.847
Mn	55	912.813	ug/L	2.257	6356181	11.319
> In	115		ug/L		200622	200622.301
Sb	121	249.360	ug/L	1.975	1164396	5.805
Sb	123		ug/L		919554	4.584
> Lu	175		ug/L		373554	373554.212
Tl	205	445.756	ug/L	0.914	7472623	19.999
U	238	5008.459	ug/L	0.739	194733835	521.309

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
Be	9	100.908					
> Sc	45		91.0				
Mn	55	91.281					
> In	115		89.4				
Sb	121	99.744					
Sb	123						
> Lu	175		94.9				
Tl	205	89.151					
U	238	100.169					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Tl	205	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

Sample ID: QC Std 10

Report Date/Time: Tuesday, April 20, 2010 13:02:24

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ICPMS#5 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Tuesday, April 20, 2010 13:04:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 11.012

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.298	ug/L	2.474	13015	0.022
Sc	45		ug/L		585009	585008.935
Mn	55	51.429	ug/L	1.051	373914	0.638
In	115		ug/L		215661	215660.716
Sb	121	49.467	ug/L	1.429	248470	1.151
Sb	123		ug/L		193707	0.898
Lu	175		ug/L		382802	382802.186
Tl	205	50.937	ug/L	0.505	877095	2.285
U	238	51.828	ug/L	0.617	2065157	5.395

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear 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	102.597					
Sc	45		94.8				
Mn	55	102.859					
In	115		96.1				
Sb	121	98.933					
Sb	123						
Lu	175		97.3				
Tl	205	101.873					
U	238	103.655					

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: Tuesday, April 20, 2010 13:05:29

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ICPMS#5 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Tuesday, April 20, 2010 13:07:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 12.013

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.000	ug/L	6725.556	23	-0.000
> Sc	45		ug/L		592881	592881.383
Mn	55	0.034	ug/L	15.001	1101	0.000
> In	115		ug/L		219028	219028.066
Sb	121	0.099	ug/L	1.744	647	0.002
Sb	123		ug/L		496	0.002
> Lu	175		ug/L		386986	386985.951
Tl	205	0.197	ug/L	1.147	5708	0.009
U	238	0.128	ug/L	6.805	5314	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Dil	Duplicate	Rel. % Difference
Be	9										
> Sc	45				96.1						
Mn	55										
> In	115				97.6						
Sb	121										
Sb	123										
> 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

Sample ID: QC Std 12

Report Date/Time: Tuesday, April 20, 2010 13:08:39

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ICPMS#5 - Summary Report

Sample ID: 1202053058

Sample Date/Time: Tuesday, April 20, 2010 13:11:07

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 957494|1|skj

Method File: c:\elandata\Method\lanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\1202053058.014

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.030	ug/L	28.948	31	0.000
Sc	45		ug/L		597273	597272.887
Mn	55	0.318	ug/L	4.817	3212	0.004
In	115		ug/L		214214	214213.577
Sb	121	0.129	ug/L	3.302	783	0.003
Sb	123		ug/L		654	0.003
Lu	175		ug/L		387871	387871.460
Tl	205	0.062	ug/L	5.547	3374	0.003
U	238	0.262	ug/L	23.236	10753	0.027

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		96.8			
Mn	55					
In	115		95.4			
Sb	121					
Sb	123					
Lu	175		98.6			
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

Sample ID: 1202053058

Report Date/Time: Tuesday, April 20, 2010 13:11:45

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ICPMS#5 - Summary Report

Sample ID: 1202053059

Sample Date/Time: Tuesday, April 20, 2010 13:14:13

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 957494|1|skj

Method File: c:\elandata\Method\lanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\1202053059.015

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	54.665	ug/L	2.775	13995	0.024
> Sc	45		ug/L		590285	590284.622
Mn	55	51.096	ug/L	1.653	374839	0.634
> In	115		ug/L		216241	216241.357
Sb	121	51.152	ug/L	1.097	257609	1.191
Sb	123		ug/L		201538	0.932
> Lu	175		ug/L		386729	386729.330
Tl	205	44.333	ug/L	1.794	771521	1.989
U	238	50.991	ug/L	0.640	2052720	5.307

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
> Sc	45		95.7			
Mn	55					
> In	115		96.3			
Sb	121					
Sb	123					
> 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

Sample ID: 1202053059

Report Date/Time: Tuesday, April 20, 2010 13:14:51

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ICPMS#5 - Summary Report

Sample ID: 247793001

Sample Date/Time: Tuesday, April 20, 2010 13:20:25

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957494|1|skj

Method File: c:\elandata\Method\ani liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\247793001.017

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.011	ug/L	213.900	21	-0.000
> Sc	45		ug/L		605401	605401.111
Mn	55	0.504	ug/L	3.615	4653	0.006
> In	115		ug/L		219448	219447.915
Sb	121	0.061	ug/L	4.776	455	0.001
Sb	123		ug/L		360	0.001
> Lu	175		ug/L		397238	397237.549
Tl	205	0.115	ug/L	4.142	4396	0.005
U	238	0.045	ug/L	12.715	2012	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		98.1			
Mn	55					
> In	115		97.7			
Sb	121					
Sb	123					
> Lu	175		100.9			
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

Sample ID: 247793001

Report Date/Time: Tuesday, April 20, 2010 13:21:03

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ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, April 20, 2010 13:36:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 8.022

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	50.235	ug/L	1.907	12908	0.022
> Sc	45		ug/L		592347	592346.802
[Mn	55	50.504	ug/L	2.552	371789	0.626
> In	115		ug/L		218137	218136.815
[Sb	121	49.018	ug/L	2.754	249002	1.141
[Sb	123		ug/L		196213	0.899
> Lu	175		ug/L		385836	385836.443
[Tl	205	49.369	ug/L	1.457	856896	2.215
[U	238	49.861	ug/L	1.624	2002356	5.190

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear 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	100.469					
> Sc	45		96.0				
[Mn	55	101.007					
> In	115		97.2				
[Sb	121	98.036					
[Sb	123						
> Lu	175		98.0				
[Tl	205	98.737					
[U	238	99.723					

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 8

Report Date/Time: Tuesday, April 20, 2010 13:36:38

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ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, April 20, 2010 13:39:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 9.023

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.002	ug/L	678.287	23	-0.000
Sc	45		ug/L		597228	597228.126
Mn	55	0.020	ug/L	6.800	1009	0.000
In	115		ug/L		220766	220765.926
Sb	121	0.069	ug/L	6.257	498	0.002
Sb	123		ug/L		385	0.001
Lu	175		ug/L		388202	388201.893
Tl	205	0.099	ug/L	6.386	4023	0.004
U	238	0.012	ug/L	9.103	641	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recov	Dilution	% Dil	Duplicate	Rel. % Difference
Be	9										
Sc	45				96.8						
Mn	55										
In	115				98.3						
Sb	121										
Sb	123										
Lu	175				98.6						
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

Sample ID: QC Std 9

Report Date/Time: Tuesday, April 20, 2010 13:39:48

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ICPMS#5 - Summary Report

Sample ID: 1202053060

Sample Date/Time: Tuesday, April 20, 2010 13:57:50

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 957494|1|skj

Method File: c:\elandata\Method\VanI liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\1202053060.029

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.477	ug/L	15.662	162	0.000
> Sc	45		ug/L		660160	660159.888
Mn	55	912.942	ug/L	1.481	7472663	11.321
> In	115		ug/L		217145	217145.189
Sb	121	0.234	ug/L	5.781	1324	0.005
Sb	123		ug/L		1054	0.004
> Lu	175		ug/L		397767	397766.764
Tl	205	0.014	ug/L	56.714	2603	0.001
U	238	1.673	ug/L	2.712	69425	0.174

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		107.0			
Mn	55					
> In	115		96.7			
Sb	121					
Sb	123					
> Lu	175		101.1			
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

Sample ID: 1202053060

Report Date/Time: Tuesday, April 20, 2010 13:58:29

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ICPMS#5 - Summary Report

Sample ID: 1202053061

Sample Date/Time: Tuesday, April 20, 2010 14:00:57

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 957494|1|skj

Method File: c:\elandata\Method\Nanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\1202053061.030

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	50.384	ug/L	1.914	14306	0.022
> Sc	45		ug/L		654736	654735.937
Mn	55	1026.921	ug/L	3.339	8333813	12.734
> In	115		ug/L		214650	214650.363
Sb	121	201.333	ug/L	1.222	1006117	4.687
Sb	123		ug/L		792422	3.691
> Lu	175		ug/L		402513	402513.420
Tl	205	77.992	ug/L	1.864	1410990	3.499
U	238	49.331	ug/L	0.575	2066865	5.135

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear 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 % Di	Duplicate Rel. % Difference
Be	9					
> Sc	45		106.1			
Mn	55					
> In	115		95.6			
Sb	121					
Sb	123					
> Lu	175		102.3			
Tl	205					
U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
Mn 55 Upper, S, EEIMn		55Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

Sample ID: 1202053061

Report Date/Time: Tuesday, April 20, 2010 14:01:35

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ICPMS#5 - Summary Report

Sample ID: 1202053062

Sample Date/Time: Tuesday, April 20, 2010 14:04:04

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 957494[5]skj

Method File: c:\elandata\Method\lanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\1202053062.031

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.153	ug/L	17.619	60	0.000
[> Sc	45		ug/L		570108	570108.245
[Mn	55	201.559	ug/L	1.365	1425503	2.499
[> In	115		ug/L		208372	208371.512
[Sb	121	0.171	ug/L	3.769	968	0.004
[Sb	123		ug/L		737	0.003
[> Lu	175		ug/L		369883	369882.685
[Tl	205	1.060	ug/L	5.321	19789	0.048
[U	238	1.046	ug/L	1.719	40416	0.109

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[Be	9					
[> Sc	45		92.4			
[Mn	55					
[> In	115		92.8			
[Sb	121					
[Sb	123					
[> Lu	175		94.0			
[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

Sample ID: 1202053062

Report Date/Time: Tuesday, April 20, 2010 14:04:42

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ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, April 20, 2010 14:10:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anal liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 6.033

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	52.169	ug/L	1.461	12837	0.023
> Sc	45		ug/L		567293	567292.861
[Mn	55	50.824	ug/L	2.237	358313	0.630
> In	115		ug/L		213000	213000.208
| Sb	121	48.930	ug/L	1.412	242717	1.139
[Sb	123		ug/L		190373	0.893
> Lu	175		ug/L		374125	374124.817
| Tl	205	49.782	ug/L	2.102	837749	2.234
[U	238	50.430	ug/L	2.628	1963537	5.249

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9	104.339				
> Sc	45		91.9			
[Mn	55	101.647				
> In	115		94.9			
| Sb	121	97.859				
[Sb	123					
> Lu	175		95.1			
| Tl	205	99.565				
[U	238	100.860				

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, April 20, 2010 14:10:57

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ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, April 20, 2010 14:13:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 7.034

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.007	ug/L	196.740	24	0.000
|>	Sc	45		ug/L		564748	564748.121
[	Mn	55	0.052	ug/L	12.403	1176	0.001
[>	In	115		ug/L		213323	213323.365
|	Sb	121	0.073	ug/L	4.981	503	0.002
[	Sb	123		ug/L		390	0.001
[>	Lu	175		ug/L		375008	375007.556
|	Tl	205	0.226	ug/L	0.972	6030	0.010
[	U	238	0.011	ug/L	6.693	568	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
|>	Sc	45		91.5				
[	Mn	55						
[>	In	115		95.0				
|	Sb	121						
[	Sb	123						
[>	Lu	175		95.3				
|	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

Sample ID: QC Std 7

Report Date/Time: Tuesday, April 20, 2010 14:14:06

Page 1

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Tuesday, April 20, 2010 15:40:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\Blank.061

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		532417	
|	Cu	63		ug/L		254	
|	Cu	65		ug/L		128	
|	Cd	111		ug/L		46	
|	Cd	114		ug/L		84	
[>	In	115		ug/L		207226	
[>	Lu	175		ug/L		372404	
|	Pb	208		ug/L		2938	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Simple Linear	
Cu	63	Simple Linear	
Cu	65	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Simple Linear	
Lu	175	Linear Thru Zero	
Pb	208	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45					
|	Cu	63					
|	Cu	65					
|	Cd	111					
|	Cd	114					
[>	In	115					
[>	Lu	175					
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Tuesday, April 20, 2010 15:40:47

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Tuesday, April 20, 2010 15:42:14

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\Standard 1.062

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		530164	530163.982
|	Cu	63		ug/L		27112	0.051
|	Cu	65	10.000	ug/L	1.615	13008	0.024
|	Cd	111	10.000	ug/L	0.681	11924	0.057
|	Cd	114		ug/L		28595	0.137
[>	In	115		ug/L		208455	208454.749
[>	Lu	175		ug/L		371699	371698.702
|	Pb	208	10.000	ug/L	1.383	300604	0.801

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45						
|	Cu	63						
|	Cu	65						
|	Cd	111						
|	Cd	114						
[>	In	115						
[>	Lu	175						
|	Pb	208						

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: Tuesday, April 20, 2010 15:42:58

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Tuesday, April 20, 2010 15:44:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\Standard 2.063

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		539476	539476.133
|	Cu	63		ug/L		264797	0.490
|	Cu	65	99.993	ug/L	0.050	130331	0.241
|	Cd	111	99.967	ug/L	1.120	117025	0.552
|	Cd	114		ug/L		285835	1.348
[>	In	115		ug/L		212061	212060.749
[>	Lu	175		ug/L		377614	377614.372
|	Pb	208	99.925	ug/L	0.604	2815464	7.448

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45						
|	Cu	63						
|	Cu	65						
|	Cd	111						
|	Cd	114						
[>	In	115						
[>	Lu	175						
|	Pb	208						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Tuesday, April 20, 2010 15:45:09

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ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Tuesday, April 20, 2010 15:46:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 1.064

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		552428	552428.101
|	Cu	63		ug/L		139666	0.252
[	Cu	65	49.328	ug/L	2.236	65886	0.119
[	Cd	111	52.298	ug/L	1.051	60912	0.289
|	Cd	114		ug/L		144935	0.687
[>	In	115		ug/L		210915	210914.654
[>	Lu	175		ug/L		378705	378705.418
[	Pb	208	52.029	ug/L	0.537	1471614	3.878

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45		103.8			
|	Cu	63					
[	Cu	65	98.656				
[	Cd	111	104.596				
|	Cd	114					
[>	In	115		101.8			
[>	Lu	175		101.7			
[	Pb	208	104.057				

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: Tuesday, April 20, 2010 15:47:21

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ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Tuesday, April 20, 2010 15:48:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 2.065

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		542518	542517.903
|	Cu	63		ug/L		332	0.000
|	Cu	65	0.028	ug/L	37.015	167	0.000
|	Cd	111	0.002	ug/L	384.463	49	0.000
|	Cd	114		ug/L		139	0.000
[>	In	115		ug/L		213146	213146.362
[>	Lu	175		ug/L		375198	375197.946
|	Pb	208	0.013	ug/L	36.953	3332	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45			101.9		
|	Cu	63					
|	Cu	65					
|	Cd	111					
|	Cd	114					
[>	In	115			102.9		
[>	Lu	175			100.8		
|	Pb	208					

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, April 20, 2010 15:49:37

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ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Tuesday, April 20, 2010 15:51:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 3.066

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		542935	542935.325
| Cu	63		ug/L		3540	0.006
| Cu	65	1.245	ug/L	1.651	1762	0.003
[Cd	111	1.240	ug/L	4.162	1515	0.007
| Cd	114		ug/L		3575	0.016
[> In	115		ug/L		214346	214345.810
[> Lu	175		ug/L		374887	374887.053
| Pb	208	2.493	ug/L	2.602	72600	0.186

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Sc	45		102.0			
| Cu	63					
| Cu	65	124.546				
[Cd	111	124.027				
| Cd	114					
[> In	115		103.4			
[> Lu	175		100.7			
Pb	208	124.668				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 3

Report Date/Time: Tuesday, April 20, 2010 15:51:49

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ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, April 20, 2010 15:53:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 4.067

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		542931	542931.316
| Cu	63		ug/L		5828	0.010
| Cu	65	2.732	ug/L	0.157	3710	0.007
[Cd	111	0.465	ug/L	17.883	586	0.003
| Cd	114		ug/L		6448	0.030
[> In	115		ug/L		209846	209845.945
[> Lu	175		ug/L		372216	372215.841
| Pb	208	0.197	ug/L	3.012	8411	0.015

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Sc	45		102.0			
| Cu	63					
| Cu	65	81.792				
[Cd	111	104.706				
| Cd	114					
[> In	115		101.3			
[> Lu	175		99.9			
| Pb	208	104.419				

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: Tuesday, April 20, 2010 15:54:02

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ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, April 20, 2010 15:55:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 5.068

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		549175	549175.439
|	Cu	63		ug/L		56154	0.102
|	Cu	65	21.139	ug/L	0.497	28151	0.051
|	Cd	111	19.060	ug/L	0.777	22337	0.105
|	Cd	114		ug/L		59430	0.280
[>	In	115		ug/L		211950	211950.045
[>	Lu	175		ug/L		370365	370364.584
|	Pb	208	19.844	ug/L	0.387	550726	1.479

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45		103.1			
|	Cu	63					
|	Cu	65	90.568				
|	Cd	111	93.233				
|	Cd	114					
[>	In	115		102.3			
[>	Lu	175		99.5			
|	Pb	208	98.290				

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, April 20, 2010 15:56:15

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ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, April 20, 2010 15:57:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 6.069

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		553811	553810.689
| Cu	63		ug/L		142469	0.257
| Cu	65	51.603	ug/L	0.664	69110	0.125
[Cd	111	51.272	ug/L	0.759	61191	0.283
| Cd	114		ug/L		146929	0.679
[> In	115		ug/L		216116	216116.437
[> Lu	175		ug/L		380325	380325.291
| Pb	208	52.348	ug/L	0.256	1486930	3.902

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Sc	45		104.0			
| Cu	63					
| Cu	65	103.206				
[Cd	111	102.543				
| Cd	114					
[> In	115		104.3			
[> Lu	175		102.1			
| Pb	208	104.695				

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: Tuesday, April 20, 2010 15:58:27

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ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, April 20, 2010 15:59:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 7.070

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		560584	560583.805
|	Cu	63		ug/L		315	0.000
|	Cu	65	0.039	ug/L	8.657	187	0.000
[	Cd	111	0.004	ug/L	218.397	53	0.000
|	Cd	114		ug/L		132	0.000
[>	In	115		ug/L		217331	217331.336
[>	Lu	175		ug/L		384293	384293.381
|	Pb	208	0.009	ug/L	46.525	3276	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45		105.3			
|	Cu	63					
|	Cu	65					
[	Cd	111					
|	Cd	114					
[>	In	115		104.9			
[>	Lu	175		103.2			
|	Pb	208					

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, April 20, 2010 16:00:42

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ICPMS#5 - Summary Report

Sample ID: 1202053058

Sample Date/Time: Tuesday, April 20, 2010 16:02:10

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 957494|1|skj

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\1202053058.071

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		558093	558092.591
| Cu	63		ug/L		680	0.001
| Cu	65	0.164	ug/L	9.487	354	0.000
| Cd	111	0.011	ug/L	118.167	60	0.000
| Cd	114		ug/L		122	0.000
[> In	115		ug/L		213029	213029.153
[> Lu	175		ug/L		384727	384726.959
| Pb	208	0.055	ug/L	8.672	4621	0.004

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Sc	45		104.8			
| Cu	63					
| Cu	65					
| Cd	111					
| Cd	114					
[> In	115		102.8			
[> Lu	175		103.3			
| Pb	208					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202053058

Report Date/Time: Tuesday, April 20, 2010 16:02:55

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202053059

Sample Date/Time: Tuesday, April 20, 2010 16:04:23

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 957494|1|skj

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\1202053059.072

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		551808	551807.882
|	Cu	63		ug/L		142334	0.258
|	Cu	65	51.667	ug/L	4.271	68904	0.125
|	Cd	111	50.908	ug/L	0.619	59905	0.281
|	Cd	114		ug/L		145174	0.681
[>	In	115		ug/L		213106	213106.435
[>	Lu	175		ug/L		378556	378556.123
|	Pb	208	51.693	ug/L	1.607	1461358	3.853

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45		103.6				
|	Cu	63						
|	Cu	65						
|	Cd	111						
|	Cd	114						
[>	In	115		102.8				
[>	Lu	175		101.7				
|	Pb	208						

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: 1202053059

Report Date/Time: Tuesday, April 20, 2010 16:05:07

Page 1

ICPMS#5 - Summary Report

Sample ID: 247793001

Sample Date/Time: Tuesday, April 20, 2010 16:08:47

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957494|1|skj

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\247793001.074

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		566906	566906.268
|	Cu	63		ug/L		3953	0.006
|	Cu	65	1.265	ug/L	2.470	1867	0.003
[	Cd	111	-0.001	ug/L	955.777	48	-0.000
|	Cd	114		ug/L		105	0.000
[>	In	115		ug/L		218504	218503.556
[>	Lu	175		ug/L		396327	396327.035
|	Pb	208	0.063	ug/L	3.901	4973	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45		106.5			
|	Cu	63					
|	Cu	65					
[	Cd	111					
|	Cd	114					
[>	In	115		105.4			
[>	Lu	175		106.4			
|	Pb	208					

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: 247793001

Report Date/Time: Tuesday, April 20, 2010 16:09:31

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, April 20, 2010 16:15:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 8.077

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		557180	557180.446
|	Cu	63		ug/L		142944	0.256
|	Cu	65	49.848	ug/L	0.677	67168	0.120
[	Cd	111	50.916	ug/L	0.885	61046	0.281
|	Cd	114		ug/L		146786	0.676
[>	In	115		ug/L		217111	217110.878
[>	Lu	175		ug/L		377401	377401.115
|	Pb	208	52.340	ug/L	1.652	1475150	3.901

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45		104.7				
|	Cu	63						
|	Cu	65	99.695					
[	Cd	111	101.833					
|	Cd	114						
[>	In	115		104.8				
[>	Lu	175		101.3				
|	Pb	208	104.680					

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: Tuesday, April 20, 2010 16:16:09

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ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, April 20, 2010 16:17:39

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 9.078

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		553367	553367.017
|	Cu	63		ug/L		256	-0.000
|	Cu	65	0.020	ug/L	48.895	160	0.000
|	Cd	111	0.005	ug/L	180.645	55	0.000
|	Cd	114		ug/L		123	0.000
[>	In	115		ug/L		217958	217957.825
[>	Lu	175		ug/L		381121	381120.830
|	Pb	208	0.008	ug/L	41.246	3248	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45		103.9			
|	Cu	63					
|	Cu	65					
|	Cd	111					
|	Cd	114					
[>	In	115		105.2			
[>	Lu	175		102.3			
|	Pb	208					

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: Tuesday, April 20, 2010 16:18:25

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ICPMS#5 - Summary Report

Sample ID: 1202053060

Sample Date/Time: Tuesday, April 20, 2010 16:26:32

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 957494|1|skj

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\1202053060.082

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		601925	601924.642
|	Cu	63		ug/L		80172	0.133
|	Cu	65	26.392	ug/L	1.813	38483	0.064
[	Cd	111	0.210	ug/L	10.571	296	0.001
|	Cd	114		ug/L		487	0.002
[>	In	115		ug/L		214279	214279.169
[>	Lu	175		ug/L		399768	399768.269
|	Pb	208	4.215	ug/L	1.538	128749	0.314

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45		113.1			
|	Cu	63					
|	Cu	65					
[	Cd	111					
|	Cd	114					
[>	In	115		103.4			
[>	Lu	175		107.3			
|	Pb	208					

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: 1202053060

Report Date/Time: Tuesday, April 20, 2010 16:27:16

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ICPMS#5 - Summary Report

Sample ID: 1202053061

Sample Date/Time: Tuesday, April 20, 2010 16:28:45

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 957494|1|skj

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\1202053061.083

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		591000	591000.234
| Cu	63		ug/L		223122	0.377
| Cu	65	74.625	ug/L	1.032	106591	0.180
| Cd	111	10.548	ug/L	2.844	12407	0.058
| Cd	114		ug/L		28255	0.133
[> In	115		ug/L		212401	212400.984
[> Lu	175		ug/L		401907	401906.968
| Pb	208	42.372	ug/L	1.641	1272321	3.158

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[> Sc	45		111.0			
| Cu	63					
| Cu	65					
| Cd	111					
| Cd	114					
[> In	115		102.5			
[> Lu	175		107.9			
| Pb	208					

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: 1202053061

Report Date/Time: Tuesday, April 20, 2010 16:29:29

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ICPMS#5 - Summary Report

Sample ID: 1202053062

Sample Date/Time: Tuesday, April 20, 2010 16:30:57

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 957494|5|skj

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\1202053062.084

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		534504	534503.995
|	Cu	63		ug/L		15726	0.029
|	Cu	65	5.704	ug/L	0.548	7487	0.014
|	Cd	111	0.048	ug/L	27.762	100	0.000
|	Cd	114		ug/L		173	0.000
[>	In	115		ug/L		204700	204700.314
[>	Lu	175		ug/L		379414	379413.620
|	Pb	208	0.900	ug/L	0.950	28458	0.067

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45		100.4			
|	Cu	63					
|	Cu	65					
|	Cd	111					
|	Cd	114					
[>	In	115		98.8			
[>	Lu	175		101.9			
|	Pb	208					

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: 1202053062

Report Date/Time: Tuesday, April 20, 2010 16:31:42

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ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, April 20, 2010 16:35:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 6.086

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		529112	529111.533
| Cu	63		ug/L		133526	0.252
| Cu	65	50.479	ug/L	0.818	64591	0.122
[Cd	111	51.151	ug/L	1.279	58347	0.282
| Cd	114		ug/L		140254	0.678
[> In	115		ug/L		206591	206591.333
[> Lu	175		ug/L		368013	368012.601
| Pb	208	52.986	ug/L	1.039	1456282	3.949

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Sc	45		99.4			
| Cu	63					
| Cu	65	100.959				
[Cd	111	102.302				
| Cd	114					
[> In	115		99.7			
[> Lu	175		98.8			
| Pb	208	105.973				

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, April 20, 2010 16:36:07

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ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, April 20, 2010 16:37:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 7.087

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		529279	529279.292
|	Cu	63		ug/L		261	0.000
|	Cu	65	0.015	ug/L	155.167	147	0.000
|	Cd	111	0.016	ug/L	128.604	64	0.000
|	Cd	114		ug/L		118	0.000
[>	In	115		ug/L		206791	206791.258
[>	Lu	175		ug/L		367610	367609.828
|	Pb	208	0.011	ug/L	43.749	3213	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45		99.4			
|	Cu	63					
|	Cu	65					
|	Cd	111					
|	Cd	114					
[>	In	115		99.8			
[>	Lu	175		98.7			
|	Pb	208					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Tuesday, April 20, 2010 16:38:23

Page 1

Method Name: WATER
 Method Description: 7470A, 245.2, ILM04 ANALYST JXL
 Element: Hg

Date: 03/03/2010
 Technique: FI-MHS
 Calibration Type:
 Hg, Calc. Intercept : Linear
 Wavelength: 253.7 nm
 Sample Info Name: 030310W1.SIF

Results Data Set Name: 030310W2

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 03/03/2010
 Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0026	0.0026	10:20:00	No
2			0.0026	0.0026	10:20:35	No
Mean:			0.0026			
SD :			0.0000			
%RSD:			1.7868			

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 03/03/2010
 Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0024	0.0050	10:21:57	No
2			0.0024	0.0050	10:22:31	No
Mean:			0.0024			
SD :			0.0000			
%RSD:			0.6044			

[Hg] Standard number 1 applied. [0.200]
 Correlation Coefficient: 1.00000 Slope: 0.01200
 Intercept : 0.00000

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 03/03/2010
 Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0046	0.0073	10:23:54	No
2			0.0046	0.0072	10:24:29	No
Mean:			0.0046			
SD :			0.0000			
%RSD:			0.7802			

[Hg] Standard number 2 applied. [0.500]
 Correlation Coefficient: 0.99056 Slope: 0.00909
 Intercept : 0.00022

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 03/03/2010
 Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0172	0.0198	10:25:54	No
2			0.0172	0.0198	10:26:29	No
Mean:			0.0172			
SD :			0.0000			
%RSD:						

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99928
Intercept : 0.00035

Slope: 0.00846

=====

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 03/03/2010
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0427	0.0453	10:27:54	No
2			0.0425	0.0451	10:28:29	No
Mean:			0.0426			
SD :			0.0001			
%RSD:			0.2618			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99990 Slope: 0.00845
Intercept : 0.00036

=====

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 03/03/2010
Sample ID: S10

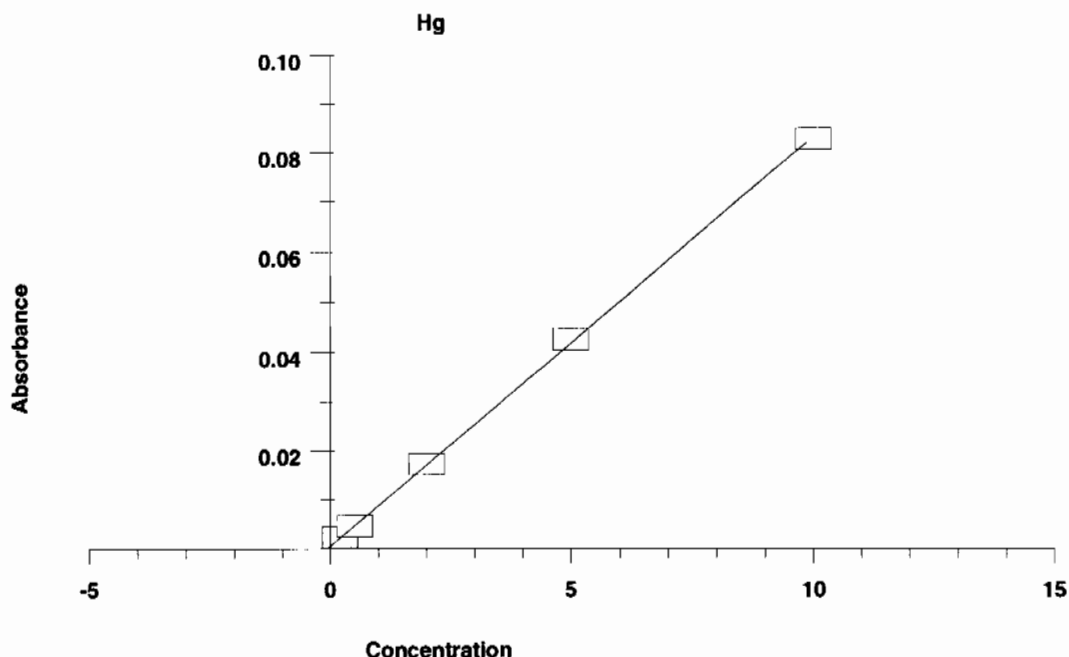
Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0828	0.0854	10:29:56	No
2			0.0826	0.0852	10:30:30	No
Mean:			0.0827			
SD :			0.0002			
%RSD:			0.1991			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99989 Slope: 0.00825
Intercept : 0.00058

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0026	---	----	----	----
S0.2	0.0024	0.200	0.221	0.0000	0.6
S0.5	0.0046	0.500	0.490	0.0000	0.8
S2.0	0.0172	2.000	2.018	0.0000	----
S5.0	0.0426	5.000	5.091	0.0001	0.3
S10	0.0827	10.000	9.951	0.0002	0.2

Correlation Coefficient: 0.99989 Slope: 0.00825 Intercept: 0.0006



=====
 Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 03/03/2010
 Sample ID: ICV

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	5.070	5.070	0.0424	0.0450	10:31:59	No
2	4.988	4.988	0.0417	0.0443	10:32:34	No
Mean:	5.029	5.029	0.0421			
SD :	0.0585	0.0585	0.0005			
%RSD:	1.2	1.2	1.1480			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 03/03/2010
 Sample ID: ICB

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.028	-0.028	0.0003	0.0030	10:33:56	No
2	-0.045	-0.045	0.0002	0.0028	10:34:30	No
Mean:	-0.037	-0.037	0.0003			
SD :	0.0123	0.0123	0.0001			
%RSD:	33.4	33.4	36.8006			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 03/03/2010
 Sample ID: CRDL

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	0.161	0.161	0.0019	0.0045	10:35:52	No
2	0.151	0.151	0.0018	0.0044	10:36:26	No
Mean:	0.156	0.156	0.0019			
SD :	0.0070	0.0070	0.0001			
%RSD:	4.5	4.5	3.1073			

QC value within specified limits.

=====

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 03/03/2010

Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.122	5.122	0.0428	0.0455	10:37:51	No
2	5.126	5.126	0.0429	0.0455	10:38:25	No
Mean:	5.124	5.124	0.0429			
SD :	0.0022	0.0022	0.0000			
%RSD:						

QC value within specified limits.

=====

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 03/03/2010

Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.052	0.052	0.0010	0.0036	10:39:53	No
2	0.052	0.052	0.0010	0.0036	10:40:29	No
Mean:	0.052	0.052	0.0010			
SD :	0.0001	0.0001	0.0000			
%RSD:	0.2	0.2	0.1002			

QC value within specified limits.

=====

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 03/03/2010

Sample ID: 1202055838|i||958584|MB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.008	-0.008	0.0005	0.0031	10:41:55	No
2	-0.008	-0.008	0.0005	0.0031	10:42:30	No
Mean:	-0.008	-0.008	0.0005			
SD :	0.0002	0.0002	0.0000			
%RSD:	2.6	2.6	0.3497			

=====

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 03/03/2010

Sample ID: 1202055839|i||LCS

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	2.091	2.091	0.0178	0.0204	10:43:54	No
2	2.081	2.081	0.0177	0.0204	10:44:29	No
Mean:	2.086	2.086	0.0178			
SD :	0.0067	0.0067	0.0001			
%RSD:	0.3	0.3	0.3123			

=====

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 03/03/2010

Sample ID: 248019001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.016	-0.016	0.0004	0.0031	10:45:55	No
2	-0.023	-0.023	0.0004	0.0030	10:46:30	No
Mean:	-0.020	-0.020	0.0004			
SD :	0.0050	0.0050	0.0000			
%RSD:	25.5	25.5	10.0274			

=====

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 03/03/2010

Sample ID: 1202055840|i|||DUP

%RSD: 4.2 4.2 3.4173

=====

Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 03/03/2010
 Sample ID: 248024003|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	0.011	0.011	0.0007	0.0033	10:59:45	No
2	-0.001	-0.001	0.0006	0.0032	11:00:20	No
Mean:	0.005	0.005	0.0006			
SD :	0.0088	0.0088	0.0001			
%RSD:	177.4	177.4	11.7519			

=====

Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 03/03/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	5.429	5.429	0.0454	0.0480	11:01:45	No
2	5.389	5.389	0.0450	0.0476	11:02:20	No
Mean:	5.409	5.409	0.0452			
SD :	0.0290	0.0290	0.0002			
%RSD:	0.5	0.5	0.5284			

QC value within specified limits.

=====

Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 03/03/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	0.066	0.066	0.0011	0.0037	11:03:49	No
2	0.056	0.056	0.0010	0.0036	11:04:24	No
Mean:	0.061	0.061	0.0011			
SD :	0.0069	0.0069	0.0001			
%RSD:	11.4	11.4	5.3134			

QC value within specified limits.

=====

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 03/03/2010
 Sample ID: 248024004|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.011	-0.011	0.0005	0.0031	11:05:50	No
2	-0.016	-0.016	0.0004	0.0030	11:06:25	No
Mean:	-0.014	-0.014	0.0005			
SD :	0.0040	0.0040	0.0000			
%RSD:	29.6	29.6	7.1605			

=====

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 03/03/2010
 Sample ID: 1202056223|i||958777|MB

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	0.030	0.030	0.0008	0.0034	11:07:49	No
2	0.011	0.011	0.0007	0.0033	11:08:24	No
Mean:	0.021	0.021	0.0007			
SD :	0.0133	0.0133	0.0001			
%RSD:	64.4	64.4	14.7019			

=====

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 03/03/2010
 Sample ID: 1202056224|i|||LCS

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	2.254	2.254	0.0192	0.0218	11:09:48	No
2	2.233	2.233	0.0190	0.0216	11:10:23	No
Mean:	2.243	2.243	0.0191			
SD :	0.0151	0.0151	0.0001			
%RSD:	0.7	0.7	0.6517			

Element: Hg Seq. No.: 27 AS Loc.: 25 Date: 03/03/2010
Sample ID: 247771001|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.023	0.023	0.0008	0.0034	11:11:47	No
2	-0.004	-0.004	0.0005	0.0032	11:12:22	No
Mean:	0.010	0.010	0.0007			
SD :	0.0195	0.0195	0.0002			
%RSD:	201.3	201.3	24.4399			

Element: Hg Seq. No.: 28 AS Loc.: 26 Date: 03/03/2010
Sample ID: 1202056225|i|||DUP

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.009	-0.009	0.0005	0.0031	11:13:47	No
2	-0.036	-0.036	0.0003	0.0029	11:14:23	No
Mean:	-0.022	-0.022	0.0004			
SD :	0.0187	0.0187	0.0002			
%RSD:	83.6	83.6	39.4014			

Element: Hg Seq. No.: 29 AS Loc.: 27 Date: 03/03/2010
Sample ID: 1202056226|i|||MS

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	2.164	2.164	0.0184	0.0210	11:15:49	No
2	2.194	2.194	0.0187	0.0213	11:16:24	No
Mean:	2.179	2.179	0.0186			
SD :	0.0212	0.0212	0.0002			
%RSD:	1.0	1.0	0.9420			

Element: Hg Seq. No.: 30 AS Loc.: 28 Date: 03/03/2010
Sample ID: 1202056227|i|5|SDILT

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.062	-0.062	0.0001	0.0027	11:17:50	No
2	-0.082	-0.082	-0.0001	0.0025	11:18:25	No
Mean:	-0.072	-0.072	0.0000			
SD :	0.0141	0.0141	0.0001			
%RSD:	19.5	19.5	703.1558			

Element: Hg Seq. No.: 31 AS Loc.: 29 Date: 03/03/2010
Sample ID: 247780001|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.095	0.095	0.0014	0.0040	11:19:51	No
2	0.061	0.061	0.0011	0.0037	11:20:26	No
Mean:	0.078	0.078	0.0012			
SD :	0.0240	0.0240	0.0002			

%RSD: 30.6 30.6 16.1709

=====
 Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 03/03/2010
 Sample ID: 247793001|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0003	0.0024	11:21:52	No
2	-0.098	-0.098	-0.0002	0.0024	11:22:27	No
Mean:	-0.100	-0.100	-0.0002			
SD :	0.0017	0.0017	0.0000			
%RSD:	1.7	1.7	5.6988			

=====
 Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 03/03/2010
 Sample ID: 247807001|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.067	-0.067	0.0000	0.0026	11:23:54	No
2	-0.065	-0.065	0.0000	0.0026	11:24:29	No
Mean:	-0.066	-0.066	0.0000			
SD :	0.0016	0.0016	0.0000			
%RSD:	2.5	2.5	41.3786			

=====
 Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 03/03/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	5.157	5.157	0.0431	0.0457	11:25:56	No
2	5.122	5.122	0.0428	0.0455	11:26:31	No
Mean:	5.140	5.140	0.0430			
SD :	0.0245	0.0245	0.0002			
%RSD:	0.5	0.5	0.4696			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 03/03/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	0.071	0.071	0.0012	0.0038	11:28:00	No
2	0.060	0.060	0.0011	0.0037	11:28:35	No
Mean:	0.065	0.065	0.0011			
SD :	0.0080	0.0080	0.0001			
%RSD:	12.2	12.2	5.8743			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 03/03/2010
 Sample ID: 247807002|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.029	-0.029	0.0003	0.0029	11:29:59	No
2	-0.039	-0.039	0.0003	0.0029	11:30:33	No
Mean:	-0.034	-0.034	0.0003			
SD :	0.0069	0.0069	0.0001			
%RSD:	20.1	20.1	19.1857			

=====
 Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 03/03/2010
 Sample ID: 247807003|i|||

Miscellaneous

Prep Logbook

Acid Digestion of Total Recoverable or Dissolved Metals in Surface and Groundwater Samples for Analysis by ICP or ICP-MS

Batch ID:	957491.0	Verified by:		Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
Analyst:	Barry Audain			LCS	1202053054	Metals Spike Mix I	U1100205-01	.25	mL
Method:	SW846 3005A			LCS	1202053054	Metals Spike Mix II	U1100205-06	.25	mL
Lab SOP:	GL-MA-E-006 REV# 9			MS	1202053056	Metals Spike Mix I	U1100205-01	.25	mL
Instrument:	Sartorius Balance B-001			MS	1202053056	Metals Spike Mix II	U1100205-06	.25	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202053053 MB	01-MAR-2010 18:38:00	Water	50	50	1	<2
1202053054 LCS	01-MAR-2010 18:38:00	Water	50	50	1	<2
247771001	01-MAR-2010 18:38:00	Water	50	50	1	<2
247793001	01-MAR-2010 18:38:00	Water	50	50	1	<2
247807001	01-MAR-2010 18:38:00	Water	50	50	1	<2
247807002	01-MAR-2010 18:38:00	Water	50	50	1	<2
247807003	01-MAR-2010 18:38:00	Water	50	50	1	<2
247807004	01-MAR-2010 18:38:00	Water	50	50	1	<2
247830002	01-MAR-2010 18:38:00	Water	50	50	1	<2
1202053055 DUP (247830002)	01-MAR-2010 18:38:00	Water	50	50	1	<2
1202053056 MS (247830002)	01-MAR-2010 18:38:00	Water	50	50	1	<2
1202053057 SDILT (247830002)	01-MAR-2010 18:38:00	Water	50	50	1	<2
247836001	01-MAR-2010 18:38:00	Water	50	50	1	<2

Comments:

Reagent/Solvent Lot ID	Description	Amount
1274969	Nitric Acid CONC.	1 mL
1274973	HYDROCHLORIC ACID	2.5 mL

Prep Logbook

Acid Digestion of Total Recoverable or Dissolved Metals in Surface and Groundwater Samples for Analysis by ICP or ICP-MS

Batch ID: 957493.0
Analyst: Francena Armstrong
Method: SW846 3005A
Lab SOP: GL-MA-E-006 REV# 9
Instrument: Sartorius Balance B-001

Verified by: _____

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202053059	ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE	U1100205-A	.5	mL
LCS	1202053059	MS SPIKE FOR ALL CLIENTS EXCEPT DOE (Solution B)	U1100205-B	.5	mL
MS	1202053061	ICP-MS DOE liquid Spike Solution A	U1090930-A	.5	mL
MS	1202053061	ICP-MS DOE Liquid Spike Solution B	U1090930-B	.5	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202053058 MB	02-MAR-2010 14:30:00	Water	50	50	1	<2
1202053059 LCS	02-MAR-2010 14:30:00	Water	50	50	1	<2
247771001	02-MAR-2010 14:30:00	Water	50	50	1	<2
247793001	02-MAR-2010 14:30:00	Water	50	50	1	<2
247807001	02-MAR-2010 14:30:00	Water	50	50	1	<2
247807002	02-MAR-2010 14:30:00	Water	50	50	1	<2
247807003	02-MAR-2010 14:30:00	Water	50	50	1	<2
247807004	02-MAR-2010 14:30:00	Water	50	50	1	<2
247830002	02-MAR-2010 14:30:00	Water	50	50	1	<2
1202053060 DUP (247830002)	02-MAR-2010 14:30:00	Water	50	50	1	<2
1202053061 MS (247830002)	02-MAR-2010 14:30:00	Water	50	50	1	<2
1202053062 SDILT (247830002)	02-MAR-2010 14:30:00	Water	50	50	1	<2
247836001	02-MAR-2010 14:30:00	Water	50	50	1	<2

Reagent/Solvent	Lot ID	Description	Amount	Comments
1274969		Nitric Acid CONC.	1 mL	
1274973		HYDROCHLORIC ACID	2.5 mL	

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GEL Laboratories LLC

Prep Logbook

Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Batch ID: 958775.0
Analyst: Tara Griffin
Method: SW846 7470A Prep
Lab SOP: GL-MA-E-010 REV# 23
Instrument: No analytical instrument

Verified by: _____
Type: LCS
Sample Id: 1202056224
Description: Mercury working intermediate standard for LCS/MS
Serial Number: WHG100302-13
Spike Amount Spike Units: .2 mL
pH Check: <2

Type: MS
Sample Id: 1202056226
Description: Mercury working intermediate standard for LCS/MS
Serial Number: WHG100302-13
Spike Amount Spike Units: .2 mL
pH Check: <2

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202056223 MB	02-MAR-2010 13:05:00	Water	20	20	1	<2
1202056224 LCS	02-MAR-2010 13:05:00	Water	20	20	1	<2
247771001	02-MAR-2010 13:05:00	Water	20	20	1	<2
1202056225 DUP (247771001)	02-MAR-2010 13:05:00	Water	20	20	1	<2
1202056226 MS (247771001)	02-MAR-2010 13:05:00	Water	20	20	1	<2
1202056227 SDILT (247771001)	02-MAR-2010 13:05:00	Water	20	20	1	<2
247780001	02-MAR-2010 13:05:00	Water	20	20	1	<2
247793001	02-MAR-2010 13:05:00	Water	20	20	1	<2
247807001	02-MAR-2010 13:05:00	Water	20	20	1	<2
247807002	02-MAR-2010 13:05:00	Water	20	20	1	<2
247807003	02-MAR-2010 13:05:00	Water	20	20	1	<2
247807004	02-MAR-2010 13:05:00	Water	20	20	1	<2
247812001	02-MAR-2010 13:05:00	Water	20	20	1	<2
247830002	02-MAR-2010 13:05:00	Water	20	20	1	<2
247836001	02-MAR-2010 13:05:00	Water	20	20	1	<2
247908001	02-MAR-2010 13:05:00	Water	20	20	1	<2
247908002	02-MAR-2010 13:05:00	Water	20	20	1	<2
247908003	02-MAR-2010 13:05:00	Water	20	20	1	<2
247919001	02-MAR-2010 13:05:00	Water	20	20	1	<2
247919002	02-MAR-2010 13:05:00	Water	20	20	1	<2

Reagent/Solvent Lot ID	Description	Amount	Comments:
1176183	Sulfuric Acid, Concentrated	1 mL	Digestion Start Date: 02-MAR-10 13:05
1255532-C	Hg reducing agent	1 mL	Digestion End Date: 02-MAR-10 15:05
1274391-I	NITRIC ACID	.5 mL	
1276435-C	5% Potassium Persulfate	1.5 mL	
1277238-C	5% KMnO4 solution	3 mL	

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GEL Laboratories LLC

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI090421-40 **Opened:** 09-OCT-09 **Amount :** 250 mL
Name: TRACE ICP Na-1000SOUR **Received:** 21-APR-09 **Catalog Number :** HP100052-1
Type: Source Material **Expires:** 09-OCT-10 **Lot Number :** 0830227
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: ENVIRONMENTAL EXPRESS
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L +/- 0.5% IN 5% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Standard Logbook

Serial ID: UI090612-02 **Opened:** 12-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L **Received:** 12-JUN-09 **Lot Number :** 1016377
Type: Source Material **Expires:** 12-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: O2SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: O2SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Standard Logbook

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI090930-A **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE liquid Spike Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	4 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Silicon	200 mg/L
Sodium	200 mg/L	Strontium	5 mg/L
Thallium	10 mg/L	Thorium	5 mg/L
Total Uranium	5 mg/L	Uranium	5 mg/L
Uranium-235	.0364 mg/L	Uranium-238	4.96 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI090930-B **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE Liquid Spike Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Standard Logbook

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H2O/tr HF
Supplier: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI100205-01 **Opened:** 05-FEB-10 **Lot Number :** 1018514
Name: METALSPIKE-1 **Received:** 05-FEB-10
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Standard Logbook

Serial ID: UI100205-06 **Opened:** 05-FEB-10 **Lot Number :** 1018515
Name: METALSPIKE-2 **Received:** 05-FEB-10
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Uranium-235	.72 ug/mL	Uranium-238	99.28 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI100205-A **Opened:** 05-FEB-10 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 05-FEB-10 **Lot Number :** 1018516
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI100205-B **Opened:** 05-FEB-10 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 05-FEB-10 **Lot Number :** 1018516
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
Supplier: O2si
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI100310-48 **Opened:** 19-MAR-10 **Amount :** 1000 mL
Name: Trace ICP ICESA **Received:** 12-MAR-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 19-MAR-11 **Lot Number :** 1019141
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI100312-40 **Opened:** 14-MAR-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 12-MAR-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 14-MAR-11 **Lot Number :** 1018981
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: O2SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI100312-41 **Opened:** 14-MAR-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 12-MAR-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 14-MAR-11 **Lot Number :** 1018981
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI100317-06 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-MAR-10 **Catalog Number :** 160055-01
Type: Source Material **Expres:** 17-MAR-11 **Lot Number :** 1019161
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI100317-07 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-MAR-10 **Catalog Number :** 160054-02
Type: Source Material **Expres:** 17-MAR-11 **Lot Number :** 1019162
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI100317-08 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-MAR-10 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019163
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI100405-12 **Opened:** 05-APR-10 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 05-APR-10 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019466
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: UI100405-13 **Opened:** 05-APR-10 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 05-APR-10 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019467
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI

Standard Logbook

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: UI100405-60 **Opened:** 05-APR-10 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 05-APR-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019464
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2Si
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI100405-61 **Opened:** 05-APR-10 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 05-APR-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019464
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

Standard Logbook

Serial ID: UI100415-11 **Opened:** 15-APR-10 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 15-APR-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 15-APR-11 **Lot Number :** 1018321
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UMS100415-01 **Opened:** 15-APR-10 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 15-APR-10 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-11 **Lot Number :** 22-20JB
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: UMS100415-02 **Opened:** 15-APR-10 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 15-APR-10 **Lot Number :** 22-21JB
Type: Source Material **Expires:** 28-FEB-11
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS100415-03 **Opened:** 15-APR-11 **Amount :** 250 ml
Name: ICPMSCaSPIKEC **Received:** 15-APR-10 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-11 **Lot Number :** 22-22JB
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: IHG100302-01 **Opened:** 02-MAR-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 02-MAR-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 03-MAR-10 **Solvent :** 1mL HNO3 + Type1 H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG100302-02 **Opened:** 02-MAR-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 02-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Intermediate **Expires:** 03-MAR-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG100302-01a **Opened:** 02-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 02-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 09-MAR-10
Employee: Tara Griffin
Supplier: GEL

Standard Logbook

Description: Mercury Working 1st Source CAL 0.2/CRA

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100302-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG100302-02 **Opened:** 02-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 02-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 09-MAR-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.
IHG100302-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG100302-03 **Opened:** 02-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 02-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 09-MAR-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL

Description: Mercury Working 1st Source CAL 2.0

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100302-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG100302-04 **Opened:** 02-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 02-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 09-MAR-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL

Description: Mercury Working 1st Source CAL 5.0/CCV

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100302-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100302-05 **Opened:** 02-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 02-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 09-MAR-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL

Description: Mercury Working 1st Source CAL 10.0

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100302-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG100302-06 Opened: 02-MAR-10 Pipet Id : Hg1289245
 Name: MHGWORK5.0ICV Received: 02-MAR-10 Solvent : 2% HNO3-1274391
 Type: Working Expires: 09-MAR-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.
IHG100302-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100302-13 Opened: 02-MAR-10 Pipet Id : Hg1289245
 Name: MHGLIQLCSMSSPIKE Received: 02-MAR-10 Solvent : 2% HNO3-1274391
 Type: Working Expires: 09-MAR-10
 Employee: Tara Griffin Verified: 20-JUL-07
 Supplier: GEL
 Description: Mercury working 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: WI100319-42 Opened: 19-MAR-10 Balance Id : 216
 Name: TRACE ICP 0.1 PPM STD. Received: 02-NOV-09 Pipet Id : 3581809
 Type: Working Expires: 20-MAR-10 Solvent : 3%HCL and 1%HNO3 -1285629
 Employee: Helen Camello
 Supplier: GEL
 Description: TRACE ICP 0.1 PPM CALIBRATION STD.
 Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100319-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100319-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100319-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100319-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100319-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100319-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100319-43 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-MAR-10 **Solvent :** 3%HCL and 1%HNO3 --1285629
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090421-40	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI100319-44 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-MAR-10 **Solvent :** 3%HCL and 1 %HNO3-1285629
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI100319-45 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1285629
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090421-40	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L

Serial ID: WI100319-46 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-MAR-10 **Solvent :** 3%HCL AND 1%HNO3-1285629
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L.	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L.	2.5 mL	500 mL	500 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100319-47 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-MAR-10 **Solvent :** 3%HCL &1%HNO3-1285629
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100420-04 **Opened:** 20-APR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 20-APR-10 **Balance Id :** 4025216
Type: Working **Expires:** 21-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1303289
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100415-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100415-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100415-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100420-04A **Opened:** 20-APR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 20-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 21-APR-10 **Solvent :** 2%HNO3/1%HCl - 1303289
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100420-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100420-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100420-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100420-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100420-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100420-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100420-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100420-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100420-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100420-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100420-05 **Opened:** 20-APR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 20-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 21-APR-10 **Solvent :** 2%HNO3/1%HCl - 1303289
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI100317-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI100317-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100420-06 **Opened:** 20-APR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 20-APR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 21-APR-10 **Solvent :** 2%HNO3/1%HCl - 1303289
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100420-07 **Opened:** 20-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 20-APR-10 **Lot Number :** 1010773
Type: Working **Expires:** 21-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1303289
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100415-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100415-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100415-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100420-08 **Opened:** 20-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 20-APR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 21-APR-10 **Solvent :** 2%HNO3/1%HCl - 1303289
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100405-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI100405-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI100405-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI100405-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI100405-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI100405-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI100405-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI100405-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI100405-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100415-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100415-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100415-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100420-70 Opened: 20-APR-10 Balance Id : 40245216
 Name: ICPMS LINEAR RANGE ST Received: 20-APR-10 Pipet Id : 1758088
 Type: Working Expires: 21-APR-10 Solvent : 2%HNO3/1%HCl - 1303289
 Employee: Paul Boyd
 Supplier: Q2SI
 Description: ICPMS LINEAR RANGE STANDARD
 Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100405-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100405-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100405-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI100405-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100405-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100405-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100405-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100405-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100405-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI100405-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI100405-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expres:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Standard Logbook

Serial ID: 1176183 **Opened:** 24-AUG-09 **Lot Number :** H20001
Name: B-H2SO4-MER **Received:** 24-AUG-09
Type: Reagent/Solvent **Expires:** 24-AUG-10
Employee: Tara Griffin
Supplier: Mallinckrodt
Description: Sulfuric Acid, Concentrated
Comments: None

Serial ID: 1215906 **Opened:** 06-NOV-09 **Lot Number :** H44465
Name: B-K2S2O8S-MER **Received:** 06-NOV-09
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Tara Griffin
Supplier: J.T BAKER
Description: Potassium Persulfate Concentrate.
Comments: None

Serial ID: 1228372-A **Opened:** 12-NOV-09 **Lot Number :** 49215936
Name: B-NH2OH.HCl-MER **Received:** 12-NOV-09
Type: Reagent/Solvent **Expires:** 12-NOV-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxylamine Hydrochloride
Comments: None

Serial ID: 1255532-C **Opened:** 15-JAN-10 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 15-JAN-10
Type: Reagent/Solvent **Expires:** 15-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1274391-1 **Opened:** 24-FEB-10 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 24-FEB-10 **Lot Number :** H44025
Type: Reagent/Solvent **Expires:** 24-FEB-11
Employee: Tara Griffin
Supplier: Mallinckrodt Chemicals
Description: NITRIC ACID
Comments: None

Standard Logbook

Serial ID: 1274969 **Opened:** 24-FEB-10 **Lot Number :** J 04043 L
Name: I-HNO3 **Received:** 24-FEB-10
Type: Reagent/Solvent **Expires:** 24-FEB-11
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1274973 **Opened:** 24-FEB-10 **Lot Number :** J02039
Name: I-HCL **Received:** 24-FEB-10 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 24-FEB-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1276435-C **Opened:** 28-FEB-10 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 28-FEB-10
Type: Reagent/Solvent **Expires:** 28-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% Potassium Persulfate
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1215906	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Serial ID: 1277238-C **Opened:** 01-MAR-10 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-MAR-10
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1277916 **Opened:** 02-MAR-10 **Lot Number :** J02039
Name: I-HCL **Received:** 02-MAR-10 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 02-MAR-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID

Standard Logbook

Comments: None

Serial ID: 1285629 **Opened:** 15-MAR-10 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 05-MAR-10 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 21-MAR-10 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1291278 **Opened:** 25-MAR-10 **Lot Number :** J 08035 L
Name: I-HNO3 **Received:** 25-MAR-10
Type: Reagent/Solvent **Expires:** 25-MAR-11
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1303289 **Opened:** 19-APR-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 19-APR-10
Type: Reagent/Solvent **Expires:** 26-APR-10
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1277916	I-HCL	36.5-38.0	90 mL	9 l	N/A
1291278	I-HNO3	69.0-70.0	180 mL	9 l	N/A

Metals Analysis

Case Narrative

**Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1983-1**

Sample Analysis

Sample ID	Client ID
247794001	RE15-10-8317
247794002	RE15-10-8319
247794003	RE15-10-8316
247794004	RE15-10-8326
247794005	RE15-10-8318
1202053063	Method Blank (MB) ICP
1202053068	Laboratory Control Sample (LCS)
1202053065	247790002(RE15-10-8386L) Serial Dilution (SD)
1202053064	247790002(RE15-10-8386D) Sample Duplicate (DUP)
1202053066	247790002(RE15-10-8386S) Matrix Spike (MS)
1202053067	247790002(RE15-10-8386SD) Matrix Spike Duplicate (MSD)
1202053069	Method Blank (MB) ICP-MS
1202053074	Laboratory Control Sample (LCS)
1202053071	247790002(RE15-10-8386L) Serial Dilution (SD)
1202053070	247790002(RE15-10-8386D) Sample Duplicate (DUP)
1202053072	247790002(RE15-10-8386S) Matrix Spike (MS)
1202053073	247790002(RE15-10-8386SD) Matrix Spike Duplicate (MSD)
1202056088	Method Blank (MB) CVAA
1202056089	Laboratory Control Sample (LCS)
1202056092	247794001(RE15-10-8317L) Serial Dilution (SD)

1202056090	247794001(RE15-10-8317D) Sample Duplicate (DUP)
1202056091	247794001(RE15-10-8317S) Matrix Spike (MS)
1202056093	247794001(RE15-10-8317SD) Matrix Spike Duplicate (MSD)

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

Method/Analysis Information

Analytical Batch:	957496, 957498 and 958710
Prep Batch :	957495, 957497 and 958704
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 standards met the advisory control limits with the exceptions of beryllium, uranium and zinc, which recovered outside of the advisory limits of 70-130%.

ICSA/ICSAB Statement

All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements

All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

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: 247790002 (RE15-10-8386) and 247794001 (RE15-10-8317).

Matrix Spike (MS) Recovery Statement

The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of calcium, magnesium and nickel, as indicated by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement

The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of potassium, magnesium and nickel, 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 calcium, as indicated by the "*" qualifier.

Duplicate Relative Percent Difference (RPD) Statement

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

Serial Dilution % Difference Statement

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

Technical Information**Holding Time Specifications**

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

Sample Dilutions

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The 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: 807427 and 819407. 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 Pauson Date: 4/20/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1983-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247794001

BASIS: Dry Weight

DATE COLLECTED 17-FEB-10

CLIENT ID: RE15-10-8317

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 93.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1310000	ug/Kg		7230	21300	21300	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-36-0	Antimony	1060	ug/Kg	U	351	1060	1060	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-38-2	Arsenic	0.648	mg/kg	J	0.21	1.05	1.05	2	MS	PRB	04/20/10 14:40	100420-2	957498
7440-39-3	Barium	13200	ug/Kg		106	532	532	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-41-7	Beryllium	0.907	mg/kg		0.021	0.105	0.105	2	MS	PRB	04/20/10 14:40	100420-2	957498
7440-43-9	Cadmium	532	ug/Kg	U	106	532	532	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-70-2	Calcium	334000	ug/Kg		8510	26600	26600	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-47-3	Chromium	2370	ug/Kg		160	532	532	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-48-4	Cobalt	387	ug/Kg	J	160	532	532	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-50-8	Copper	1200	ug/Kg		319	1060	1060	1	P	HSC	03/19/10 16:38	031910-1	957496
7439-89-6	Iron	7680000	ug/Kg		8510	26600	26600	1	P	HSC	03/19/10 16:38	031910-1	957496
7439-92-1	Lead	5180	ug/Kg		266	1060	1060	1	P	HSC	03/19/10 16:38	031910-1	957496
7439-95-4	Magnesium	239000	ug/Kg		9040	31900	31900	1	P	HSC	03/19/10 16:38	031910-1	957496
7439-96-5	Manganese	266000	ug/Kg		213	1060	1060	1	P	HSC	03/19/10 16:38	031910-1	957496
7439-97-6	Mercury	10.9	ug/kg	U	3.69	10.9	10.9	1	AV	JXLI	03/08/10 11:08	030810S1-5	958710
7440-02-0	Nickel	1.94	mg/Kg		0.105	0.42	0.42	2	MS	PRB	04/20/10 14:40	100420-2	957498
7440-09-7	Potassium	639000	ug/Kg		6810	26600	26600	1	P	HSC	03/19/10 16:38	031910-1	957496
7782-49-2	Selenium	1.05	mg/kg	U	0.525	1.05	1.05	2	MS	PRB	04/20/10 14:40	100420-2	957498
7440-22-4	Silver	124	ug/Kg	J	106	532	532	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-23-5	Sodium	475000	ug/Kg		7440	26600	26600	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-28-0	Thallium	0.078	mg/kg	J	0.0631	0.21	0.21	2	MS	PRB	04/20/10 14:40	100420-2	957498
7440-61-1	Uranium	0.687	mg/kg		0.0139	0.042	0.042	2	MS	PRB	04/20/10 14:40	100420-2	957498
7440-62-2	Vanadium	3340	ug/Kg		106	532	532	1	P	HSC	03/19/10 16:38	031910-1	957496
7440-66-6	Zinc	51500	ug/Kg		351	1060	1060	1	P	HSC	03/19/10 16:38	031910-1	957496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957496	957495	SW846 3050B	0.502	g	50	mL	02/26/10	AXG2
957498	957497	SW846 3050B	0.508	g	50	mL	02/26/10	AXG2
958710	958704	SW846 7471A Prep	0.59	g	30	mL	03/06/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1983-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247794002

BASIS: Dry Weight

DATE COLLECTED 17-FEB-10

CLIENT ID: RE15-10-8319

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 96.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	605000	ug/Kg		6790	20000	20000	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-36-0	Antimony	998	ug/Kg	U	329	998	998	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-38-2	Arsenic	0.209	mg/kg	J	0.197	0.985	0.985	2	MS	PRB	04/20/10 14:43	100420-2	957498
7440-39-3	Barium	5190	ug/Kg		99.8	499	499	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-41-7	Beryllium	0.216	mg/kg		0.0197	0.0985	0.0985	2	MS	PRB	04/20/10 14:43	100420-2	957498
7440-43-9	Cadmium	499	ug/Kg	U	99.8	499	499	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-70-2	Calcium	186000	ug/Kg		7980	25000	25000	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-47-3	Chromium	1780	ug/Kg		150	499	499	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-48-4	Cobalt	271	ug/Kg	J	150	499	499	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-50-8	Copper	932	ug/Kg	J	299	998	998	1	P	HSC	03/19/10 16:45	031910-1	957496
7439-89-6	Iron	6080000	ug/Kg		7980	25000	25000	1	P	HSC	03/19/10 16:45	031910-1	957496
7439-92-1	Lead	2620	ug/Kg		250	998	998	1	P	HSC	03/19/10 16:45	031910-1	957496
7439-95-4	Magnesium	114000	ug/Kg		8480	29900	29900	1	P	HSC	03/19/10 16:45	031910-1	957496
7439-96-5	Manganese	177000	ug/Kg		200	998	998	1	P	HSC	03/19/10 16:45	031910-1	957496
7439-97-6	Mercury	10.6	ug/kg	U	3.61	10.6	10.6	1	AV	JXL1	03/08/10 11:17	030810S1-5	958710
7440-02-0	Nickel	0.360	mg/kg	J	0.0985	0.394	0.394	2	MS	PRB	04/20/10 14:43	100420-2	957498
7440-09-7	Potassium	347000	ug/Kg		6390	25000	25000	1	P	HSC	03/19/10 16:45	031910-1	957496
7782-49-2	Selenium	0.985	mg/kg	U	0.492	0.985	0.985	2	MS	PRB	04/20/10 14:43	100420-2	957498
7440-22-4	Silver	499	ug/Kg	U	99.8	499	499	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-23-5	Sodium	223000	ug/Kg		6990	25000	25000	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-28-0	Thallium	0.197	mg/kg	U	0.0591	0.197	0.197	2	MS	PRB	04/20/10 14:43	100420-2	957498
7440-61-1	Uranium	0.424	mg/kg		0.013	0.0394	0.0394	2	MS	PRB	04/20/10 14:43	100420-2	957498
7440-62-2	Vanadium	1750	ug/Kg		99.8	499	499	1	P	HSC	03/19/10 16:45	031910-1	957496
7440-66-6	Zinc	41000	ug/Kg		329	998	998	1	P	HSC	03/19/10 16:45	031910-1	957496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957496	957495	SW846 3050B	0.518	g	50	mL	02/26/10	AXG2
957498	957497	SW846 3050B	0.525	g	50	mL	02/26/10	AXG2
958710	958704	SW846 7471A Prep	0.585	g	30	mL	03/06/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1983-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247794003

BASIS: Dry Weight

DATE COLLECTED 17-FEB-10

CLIENT ID: RE15-10-8316

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 96

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1040000	ug/Kg		6860	20200	20200	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-36-0	Antimony	1010	ug/Kg	U	333	1010	1010	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-38-2	Arsenic	0.258	mg/kg	J	0.201	1	1	2	MS	PRB	04/20/10 14:47	100420-2	957498
7440-39-3	Barium	10400	ug/Kg		101	505	505	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-41-7	Beryllium	0.228	mg/kg		0.0201	0.1	0.1	2	MS	PRB	04/20/10 14:47	100420-2	957498
7440-43-9	Cadmium	505	ug/Kg	U	101	505	505	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-70-2	Calcium	265000	ug/Kg		8080	25200	25200	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-47-3	Chromium	2140	ug/Kg		151	505	505	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-48-4	Cobalt	258	ug/Kg	J	151	505	505	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-50-8	Copper	867	ug/Kg	J	303	1010	1010	1	P	HSC	03/19/10 16:52	031910-1	957496
7439-89-6	Iron	6070000	ug/Kg		8080	25200	25200	1	P	HSC	03/19/10 16:52	031910-1	957496
7439-92-1	Lead	2840	ug/Kg		252	1010	1010	1	P	HSC	03/19/10 16:52	031910-1	957496
7439-95-4	Magnesium	119000	ug/Kg		8580	30300	30300	1	P	HSC	03/19/10 16:52	031910-1	957496
7439-96-5	Manganese	206000	ug/Kg		202	1010	1010	1	P	HSC	03/19/10 16:52	031910-1	957496
7439-97-6	Mercury	11.3	ug/kg	U	3.84	11.3	11.3	1	AV	JXL1	03/08/10 11:18	030810S1-5	958710
7440-02-0	Nickel	0.350	mg/kg	J	0.1	0.401	0.401	2	MS	PRB	04/20/10 14:47	100420-2	957498
7440-09-7	Potassium	519000	ug/Kg		6460	25200	25200	1	P	HSC	03/19/10 16:52	031910-1	957496
7782-49-2	Selenium	1	mg/kg	U	0.502	1	1	2	MS	PRB	04/20/10 14:47	100420-2	957498
7440-22-4	Silver	118	ug/Kg	J	101	505	505	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-23-5	Sodium	402000	ug/Kg		7070	25200	25200	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-28-0	Thallium	0.201	mg/kg	U	0.0602	0.201	0.201	2	MS	PRB	04/20/10 14:47	100420-2	957498
7440-61-1	Uranium	0.358	mg/kg		0.0132	0.0401	0.0401	2	MS	PRB	04/20/10 14:47	100420-2	957498
7440-62-2	Vanadium	2040	ug/Kg		101	505	505	1	P	HSC	03/19/10 16:52	031910-1	957496
7440-66-6	Zinc	34200	ug/Kg		333	1010	1010	1	P	HSC	03/19/10 16:52	031910-1	957496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957496	957495	SW846 3050B	0.516	g	50	mL	02/26/10	AXG2
957498	957497	SW846 3050B	0.519	g	50	mL	02/26/10	AXG2
958710	958704	SW846 7471A Prep	0.553	g	30	mL	03/06/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1983-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247794004

BASIS: Dry Weight

DATE COLLECTED 17-FEB-10

CLIENT ID: RE15-10-8326

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 96

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1140000	ug/Kg		7060	20800	20800	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-36-0	Antimony	1040	ug/Kg	U	342	1040	1040	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-38-2	Arsenic	0.352	mg/kg	J	0.2	1	1	2	MS	PRB	04/20/10 14:50	100420-2	957498
7440-39-3	Barium	12000	ug/Kg		104	519	519	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-41-7	Beryllium	0.273	mg/kg		0.02	0.1	0.1	2	MS	PRB	04/20/10 14:50	100420-2	957498
7440-43-9	Cadmium	519	ug/Kg	U	104	519	519	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-70-2	Calcium	284000	ug/Kg		8300	25900	25900	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-47-3	Chromium	3820	ug/Kg		156	519	519	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-48-4	Cobalt	299	ug/Kg	J	156	519	519	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-50-8	Copper	861	ug/Kg	J	311	1040	1040	1	P	HSC	03/19/10 16:59	031910-1	957496
7439-89-6	Iron	7120000	ug/Kg		8300	25900	25900	1	P	HSC	03/19/10 16:59	031910-1	957496
7439-92-1	Lead	3330	ug/Kg		259	1040	1040	1	P	HSC	03/19/10 16:59	031910-1	957496
7439-95-4	Magnesium	146000	ug/Kg		8820	31100	31100	1	P	HSC	03/19/10 16:59	031910-1	957496
7439-96-5	Manganese	245000	ug/Kg		208	1040	1040	1	P	HSC	03/19/10 16:59	031910-1	957496
7439-97-6	Mercury	12.4	ug/kg	U	4.23	12.4	12.4	1	AV	JXL1	03/08/10 11:20	030810S1-5	958710
7440-02-0	Nickel	0.495	mg/kg		0.1	0.401	0.401	2	MS	PRB	04/20/10 14:50	100420-2	957498
7440-09-7	Potassium	569000	ug/Kg		6640	25900	25900	1	P	HSC	03/19/10 16:59	031910-1	957496
7782-49-2	Selenium	1	mg/kg	U	0.501	1	1	2	MS	PRB	04/20/10 14:50	100420-2	957498
7440-22-4	Silver	164	ug/Kg	J	104	519	519	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-23-5	Sodium	438000	ug/Kg		7260	25900	25900	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-28-0	Thallium	0.20	mg/kg	U	0.0601	0.2	0.2	2	MS	PRB	04/20/10 14:50	100420-2	957498
7440-61-1	Uranium	0.40	mg/kg		0.0132	0.0401	0.0401	2	MS	PRB	04/20/10 14:50	100420-2	957498
7440-62-2	Vanadium	2210	ug/Kg		104	519	519	1	P	HSC	03/19/10 16:59	031910-1	957496
7440-66-6	Zinc	40100	ug/Kg		342	1040	1040	1	P	HSC	03/19/10 16:59	031910-1	957496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957496	957495	SW846 3050B	0.502	g	50	mL	02/26/10	AXG2
957498	957497	SW846 3050B	0.52	g	50	mL	02/26/10	AXG2
958710	958704	SW846 7471A Prep	0.503	g	30	mL	03/06/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1983-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247794005

BASIS: Dry Weight

DATE COLLECTED 17-FEB-10

CLIENT ID: RE15-10-8318

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 95.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	742000	ug/Kg		6900	20300	20300	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-36-0	Antimony	1020	ug/Kg	U	335	1020	1020	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-38-2	Arsenic	1.02	mg/kg	U	0.203	1.02	1.02	2	MS	PRB	04/20/10 14:54	100420-2	957498
7440-39-3	Barium	6350	ug/Kg		102	508	508	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-41-7	Beryllium	0.281	mg/kg		0.0203	0.102	0.102	2	MS	PRB	04/20/10 14:54	100420-2	957498
7440-43-9	Cadmium	508	ug/Kg	U	102	508	508	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-70-2	Calcium	265000	ug/Kg		8120	25400	25400	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-47-3	Chromium	1710	ug/Kg		152	508	508	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-48-4	Cobalt	285	ug/Kg	J	152	508	508	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-50-8	Copper	1060	ug/Kg		305	1020	1020	1	P	HSC	03/19/10 17:06	031910-1	957496
7439-89-6	Iron	6470000	ug/Kg		8120	25400	25400	1	P	HSC	03/19/10 17:06	031910-1	957496
7439-92-1	Lead	3840	ug/Kg		254	1020	1020	1	P	HSC	03/19/10 17:06	031910-1	957496
7439-95-4	Magnesium	138000	ug/Kg		8630	30500	30500	1	P	HSC	03/19/10 17:06	031910-1	957496
7439-96-5	Manganese	203000	ug/Kg		203	1020	1020	1	P	HSC	03/19/10 17:06	031910-1	957496
7439-97-6	Mercury	12.2	ug/kg	U	4.14	12.2	12.2	1	AV	JXL1	03/08/10 11:22	030810S1-5	958710
7440-02-0	Nickel	0.471	mg/kg		0.102	0.407	0.407	2	MS	PRB	04/20/10 14:54	100420-2	957498
7440-09-7	Potassium	404000	ug/Kg		6500	25400	25400	1	P	HSC	03/19/10 17:06	031910-1	957496
7782-49-2	Selenium	1.02	mg/kg	U	0.509	1.02	1.02	2	MS	PRB	04/20/10 14:54	100420-2	957498
7440-22-4	Silver	149	ug/Kg	J	102	508	508	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-23-5	Sodium	277000	ug/Kg		7110	25400	25400	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-28-0	Thallium	0.203	mg/kg	U	0.061	0.203	0.203	2	MS	PRB	04/20/10 14:54	100420-2	957498
7440-61-1	Uranium	0.441	mg/kg		0.0134	0.0407	0.0407	2	MS	PRB	04/20/10 14:54	100420-2	957498
7440-62-2	Vanadium	1940	ug/Kg		102	508	508	1	P	HSC	03/19/10 17:06	031910-1	957496
7440-66-6	Zinc	39700	ug/Kg		335	1020	1020	1	P	HSC	03/19/10 17:06	031910-1	957496

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957496	957495	SW846 3050B	0.516	g	50	mL	02/26/10	AXG2
957498	957497	SW846 3050B	0.515	g	50	mL	02/26/10	AXG2
958710	958704	SW846 7471A Prep	0.516	g	30	mL	03/06/10	TXB3

Quality Control Summary

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1983-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,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										
	Mercury	5.2	ug/L	5	ug/L	104	90.0 – 110.0	AV	08-MAR-10 09:19	030810S1-5
	Aluminum	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Antimony	525	ug/L	500	ug/L	105	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Barium	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Cadmium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Calcium	5170	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Chromium	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Cobalt	516	ug/L	500	ug/L	103.3	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Copper	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Iron	5240	ug/L	5000	ug/L	104.9	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Lead	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Magnesium	5440	ug/L	5000	ug/L	108.8	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Manganese	516	ug/L	500	ug/L	103.3	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Potassium	2560	ug/L	2500	ug/L	102.3	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Silver	260	ug/L	250	ug/L	104.2	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Sodium	2460	ug/L	2500	ug/L	98.5	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Vanadium	516	ug/L	500	ug/L	103.3	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Zinc	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Arsenic	50.7	ug/L	50	ug/L	101.4	90.0 – 110.0	MS	20-APR-10 13:43	100420-2
	Beryllium	50.4	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	20-APR-10 13:43	100420-2
	Nickel	52.2	ug/L	50	ug/L	104.4	90.0 – 110.0	MS	20-APR-10 13:43	100420-2
	Selenium	49.6	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	20-APR-10 13:43	100420-2
	Thallium	49.9	ug/L	50	ug/L	99.8	90.0 – 110.0	MS	20-APR-10 13:43	100420-2
	Uranium	51.7	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	20-APR-10 13:43	100420-2
CCV01										
	Mercury	5.18	ug/L	5	ug/L	103.5	80.0 – 120.0	AV	08-MAR-10 09:24	030810S1-5
	Aluminum	5010	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	19-MAR-10 08:47	031910-1
	Antimony	519	ug/L	500	ug/L	103.9	90.0 – 110.0	P	19-MAR-10 08:47	031910-1
	Barium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	19-MAR-10 08:47	031910-1
	Cadmium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	19-MAR-10 08:47	031910-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1983-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,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>
	Calcium	5190	ug/L	5000	ug/L	103.9	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Chromium	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Cobalt	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Copper	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Iron	5300	ug/L	5000	ug/L	106	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Lead	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Magnesium	5370	ug/L	5000	ug/L	107.5	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Manganese	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Potassium	5210	ug/L	5000	ug/L	104.1	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Silver	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Sodium	10300	ug/L	10000	ug/L	103.1	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Vanadium	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Zinc	494	ug/L	500	ug/L	98.7	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Arsenic	50.8	ug/L	50	ug/L	101.5	90.0 - 110.0	MS	20-APR-10 14:00	100420-2
	Beryllium	48.8	ug/L	50	ug/L	97.7	90.0 - 110.0	MS	20-APR-10 14:00	100420-2
	Nickel	51.4	ug/L	50	ug/L	102.8	90.0 - 110.0	MS	20-APR-10 14:00	100420-2
	Selenium	51.6	ug/L	50	ug/L	103.1	90.0 - 110.0	MS	20-APR-10 14:00	100420-2
	Thallium	50	ug/L	50	ug/L	99.9	90.0 - 110.0	MS	20-APR-10 14:00	100420-2
	Uranium	52.3	ug/L	50	ug/L	104.6	90.0 - 110.0	MS	20-APR-10 14:00	100420-2
CCV02	Mercury	5.3	ug/L	5	ug/L	106	80.0 - 120.0	AV	08-MAR-10 09:44	030810S1-5
	Aluminum	5140	ug/L	5000	ug/L	102.9	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Antimony	517	ug/L	500	ug/L	103.4	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Barium	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Cadmium	501	ug/L	500	ug/L	100.1	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Calcium	5190	ug/L	5000	ug/L	103.8	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Chromium	500	ug/L	500	ug/L	100	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Cobalt	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Copper	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Iron	5230	ug/L	5000	ug/L	104.7	90.0 - 110.0	P	19-MAR-10 09:08	031910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1983-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,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	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Magnesium	5410	ug/L	5000	ug/L	108.2	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Manganese	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Potassium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Silver	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Sodium	9900	ug/L	10000	ug/L	99	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Vanadium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Zinc	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Arsenic	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	20-APR-10 14:30	100420-2
	Beryllium	47.6	ug/L	50	ug/L	95.2	90.0 – 110.0	MS	20-APR-10 14:30	100420-2
	Nickel	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	20-APR-10 14:30	100420-2
	Selenium	48.4	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	20-APR-10 14:30	100420-2
	Thallium	49.8	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	20-APR-10 14:30	100420-2
	Uranium	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	20-APR-10 14:30	100420-2
CCV03										
	Mercury	5.4	ug/L	5	ug/L	108	80.0 – 120.0	AV	08-MAR-10 10:04	030810S1-5
	Aluminum	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Antimony	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Barium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Cadmium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Calcium	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Chromium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Cobalt	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Copper	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Iron	5320	ug/L	5000	ug/L	106.4	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Lead	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Magnesium	5390	ug/L	5000	ug/L	107.7	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Manganese	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Potassium	5220	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Silver	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	19-MAR-10 10:18	031910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1983-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,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>
	Sodium	10500	ug/L	10000	ug/L	104.9	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Zinc	495	ug/L	500	ug/L	99	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Arsenic	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	20-APR-10 14:57	100420-2
	Beryllium	47.4	ug/L	50	ug/L	94.7	90.0 – 110.0	MS	20-APR-10 14:57	100420-2
	Nickel	49.4	ug/L	50	ug/L	98.9	90.0 – 110.0	MS	20-APR-10 14:57	100420-2
	Selenium	47.9	ug/L	50	ug/L	95.8	90.0 – 110.0	MS	20-APR-10 14:57	100420-2
	Thallium	50	ug/L	50	ug/L	100	90.0 – 110.0	MS	20-APR-10 14:57	100420-2
	Uranium	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	20-APR-10 14:57	100420-2
CCV04	Mercury	5.1	ug/L	5	ug/L	102	80.0 – 120.0	AV	08-MAR-10 10:25	030810S1-5
	Aluminum	5250	ug/L	5000	ug/L	105	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Antimony	522	ug/L	500	ug/L	104.4	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Barium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Cadmium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Calcium	5230	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Cobalt	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Copper	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Iron	5270	ug/L	5000	ug/L	105.5	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Lead	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Magnesium	5330	ug/L	5000	ug/L	106.6	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Manganese	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Potassium	5370	ug/L	5000	ug/L	107.4	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Silver	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Sodium	10200	ug/L	10000	ug/L	102.5	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Vanadium	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Zinc	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
CCV05	Mercury	5.18	ug/L	5	ug/L	103.5	80.0 – 120.0	AV	08-MAR-10 10:45	030810S1-5

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1983-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Aluminum	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Antimony	523	ug/L	500	ug/L	104.6	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Barium	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Cadmium	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Calcium	5210	ug/L	5000	ug/L	104.1	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Chromium	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Cobalt	513	ug/L	500	ug/L	102.5	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Copper	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Iron	5290	ug/L	5000	ug/L	105.9	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Lead	505	ug/L	500	ug/L	101	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Magnesium	5320	ug/L	5000	ug/L	106.5	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Manganese	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Potassium	5290	ug/L	5000	ug/L	105.8	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Silver	509	ug/L	500	ug/L	101.7	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Sodium	10400	ug/L	10000	ug/L	104.3	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Zinc	504	ug/L	500	ug/L	100.7	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
CCV06										
	Mercury	5.2	ug/L	5	ug/L	104	80.0 - 120.0	AV	08-MAR-10 11:05	030810S1-5
	Aluminum	5040	ug/L	5000	ug/L	100.8	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Antimony	535	ug/L	500	ug/L	107	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Barium	517	ug/L	500	ug/L	103.4	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Cadmium	516	ug/L	500	ug/L	103.3	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Calcium	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Chromium	517	ug/L	500	ug/L	103.4	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Cobalt	524	ug/L	500	ug/L	104.7	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Copper	510	ug/L	500	ug/L	102	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Iron	5230	ug/L	5000	ug/L	104.6	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Lead	514	ug/L	500	ug/L	102.9	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Magnesium	5290	ug/L	5000	ug/L	105.7	90.0 - 110.0	P	19-MAR-10 13:15	031910-1

SW846

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1983-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,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>
	Manganese	518	ug/L	500	ug/L	103.6	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Potassium	5160	ug/L	5000	ug/L	103.3	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Silver	518	ug/L	500	ug/L	103.6	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Sodium	10000	ug/L	10000	ug/L	100.2	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Vanadium	521	ug/L	500	ug/L	104.2	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
	Zinc	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	19-MAR-10 13:15	031910-1
CCV07										
	Mercury	5.38	ug/L	5	ug/L	107.5	80.0 - 120.0	AV	08-MAR-10 11:25	030810S1-5
	Aluminum	5110	ug/L	5000	ug/L	102.1	90.0 - 110.0	P	19-MAR-10 14:17	031910-1
	Antimony	523	ug/L	500	ug/L	104.5	90.0 - 110.0	P	19-MAR-10 14:17	031910-1
	Barium	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	19-MAR-10 14:17	031910-1
	Cadmium	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	19-MAR-10 14:17	031910-1
	Calcium	5180	ug/L	5000	ug/L	103.7	90.0 - 110.0	P	19-MAR-10 14:17	031910-1
	Chromium	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	19-MAR-10 14:17	031910-1
	Cobalt	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	19-MAR-10 14:17	031910-1
	Copper	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	19-MAR-10 14:17	031910-1
	Iron	5250	ug/L	5000	ug/L	105.1	90.0 - 110.0	P	19-MAR-10 14:17	031910-1
	Lead	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	19-MAR-10 14:17	031910-1
	Magnesium	5350	ug/L	5000	ug/L	107	90.0 - 110.0	P	19-MAR-10 14:17	031910-1
	Manganese	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	19-MAR-10 14:17	031910-1
	Potassium	5270	ug/L	5000	ug/L	105.4	90.0 - 110.0	P	19-MAR-10 14:17	031910-1
	Silver	503	ug/L	500	ug/L	100.5	90.0 - 110.0	P	19-MAR-10 14:17	031910-1
	Sodium	10300	ug/L	10000	ug/L	102.9	90.0 - 110.0	P	19-MAR-10 14:17	031910-1
	Vanadium	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	19-MAR-10 14:17	031910-1
	Zinc	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	19-MAR-10 14:17	031910-1
CCV08										
	Aluminum	4930	ug/L	5000	ug/L	98.6	90.0 - 110.0	P	19-MAR-10 15:12	031910-1
	Antimony	526	ug/L	500	ug/L	105.1	90.0 - 110.0	P	19-MAR-10 15:12	031910-1
	Barium	505	ug/L	500	ug/L	101	90.0 - 110.0	P	19-MAR-10 15:12	031910-1
	Cadmium	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	19-MAR-10 15:12	031910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1983-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,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>
	Calcium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Chromium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Cobalt	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Copper	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Iron	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Lead	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Magnesium	5180	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Manganese	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Potassium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Silver	510	ug/L	500	ug/L	102	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Sodium	9760	ug/L	10000	ug/L	97.6	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Zinc	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
CCV09	Aluminum	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	19-MAR-10 16:16	031910-1
	Antimony	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	19-MAR-10 16:16	031910-1
	Barium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-MAR-10 16:16	031910-1
	Cadmium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	19-MAR-10 16:16	031910-1
	Calcium	4990	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	19-MAR-10 16:16	031910-1
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-MAR-10 16:16	031910-1
	Cobalt	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	19-MAR-10 16:16	031910-1
	Copper	500	ug/L	500	ug/L	100	90.0 – 110.0	P	19-MAR-10 16:16	031910-1
	Iron	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	19-MAR-10 16:16	031910-1
	Lead	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	19-MAR-10 16:16	031910-1
	Magnesium	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	19-MAR-10 16:16	031910-1
	Manganese	500	ug/L	500	ug/L	100	90.0 – 110.0	P	19-MAR-10 16:16	031910-1
	Potassium	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	19-MAR-10 16:16	031910-1
	Silver	510	ug/L	500	ug/L	102	90.0 – 110.0	P	19-MAR-10 16:16	031910-1
	Sodium	9640	ug/L	10000	ug/L	96.4	90.0 – 110.0	P	19-MAR-10 16:16	031910-1
	Vanadium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	19-MAR-10 16:16	031910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1983-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,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>
CCV10	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	19-MAR-10 16:16	031910-1
	Aluminum	4980	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	19-MAR-10 17:13	031910-1
	Antimony	523	ug/L	500	ug/L	104.5	90.0 – 110.0	P	19-MAR-10 17:13	031910-1
	Barium	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	19-MAR-10 17:13	031910-1
	Cadmium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	19-MAR-10 17:13	031910-1
	Calcium	5080	ug/L	5000	ug/L	101.6	90.0 – 110.0	P	19-MAR-10 17:13	031910-1
	Chromium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	19-MAR-10 17:13	031910-1
	Cobalt	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	19-MAR-10 17:13	031910-1
	Copper	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	19-MAR-10 17:13	031910-1
	Iron	5170	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	19-MAR-10 17:13	031910-1
	Lead	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	19-MAR-10 17:13	031910-1
	Magnesium	5250	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	19-MAR-10 17:13	031910-1
	Manganese	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	19-MAR-10 17:13	031910-1
	Potassium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	19-MAR-10 17:13	031910-1
	Silver	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	19-MAR-10 17:13	031910-1
	Sodium	10100	ug/L	10000	ug/L	101.4	90.0 – 110.0	P	19-MAR-10 17:13	031910-1
	Vanadium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	19-MAR-10 17:13	031910-1
	Zinc	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	19-MAR-10 17:13	031910-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1983-1

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS3,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										
	Mercury	.192	ug/L	.2	ug/L	96	70.0 – 130.0	AV	08-MAR-10 09:23	030810S1-5
	Arsenic	6.11	ug/L	5	ug/L	122.2	70.0 – 130.0	MS	20-APR-10 13:50	100420-2
	Beryllium	.674	ug/L	.5	ug/L	134.8	70.0 – 130.0	MS	20-APR-10 13:50	100420-2
	Selenium	5.85	ug/L	5	ug/L	117	70.0 – 130.0	MS	20-APR-10 13:50	100420-2
	Uranium	.291	ug/L	.2	ug/L	145.5	70.0 – 130.0	MS	20-APR-10 13:50	100420-2
	Thallium	1.03	ug/L	1	ug/L	103.2	70.0 – 130.0	MS	20-APR-10 13:50	100420-2
	Nickel	2.4	ug/L	2	ug/L	119.9	70.0 – 130.0	MS	20-APR-10 13:50	100420-2
PQL01										
	Aluminum	211	ug/L	200	ug/L	105.6	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Iron	117	ug/L	100	ug/L	116.6	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Lead	12.2	ug/L	10	ug/L	122.4	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Magnesium	344	ug/L	300	ug/L	114.8	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Manganese	10.6	ug/L	10	ug/L	106.1	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Potassium	170	ug/L	150	ug/L	113.2	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Silver	5.16	ug/L	5	ug/L	103.2	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Sodium	286	ug/L	300	ug/L	95.2	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Antimony	10.5	ug/L	10	ug/L	104.7	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Barium	5.23	ug/L	5	ug/L	104.6	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Cadmium	5.13	ug/L	5	ug/L	102.6	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Chromium	5.11	ug/L	5	ug/L	102.1	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Cobalt	5.16	ug/L	5	ug/L	103.2	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Copper	10.4	ug/L	10	ug/L	104	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Vanadium	4.92	ug/L	5	ug/L	98.3	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Zinc	13.7	ug/L	10	ug/L	137.3	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Calcium	223	ug/L	200	ug/L	111.7	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
PQL02										
	Aluminum	211	ug/L	200	ug/L	105.6	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Iron	107	ug/L	100	ug/L	107.5	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Lead	12.1	ug/L	10	ug/L	121.3	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Magnesium	384	ug/L	300	ug/L	128	70.0 – 130.0	P	19-MAR-10 10:25	031910-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1983-1

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: HG3,ICPMS3,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>
	Manganese	10.6	ug/L	10	ug/L	106.4	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Potassium	171	ug/L	150	ug/L	113.7	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Silver	5.08	ug/L	5	ug/L	101.7	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Sodium	287	ug/L	300	ug/L	95.6	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Antimony	11.8	ug/L	10	ug/L	117.6	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Barium	5.33	ug/L	5	ug/L	106.6	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Cadmium	5.26	ug/L	5	ug/L	105.3	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Cobalt	5.4	ug/L	5	ug/L	108.1	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Copper	10.1	ug/L	10	ug/L	101.2	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Vanadium	5.01	ug/L	5	ug/L	100.3	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Zinc	13.6	ug/L	10	ug/L	135.7	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Calcium	221	ug/L	200	ug/L	110.5	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Chromium	5.12	ug/L	5	ug/L	102.3	70.0 – 130.0	P	19-MAR-10 10:25	031910-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1983-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
ICB01	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	08-MAR-10 09:21	030810S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 07:50	031910-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 07:50	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 07:50	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 07:50	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 07:50	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 07:50	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 07:50	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 07:50	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 07:50	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 07:50	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 07:50	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 07:50	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 07:50	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 07:50	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 07:50	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 07:50	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 07:50	031910-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	20-APR-10 13:46	100420-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	20-APR-10 13:46	100420-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	20-APR-10 13:46	100420-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	20-APR-10 13:46	100420-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	20-APR-10 13:46	100420-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	20-APR-10 13:46	100420-2
CCB01	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	08-MAR-10 09:26	030810S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 08:54	031910-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 08:54	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 08:54	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 08:54	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 08:54	031910-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1983-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 08:54	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 08:54	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 08:54	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 08:54	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 08:54	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 08:54	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 08:54	031910-1
	Potassium	79.8	+/-250	J	64.0	250	SOL	P	19-MAR-10 08:54	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 08:54	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 08:54	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 08:54	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 08:54	031910-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	20-APR-10 14:03	100420-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	20-APR-10 14:03	100420-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	20-APR-10 14:03	100420-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	20-APR-10 14:03	100420-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	20-APR-10 14:03	100420-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	20-APR-10 14:03	100420-2
CCB02	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	08-MAR-10 09:46	030810S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 09:15	031910-1
	Antimony	4.1	+/-10	J	3.3	10.0	SOL	P	19-MAR-10 09:15	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 09:15	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 09:15	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 09:15	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 09:15	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 09:15	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 09:15	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 09:15	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 09:15	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 09:15	031910-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1983-1

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>
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 09:15	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 09:15	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 09:15	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 09:15	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 09:15	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 09:15	031910-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	20-APR-10 14:33	100420-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	20-APR-10 14:33	100420-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	20-APR-10 14:33	100420-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	20-APR-10 14:33	100420-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	20-APR-10 14:33	100420-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	20-APR-10 14:33	100420-2
CCB03	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	08-MAR-10 10:06	030810S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 10:32	031910-1
	Antimony	5.04	+/-10	J	3.3	10.0	SOL	P	19-MAR-10 10:32	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 10:32	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 10:32	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 10:32	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 10:32	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 10:32	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 10:32	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 10:32	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 10:32	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 10:32	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 10:32	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 10:32	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 10:32	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 10:32	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 10:32	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 10:32	031910-1

SW846

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1983-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	20-APR-10 15:00	100420-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	20-APR-10 15:00	100420-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	20-APR-10 15:00	100420-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	20-APR-10 15:00	100420-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	20-APR-10 15:00	100420-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	20-APR-10 15:00	100420-2
CCB04	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	08-MAR-10 10:26	030810S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 11:45	031910-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 11:45	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 11:45	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 11:45	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 11:45	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 11:45	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 11:45	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 11:45	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 11:45	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 11:45	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 11:45	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 11:45	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 11:45	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 11:45	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 11:45	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 11:45	031910-1
	Zinc	4.13	+/-10	J	3.3	10.0	SOL	P	19-MAR-10 11:45	031910-1
CCB05	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	08-MAR-10 10:46	030810S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 12:56	031910-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 12:56	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 12:56	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 12:56	031910-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1983-1

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>
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 12:56	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 12:56	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 12:56	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 12:56	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 12:56	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 12:56	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 12:56	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 12:56	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 12:56	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 12:56	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 12:56	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 12:56	031910-1
	Zinc	3.36	+/-10	J	3.3	10.0	SOL	P	19-MAR-10 12:56	031910-1
CCB06	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	08-MAR-10 11:07	030810S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 13:22	031910-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 13:22	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 13:22	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 13:22	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 13:22	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 13:22	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 13:22	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 13:22	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 13:22	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 13:22	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 13:22	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 13:22	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 13:22	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 13:22	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 13:22	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 13:22	031910-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1983-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB07	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 13:22	031910-1
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	08-MAR-10 11:27	030810S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 14:24	031910-1
	Antimony	3.73	+/-10	J	3.3	10.0	SOL	P	19-MAR-10 14:24	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 14:24	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 14:24	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 14:24	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 14:24	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 14:24	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 14:24	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 14:24	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 14:24	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 14:24	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 14:24	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 14:24	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 14:24	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 14:24	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 14:24	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 14:24	031910-1
CCB08	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 15:19	031910-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 15:19	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 15:19	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 15:19	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 15:19	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 15:19	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 15:19	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 15:19	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 15:19	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 15:19	031910-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1983-1

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>
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 15:19	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 15:19	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 15:19	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 15:19	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 15:19	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 15:19	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 15:19	031910-1
CCB09	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 16:23	031910-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 16:23	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 16:23	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 16:23	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 16:23	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 16:23	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 16:23	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 16:23	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 16:23	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 16:23	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 16:23	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 16:23	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 16:23	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 16:23	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 16:23	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 16:23	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 16:23	031910-1
CCB10	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 17:20	031910-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 17:20	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 17:20	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 17:20	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 17:20	031910-1

Metals

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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1983-1

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>
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 17:20	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 17:20	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 17:20	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 17:20	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 17:20	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 17:20	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 17:20	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 17:20	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 17:20	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 17:20	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 17:20	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 17:20	031910-1

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-1983-1

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>
1202053063	Potassium	6240	ug/Kg	+/-24400	U	P	6240	24400
	Silver	97.5	ug/Kg	+/-487	U	P	97.5	487
	Sodium	6820	ug/Kg	+/-24400	U	P	6820	24400
	Vanadium	97.5	ug/Kg	+/-487	U	P	97.5	487
	Barium	97.5	ug/Kg	+/-487	U	P	97.5	487
	Antimony	449	ug/Kg	+/-975	J	P	322	975
	Aluminum	6630	ug/Kg	+/-19500	U	P	6630	19500
	Zinc	322	ug/Kg	+/-975	U	P	322	975
	Cadmium	97.5	ug/Kg	+/-487	U	P	97.5	487
	Manganese	195	ug/Kg	+/-975	U	P	195	975
	Magnesium	8280	ug/Kg	+/-29200	U	P	8280	29200
	Lead	244	ug/Kg	+/-975	U	P	244	975
	Iron	7800	ug/Kg	+/-24400	U	P	7800	24400
	Copper	292	ug/Kg	+/-975	U	P	292	975
	Cobalt	146	ug/Kg	+/-487	U	P	146	487
	Chromium	146	ug/Kg	+/-487	U	P	146	487
	Calcium	7800	ug/Kg	+/-24400	U	P	7800	24400
1202053069	Arsenic	0.193	mg/kg	+/-0.967	U	MS	0.193	0.967
	Beryllium	0.0193	mg/kg	+/-0.0967	U	MS	0.0193	0.0967
	Nickel	0.0967	mg/kg	+/-0.387	U	MS	0.0967	0.387
	Selenium	0.484	mg/kg	+/-0.967	U	MS	0.484	0.967
	Thallium	0.058	mg/kg	+/-0.193	U	MS	0.058	0.193
	Uranium	0.0128	mg/kg	+/-0.0387	U	MS	0.0128	0.0387
1202056088	Mercury	4.03	ug/kg	+/-11.9	U	AV	4.03	11.9

METALS
-4-
Interference Check Sample

SDG No: 10-1983-1

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	512000	ug/L	500000	ug/L	103	80.0 – 120.0	19-MAR-10 08:04	031910-1
	Antimony	0.061	ug/L					19-MAR-10 08:04	031910-1
	Barium	0.525	ug/L					19-MAR-10 08:04	031910-1
	Cadmium	0.764	ug/L					19-MAR-10 08:04	031910-1
	Calcium	473000	ug/L	500000	ug/L	94.6	80.0 – 120.0	19-MAR-10 08:04	031910-1
	Chromium	0.655	ug/L					19-MAR-10 08:04	031910-1
	Cobalt	-1.25	ug/L					19-MAR-10 08:04	031910-1
	Copper	2.12	ug/L					19-MAR-10 08:04	031910-1
	Iron	185000	ug/L	200000	ug/L	92.5	80.0 – 120.0	19-MAR-10 08:04	031910-1
	Lead	-10.6	ug/L					19-MAR-10 08:04	031910-1
	Magnesium	488000	ug/L	500000	ug/L	97.7	80.0 – 120.0	19-MAR-10 08:04	031910-1
	Manganese	-2.72	ug/L					19-MAR-10 08:04	031910-1
	Potassium	-190.0	ug/L					19-MAR-10 08:04	031910-1
	Silver	-1.58	ug/L					19-MAR-10 08:04	031910-1
	Sodium	9.4	ug/L					19-MAR-10 08:04	031910-1
	Vanadium	-3.12	ug/L					19-MAR-10 08:04	031910-1
	Zinc	0.975	ug/L					19-MAR-10 08:04	031910-1
ICSAB01									
	Aluminum	514000	ug/L	500000	ug/L	103	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Antimony	542	ug/L	500	ug/L	108	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Barium	492	ug/L	500	ug/L	98.5	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Cadmium	464	ug/L	500	ug/L	92.7	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Calcium	478000	ug/L	500000	ug/L	95.5	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Chromium	486	ug/L	500	ug/L	97.2	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Cobalt	445	ug/L	500	ug/L	89	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Copper	547	ug/L	500	ug/L	110	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Iron	188000	ug/L	200000	ug/L	94	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Lead	451	ug/L	500	ug/L	90.3	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Magnesium	492000	ug/L	500000	ug/L	98.4	80.0 – 120.0	19-MAR-10 08:11	031910-1

METALS

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Interference Check Sample

SDG No: 10-1983-1

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>
	Manganese	476	ug/L	500	ug/L	95.3	80.0 - 120.0	19-MAR-10 08:11	031910-1
	Potassium	5280	ug/L	5000	ug/L	106	80.0 - 120.0	19-MAR-10 08:11	031910-1
	Silver	274	ug/L	250	ug/L	110	80.0 - 120.0	19-MAR-10 08:11	031910-1
	Sodium	5500	ug/L	5000	ug/L	110	80.0 - 120.0	19-MAR-10 08:11	031910-1
	Vanadium	508	ug/L	500	ug/L	102	80.0 - 120.0	19-MAR-10 08:11	031910-1
	Zinc	493	ug/L	500	ug/L	98.5	80.0 - 120.0	19-MAR-10 08:11	031910-1

METALS

-4-

Interference Check Sample

SDG No: 10-1983-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Arsenic	0.502	ug/L					20-APR-10 13:53	100420-2
	Beryllium	0.096	ug/L					20-APR-10 13:53	100420-2
	Nickel	3.04	ug/L					20-APR-10 13:53	100420-2
	Selenium	-0.173	ug/L					20-APR-10 13:53	100420-2
	Thallium	-0.178	ug/L					20-APR-10 13:53	100420-2
	Uranium	-0.004	ug/L					20-APR-10 13:53	100420-2
ICSAB01									
	Arsenic	19.4	ug/L	20	ug/L	97	80.0 - 120.0	20-APR-10 13:56	100420-2
	Beryllium	19.4	ug/L	20	ug/L	97	80.0 - 120.0	20-APR-10 13:56	100420-2
	Nickel	20.0	ug/L	23.31	ug/L	85.6	80.0 - 120.0	20-APR-10 13:56	100420-2
	Selenium	18.9	ug/L	20	ug/L	94.5	80.0 - 120.0	20-APR-10 13:56	100420-2
	Thallium	19.6	ug/L	20	ug/L	98.2	80.0 - 120.0	20-APR-10 13:56	100420-2
	Uranium	19.7	ug/L	20	ug/L	98.4	80.0 - 120.0	20-APR-10 13:56	100420-2

METALS

-5a-

Matrix Spike Summary

SDG NO.	10-1983-1	Client ID	RE15-10-8386S
Contract:	LANL01004	Level:	Low
Matrix:	SOIL	% Solids:	94.6
Sample ID:	247790002	Spike ID:	1202053066

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Aluminum	ug/Kg		7540000		4680000		522000	548	N/A	P
Antimony	ug/Kg	75-125	46700		342	U	52200	89.4		P
Barium	ug/Kg	75-125	115000		59600		52200	106		P
Cadmium	ug/Kg	75-125	49000		104	U	52200	93.6		P
Calcium	ug/Kg	75-125	6270000		1980000		522000	821	N	P
Chromium	ug/Kg	75-125	69200		19100		52200	95.9		P
Cobalt	ug/Kg	75-125	51100		1880		52200	94.3		P
Copper	ug/Kg	75-125	59200		3740		52200	106		P
Iron	ug/Kg		11800000		10800000		522000	196	N/A	P
Lead	ug/Kg	75-125	54000		3930		52200	95.9		P
Magnesium	ug/Kg	75-125	1940000		1150000		522000	151	N	P
Manganese	ug/Kg		277000		228000		52200	94.3	N/A	P
Potassium	ug/Kg	75-125	1510000		869000		522000	123		P
Silver	ug/Kg	75-125	51600		224	J	52200	98.3		P
Sodium	ug/Kg	75-125	917000		342000		522000	110		P
Vanadium	ug/Kg	75-125	64300		11600		52200	101		P
Zinc	ug/Kg	75-125	82600		31800		52200	97.2		P

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1983-1 Client ID RE15-10-8386SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 94.6

Sample ID: 247790002 Spike ID: 1202053067

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Magnesium	ug/Kg	75-125	1850000		1150000		517000	135	N	P
Manganese	ug/Kg		292000		228000		51700	123	N/A	P
Potassium	ug/Kg	75-125	1530000		869000		517000	128	N	P
Silver	ug/Kg	75-125	51400		224	J	51700	99		P
Sodium	ug/Kg	75-125	955000		342000		517000	118		P
Vanadium	ug/Kg	75-125	63200		11600		51700	99.7		P
Zinc	ug/Kg	75-125	85000		31800		51700	103		P
Aluminum	ug/Kg		7130000		4680000		517000	473	N/A	P
Antimony	ug/Kg	75-125	46300		342	U	51700	89.6		P
Barium	ug/Kg	75-125	117000		59600		51700	111		P
Cadmium	ug/Kg	75-125	49200		104	U	51700	95.1		P
Calcium	ug/Kg	75-125	2510000		1980000		517000	102		P
Chromium	ug/Kg	75-125	71200		19100		51700	101		P
Cobalt	ug/Kg	75-125	51300		1880		51700	95.6		P
Copper	ug/Kg	75-125	58900		3740		51700	107		P
Iron	ug/Kg		12500000		10800000		517000	319	N/A	P
Lead	ug/Kg	75-125	54000		3930		51700	96.7		P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1983-1 Client ID RE15-10-8386S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 94.6

Sample ID: 247790002 Spike ID: 1202053072

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Arsenic	mg/kg	75-125	9.2		1.05		8.39	97.1		MS
Beryllium	mg/kg	75-125	4.89		0.481		5.24	84.1		MS
Nickel	mg/kg	75-125	10.5		7.4		5.24	58.9	N	MS
Selenium	mg/kg	75-125	1.83		0.524	U	2.1	84.7		MS
Thallium	mg/kg	75-125	10.5		0.158	J	10.5	98.8		MS
Uranium	mg/kg	75-125	7.89		3.15		5.24	90.3		MS

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1983-1 Client ID RE15-10-8386SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 94.6

Sample ID: 247790002 Spike ID: 1202053073

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Arsenic	mg/kg	75-125	8.46		1.05		8.04	92.1		MS
Beryllium	mg/kg	75-125	4.35		0.481		5.02	77.1		MS
Nickel	mg/kg	75-125	10.4		7.4		5.02	59	N	MS
Selenium	mg/kg	75-125	1.79		0.524	U	2.01	86.1		MS
Thallium	mg/kg	75-125	9.62		0.158	J	10	94.2		MS
Uranium	mg/kg	75-125	7.03		3.15		5.02	77.1		MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1983-1 **Client ID** RE15-10-8317S**Contract:** LANL01004 **Level:** Low**Matrix:** SOIL **% Solids:** 93.7**Sample ID:** 247794001 **Spike ID:** 1202056091

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	146		3.69	U	125	116		AV

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO.	10-1983-1	Client ID	RE15-10-8317SD
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Contract:	LANL01004	Level:	Low
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Matrix:	SOIL	% Solids:	93.7
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Sample ID:	247794001	Spike ID:	1202056093
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Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	140		3.69	U	122	115		AV

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1983-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8386D

Sample ID: 247790002

Duplicate ID: 1202053064

Percent Solids for Dup: 94.6

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20%	4680000		4490000		4.14		P
Antimony	ug/Kg		342 U		339 U				P
Barium	ug/Kg	+/-20%	59600		54200		9.59		P
Cadmium	ug/Kg		104 U		103 U				P
Calcium	ug/Kg	+/-20%	1980000		1780000		10.4		P
Chromium	ug/Kg	+/-20%	19100		18100		5.15		P
Cobalt	ug/Kg	+/-513	1880		1780		5.28		P
Copper	ug/Kg	+/-1030	3740		3570		4.64		P
Iron	ug/Kg	+/-20%	10800000		11600000		7.3		P
Lead	ug/Kg	+/-1030	3930		4220		7.14		P
Magnesium	ug/Kg	+/-20%	1150000		1090000		4.96		P
Manganese	ug/Kg	+/-20%	228000		215000		5.87		P
Potassium	ug/Kg	+/-20%	869000		831000		4.39		P
Silver	ug/Kg	+/-513	224 J		329 J		37.7		P
Sodium	ug/Kg	+/-20%	342000		307000		10.7		P
Vanadium	ug/Kg	+/-20%	11600		12400		6.42		P
Zinc	ug/Kg	+/-20%	31800		33800		6.04		P

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1983-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8386SD

Sample ID: 1202053066

Duplicate ID: 1202053067

Percent Solids for Dup: 94.6

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20	7540000		7130000		5.7		P
Antimony	ug/Kg	+/-20	46700		46300		.814		P
Barium	ug/Kg	+/-20	115000		117000		1.36		P
Cadmium	ug/Kg	+/-20	49000		49200		.518		P
Calcium	ug/Kg	+/-20	6270000		2510000		85.7	*	P
Chromium	ug/Kg	+/-20	69200		71200		2.96		P
Cobalt	ug/Kg	+/-20	51100		51300		.328		P
Copper	ug/Kg	+/-20	59200		58900		.497		P
Iron	ug/Kg	+/-20	11800000		12500000		5.17		P
Lead	ug/Kg	+/-20	54000		54000		.163		P
Magnesium	ug/Kg	+/-20	1940000		1850000		4.75		P
Manganese	ug/Kg	+/-20	277000		292000		5.11		P
Potassium	ug/Kg	+/-20	1510000		1530000		1.25		P
Silver	ug/Kg	+/-20	51600		51400		.331		P
Sodium	ug/Kg	+/-20	917000		955000		4		P
Vanadium	ug/Kg	+/-20	64300		63200		1.79		P
Zinc	ug/Kg	+/-20	82600		85000		2.81		P

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1983-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8386D

Sample ID: 247790002

Duplicate ID: 1202053070

Percent Solids for Dup: 94.6

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-1	1.05		0.768 J		31.1		MS
Beryllium	mg/kg	+/- .1	0.481		0.405		17.1		MS
Nickel	mg/kg	+/-20%	7.4		5.31		32.9	*	MS
Selenium	mg/kg		0.524 U		0.501 U				MS
Thallium	mg/kg		0.158 J		0.0601 U		200		MS
Uranium	mg/kg	+/-20%	3.15		1.81		54.1	*	MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1983-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8386SD

Sample ID: 1202053072

Duplicate ID: 1202053073

Percent Solids for Dup: 94.6

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-20	9.2		8.46		8.43		MS
Beryllium	mg/kg	+/-20	4.89		4.35		11.6		MS
Nickel	mg/kg	+/-20	10.5		10.4		1.19		MS
Selenium	mg/kg	+/-20	1.83		1.79		2.49		MS
Thallium	mg/kg	+/-20	10.5		9.62		8.94		MS
Uranium	mg/kg	+/-20	7.89		7.03		11.5		MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1983-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8317D

Sample ID: 247794001

Duplicate ID: 1202056090

Percent Solids for Dup: 93.7

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg		3.69 U		4.06 U				AV

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1983-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8317SD

Sample ID: 1202056091

Duplicate ID: 1202056093

Percent Solids for Dup: 93.7

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	146		140		3.91		AV

METALS

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Laboratory Control Sample Summary

SDG NO. 10-1983-1

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>
1202053068								
	Aluminum	ug/Kg	10500000	9100000		86.7	56-144	P
	Antimony	ug/Kg	173000	113000		65.5	71-130	P
	Barium	ug/Kg	198000	191000		96.3	80-120	P
	Cadmium	ug/Kg	60700	56500		93.1	81-120	P
	Calcium	ug/Kg	9870000	9820000		99.5	83-117	P
	Chromium	ug/Kg	236000	230000		97.4	80-120	P
	Cobalt	ug/Kg	91200	88600		97.1	81-120	P
	Copper	ug/Kg	174000	178000		102	81-118	P
	Iron	ug/Kg	18000000	18200000		101	51-149	P
	Lead	ug/Kg	86000	83000		96.5	79-121	P
	Manganese	ug/Kg	558000	531000		95.2	81-119	P
	Potassium	ug/Kg	4300000	4120000		95.7	74-127	P
	Silver	ug/Kg	30100	30700		102	66-134	P
	Sodium	ug/Kg	1020000	1010000		99.4	74-127	P
	Vanadium	ug/Kg	115000	120000		104	79-121	P
	Zinc	ug/Kg	594000	560000		94.3	80-121	P
	Magnesium	ug/Kg	4000000	3750000		93.6	79-122	P

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1983-1

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>
1202053074								
	Arsenic	mg/kg	104	109		105	78-123	MS
	Beryllium	mg/kg	77.6	77.9		100	84-116	MS
	Nickel	mg/kg	134	145		108	78-123	MS
	Selenium	mg/kg	286	299		105	77-123	MS
	Thallium	mg/kg	121	126		104	78-122	MS
	Uranium	mg/kg	2.13	2.36		111	73-127	MS

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1983-1

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>
1202056089	Mercury	ug/kg	5150	4980		96.7	71.6-128.3	AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-1983-1 **Client ID** RE15-10-8386L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 247790002 **Serial Dilution ID:** 1202053065

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	45200		44500		1.66		10	P
Antimony	3.3	U	16.5	U				P
Barium	575		590		2.61		10	P
Cadmium	1	U	5	U				P
Calcium	19100		19000		.785		10	P
Chromium	184		189		2.45		10	P
Cobalt	18.2		19	J	4.4			P
Copper	36.1		34.9	J	3.46			P
Iron	104000		107000		2.4		10	P
Lead	37.9		43.5	J	14.6			P
Magnesium	11100		11100		0		10	P
Manganese	2200		2310		4.77		10	P
Potassium	8380		8350		.358		10	P
Silver	2.16	J	5	U	100			P
Sodium	3300		3370		1.97			P
Vanadium	112		114		1.34		10	P
Zinc	307		311		1.3		10	P

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1983-1 Client ID RE15-10-8386L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 247790002 Serial Dilution ID: 1202053071

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	5.01		5	U	100			MS
Beryllium	2.29		2.8		22.1			MS
Nickel	35.3		39.8		12.7			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.752	J	1.5	U	100			MS
Uranium	15		15.3		1.67		10	MS

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1983-1 Client ID RE15-10-8317L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 247794001 Serial Dilution ID: 1202056092

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.068	U	.34	U				AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1983-1

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	957495						
1202053063	MB for batch 957495	MB	S	26-FEB-10	.513g	50mL	
1202053068	LCS for batch 957495	LCS	S	26-FEB-10	.509g	50mL	
1202053066	RE15-10-8386S	MS	S	26-FEB-10	.506g	50mL	
1202053067	RE15-10-8386SD	MSD	S	26-FEB-10	.511g	50mL	
1202053064	RE15-10-8386D	DUP	S	26-FEB-10	.515g	50mL	
247794001	RE15-10-8317	SAMPLE	S	26-FEB-10	.502g	50mL	
247794002	RE15-10-8319	SAMPLE	S	26-FEB-10	.518g	50mL	
247794003	RE15-10-8316	SAMPLE	S	26-FEB-10	.516g	50mL	
247794004	RE15-10-8326	SAMPLE	S	26-FEB-10	.502g	50mL	
247794005	RE15-10-8318	SAMPLE	S	26-FEB-10	.516g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1983-1

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 957497							
1202053069	MB for batch 957497	MB	S	26-FEB-10	.517g	50mL	
1202053074	LCS for batch 957497	LCS	S	26-FEB-10	.503g	50mL	
1202053072	RE15-10-8386S	MS	S	26-FEB-10	.504g	50mL	
1202053073	RE15-10-8386SD	MSD	S	26-FEB-10	.526g	50mL	
1202053070	RE15-10-8386D	DUP	S	26-FEB-10	.528g	50mL	
247794001	RE15-10-8317	SAMPLE	S	26-FEB-10	.508g	50mL	
247794002	RE15-10-8319	SAMPLE	S	26-FEB-10	.525g	50mL	
247794003	RE15-10-8316	SAMPLE	S	26-FEB-10	.519g	50mL	
247794004	RE15-10-8326	SAMPLE	S	26-FEB-10	.52g	50mL	
247794005	RE15-10-8318	SAMPLE	S	26-FEB-10	.515g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1983-1

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	958704						
1202056088	MB for batch 958704	MB	S	06-MAR-10	.506g	30mL	
1202056089	LCS for batch 958704	LCS	S	06-MAR-10	.208g	30mL	
1202056091	RE15-10-8317S	MS	S	06-MAR-10	.512g	30mL	
1202056093	RE15-10-8317SD	MSD	S	06-MAR-10	.526g	30mL	
1202056090	RE15-10-8317D	DUP	S	06-MAR-10	.536g	30mL	
247794001	RE15-10-8317	SAMPLE	S	06-MAR-10	.59g	30mL	
247794002	RE15-10-8319	SAMPLE	S	06-MAR-10	.585g	30mL	
247794003	RE15-10-8316	SAMPLE	S	06-MAR-10	.553g	30mL	
247794004	RE15-10-8326	SAMPLE	S	06-MAR-10	.503g	30mL	
247794005	RE15-10-8318	SAMPLE	S	06-MAR-10	.516g	30mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 19-MAR-10

End Date: 19-MAR-10

Client Sdg: 10-1983-1

Method P

Data File: 031910-1

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	07:10:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S0.1	1	07:17:00		X		X		X		X	X	X		X		X			X		X				X	X
S0.5	1	07:23:00	X	X		X		X	X	X	X	X		X	X	X			X		X				X	X
SCAL	1	07:30:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S10	1	07:37:00	X						X				X		X							X				
ICV01	1	07:43:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICB01	1	07:50:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
PQL01	1	07:57:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSA01	1	08:04:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSAB01	1	08:11:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR01	1	08:18:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR02	1	08:24:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	08:31:00																								
ZZZZZZ	1	08:38:00																								
CCV01	1	08:47:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB01	1	08:54:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR03	1	09:01:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV02	1	09:08:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB02	1	09:15:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	09:29:00																								
ZZZZZZ	1	09:36:00																								
ZZZZZZ	1	09:43:00																								
ZZZZZZ	1	09:49:00																								
ZZZZZZ	20	09:56:00																								
ZZZZZZ	20	10:03:00																								
ZZZZZZ	10	10:11:00																								
CCV03	1	10:18:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
PQL02	1	10:25:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB03	1	10:32:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	10:42:00																								
ZZZZZZ	1	10:49:00																								
ZZZZZZ	1	10:56:00																								
ZZZZZZ	1	11:03:00																								
ZZZZZZ	1	11:10:00																								
ZZZZZZ	1	11:17:00																								
ZZZZZZ	5	11:24:00																								
ZZZZZZ	1	11:31:00																								
CCV04	1	11:38:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB04	1	11:45:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	11:52:00																								

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																								
ZZZZZZ	1	11:59:00																								
ZZZZZZ	1	12:07:00																								
ZZZZZZ	1	12:14:00																								
ZZZZZZ	1	12:21:00																								
ZZZZZZ	1	12:28:00																								
ZZZZZZ	1	12:35:00																								
ZZZZZZ	1	12:42:00																								
CCV05	1	12:49:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X		X	X			
CCB05	1	12:56:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X		X	X			
CCV06	1	13:15:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X		X	X			
CCB06	1	13:22:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X		X	X			
ZZZZZZ	1	13:29:00																								
ZZZZZZ	1	13:36:00																								
ZZZZZZ	1	13:43:00																								
ZZZZZZ	1	13:50:00																								
ZZZZZZ	1	13:56:00																								
ZZZZZZ	1	14:03:00																								
ZZZZZZ	1	14:10:00																								
CCV07	1	14:17:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X		X	X			
CCB07	1	14:24:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X		X	X			
ZZZZZZ	1	14:31:00																								
ZZZZZZ	1	14:38:00																								
ZZZZZZ	1	14:45:00																								
ZZZZZZ	1	14:52:00																								
ZZZZZZ	5	14:59:00																								
ZZZZZZ	1	15:05:00																								
CCV08	1	15:12:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X		X	X			
CCB08	1	15:19:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X		X	X			
1202053063	1	15:27:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X		X	X			
1202053068	1	15:34:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X		X	X			
ZZZZZZ	1	15:41:00																								
1202053064	1	15:48:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X		X	X			
1202053066	1	15:55:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X		X	X			
1202053067	1	16:02:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X		X	X			
1202053065	5	16:09:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X		X	X			
CCV09	1	16:16:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X		X	X			
CCB09	1	16:23:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X		X	X			
ZZZZZZ	1	16:30:00																								
247794001	1	16:38:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X		X	X			
247794002	1	16:45:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X		X	X			

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
247794003	1	16:52:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
247794004	1	16:59:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
247794005	1	17:06:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV10	1	17:13:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB10	1	17:20:00	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: HG3

Start Date: 08-MAR-10

End Date: 08-MAR-10

Client Sdg: 10-1983-1

Method: AV

Data File: 030810S1-5

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	Ti	U	V	Zn
S0.0	1	09:09:00															X									
S0.2	1	09:11:00															X									
S0.5	1	09:13:00															X									
S2.0	1	09:14:00															X									
S5.0	1	09:16:00															X									
S10.0	1	09:18:00															X									
ICV01	1	09:19:00															X									
ICB01	1	09:21:00															X									
CRDL01	1	09:23:00															X									
CCV01	1	09:24:00															X									
CCB01	1	09:26:00															X									
ZZZZZZ	1	09:28:00																								
ZZZZZZ	10	09:29:00																								
ZZZZZZ	1	09:31:00																								
ZZZZZZ	1	09:33:00																								
ZZZZZZ	1	09:34:00																								
ZZZZZZ	1	09:36:00																								
ZZZZZZ	5	09:38:00																								
ZZZZZZ	1	09:39:00																								
ZZZZZZ	1	09:41:00																								
ZZZZZZ	1	09:43:00																								
CCV02	1	09:44:00															X									
CCB02	1	09:46:00															X									
ZZZZZZ	1	09:48:00																								
ZZZZZZ	1	09:49:00																								
ZZZZZZ	1	09:51:00																								
ZZZZZZ	1	09:53:00																								
ZZZZZZ	1	09:54:00																								
ZZZZZZ	1	09:56:00																								
ZZZZZZ	1	09:58:00																								
ZZZZZZ	1	09:59:00																								
ZZZZZZ	1	10:01:00																								
ZZZZZZ	1	10:03:00																								
CCV03	1	10:04:00															X									
CCB03	1	10:06:00															X									
ZZZZZZ	1	10:08:00																								
ZZZZZZ	1	10:09:00																								
ZZZZZZ	1	10:11:00																								
ZZZZZZ	1	10:13:00																								
ZZZZZZ	10	10:15:00																								

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time
ZZZZZZ	1	10:16:00
ZZZZZZ	1	10:18:00
ZZZZZZ	1	10:20:00
ZZZZZZ	1	10:21:00
ZZZZZZ	5	10:23:00
CCV04	1	10:25:00
CCB04	1	10:26:00
ZZZZZZ	1	10:28:00
ZZZZZZ	1	10:30:00
ZZZZZZ	1	10:31:00
ZZZZZZ	1	10:33:00
ZZZZZZ	1	10:35:00
ZZZZZZ	1	10:36:00
ZZZZZZ	1	10:38:00
ZZZZZZ	1	10:40:00
ZZZZZZ	1	10:41:00
ZZZZZZ	1	10:43:00
CCV05	1	10:45:00
CCB05	1	10:46:00
ZZZZZZ	1	10:48:00
ZZZZZZ	1	10:50:00
ZZZZZZ	1	10:51:00
ZZZZZZ	1	10:53:00
ZZZZZZ	1	10:55:00
ZZZZZZ	1	10:56:00
ZZZZZZ	1	10:58:00
ZZZZZZ	1	11:00:00
1202056088	1	11:01:00
1202056089	10	11:03:00
CCV06	1	11:05:00
CCB06	1	11:07:00
247794001	1	11:08:00
1202056090	1	11:10:00
1202056091	1	11:12:00
1202056093	1	11:13:00
1202056092	5	11:15:00
247794002	1	11:17:00
247794003	1	11:18:00
247794004	1	11:20:00
247794005	1	11:22:00

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	11:23:00																								
CCV07	1	11:25:00															X									
CCB07	1	11:27:00															X									

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS3

Start Date: 20-APR-10

Client Sdg: 10-1983-1

Method MS

Data File: 100420-2

End Date: 20-APR-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	13:33:00			X		X											X	X				X	X		
S10	1	13:36:00			X		X											X	X				X	X		
S100	1	13:40:00			X		X											X	X				X	X		
ICV01	1	13:43:00			X		X											X	X				X	X		
ICB01	1	13:46:00			X		X											X	X				X	X		
CRDL01	1	13:50:00			X		X											X	X				X	X		
ICSA01	1	13:53:00			X		X											X	X				X	X		
ICSAB01	1	13:56:00			X		X											X	X				X	X		
CCV01	1	14:00:00			X		X											X	X				X	X		
CCB01	1	14:03:00			X		X											X	X				X	X		
1202053069	2	14:06:00			X		X											X	X				X	X		
1202053074	40	14:10:00			X		X											X	X				X	X		
ZZZZZZ	2	14:13:00																								
1202053070	2	14:16:00			X		X											X	X				X	X		
1202053072	2	14:20:00			X		X											X	X				X	X		
1202053073	2	14:23:00			X		X											X	X				X	X		
1202053071	10	14:27:00			X		X											X	X				X	X		
CCV02	1	14:30:00			X		X											X	X				X	X		
CCB02	1	14:33:00			X		X											X	X				X	X		
ZZZZZZ	2	14:37:00																								
247794001	2	14:40:00			X		X											X	X				X	X		
247794002	2	14:43:00			X		X											X	X				X	X		
247794003	2	14:47:00			X		X											X	X				X	X		
247794004	2	14:50:00			X		X											X	X				X	X		
247794005	2	14:54:00			X		X											X	X				X	X		
CCV03	1	14:57:00			X		X											X	X				X	X		
CCB03	1	15:00:00			X		X											X	X				X	X		

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1983-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP/MS	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
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. 10-1983-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 15-JUN-09

		<u>Wavelength</u> (nm)	<u>MDL</u> ug/L	<u>RDL</u> ug/L
MERCURY	<u>Analyte</u>			
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1983-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u> (nm)	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1983-1**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
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: **10-1983-1**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	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: 10-1983-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	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: GEL

GEL Job No: 10-1983-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silica
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: 10-1983-1

Contract: LANI.01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silicon	Silver	Strontium	Sulfur	Thallium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	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	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1983-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Tin	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-15.4932	3.30431	0.00000	-2.81282	0.00000
Arsenic	188.979	0.00000	-8.66313	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	-2.20293	0.00000
Beryllium	313.107	0.00000	-2.27027	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	-0.19473	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.39645	-1.41250	0.00000
Cobalt	228.616	0.00000	2.09497	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.55360	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	-9.37529	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	0.81635	-4.04400	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	-8.29801	0.00000	1.88584	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.43915	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	1.05947	-1.91382	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Linear Ranges

SDG NO. 10-1983-1

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>
Thallium	20	10000	ug/L	01-FEB-10
Uranium	20	15000	ug/L	01-FEB-10
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10
Aluminum	20	500000	ug/L	01-FEB-10
Antimony	20	10000	ug/L	01-FEB-10
Arsenic	20	10000	ug/L	01-FEB-10
Barium	20	15000	ug/L	01-FEB-10
Beryllium	20	3000	ug/L	01-FEB-10
Cadmium	20	10000	ug/L	01-FEB-10
Calcium	20	500000	ug/L	01-FEB-10
Chromium	20	25000	ug/L	01-FEB-10
Cobalt	20	10000	ug/L	01-FEB-10
Copper	20	20000	ug/L	01-FEB-10
Iron	20	500000	ug/L	01-FEB-10
Lead	20	25000	ug/L	01-FEB-10
Magnesium	20	500000	ug/L	01-FEB-10
Manganese	20	10000	ug/L	01-FEB-10
Nickel	20	10000	ug/L	01-FEB-10
Potassium	20	300000	ug/L	01-FEB-10
Selenium	20	10000	ug/L	01-FEB-10
Silver	20	1000	ug/L	01-FEB-10
Sodium	20	500000	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-1983-1

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS3

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	1	50000	ug/L	01-FEB-10
Antimony	1000	250	ug/L	01-FEB-10
Arsenic	1000	1000	ug/L	01-FEB-10
Barium	1000	1000	ug/L	01-FEB-10
Beryllium	1000	1000	ug/L	01-FEB-10
Cadmium	1000	1000	ug/L	01-FEB-10
Calcium	500	50000	ug/L	01-FEB-10
Chromium	1000	1000	ug/L	01-FEB-10
Cobalt	1000	1000	ug/L	01-FEB-10
Copper	1000	1000	ug/L	01-FEB-10
Iron	500	50000	ug/L	01-FEB-10
Lead	1000	5000	ug/L	01-FEB-10
Magnesium	1	50000	ug/L	01-FEB-10
Manganese	1000	1000	ug/L	01-FEB-10
Nickel	1000	1000	ug/L	01-FEB-10
Potassium	1	50000	ug/L	01-FEB-10
Selenium	1000	500	ug/L	01-FEB-10
Silver	1000	250	ug/L	01-FEB-10
Sodium	1	50000	ug/L	01-FEB-10
Thallium	1000	500	ug/L	01-FEB-10
Uranium	1000	5000	ug/L	01-FEB-10
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10

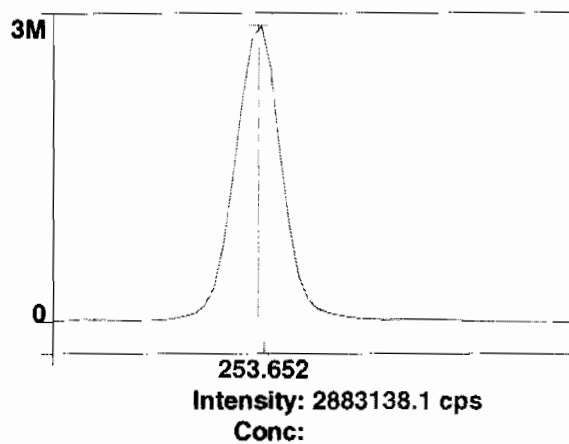
Raw Data

Method: Hg_ReAlign
Result: 042010

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



1

3/19/2010 06:54:45 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): -0.000 Slit adjustment: 0

Analysis Begun

Start Time: 3/19/2010 07:10:13 Plasma On Time: 3/15/2010 06:51:19
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\031910.sif
Batch ID:
Results Data Set: 031910
Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded

Method Name: General Eng.2AX
IEC File: 011110.iec
Method Description:

Method Last Saved: 3/18/2010 18:42:02
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: 3/19/2010 07:10:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0

Net	Corrected	Calib.	Analysis
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Repl#	Analyte	Intensity	Intensity	Conc. Units	Time
1	Sc Radial	4353.7	4353.7	0.000 %	07:12:08
1	Y RADIAL	4701.2	4701.2	0.000 %	07:12:08
1	Al 396.153Radial†	-70.7	-71.4	[0.00] ug/L	07:12:28
1	Ca 317.933Radial†	17.3	17.5	[0.00] ug/L	07:12:28
1	Fe 238.204 Radial†	9.7	9.8	[0.00] ug/L	07:12:28
1	K 766.490 Radial†	2594.9	2619.5	[0.00] ug/L	07:12:08
1	Mg 279.077 IEC†	0.4	0.4	[0.00] ug/L	07:12:28
1	Na 589.592 Radial†	-880.1	-888.4	[0.00] ug/L	07:12:08
1	Sr 421.552†	28.7	28.9	[0.00] ug/L	07:12:08
1	Sc 361.383	813923.1	813923.1	0.0000 %	07:13:24
1	Y 371.029	687856.7	687856.7	0.0000 %	07:13:24
1	Ag 328.068†	163.2	164.2	[0.00] ug/L	07:13:24
1	As 188.979†	-27.2	-27.4	[0.00] ug/L	07:13:44
1	B 249.677†	-533.0	-536.2	[0.00] ug/L	07:13:44
1	Ba 233.527†	-6.3	-6.3	[0.00] ug/L	07:13:44
1	Be 313.107†	-3672.2	-3694.3	[0.00] ug/L	07:13:24
1	Cd 226.502†	-177.2	-178.3	[0.00] ug/L	07:13:44
1	Co 228.616†	-39.2	-39.4	[0.00] ug/L	07:13:44
1	Cr 267.716†	70.5	70.9	[0.00] ug/L	07:13:44
1	Cu 324.752†	5494.6	5527.6	[0.00] ug/L	07:13:24
1	Mn 257.610†	391.2	393.5	[0.00] ug/L	07:13:44
1	Mo 202.031†	4.3	4.3	[0.00] ug/L	07:13:44
1	Ni 231.604†	78.3	78.8	[0.00] ug/L	07:13:44
1	P 214.914†	181.5	182.6	[0.00] ug/L	07:13:44
1	Pb 220.353†	-56.8	-57.2	[0.00] ug/L	07:13:44
1	S 181.975 Axial†	28.5	28.7	[0.00] ug/L	07:13:44
1	Sb 206.836†	27.2	27.4	[0.00] ug/L	07:13:44
1	Se 196.026†	-14.5	-14.6	[0.00] ug/L	07:13:44
1	Si 251.611†	480.1	483.0	[0.00] ug/L	07:13:44
1	Sn 189.927†	11.1	11.2	[0.00] ug/L	07:13:44
1	Ti 334.940†	-1120.6	-1127.3	[0.00] ug/L	07:13:24
1	Tl 190.801†	-33.9	-34.1	[0.00] ug/L	07:13:44
1	U 409.014†	-2254.8	-2268.4	[0.00] ug/L	07:13:24
1	V 292.402†	-1344.0	-1352.1	[0.00] ug/L	07:13:24
1	Zn 213.857†	561.6	565.0	[0.00] ug/L	07:13:44
1	SiO2†	511.8	514.9	[0.00] ug/L	07:14:55
2	Sc Radial	4414.0	4414.0	0.000 %	07:12:33
2	Y RADIAL	4778.8	4778.8	0.000 %	07:12:33
2	Al 396.153Radial†	-78.8	-78.5	[0.00] ug/L	07:12:53
2	Ca 317.933Radial†	16.9	16.9	[0.00] ug/L	07:12:53
2	Fe 238.204 Radial†	7.2	7.2	[0.00] ug/L	07:12:53
2	K 766.490 Radial†	2539.4	2528.4	[0.00] ug/L	07:12:33
2	Mg 279.077 IEC†	1.1	1.0	[0.00] ug/L	07:12:53
2	Na 589.592 Radial†	-865.3	-861.6	[0.00] ug/L	07:12:33
2	Sr 421.552†	13.8	13.7	[0.00] ug/L	07:12:33
2	Sc 361.383	820260.9	820260.9	0.0000 %	07:13:50
2	Y 371.029	692610.2	692610.2	0.0000 %	07:13:50
2	Ag 328.068†	188.4	188.1	[0.00] ug/L	07:13:50
2	As 188.979†	-24.0	-23.9	[0.00] ug/L	07:14:10
2	B 249.677†	-538.2	-537.3	[0.00] ug/L	07:14:10
2	Ba 233.527†	-4.3	-4.3	[0.00] ug/L	07:14:10
2	Be 313.107†	-3734.7	-3728.2	[0.00] ug/L	07:13:50
2	Cd 226.502†	-161.4	-161.2	[0.00] ug/L	07:14:10
2	Co 228.616†	-38.5	-38.4	[0.00] ug/L	07:14:10
2	Cr 267.716†	73.2	73.0	[0.00] ug/L	07:14:10
2	Cu 324.752†	5607.8	5597.9	[0.00] ug/L	07:13:50
2	Mn 257.610†	387.1	386.5	[0.00] ug/L	07:14:10
2	Mo 202.031†	6.2	6.2	[0.00] ug/L	07:14:10
2	Ni 231.604†	95.9	95.7	[0.00] ug/L	07:14:10
2	P 214.914†	197.1	196.7	[0.00] ug/L	07:14:10
2	Pb 220.353†	-49.7	-49.6	[0.00] ug/L	07:14:10
2	S 181.975 Axial†	30.2	30.2	[0.00] ug/L	07:14:10
2	Sb 206.836†	22.6	22.5	[0.00] ug/L	07:14:10
2	Se 196.026†	-17.3	-17.3	[0.00] ug/L	07:14:10
2	Si 251.611†	500.7	499.8	[0.00] ug/L	07:14:10
2	Sn 189.927†	4.3	4.3	[0.00] ug/L	07:14:10
2	Ti 334.940†	-1112.7	-1110.8	[0.00] ug/L	07:13:50
2	Tl 190.801†	-27.8	-27.8	[0.00] ug/L	07:14:10
2	U 409.014†	-2181.2	-2177.4	[0.00] ug/L	07:13:50
2	V 292.402†	-1308.1	-1305.8	[0.00] ug/L	07:13:50

2	Zn 213.857†	572.4	571.4	[0.00]	ug/L	07:14:10
2	SiO2†	481.0	480.2	[0.00]	ug/L	07:15:15
3	Sc Radial	4417.5	4417.5	0.000	%	07:12:58
3	Y RADIAL	4801.7	4801.7	0.000	%	07:12:58
3	Al 396.153Radial†	-84.8	-84.4	[0.00]	ug/L	07:13:18
3	Ca 317.933Radial†	12.8	12.8	[0.00]	ug/L	07:13:18
3	Fe 238.204 Radial†	8.5	8.4	[0.00]	ug/L	07:13:18
3	K 766.490 Radial†	2661.8	2648.3	[0.00]	ug/L	07:12:58
3	Mg 279.077 IEC†	3.1	3.1	[0.00]	ug/L	07:13:18
3	Na 589.592 Radial†	-879.8	-875.3	[0.00]	ug/L	07:12:58
3	Sr 421.552†	19.9	19.8	[0.00]	ug/L	07:12:58
3	Sc 361.383	822290.3	822290.3	0.0000	%	07:14:15
3	Y 371.029	694473.4	694473.4	0.0000	%	07:14:15
3	Ag 328.068†	204.0	203.1	[0.00]	ug/L	07:14:15
3	As 188.979†	-29.2	-29.1	[0.00]	ug/L	07:14:35
3	B 249.677†	-540.9	-538.6	[0.00]	ug/L	07:14:35
3	Ba 233.527†	8.5	8.5	[0.00]	ug/L	07:14:35
3	Be 313.107†	-3786.6	-3770.6	[0.00]	ug/L	07:14:15
3	Cd 226.502†	-173.2	-172.5	[0.00]	ug/L	07:14:35
3	Co 228.616†	-61.1	-60.8	[0.00]	ug/L	07:14:35
3	Cr 267.716†	70.8	70.5	[0.00]	ug/L	07:14:35
3	Cu 324.752†	5553.8	5530.4	[0.00]	ug/L	07:14:15
3	Mn 257.610†	388.8	387.2	[0.00]	ug/L	07:14:35
3	Mo 202.031†	15.1	15.1	[0.00]	ug/L	07:14:35
3	Ni 231.604†	78.0	77.7	[0.00]	ug/L	07:14:35
3	P 214.914†	183.3	182.6	[0.00]	ug/L	07:14:35
3	Pb 220.353†	-68.4	-68.2	[0.00]	ug/L	07:14:35
3	S 181.975 Axial†	31.8	31.7	[0.00]	ug/L	07:14:35
3	Sb 206.836†	21.2	21.1	[0.00]	ug/L	07:14:35
3	Se 196.026†	-19.1	-19.0	[0.00]	ug/L	07:14:35
3	Si 251.611†	483.8	481.8	[0.00]	ug/L	07:14:35
3	Sn 189.927†	6.0	6.0	[0.00]	ug/L	07:14:35
3	Ti 334.940†	-1130.3	-1125.5	[0.00]	ug/L	07:14:15
3	Tl 190.801†	-25.5	-25.4	[0.00]	ug/L	07:14:35
3	U 409.014†	-2176.0	-2166.9	[0.00]	ug/L	07:14:15
3	V 292.402†	-1299.9	-1294.4	[0.00]	ug/L	07:14:15
3	Zn 213.857†	576.3	573.9	[0.00]	ug/L	07:14:35
3	SiO2†	505.1	502.9	[0.00]	ug/L	07:15:35

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	818824.8	4364.54	0.53%	0.0000	%
Sc Radial	4395.1	35.85	0.82%	0.000	%
Y 371.029	691646.8	3411.92	0.49%	0.0000	%
Y RADIAL	4760.6	52.66	1.11%	0.000	%
Ag 328.068†	185.1	19.62	10.60%	[0.00]	ug/L
Al 396.153Radial†	-78.1	6.49	8.31%	[0.00]	ug/L
As 188.979†	-26.8	2.63	9.80%	[0.00]	ug/L
B 249.677†	-537.4	1.22	0.23%	[0.00]	ug/L
Ba 233.527†	-0.7	8.03	>999.9%	[0.00]	ug/L
Be 313.107†	-3731.0	38.23	1.02%	[0.00]	ug/L
Ca 317.933Radial†	15.7	2.56	16.28%	[0.00]	ug/L
Cd 226.502†	-170.6	8.70	5.10%	[0.00]	ug/L
Co 228.616†	-46.2	12.65	27.38%	[0.00]	ug/L
Cr 267.716†	71.5	1.34	1.87%	[0.00]	ug/L
Cu 324.752†	5552.0	39.81	0.72%	[0.00]	ug/L
Fe 238.204 Radial†	8.5	1.30	15.32%	[0.00]	ug/L
K 766.490 Radial†	2598.8	62.57	2.41%	[0.00]	ug/L
Mg 279.077 IEC†	1.5	1.42	93.27%	[0.00]	ug/L
Mn 257.610†	389.1	3.91	1.00%	[0.00]	ug/L
Mo 202.031†	8.5	5.74	67.28%	[0.00]	ug/L
Na 589.592 Radial†	-875.1	13.40	1.53%	[0.00]	ug/L
Ni 231.604†	84.1	10.11	12.03%	[0.00]	ug/L
P 214.914†	187.3	8.17	4.36%	[0.00]	ug/L
Pb 220.353†	-58.3	9.33	16.01%	[0.00]	ug/L
S 181.975 Axial†	30.2	1.49	4.94%	[0.00]	ug/L
Sb 206.836†	23.7	3.28	13.84%	[0.00]	ug/L
Se 196.026†	-17.0	2.24	13.19%	[0.00]	ug/L
Si 251.611†	488.2	10.08	2.06%	[0.00]	ug/L

Sn 189.927†	7.2	3.58	49.92%	[0.00]	ug/L
Sr 421.552†	20.8	7.65	36.76%	[0.00]	ug/L
Ti 334.940†	-1121.2	9.07	0.81%	[0.00]	ug/L
Tl 190.801†	-29.1	4.53	15.58%	[0.00]	ug/L
U 409.014†	-2204.2	55.80	2.53%	[0.00]	ug/L
V 292.402†	-1317.4	30.53	2.32%	[0.00]	ug/L
Zn 213.857†	570.1	4.60	0.81%	[0.00]	ug/L
SiO2†	499.3	17.63	3.53%	[0.00]	ug/L

Sequence No.: 2
 Sample ID: S0.1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 3/19/2010 07:17:46
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	4299.2	4299.2	97.8 %		07:19:44
1	Y RADIAL	4673.1	4673.1	98.16 %		07:19:44
1	K 766.490 Radial†	7813.6	5389.1	[1000] ug/L		07:19:39
1	Sr 421.552†	12088.1	12336.8	[100] ug/L		07:19:44
1	Sc 361.383	819565.4	819565.4	100.09 %		07:20:11
1	Y 371.029	689971.2	689971.2	99.758 %		07:20:11
1	Ag 328.068†	19793.2	19590.2	[100] ug/L		07:20:11
1	As 188.979†	168.5	195.1	[100] ug/L		07:20:31
1	B 249.677†	2888.3	3423.0	[100] ug/L		07:20:11
1	Ba 233.527†	10948.2	10939.0	[100] ug/L		07:20:11
1	Be 313.107†	234967.8	238486.5	[100] ug/L		07:20:11
1	Cd 226.502†	6701.2	6865.8	[100] ug/L		07:20:31
1	Co 228.616†	3917.8	3960.4	[100] ug/L		07:20:31
1	Cr 267.716†	7686.1	7607.7	[100] ug/L		07:20:11
1	Cu 324.752†	36199.8	30615.1	[100] ug/L		07:20:11
1	Mn 257.610†	79100.7	78640.2	[100] ug/L		07:20:11
1	Mo 202.031†	1143.2	1133.6	[100] ug/L		07:20:31
1	Ni 231.604†	3285.2	3198.1	[100] ug/L		07:20:31
1	P 214.914†	856.5	668.4	[500] ug/L		07:20:31
1	Pb 220.353†	619.7	677.4	[100] ug/L		07:20:31
1	S 181.975 Axial†	142.1	111.8	[200] ug/L		07:20:31
1	Sb 206.836†	263.5	239.6	[100] ug/L		07:20:31
1	Se 196.026†	105.0	121.8	[100] ug/L		07:20:31
1	Si 251.611†	13768.7	13268.1	[500] ug/L		07:20:11
1	Sn 189.927†	444.8	437.2	[100] ug/L		07:20:31
1	Ti 334.940†	56944.7	58014.5	[100] ug/L		07:20:11
1	Tl 190.801†	236.6	265.5	[100] ug/L		07:20:31
1	U 409.014†	1277.7	3480.8	[100] ug/L		07:20:11
1	V 292.402†	11266.0	12573.2	[100] ug/L		07:20:11
1	Zn 213.857†	8992.7	8414.5	[100] ug/L		07:20:11
1	SiO2†	13699.9	13188.2	[1069.5] ug/L		07:21:27
2	Sc Radial	4351.7	4351.7	99.0 %		07:19:54
2	Y RADIAL	4736.2	4736.2	99.49 %		07:19:54
2	K 766.490 Radial†	7639.5	5116.9	[1000] ug/L		07:19:49
2	Sr 421.552†	12186.1	12286.7	[100] ug/L		07:19:54
2	Sc 361.383	806559.5	806559.5	98.502 %		07:20:36
2	Y 371.029	679008.4	679008.4	98.173 %		07:20:36
2	Ag 328.068†	19410.1	19520.1	[100] ug/L		07:20:36
2	As 188.979†	160.0	189.2	[100] ug/L		07:20:57
2	B 249.677†	2853.4	3434.1	[100] ug/L		07:20:36
2	Ba 233.527†	10778.3	10943.0	[100] ug/L		07:20:36
2	Be 313.107†	231279.8	238527.9	[100] ug/L		07:20:36
2	Cd 226.502†	6685.7	6958.0	[100] ug/L		07:20:57
2	Co 228.616†	3912.0	4017.7	[100] ug/L		07:20:57
2	Cr 267.716†	7564.8	7608.4	[100] ug/L		07:20:36
2	Cu 324.752†	35581.8	30570.9	[100] ug/L		07:20:36
2	Mn 257.610†	77938.0	78734.1	[100] ug/L		07:20:36
2	Mo 202.031†	1144.1	1152.9	[100] ug/L		07:20:57
2	Ni 231.604†	3297.2	3263.3	[100] ug/L		07:20:57
2	P 214.914†	848.3	673.9	[500] ug/L		07:20:57
2	Pb 220.353†	620.7	688.5	[100] ug/L		07:20:57
2	S 181.975 Axial†	146.4	118.4	[200] ug/L		07:20:57
2	Sb 206.836†	264.3	244.6	[100] ug/L		07:20:57
2	Se 196.026†	107.5	126.1	[100] ug/L		07:20:57
2	Si 251.611†	13541.3	13259.0	[500] ug/L		07:20:36
2	Sn 189.927†	446.3	445.9	[100] ug/L		07:20:57
2	Ti 334.940†	56083.7	58057.7	[100] ug/L		07:20:36
2	Tl 190.801†	232.7	265.4	[100] ug/L		07:20:57
2	U 409.014†	1337.0	3561.5	[100] ug/L		07:20:36

2	V 292.402†	11053.6	12539.2	[100]	ug/L	07:20:36
2	Zn 213.857†	8858.1	8422.7	[100]	ug/L	07:20:36
2	SiO2†	13722.0	13431.3	[1069.5]	ug/L	07:21:32
3	Sc Radial	4298.2	4298.2	97.8	%	07:20:04
3	Y RADIAL	4680.6	4680.6	98.32	%	07:20:04
3	K 766.490 Radial†	7824.1	5401.6	[1000]	ug/L	07:19:59
3	Sr 421.552†	12067.8	12318.9	[100]	ug/L	07:20:04
3	Sc 361.383	819475.4	819475.4	100.08	%	07:21:02
3	Y 371.029	690004.4	690004.4	99.763	%	07:21:02
3	Ag 328.068†	19783.4	19582.5	[100]	ug/L	07:21:02
3	As 188.979†	160.2	186.9	[100]	ug/L	07:21:22
3	B 249.677†	2918.4	3453.5	[100]	ug/L	07:21:02
3	Ba 233.527†	10967.6	10959.6	[100]	ug/L	07:21:02
3	Be 313.107†	234959.9	238504.4	[100]	ug/L	07:21:02
3	Cd 226.502†	6644.2	6809.6	[100]	ug/L	07:21:22
3	Co 228.616†	3875.7	3918.8	[100]	ug/L	07:21:22
3	Cr 267.716†	7681.2	7603.6	[100]	ug/L	07:21:02
3	Cu 324.752†	36243.6	30662.8	[100]	ug/L	07:21:02
3	Mn 257.610†	79237.9	78785.9	[100]	ug/L	07:21:02
3	Mo 202.031†	1142.7	1133.3	[100]	ug/L	07:21:22
3	Ni 231.604†	3256.6	3170.0	[100]	ug/L	07:21:22
3	P 214.914†	855.5	667.5	[500]	ug/L	07:21:22
3	Pb 220.353†	594.6	652.4	[100]	ug/L	07:21:22
3	S 181.975 Axial†	141.7	111.4	[200]	ug/L	07:21:22
3	Sb 206.836†	256.8	232.9	[100]	ug/L	07:21:22
3	Se 196.026†	97.7	114.6	[100]	ug/L	07:21:22
3	Si 251.611†	13838.2	13339.0	[500]	ug/L	07:21:02
3	Sn 189.927†	447.8	440.3	[100]	ug/L	07:21:22
3	Ti 334.940†	57007.2	58083.1	[100]	ug/L	07:21:02
3	Tl 190.801†	233.6	262.6	[100]	ug/L	07:21:22
3	U 409.014†	1393.7	3596.8	[100]	ug/L	07:21:02
3	V 292.402†	11249.5	12558.0	[100]	ug/L	07:21:02
3	Zn 213.857†	9030.1	8452.9	[100]	ug/L	07:21:02
3	SiO2†	13379.9	12869.9	[1069.5]	ug/L	07:21:37

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	815200.1	7483.11	0.92%	99.557	%
Sc Radial	4316.4	30.60	0.71%	98.2	%
Y 371.029	686328.0	6339.00	0.92%	99.231	%
Y RADIAL	4696.6	34.45	0.73%	98.66	%
Ag 328.068†	19564.3	38.44	0.20%	[100]	ug/L
As 188.979†	190.4	4.23	2.22%	[100]	ug/L
B 249.677†	3436.9	15.41	0.45%	[100]	ug/L
Ba 233.527†	10947.2	10.95	0.10%	[100]	ug/L
Be 313.107†	238506.3	20.75	0.01%	[100]	ug/L
Cd 226.502†	6877.8	74.92	1.09%	[100]	ug/L
Co 228.616†	3965.6	49.63	1.25%	[100]	ug/L
Cr 267.716†	7606.6	2.55	0.03%	[100]	ug/L
Cu 324.752†	30616.3	45.95	0.15%	[100]	ug/L
K 766.490 Radial†	5302.5	160.89	3.03%	[1000]	ug/L
Mn 257.610†	78720.1	73.87	0.09%	[100]	ug/L
Mo 202.031†	1139.9	11.27	0.99%	[100]	ug/L
Ni 231.604†	3210.5	47.86	1.49%	[100]	ug/L
P 214.914†	670.0	3.47	0.52%	[500]	ug/L
Pb 220.353†	672.8	18.46	2.74%	[100]	ug/L
S 181.975 Axial†	113.9	3.97	3.49%	[200]	ug/L
Sb 206.836†	239.0	5.88	2.46%	[100]	ug/L
Se 196.026†	120.8	5.83	4.83%	[100]	ug/L
Si 251.611†	13288.7	43.81	0.33%	[500]	ug/L
Sn 189.927†	441.1	4.43	1.00%	[100]	ug/L
Sr 421.552†	12314.1	25.41	0.21%	[100]	ug/L
Ti 334.940†	58051.8	34.72	0.06%	[100]	ug/L
Tl 190.801†	264.5	1.66	0.63%	[100]	ug/L
U 409.014†	3546.4	59.46	1.68%	[100]	ug/L
V 292.402†	12556.8	17.06	0.14%	[100]	ug/L
Zn 213.857†	8430.0	20.23	0.24%	[100]	ug/L
SiO2†	13163.2	281.55	2.14%	[1069.5]	ug/L

Sequence No.: 3
 Sample ID: S0.5
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 3/19/2010 07:23:48
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	4176.8	4176.8	95.0	%	07:26:01
1	Y RADIAL	4651.6	4651.6	97.71	%	07:25:41
1	Al 396.153Radial†	4914.3	5249.1	[5000]	ug/L	07:25:41
1	Ca 317.933Radial†	2634.9	2756.9	[5000]	ug/L	07:26:01
1	K 766.490 Radial†	28253.2	27130.7	[5000]	ug/L	07:25:41
1	Mg 279.077 IEC†	121.5	126.4	[5000]	ug/L	07:26:01
1	Sr 421.552†	60226.2	63352.3	[500]	ug/L	07:25:41
1	Sc 361.383	821637.6	821637.6	100.34	%	07:26:58
1	Y 371.029	685019.0	685019.0	99.042	%	07:26:58
1	Ag 328.068†	98692.4	98169.4	[500]	ug/L	07:27:03
1	As 188.979†	887.8	911.5	[500]	ug/L	07:27:23
1	B 249.677†	17522.6	18000.0	[500]	ug/L	07:27:03
1	Ba 233.527†	54446.1	54260.5	[500]	ug/L	07:27:03
1	Be 313.107†	1185449.4	1185122.2	[500]	ug/L	07:26:58
1	Cd 226.502†	35110.5	35160.9	[500]	ug/L	07:27:03
1	Co 228.616†	20009.0	19986.7	[500]	ug/L	07:27:03
1	Cr 267.716†	38103.4	37901.5	[500]	ug/L	07:27:03
1	Cu 324.752†	159261.1	153163.9	[500]	ug/L	07:27:03
1	Mn 257.610†	382996.5	381296.3	[500]	ug/L	07:26:58
1	Mo 202.031†	5661.9	5634.0	[500]	ug/L	07:27:23
1	Ni 231.604†	16362.9	16222.8	[500]	ug/L	07:27:03
1	P 214.914†	3554.2	3354.8	[2500]	ug/L	07:27:23
1	Pb 220.353†	3215.7	3263.0	[500]	ug/L	07:27:23
1	S 181.975 Axial†	589.7	557.5	[1000]	ug/L	07:27:23
1	Sb 206.836†	1218.1	1190.2	[500]	ug/L	07:27:23
1	Se 196.026†	576.1	591.1	[500]	ug/L	07:27:23
1	Si 251.611†	67712.5	66992.5	[2500]	ug/L	07:27:03
1	Sn 189.927†	2220.6	2205.8	[500]	ug/L	07:27:23
1	Ti 334.940†	286976.2	287114.9	[500]	ug/L	07:27:03
1	Tl 190.801†	1277.6	1302.4	[500]	ug/L	07:27:23
1	U 409.014†	14882.9	17036.1	[500]	ug/L	07:27:03
1	V 292.402†	62512.7	63616.1	[500]	ug/L	07:27:03
1	Zn 213.857†	42904.3	42187.4	[500]	ug/L	07:27:03
1	SiO2†	66118.3	65392.6	[5347.5]	ug/L	07:28:31
2	Sc Radial	4187.9	4187.9	95.3	%	07:26:26
2	Y RADIAL	4622.9	4622.9	97.11	%	07:26:06
2	Al 396.153Radial†	4898.9	5219.3	[5000]	ug/L	07:26:06
2	Ca 317.933Radial†	2632.3	2746.8	[5000]	ug/L	07:26:26
2	K 766.490 Radial†	28051.2	26840.0	[5000]	ug/L	07:26:06
2	Mg 279.077 IEC†	123.8	128.4	[5000]	ug/L	07:26:26
2	Sr 421.552†	59628.2	62556.9	[500]	ug/L	07:26:06
2	Sc 361.383	825022.8	825022.8	100.76	%	07:27:29
2	Y 371.029	687439.8	687439.8	99.392	%	07:27:29
2	Ag 328.068†	97697.4	96778.3	[500]	ug/L	07:27:34
2	As 188.979†	890.6	910.7	[500]	ug/L	07:27:54
2	B 249.677†	17330.0	17737.2	[500]	ug/L	07:27:34
2	Ba 233.527†	53830.4	53426.7	[500]	ug/L	07:27:34
2	Be 313.107†	1189558.3	1184352.8	[500]	ug/L	07:27:29
2	Cd 226.502†	34616.6	34527.2	[500]	ug/L	07:27:34
2	Co 228.616†	19815.7	19713.0	[500]	ug/L	07:27:34
2	Cr 267.716†	37703.7	37349.0	[500]	ug/L	07:27:34
2	Cu 324.752†	157566.2	150830.5	[500]	ug/L	07:27:34
2	Mn 257.610†	384618.0	381339.5	[500]	ug/L	07:27:29
2	Mo 202.031†	5644.3	5593.4	[500]	ug/L	07:27:54
2	Ni 231.604†	16177.2	15971.6	[500]	ug/L	07:27:34
2	P 214.914†	3569.2	3355.1	[2500]	ug/L	07:27:54
2	Pb 220.353†	3211.8	3245.9	[500]	ug/L	07:27:54
2	S 181.975 Axial†	589.2	554.6	[1000]	ug/L	07:27:54
2	Sb 206.836†	1221.4	1188.5	[500]	ug/L	07:27:54

2	Se 196.026†	590.5	603.1	[500]	ug/L	07:27:54
2	Si 251.611†	66983.6	65992.2	[2500]	ug/L	07:27:34
2	Sn 189.927†	2206.0	2182.2	[500]	ug/L	07:27:54
2	Ti 334.940†	284172.9	283159.3	[500]	ug/L	07:27:34
2	Tl 190.801†	1271.4	1291.0	[500]	ug/L	07:27:54
2	U 409.014†	14780.1	16873.3	[500]	ug/L	07:27:34
2	V 292.402†	61704.6	62558.5	[500]	ug/L	07:27:34
2	Zn 213.857†	42493.9	41604.6	[500]	ug/L	07:27:34
2	SiO2†	66791.9	65790.8	[5347.5]	ug/L	07:28:36
3	Sc Radial	4203.5	4203.5	95.6	%	07:26:51
3	Y RADIAL	4694.9	4694.9	98.62	%	07:26:31
3	Al 396.153Radial†	4935.9	5239.0	[5000]	ug/L	07:26:31
3	Ca 317.933Radial†	2631.7	2735.9	[5000]	ug/L	07:26:51
3	K 766.490 Radial†	28217.2	26904.4	[5000]	ug/L	07:26:31
3	Mg 279.077 IEC†	124.5	128.6	[5000]	ug/L	07:26:51
3	Sr 421.552†	60103.1	62821.5	[500]	ug/L	07:26:31
3	Sc 361.383	826571.9	826571.9	100.95	%	07:28:00
3	Y 371.029	687898.7	687898.7	99.458	%	07:28:00
3	Ag 328.068†	99152.7	98038.2	[500]	ug/L	07:28:05
3	As 188.979†	889.6	908.1	[500]	ug/L	07:28:25
3	B 249.677†	17693.7	18065.2	[500]	ug/L	07:28:05
3	Ba 233.527†	54817.6	54304.6	[500]	ug/L	07:28:05
3	Be 313.107†	1190349.2	1182923.6	[500]	ug/L	07:28:00
3	Cd 226.502†	35274.6	35114.6	[500]	ug/L	07:28:05
3	Co 228.616†	20091.0	19948.9	[500]	ug/L	07:28:05
3	Cr 267.716†	38295.2	37864.7	[500]	ug/L	07:28:05
3	Cu 324.752†	160283.3	153229.1	[500]	ug/L	07:28:05
3	Mn 257.610†	385572.6	381569.8	[500]	ug/L	07:28:00
3	Mo 202.031†	5688.1	5626.2	[500]	ug/L	07:28:25
3	Ni 231.604†	16456.1	16217.8	[500]	ug/L	07:28:05
3	P 214.914†	3559.1	3338.4	[2500]	ug/L	07:28:25
3	Pb 220.353†	3226.6	3254.6	[500]	ug/L	07:28:25
3	S 181.975 Axial†	594.2	558.4	[1000]	ug/L	07:28:25
3	Sb 206.836†	1241.9	1206.6	[500]	ug/L	07:28:25
3	Se 196.026†	590.7	602.1	[500]	ug/L	07:28:25
3	Si 251.611†	68168.0	67040.9	[2500]	ug/L	07:28:05
3	Sn 189.927†	2212.7	2184.8	[500]	ug/L	07:28:25
3	Ti 334.940†	289122.7	287534.1	[500]	ug/L	07:28:05
3	Tl 190.801†	1277.8	1294.9	[500]	ug/L	07:28:25
3	U 409.014†	15107.2	17169.8	[500]	ug/L	07:28:05
3	V 292.402†	62733.4	63462.9	[500]	ug/L	07:28:05
3	Zn 213.857†	43215.4	42240.3	[500]	ug/L	07:28:05
3	SiO2†	66865.0	65739.0	[5347.5]	ug/L	07:28:41

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	824410.7	2523.46	0.31%	100.68 %
Sc Radial	4189.4	13.40	0.32%	95.3 %
Y 371.029	686785.8	1547.25	0.23%	99.297 %
Y RADIAL	4656.5	36.25	0.78%	97.81 %
Ag 328.068†	97662.0	768.09	0.79%	[500] ug/L
Al 396.153Radial†	5235.8	15.16	0.29%	[5000] ug/L
As 188.979†	910.1	1.80	0.20%	[500] ug/L
B 249.677†	17934.1	173.65	0.97%	[500] ug/L
Ba 233.527†	53997.2	494.58	0.92%	[500] ug/L
Be 313.107†	1184132.9	1115.71	0.09%	[500] ug/L
Ca 317.933Radial†	2746.5	10.52	0.38%	[5000] ug/L
Cd 226.502†	34934.2	353.27	1.01%	[500] ug/L
Co 228.616†	19882.9	148.31	0.75%	[500] ug/L
Cr 267.716†	37705.1	308.91	0.82%	[500] ug/L
Cu 324.752†	152407.8	1366.39	0.90%	[500] ug/L
K 766.490 Radial†	26958.4	152.71	0.57%	[5000] ug/L
Mg 279.077 IEC†	127.8	1.24	0.97%	[5000] ug/L
Mn 257.610†	381401.8	147.04	0.04%	[500] ug/L
Mo 202.031†	5617.9	21.56	0.38%	[500] ug/L
Ni 231.604†	16137.4	143.62	0.89%	[500] ug/L
P 214.914†	3349.4	9.54	0.28%	[2500] ug/L
Pb 220.353†	3254.5	8.54	0.26%	[500] ug/L
S 181.975 Axial†	556.8	1.98	0.36%	[1000] ug/L

Sb 206.836†	1195.1	9.96	0.83%	[500] ug/L
Se 196.026†	598.8	6.64	1.11%	[500] ug/L
Si 251.611†	66675.2	592.00	0.89%	[2500] ug/L
Sn 189.927†	2190.9	12.95	0.59%	[500] ug/L
Sr 421.552†	62910.2	405.09	0.64%	[500] ug/L
Ti 334.940†	285936.1	2413.92	0.84%	[500] ug/L
Tl 190.801†	1296.1	5.78	0.45%	[500] ug/L
U 409.014†	17026.4	148.49	0.87%	[500] ug/L
V 292.402†	63212.5	571.55	0.90%	[500] ug/L
Zn 213.857†	42010.8	352.73	0.84%	[500] ug/L
SiO2†	65640.8	216.53	0.33%	[5347.5] ug/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 3/19/2010 07:30:51

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	4344.4	4344.4	98.8 %	07:32:44
1	Y RADIAL	4668.8	4668.8	98.07 %	07:32:44
1	Al 396.153Radial†	9900.0	10093.5	[10000] ug/L	07:32:44
1	Ca 317.933Radial†	5333.2	5379.7	[10000] ug/L	07:32:44
1	Fe 238.204 Radial†	855.1	856.7	[10000] ug/L	07:33:04
1	K 766.490 Radial†	54124.1	52156.7	[10000] ug/L	07:32:44
1	Mg 279.077 IEC†	245.6	246.9	[10000] ug/L	07:33:04
1	Na 589.592 Radial†	26296.6	27478.5	[10000] ug/L	07:32:44
1	Sr 421.552†	122992.3	124406.1	[1000] ug/L	07:32:44
1	Sc 361.383	819368.6	819368.6	100.07 %	07:34:03
1	Y 371.029	681762.9	681762.9	98.571 %	07:34:03
1	Ag 328.068†	192124.2	191811.5	[1000] ug/L	07:34:03
1	As 188.979†	1787.9	1813.5	[1000] ug/L	07:34:23
1	B 249.677†	35038.7	35552.8	[1000] ug/L	07:34:03
1	Ba 233.527†	106549.2	106479.2	[1000] ug/L	07:34:03
1	Be 313.107†	2343163.6	2345339.4	[1000] ug/L	07:34:03
1	Cd 226.502†	68574.5	68699.6	[1000] ug/L	07:34:03
1	Co 228.616†	38220.4	38241.3	[1000] ug/L	07:34:23
1	Cr 267.716†	74436.4	74315.5	[1000] ug/L	07:34:03
1	Cu 324.752†	307593.6	301837.4	[1000] ug/L	07:34:03
1	Mn 257.610†	760183.6	759290.0	[1000] ug/L	07:34:03
1	Mo 202.031†	11214.5	11198.6	[1000] ug/L	07:34:23
1	Ni 231.604†	31271.9	31167.1	[1000] ug/L	07:34:23
1	P 214.914†	6883.9	6692.0	[5000] ug/L	07:34:23
1	Pb 220.353†	6420.7	6474.7	[1000] ug/L	07:34:23
1	S 181.975 Axial†	1148.2	1117.2	[2000] ug/L	07:34:23
1	Sb 206.836†	2390.0	2364.7	[1000] ug/L	07:34:23
1	Se 196.026†	1177.1	1193.2	[1000] ug/L	07:34:23
1	Si 251.611†	131710.3	131134.7	[5000] ug/L	07:34:03
1	Sn 189.927†	4409.0	4398.9	[1000] ug/L	07:34:23
1	Ti 334.940†	574509.8	575249.8	[1000] ug/L	07:34:03
1	Tl 190.801†	2539.4	2566.8	[1000] ug/L	07:34:23
1	U 409.014†	30310.0	32494.1	[1000] ug/L	07:34:03
1	V 292.402†	123779.9	125015.2	[1000] ug/L	07:34:03
1	Zn 213.857†	82765.8	82140.8	[1000] ug/L	07:34:03
1	SiO2†	132053.9	131467.0	[10695] ug/L	07:35:24
2	Sc Radial	4357.0	4357.0	99.1 %	07:33:09
2	Y RADIAL	4710.6	4710.6	98.95 %	07:33:09
2	Al 396.153Radial†	9962.0	10127.1	[10000] ug/L	07:33:09
2	Ca 317.933Radial†	5341.3	5372.3	[10000] ug/L	07:33:09
2	Fe 238.204 Radial†	854.5	853.6	[10000] ug/L	07:33:29
2	K 766.490 Radial†	54185.4	52060.1	[10000] ug/L	07:33:09
2	Mg 279.077 IEC†	247.3	247.9	[10000] ug/L	07:33:29
2	Na 589.592 Radial†	26245.8	27350.2	[10000] ug/L	07:33:09
2	Sr 421.552†	123608.6	124667.8	[1000] ug/L	07:33:09
2	Sc 361.383	825030.9	825030.9	100.76 %	07:34:31
2	Y 371.029	685551.0	685551.0	99.119 %	07:34:31
2	Ag 328.068†	193526.5	191885.6	[1000] ug/L	07:34:31
2	As 188.979†	1800.1	1813.4	[1000] ug/L	07:34:51
2	B 249.677†	35389.2	35660.3	[1000] ug/L	07:34:31
2	Ba 233.527†	107337.0	106530.3	[1000] ug/L	07:34:31
2	Be 313.107†	2360060.0	2346038.1	[1000] ug/L	07:34:31
2	Cd 226.502†	69252.4	68902.1	[1000] ug/L	07:34:31
2	Co 228.616†	38675.7	38431.0	[1000] ug/L	07:34:51
2	Cr 267.716†	75156.9	74520.0	[1000] ug/L	07:34:31
2	Cu 324.752†	310179.0	302293.8	[1000] ug/L	07:34:31
2	Mn 257.610†	766947.4	760789.2	[1000] ug/L	07:34:31
2	Mo 202.031†	11357.1	11263.1	[1000] ug/L	07:34:51
2	Ni 231.604†	31613.1	31291.2	[1000] ug/L	07:34:51

2	P 214.914†	6950.8	6711.2	[5000]	ug/L	07:34:51
2	Pb 220.353†	6501.7	6511.1	[1000]	ug/L	07:34:51
2	S 181.975 Axial†	1154.9	1116.1	[2000]	ug/L	07:34:51
2	Sb 206.836†	2442.5	2400.4	[1000]	ug/L	07:34:51
2	Se 196.026†	1199.8	1207.7	[1000]	ug/L	07:34:51
2	Si 251.611†	132902.2	131414.3	[5000]	ug/L	07:34:31
2	Sn 189.927†	4443.2	4402.6	[1000]	ug/L	07:34:51
2	Ti 334.940†	579279.1	576042.9	[1000]	ug/L	07:34:31
2	Tl 190.801†	2581.0	2590.7	[1000]	ug/L	07:34:51
2	U 409.014†	30791.4	32764.0	[1000]	ug/L	07:34:31
2	V 292.402†	124696.3	125075.7	[1000]	ug/L	07:34:31
2	Zn 213.857†	83432.2	82234.5	[1000]	ug/L	07:34:31
2	SiO2†	132062.1	130569.4	[10695]	ug/L	07:35:29
3	Sc Radial	4286.2	4286.2	97.5	%	07:33:35
3	Y RADIAL	4648.8	4648.8	97.65	%	07:33:35
3	Al 396.153Radial†	9858.2	10186.7	[10000]	ug/L	07:33:35
3	Ca 317.933Radial†	5285.1	5403.6	[10000]	ug/L	07:33:35
3	Fe 238.204 Radial†	857.4	870.7	[10000]	ug/L	07:33:55
3	K 766.490 Radial†	53393.5	52151.0	[10000]	ug/L	07:33:35
3	Mg 279.077 IEC†	248.5	253.3	[10000]	ug/L	07:33:55
3	Na 589.592 Radial†	25596.1	27121.3	[10000]	ug/L	07:33:35
3	Sr 421.552†	121376.4	124438.7	[1000]	ug/L	07:33:35
3	Sc 361.383	819528.5	819528.5	100.09	%	07:34:58
3	Y 371.029	680490.9	680490.9	98.387	%	07:34:58
3	Ag 328.068†	192351.3	192001.0	[1000]	ug/L	07:34:58
3	As 188.979†	1810.4	1835.6	[1000]	ug/L	07:35:18
3	B 249.677†	35087.9	35595.1	[1000]	ug/L	07:34:58
3	Ba 233.527†	106371.3	106280.7	[1000]	ug/L	07:34:58
3	Be 313.107†	2336429.7	2338154.4	[1000]	ug/L	07:34:58
3	Cd 226.502†	68339.3	68451.2	[1000]	ug/L	07:34:58
3	Co 228.616†	38543.9	38557.0	[1000]	ug/L	07:35:18
3	Cr 267.716†	74336.2	74200.8	[1000]	ug/L	07:34:58
3	Cu 324.752†	308824.8	303007.6	[1000]	ug/L	07:34:58
3	Mn 257.610†	760159.6	759117.9	[1000]	ug/L	07:34:58
3	Mo 202.031†	11311.6	11293.3	[1000]	ug/L	07:35:18
3	Ni 231.604†	31511.2	31400.1	[1000]	ug/L	07:35:18
3	P 214.914†	6937.1	6743.8	[5000]	ug/L	07:35:18
3	Pb 220.353†	6481.7	6534.5	[1000]	ug/L	07:35:18
3	S 181.975 Axial†	1151.4	1120.2	[2000]	ug/L	07:35:18
3	Sb 206.836†	2431.5	2405.7	[1000]	ug/L	07:35:18
3	Se 196.026†	1185.9	1201.9	[1000]	ug/L	07:35:18
3	Si 251.611†	131907.0	131305.6	[5000]	ug/L	07:34:58
3	Sn 189.927†	4448.1	4437.1	[1000]	ug/L	07:35:18
3	Ti 334.940†	575356.7	575983.9	[1000]	ug/L	07:34:58
3	Tl 190.801†	2562.9	2589.7	[1000]	ug/L	07:35:18
3	U 409.014†	30555.8	32733.8	[1000]	ug/L	07:34:58
3	V 292.402†	123490.0	124701.4	[1000]	ug/L	07:34:58
3	Zn 213.857†	82686.9	82045.8	[1000]	ug/L	07:34:58
3	SiO2†	131524.8	130912.6	[10695]	ug/L	07:35:34

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	821309.3	3223.93	0.39%	100.30	%
Sc Radial	4329.2	37.77	0.87%	98.5	%
Y 371.029	682601.6	2632.21	0.39%	98.692	%
Y RADIAL	4676.1	31.56	0.67%	98.22	%
Ag 328.068†	191899.4	95.49	0.05%	[1000]	ug/L
Al 396.153Radial†	10135.8	47.17	0.47%	[10000]	ug/L
As 188.979†	1820.9	12.80	0.70%	[1000]	ug/L
B 249.677†	35602.8	54.15	0.15%	[1000]	ug/L
Ba 233.527†	106430.1	131.89	0.12%	[1000]	ug/L
Be 313.107†	2343177.3	4363.95	0.19%	[1000]	ug/L
Ca 317.933Radial†	5385.2	16.38	0.30%	[10000]	ug/L
Cd 226.502†	68684.3	225.84	0.33%	[1000]	ug/L
Co 228.616†	38409.7	158.92	0.41%	[1000]	ug/L
Cr 267.716†	74345.5	161.70	0.22%	[1000]	ug/L
Cu 324.752†	302379.6	589.80	0.20%	[1000]	ug/L
Fe 238.204 Radial†	860.3	9.13	1.06%	[10000]	ug/L
K 766.490 Radial†	52122.6	54.20	0.10%	[10000]	ug/L

Mg 279.077 IEC†	249.4	3.39	1.36%	[10000]	ug/L
Mn 257.610†	759732.4	919.29	0.12%	[1000]	ug/L
Mo 202.031†	11251.7	48.40	0.43%	[1000]	ug/L
Na 589.592 Radial†	27316.7	180.92	0.66%	[10000]	ug/L
Ni 231.604†	31286.1	116.56	0.37%	[1000]	ug/L
P 214.914†	6715.7	26.19	0.39%	[5000]	ug/L
Pb 220.353†	6506.8	30.09	0.46%	[1000]	ug/L
S 181.975 Axial†	1117.8	2.14	0.19%	[2000]	ug/L
Sb 206.836†	2390.3	22.30	0.93%	[1000]	ug/L
Se 196.026†	1201.0	7.29	0.61%	[1000]	ug/L
Si 251.611†	131284.9	140.98	0.11%	[5000]	ug/L
Sn 189.927†	4412.9	21.08	0.48%	[1000]	ug/L
Sr 421.552†	124504.2	142.63	0.11%	[1000]	ug/L
Ti 334.940†	575758.8	441.87	0.08%	[1000]	ug/L
Tl 190.801†	2582.4	13.54	0.52%	[1000]	ug/L
U 409.014†	32663.9	147.89	0.45%	[1000]	ug/L
V 292.402†	124930.8	200.93	0.16%	[1000]	ug/L
Zn 213.857†	82140.4	94.36	0.11%	[1000]	ug/L
SiO2†	130983.0	452.91	0.35%	[10695]	ug/L

Sequence No.: 5
 Sample ID: S10
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 3/19/2010 07:37:45
 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	4263.0	4263.0	97.0 %		07:39:59
1	Y RADIAL	4575.6	4575.6	96.11 %		07:39:59
1	Al 396.153Radial†	49831.2	51453.0	[50000] ug/L		07:39:39
1	Ca 317.933Radial†	25954.1	26742.4	[50000] ug/L		07:39:39
1	Fe 238.204 Radial†	1687.7	1731.5	[20000] ug/L		07:39:59
1	Mg 279.077 IEC†	1178.7	1213.7	[50000] ug/L		07:39:59
1	Na 589.592 Radial†	55567.4	58164.0	[20000] ug/L		07:39:39
1	Sc 361.383	789692.1	789692.1	96.442 %		07:40:56
1	Y 371.029	653528.4	653528.4	94.489 %		07:40:56
2	Sc Radial	4290.8	4290.8	97.6 %		07:40:24
2	Y RADIAL	4619.8	4619.8	97.04 %		07:40:24
2	Al 396.153Radial†	48689.3	49950.4	[50000] ug/L		07:40:04
2	Ca 317.933Radial†	25266.7	25864.9	[50000] ug/L		07:40:04
2	Fe 238.204 Radial†	1692.1	1724.8	[20000] ug/L		07:40:24
2	Mg 279.077 IEC†	1181.2	1208.4	[50000] ug/L		07:40:24
2	Na 589.592 Radial†	54008.3	56195.6	[20000] ug/L		07:40:04
2	Sc 361.383	793240.2	793240.2	96.875 %		07:41:02
2	Y 371.029	656699.3	656699.3	94.947 %		07:41:02
3	Sc Radial	4280.8	4280.8	97.4 %		07:40:49
3	Y RADIAL	4602.7	4602.7	96.68 %		07:40:49
3	Al 396.153Radial†	49877.2	51287.3	[50000] ug/L		07:40:29
3	Ca 317.933Radial†	25897.8	26573.7	[50000] ug/L		07:40:29
3	Fe 238.204 Radial†	1689.6	1726.2	[20000] ug/L		07:40:49
3	Mg 279.077 IEC†	1178.0	1207.9	[50000] ug/L		07:40:49
3	Na 589.592 Radial†	55072.5	57418.3	[20000] ug/L		07:40:29
3	Sc 361.383	800906.3	800906.3	97.812 %		07:41:07
3	Y 371.029	662694.7	662694.7	95.814 %		07:41:07

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib Units
Sc 361.383	794612.9	5731.76	0.72%	97.043 %	
Sc Radial	4278.2	14.08	0.33%	97.3 %	
Y 371.029	657640.8	4655.12	0.71%	95.083 %	
Y RADIAL	4599.4	22.30	0.48%	96.61 %	
Al 396.153Radial†	50896.9	823.85	1.62%	[50000] ug/L	
Ca 317.933Radial†	26393.7	465.66	1.76%	[50000] ug/L	
Fe 238.204 Radial†	1727.5	3.53	0.20%	[20000] ug/L	
Mg 279.077 IEC†	1210.0	3.21	0.27%	[50000] ug/L	
Na 589.592 Radial†	57259.3	993.78	1.74%	[20000] ug/L	

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	192.6	0.00000	0.999974	
Al 396.153Radial	3	Lin Thru 0	0.0	1.018	0.00000	0.999996	
As 188.979	3	Lin Thru 0	0.0	1.821	0.00000	0.999992	
B 249.677	3	Lin Thru 0	0.0	35.65	0.00000	0.999990	
Ba 233.527	3	Lin Thru 0	0.0	106.8	0.00000	0.999980	
Be 313.107	3	Lin Thru 0	0.0	2348	0.00000	0.999990	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5285	0.00000	0.999985	
Cd 226.502	3	Lin Thru 0	0.0	68.92	0.00000	0.999977	
Co 228.616	3	Lin Thru 0	0.0	38.69	0.00000	0.999900	
Cr 267.716	3	Lin Thru 0	0.0	74.57	0.00000	0.999982	
Cu 324.752	3	Lin Thru 0	0.0	302.9	0.00000	0.999994	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0863	0.00000	0.999999	
K 766.490 Radial	3	Lin Thru 0	0.0	5.249	0.00000	0.999907	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0242	0.00000	0.999969
Mn 257.610	3	Lin Thru 0	0.0	760.6	0.00000	0.999994
Mo 202.031	3	Lin Thru 0	0.0	11.25	0.00000	0.999999
Na 589.592 Radia	2	Lin Thru 0	0.0	2.837	0.00000	0.999829
Ni 231.604	3	Lin Thru 0	0.0	31.49	0.00000	0.999920
P 214.914	3	Lin Thru 0	0.0	1.342	0.00000	0.999999
Pb 220.353	3	Lin Thru 0	0.0	6.509	0.00000	0.999995
S 181.975 Axial	3	Lin Thru 0	0.0	0.5586	0.00000	0.999997
Sb 206.836	3	Lin Thru 0	0.0	2.390	0.00000	1.000000
Se 196.026	3	Lin Thru 0	0.0	1.200	0.00000	0.999999
Si 251.611	3	Lin Thru 0	0.0	26.34	0.00000	0.999980
Sn 189.927	3	Lin Thru 0	0.0	4.407	0.00000	0.999996
Sr 421.552	3	Lin Thru 0	0.0	124.8	0.00000	0.999990
Ti 334.940	3	Lin Thru 0	0.0	575.0	0.00000	0.999996
Tl 190.801	3	Lin Thru 0	0.0	2.585	0.00000	0.999997
U 409.014	3	Lin Thru 0	0.0	32.96	0.00000	0.999836
V 292.402	3	Lin Thru 0	0.0	125.2	0.00000	0.999989
Zn 213.857	3	Lin Thru 0	0.0	82.53	0.00000	0.999957
SiO2	3	Lin Thru 0	0.0	12.25	0.00000	1.000000

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/19/2010 07:43:19

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	4236.5	4236.5	96.4 %		07:45:31
1	Y RADIAL	4746.7	4746.7	99.71 %		07:45:11
1	Al 396.153Radial†	5043.7	5310.7	5190.6 ug/L	5190.6 ppb	07:45:11
1	Ca 317.933Radial†	2646.9	2730.3	5166.3 ug/L	5166.3 ppb	07:45:31
1	Fe 238.204 Radial†	443.6	451.8	5249.8 ug/L	5249.8 ppb	07:45:31
1	K 766.490 Radial†	15378.7	13355.8	2541.1 ug/L	2541.1 ppb	07:45:11
1	Mg 279.077 IEC†	129.9	133.2	5494.7 ug/L	5494.7 ppb	07:45:31
1	Na 589.592 Radial†	5945.3	7043.0	2482.8 ug/L	2482.8 ppb	07:45:11
1	Sr 421.552†	65683.4	68121.9	546.01 ug/L	546.01 ppb	07:45:11
1	Sc 361.383	828020.8	828020.8	101.12 %		07:46:29
1	Y 371.029	691853.4	691853.4	100.03 %		07:46:29
1	Ag 328.068†	50281.0	49537.5	260.39 ug/L	260.39 ppb	07:46:29
1	As 188.979†	842.0	859.4	476.13 ug/L	476.13 ppb	07:46:49
1	B 249.677†	18333.9	18667.6	521.37 ug/L	521.37 ppb	07:46:29
1	Ba 233.527†	55293.2	54679.8	513.44 ug/L	513.44 ppb	07:46:29
1	Be 313.107†	620824.3	617660.4	264.14 ug/L	264.14 ppb	07:46:29
1	Cd 226.502†	34825.2	34609.1	502.04 ug/L	502.04 ppb	07:46:29
1	Co 228.616†	20188.0	20010.0	517.35 ug/L	517.35 ppb	07:46:29
1	Cr 267.716†	37007.0	36524.5	490.87 ug/L	490.87 ppb	07:46:29
1	Cu 324.752†	161407.2	154062.6	508.63 ug/L	508.63 ppb	07:46:29
1	Mn 257.610†	397858.6	393050.9	517.08 ug/L	517.08 ppb	07:46:29
1	Mo 202.031†	6082.7	6006.6	534.40 ug/L	534.40 ppb	07:46:49
1	Ni 231.604†	16297.5	16032.5	508.84 ug/L	508.84 ppb	07:46:29
1	P 214.914†	3585.3	3358.2	2402.7 ug/L	2402.7 ppb	07:46:49
1	Pb 220.353†	3230.6	3253.0	501.29 ug/L	501.29 ppb	07:46:49
1	S 181.975 Axial†	1435.1	1389.0	2485.7 ug/L	2485.7 ppb	07:46:49
1	Sb 206.836†	1237.1	1199.7	521.16 ug/L	521.16 ppb	07:46:49
1	Se 196.026†	3117.5	3099.8	2600.8 ug/L	2600.8 ppb	07:46:49
1	Si 251.611†	132565.1	130604.6	4951.6 ug/L	4951.6 ppb	07:46:29
1	Sn 189.927†	2396.2	2362.4	536.72 ug/L	536.72 ppb	07:46:49
1	Ti 334.940†	289993.6	287894.1	500.51 ug/L	500.51 ppb	07:46:29
1	Tl 190.801†	1336.3	1350.6	525.90 ug/L	525.90 ppb	07:46:49
1	U 409.014†	14608.3	16650.2	503.45 ug/L	503.45 ppb	07:46:29
1	V 292.402†	63227.7	63842.9	516.94 ug/L	516.94 ppb	07:46:29
1	Zn 213.857†	43406.0	42353.9	508.47 ug/L	508.47 ppb	07:46:29
1	SiO2†	131517.0	129557.0	10559 ug/L	10559 ppb	07:47:47
2	Sc Radial	4236.2	4236.2	96.4 %		07:45:57
2	Y RADIAL	4735.0	4735.0	99.46 %		07:45:37
2	Al 396.153Radial†	5034.3	5301.2	5181.0 ug/L	5181.0 ppb	07:45:37
2	Ca 317.933Radial†	2653.7	2737.5	5180.0 ug/L	5180.0 ppb	07:45:57
2	Fe 238.204 Radial†	444.4	452.6	5259.7 ug/L	5259.7 ppb	07:45:57
2	K 766.490 Radial†	15389.8	13368.3	2543.5 ug/L	2543.5 ppb	07:45:37
2	Mg 279.077 IEC†	128.0	131.2	5414.3 ug/L	5414.3 ppb	07:45:57
2	Na 589.592 Radial†	5861.5	6956.4	2452.3 ug/L	2452.3 ppb	07:45:37
2	Sr 421.552†	65138.0	67560.5	541.51 ug/L	541.51 ppb	07:45:37
2	Sc 361.383	820882.8	820882.8	100.25 %		07:46:55
2	Y 371.029	687024.5	687024.5	99.332 %		07:46:55
2	Ag 328.068†	49859.0	49548.8	260.46 ug/L	260.46 ppb	07:46:55
2	As 188.979†	857.3	882.0	488.48 ug/L	488.48 ppb	07:47:15
2	B 249.677†	18074.8	18566.8	518.55 ug/L	518.55 ppb	07:46:55
2	Ba 233.527†	54807.3	54670.6	513.35 ug/L	513.35 ppb	07:46:55
2	Be 313.107†	615521.6	617709.5	264.16 ug/L	264.16 ppb	07:46:55
2	Cd 226.502†	34435.0	34519.3	500.74 ug/L	500.74 ppb	07:46:55
2	Co 228.616†	19937.1	19933.4	515.39 ug/L	515.39 ppb	07:46:55
2	Cr 267.716†	36766.8	36603.1	491.93 ug/L	491.93 ppb	07:46:55
2	Cu 324.752†	159435.0	153483.3	506.73 ug/L	506.73 ppb	07:46:55
2	Mn 257.610†	393797.0	392420.7	516.26 ug/L	516.26 ppb	07:46:55
2	Mo 202.031†	6112.4	6088.6	541.69 ug/L	541.69 ppb	07:47:15
2	Ni 231.604†	16226.6	16101.8	511.04 ug/L	511.04 ppb	07:46:55

2	P 214.914†	3616.6	3420.3	2449.3 ug/L	2449.3 ppb	07:47:15
2	Pb 220.353†	3236.1	3286.3	506.43 ug/L	506.43 ppb	07:47:15
2	S 181.975 Axial†	1446.8	1413.0	2528.5 ug/L	2528.5 ppb	07:47:15
2	Sb 206.836†	1247.3	1220.5	530.13 ug/L	530.13 ppb	07:47:15
2	Se 196.026†	3136.4	3145.5	2638.9 ug/L	2638.9 ppb	07:47:15
2	Si 251.611†	131086.9	130270.1	4938.8 ug/L	4938.8 ppb	07:46:55
2	Sn 189.927†	2402.1	2388.9	542.72 ug/L	542.72 ppb	07:47:15
2	Ti 334.940†	287075.9	287477.4	499.80 ug/L	499.80 ppb	07:46:55
2	Tl 190.801†	1363.4	1389.1	540.79 ug/L	540.79 ppb	07:47:15
2	U 409.014†	14162.5	16331.2	493.76 ug/L	493.76 ppb	07:46:55
2	V 292.402†	62608.2	63768.7	516.43 ug/L	516.43 ppb	07:46:55
2	Zn 213.857†	42973.0	42295.1	507.75 ug/L	507.75 ppb	07:46:55
2	SiO2†	129984.9	129159.7	10526 ug/L	10526 ppb	07:47:52
3	Sc Radial	4249.4	4249.4	96.7 %		07:46:22
3	Y RADIAL	4742.6	4742.6	99.62 %		07:46:02
3	Al 396.153Radial†	5051.7	5303.0	5183.1 ug/L	5183.1 ppb	07:46:02
3	Ca 317.933Radial†	2658.2	2733.6	5172.6 ug/L	5172.6 ppb	07:46:22
3	Fe 238.204 Radial†	442.5	449.2	5220.7 ug/L	5220.7 ppb	07:46:22
3	K 766.490 Radial†	15649.2	13587.0	2585.2 ug/L	2585.2 ppb	07:46:02
3	Mg 279.077 IEC†	128.5	131.3	5417.7 ug/L	5417.7 ppb	07:46:22
3	Na 589.592 Radial†	5869.2	6945.6	2448.5 ug/L	2448.5 ppb	07:46:02
3	Sr 421.552†	65487.0	67711.5	542.72 ug/L	542.72 ppb	07:46:02
3	Sc 361.383	827095.9	827095.9	101.01 %		07:47:21
3	Y 371.029	692361.2	692361.2	100.10 %		07:47:21
3	Ag 328.068†	50259.5	49571.7	260.55 ug/L	260.55 ppb	07:47:21
3	As 188.979†	842.1	860.4	476.66 ug/L	476.66 ppb	07:47:41
3	B 249.677†	18172.4	18528.1	517.47 ug/L	517.47 ppb	07:47:21
3	Ba 233.527†	55205.3	54653.9	513.19 ug/L	513.19 ppb	07:47:21
3	Be 313.107†	620935.3	618456.9	264.48 ug/L	264.48 ppb	07:47:21
3	Cd 226.502†	34701.6	34525.3	500.83 ug/L	500.83 ppb	07:47:21
3	Co 228.616†	20116.9	19961.9	516.11 ug/L	516.11 ppb	07:47:21
3	Cr 267.716†	37016.0	36574.3	491.54 ug/L	491.54 ppb	07:47:21
3	Cu 324.752†	160873.9	153713.2	507.48 ug/L	507.48 ppb	07:47:21
3	Mn 257.610†	396517.7	392163.4	515.92 ug/L	515.92 ppb	07:47:21
3	Mo 202.031†	6064.4	5995.2	533.39 ug/L	533.39 ppb	07:47:41
3	Ni 231.604†	16302.2	16055.1	509.55 ug/L	509.55 ppb	07:47:21
3	P 214.914†	3576.3	3353.2	2399.2 ug/L	2399.2 ppb	07:47:41
3	Pb 220.353†	3197.5	3223.8	496.81 ug/L	496.81 ppb	07:47:41
3	S 181.975 Axial†	1440.1	1395.5	2497.3 ug/L	2497.3 ppb	07:47:41
3	Sb 206.836†	1240.5	1204.4	523.11 ug/L	523.11 ppb	07:47:41
3	Se 196.026†	3103.0	3088.9	2591.7 ug/L	2591.7 ppb	07:47:41
3	Si 251.611†	131993.1	130185.0	4935.6 ug/L	4935.6 ppb	07:47:21
3	Sn 189.927†	2394.1	2363.0	536.84 ug/L	536.84 ppb	07:47:41
3	Ti 334.940†	289182.3	287411.7	499.68 ug/L	499.68 ppb	07:47:21
3	Tl 190.801†	1341.9	1357.6	528.61 ug/L	528.61 ppb	07:47:41
3	U 409.014†	14513.2	16572.3	501.08 ug/L	501.08 ppb	07:47:21
3	V 292.402†	62962.4	63650.2	515.39 ug/L	515.39 ppb	07:47:21
3	Zn 213.857†	43202.6	42200.5	506.62 ug/L	506.62 ppb	07:47:21
3	SiO2†	131712.1	129895.6	10586 ug/L	10586 ppb	07:47:57

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	825333.2	100.79 %	0.474			0.47%
Sc Radial	4240.7	96.5 %	0.17			0.18%
Y 371.029	690413.1	99.822 %	0.4259			0.43%
Y RADIAL	4741.4	99.60 %	0.126			0.13%
Ag 328.068†	49552.7	260.47 ug/L	0.083	260.47 ppb	0.083	0.03%
QC value within limits for Ag 328.068 Recovery = 104.19%						
Al 396.153Radial†	5304.9	5184.9 ug/L	5.08	5184.9 ppb	5.08	0.10%
QC value within limits for Al 396.153Radial Recovery = 103.70%						
As 188.979†	867.3	480.42 ug/L	6.979	480.42 ppb	6.979	1.45%
QC value within limits for As 188.979 Recovery = 96.08%						
B 249.677†	18587.5	519.13 ug/L	2.017	519.13 ppb	2.017	0.39%
QC value within limits for B 249.677 Recovery = 103.83%						
Ba 233.527†	54668.1	513.32 ug/L	0.125	513.32 ppb	0.125	0.02%
QC value within limits for Ba 233.527 Recovery = 102.66%						
Be 313.107†	617942.3	264.26 ug/L	0.189	264.26 ppb	0.189	0.07%
QC value within limits for Be 313.107 Recovery = 105.70%						
Ca 317.933Radial†	2733.8	5173.0 ug/L	6.84	5173.0 ppb	6.84	0.13%

QC value within limits for Ca 317.933 Radial Recovery = 103.46%

Cd 226.502†	34551.2	501.21 ug/L	0.728	501.21 ppb	0.728	0.15%
QC value within limits for Cd 226.502 Recovery = 100.24%						
Co 228.616†	19968.4	516.29 ug/L	0.993	516.29 ppb	0.993	0.19%
QC value within limits for Co 228.616 Recovery = 103.26%						
Cr 267.716†	36567.3	491.45 ug/L	0.535	491.45 ppb	0.535	0.11%
QC value within limits for Cr 267.716 Recovery = 98.29%						
Cu 324.752†	153753.0	507.61 ug/L	0.960	507.61 ppb	0.960	0.19%
QC value within limits for Cu 324.752 Recovery = 101.52%						
Fe 238.204 Radial†	451.2	5243.4 ug/L	20.29	5243.4 ppb	20.29	0.39%
QC value within limits for Fe 238.204 Radial Recovery = 104.87%						
K 766.490 Radial†	13437.0	2556.6 ug/L	24.79	2556.6 ppb	24.79	0.97%
QC value within limits for K 766.490 Radial Recovery = 102.26%						
Mg 279.077 IEC†	131.9	5442.2 ug/L	45.49	5442.2 ppb	45.49	0.84%
QC value within limits for Mg 279.077 IEC Recovery = 108.84%						
Mn 257.610†	392545.0	516.42 ug/L	0.600	516.42 ppb	0.600	0.12%
QC value within limits for Mn 257.610 Recovery = 103.28%						
Mo 202.031†	6030.1	536.49 ug/L	4.528	536.49 ppb	4.528	0.84%
QC value within limits for Mo 202.031 Recovery = 107.30%						
Na 589.592 Radial†	6981.7	2461.2 ug/L	18.82	2461.2 ppb	18.82	0.76%
QC value within limits for Na 589.592 Radial Recovery = 98.45%						
Ni 231.604†	16063.1	509.81 ug/L	1.124	509.81 ppb	1.124	0.22%
QC value within limits for Ni 231.604 Recovery = 101.96%						
P 214.914†	3377.2	2417.1 ug/L	27.99	2417.1 ppb	27.99	1.16%
QC value within limits for P 214.914 Recovery = 96.68%						
Pb 220.353†	3254.4	501.51 ug/L	4.813	501.51 ppb	4.813	0.96%
QC value within limits for Pb 220.353 Recovery = 100.30%						
S 181.975 Axial†	1399.2	2503.8 ug/L	22.17	2503.8 ppb	22.17	0.89%
QC value within limits for S 181.975 Axial Recovery = 100.15%						
Sb 206.836†	1208.2	524.80 ug/L	4.720	524.80 ppb	4.720	0.90%
QC value within limits for Sb 206.836 Recovery = 104.96%						
Se 196.026†	3111.4	2610.5 ug/L	25.06	2610.5 ppb	25.06	0.96%
QC value within limits for Se 196.026 Recovery = 104.42%						
Si 251.611†	130353.2	4942.0 ug/L	8.43	4942.0 ppb	8.43	0.17%
QC value within limits for Si 251.611 Recovery = 98.84%						
Sn 189.927†	2371.4	538.76 ug/L	3.429	538.76 ppb	3.429	0.64%
QC value within limits for Sn 189.927 Recovery = 107.75%						
Sr 421.552†	67798.0	543.41 ug/L	2.329	543.41 ppb	2.329	0.43%
QC value within limits for Sr 421.552 Recovery = 108.68%						
Ti 334.940†	287594.4	499.99 ug/L	0.450	499.99 ppb	0.450	0.09%
QC value within limits for Ti 334.940 Recovery = 100.00%						
Tl 190.801†	1365.7	531.77 ug/L	7.929	531.77 ppb	7.929	1.49%
QC value within limits for Tl 190.801 Recovery = 106.35%						
U 409.014†	16517.9	499.43 ug/L	5.048	499.43 ppb	5.048	1.01%
QC value within limits for U 409.014 Recovery = 99.89%						
V 292.402†	63753.9	516.25 ug/L	0.792	516.25 ppb	0.792	0.15%
QC value within limits for V 292.402 Recovery = 103.25%						
Zn 213.857†	42283.2	507.61 ug/L	0.936	507.61 ppb	0.936	0.18%
QC value within limits for Zn 213.857 Recovery = 101.52%						
SiO2†	129537.4	10557 ug/L	30.2	10557 ppb	30.2	0.29%
QC value within limits for SiO2 Recovery = 98.71%						

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 3/19/2010 07:50:08

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	4227.6	4227.6	96.2 %		07:52:21
1	Y RADIAL	4774.1	4774.1	100.3 %		07:52:01
1	Al 396.153Radial†	-68.9	6.4	6.3185 ug/L	6.3185 ppb	07:52:21
1	Ca 317.933Radial†	18.9	4.0	7.5299 ug/L	7.5299 ppb	07:52:21
1	Fe 238.204 Radial†	9.1	1.0	11.562 ug/L	11.562 ppb	07:52:21
1	K 766.490 Radial†	2602.7	107.0	20.388 ug/L	20.388 ppb	07:52:01
1	Mg 279.077 IEC†	1.1	-0.4	-16.653 ug/L	-16.653 ppb	07:52:21
1	Na 589.592 Radial†	-877.3	-37.0	-13.028 ug/L	-13.028 ppb	07:52:01
1	Sr 421.552†	-2.3	-23.2	-0.1857 ug/L	-0.1857 ppb	07:52:01
1	Sc 361.383	822500.8	822500.8	100.45 %		07:53:18
1	Y 371.029	694388.9	694388.9	100.40 %		07:53:18
1	Ag 328.068†	219.4	33.2	0.1721 ug/L	0.1721 ppb	07:53:18
1	As 188.979†	-14.3	12.6	6.8925 ug/L	6.8925 ppb	07:53:38
1	B 249.677†	-143.2	394.8	11.075 ug/L	11.075 ppb	07:53:38
1	Ba 233.527†	3.8	4.5	0.0412 ug/L	0.0412 ppb	07:53:38
1	Be 313.107†	-3620.9	126.3	0.0535 ug/L	0.0535 ppb	07:53:18
1	Cd 226.502†	-170.4	1.0	0.0130 ug/L	0.0130 ppb	07:53:38
1	Co 228.616†	-53.3	-6.9	-0.1775 ug/L	-0.1775 ppb	07:53:38
1	Cr 267.716†	81.7	9.8	0.1311 ug/L	0.1311 ppb	07:53:38
1	Cu 324.752†	5460.0	-116.4	-0.3851 ug/L	-0.3851 ppb	07:53:18
1	Mn 257.610†	435.0	44.0	0.0597 ug/L	0.0597 ppb	07:53:38
1	Mo 202.031†	12.1	3.5	0.3106 ug/L	0.3106 ppb	07:53:38
1	Ni 231.604†	74.1	-10.3	-0.3261 ug/L	-0.3261 ppb	07:53:38
1	P 214.914†	199.0	10.8	8.1501 ug/L	8.1501 ppb	07:53:38
1	Pb 220.353†	-64.9	-6.3	-0.9611 ug/L	-0.9611 ppb	07:53:38
1	S 181.975 Axial†	28.0	-2.3	-4.1877 ug/L	-4.1877 ppb	07:53:38
1	Sb 206.836†	25.3	1.5	0.6355 ug/L	0.6355 ppb	07:53:38
1	Se 196.026†	-18.2	-1.2	-0.9475 ug/L	-0.9475 ppb	07:53:38
1	Si 251.611†	523.3	32.7	1.2394 ug/L	1.2394 ppb	07:53:38
1	Sn 189.927†	9.4	2.2	0.5039 ug/L	0.5039 ppb	07:53:38
1	Ti 334.940†	-1203.2	-76.6	-0.1322 ug/L	-0.1322 ppb	07:53:18
1	Tl 190.801†	-32.0	-2.7	-1.0626 ug/L	-1.0626 ppb	07:53:38
1	U 409.014†	-2124.4	89.3	2.7075 ug/L	2.7075 ppb	07:53:18
1	V 292.402†	-1376.1	-52.5	-0.4113 ug/L	-0.4113 ppb	07:53:18
1	Zn 213.857†	569.1	-3.5	-0.0418 ug/L	-0.0418 ppb	07:53:38
1	SiO2†	542.5	40.7	3.3134 ug/L	3.3134 ppb	07:54:49
2	Sc Radial	4262.1	4262.1	97.0 %		07:52:47
2	Y RADIAL	4708.4	4708.4	98.90 %		07:52:27
2	Al 396.153Radial†	-75.6	0.2	0.1122 ug/L	0.1122 ppb	07:52:47
2	Ca 317.933Radial†	15.6	0.4	0.7040 ug/L	0.7040 ppb	07:52:47
2	Fe 238.204 Radial†	8.1	-0.1	-1.2667 ug/L	-1.2667 ppb	07:52:47
2	K 766.490 Radial†	2562.5	43.7	8.3262 ug/L	8.3262 ppb	07:52:27
2	Mg 279.077 IEC†	0.5	-1.0	-43.214 ug/L	-43.214 ppb	07:52:47
2	Na 589.592 Radial†	-902.5	-55.5	-19.565 ug/L	-19.565 ppb	07:52:27
2	Sr 421.552†	-0.1	-20.9	-0.1676 ug/L	-0.1676 ppb	07:52:27
2	Sc 361.383	809397.3	809397.3	98.849 %		07:53:44
2	Y 371.029	684094.8	684094.8	98.908 %		07:53:44
2	Ag 328.068†	108.4	-75.5	-0.3948 ug/L	-0.3948 ppb	07:53:44
2	As 188.979†	-26.5	-0.0	-0.0164 ug/L	-0.0164 ppb	07:54:04
2	B 249.677†	-133.5	402.3	11.288 ug/L	11.288 ppb	07:54:04
2	Ba 233.527†	-10.0	-9.4	-0.0882 ug/L	-0.0882 ppb	07:54:04
2	Be 313.107†	-3759.4	-72.2	-0.0306 ug/L	-0.0306 ppb	07:53:44
2	Cd 226.502†	-175.0	-6.4	-0.0927 ug/L	-0.0927 ppb	07:54:04
2	Co 228.616†	-54.4	-8.9	-0.2262 ug/L	-0.2262 ppb	07:54:04
2	Cr 267.716†	75.5	4.9	0.0640 ug/L	0.0640 ppb	07:54:04
2	Cu 324.752†	5612.9	126.3	0.4151 ug/L	0.4151 ppb	07:53:44
2	Mn 257.610†	405.8	21.5	0.0299 ug/L	0.0299 ppb	07:54:04
2	Mo 202.031†	22.9	14.6	1.3019 ug/L	1.3019 ppb	07:54:04
2	Ni 231.604†	81.9	-1.2	-0.0393 ug/L	-0.0393 ppb	07:54:04

2	P 214.914†	176.7	-8.5	-6.4383 ug/L	-6.4383 ppb	07:54:04
2	Pb 220.353†	-50.1	7.6	1.1742 ug/L	1.1742 ppb	07:54:04
2	S 181.975 Axial†	28.6	-1.2	-2.1912 ug/L	-2.1912 ppb	07:54:04
2	Sb 206.836†	26.4	3.0	1.2919 ug/L	1.2919 ppb	07:54:04
2	Se 196.026†	-26.5	-9.8	-8.1711 ug/L	-8.1711 ppb	07:54:04
2	Si 251.611†	511.4	29.2	1.0927 ug/L	1.0927 ppb	07:54:04
2	Sn 189.927†	7.7	0.6	0.1470 ug/L	0.1470 ppb	07:54:04
2	Ti 334.940†	-1067.3	41.5	0.0743 ug/L	0.0743 ppb	07:53:44
2	Tl 190.801†	-29.0	-0.3	-0.1073 ug/L	-0.1073 ppb	07:54:04
2	U 409.014†	-2072.2	107.9	3.2725 ug/L	3.2725 ppb	07:53:44
2	V 292.402†	-1292.4	10.0	0.1038 ug/L	0.1038 ppb	07:53:44
2	Zn 213.857†	554.3	-9.3	-0.1129 ug/L	-0.1129 ppb	07:54:04
2	SiO2†	534.3	41.2	3.3239 ug/L	3.3239 ppb	07:55:09
3	Sc Radial	4234.0	4234.0	96.3 %		07:53:12
3	Y RADIAL	4724.6	4724.6	99.24 %		07:52:52
3	Al 396.153Radial†	-81.6	-6.6	-6.5359 ug/L	-6.5359 ppb	07:53:12
3	Ca 317.933Radial†	16.3	1.3	2.3818 ug/L	2.3818 ppb	07:53:12
3	Fe 238.204 Radial†	9.4	1.3	15.504 ug/L	15.504 ppb	07:53:12
3	K 766.490 Radial†	2538.1	35.9	6.8490 ug/L	6.8490 ppb	07:52:52
3	Mg 279.077 IEC†	4.4	3.0	123.58 ug/L	123.58 ppb	07:53:12
3	Na 589.592 Radial†	-910.3	-69.8	-24.604 ug/L	-24.604 ppb	07:52:52
3	Sr 421.552†	52.7	33.9	0.2718 ug/L	0.2718 ppb	07:52:52
3	Sc 361.383	824073.6	824073.6	100.64 %		07:54:09
3	Y 371.029	697428.4	697428.4	100.84 %		07:54:09
3	Ag 328.068†	260.6	73.8	0.3839 ug/L	0.3839 ppb	07:54:09
3	As 188.979†	-24.2	2.7	1.4956 ug/L	1.4956 ppb	07:54:29
3	B 249.677†	-133.9	404.3	11.340 ug/L	11.340 ppb	07:54:29
3	Ba 233.527†	24.9	25.4	0.2395 ug/L	0.2395 ppb	07:54:29
3	Be 313.107†	-3640.4	113.8	0.0487 ug/L	0.0487 ppb	07:54:09
3	Cd 226.502†	-164.0	7.7	0.1121 ug/L	0.1121 ppb	07:54:29
3	Co 228.616†	-49.5	-3.0	-0.0776 ug/L	-0.0776 ppb	07:54:29
3	Cr 267.716†	78.7	6.7	0.0889 ug/L	0.0889 ppb	07:54:29
3	Cu 324.752†	5545.9	-41.4	-0.1401 ug/L	-0.1401 ppb	07:54:09
3	Mn 257.610†	423.7	31.9	0.0384 ug/L	0.0384 ppb	07:54:29
3	Mo 202.031†	12.7	4.1	0.3639 ug/L	0.3639 ppb	07:54:29
3	Ni 231.604†	92.7	8.1	0.2558 ug/L	0.2558 ppb	07:54:29
3	P 214.914†	185.9	-2.6	-1.9063 ug/L	-1.9063 ppb	07:54:29
3	Pb 220.353†	-55.4	3.3	0.4986 ug/L	0.4986 ppb	07:54:29
3	S 181.975 Axial†	25.6	-4.7	-8.4722 ug/L	-8.4722 ppb	07:54:29
3	Sb 206.836†	24.2	0.4	0.1882 ug/L	0.1882 ppb	07:54:29
3	Se 196.026†	-16.5	0.5	0.4855 ug/L	0.4855 ppb	07:54:29
3	Si 251.611†	522.6	31.1	1.1761 ug/L	1.1761 ppb	07:54:29
3	Sn 189.927†	14.3	7.0	1.5931 ug/L	1.5931 ppb	07:54:29
3	Ti 334.940†	-1072.1	56.0	0.0843 ug/L	0.0843 ppb	07:54:09
3	Tl 190.801†	-26.9	2.3	0.9032 ug/L	0.9032 ppb	07:54:29
3	U 409.014†	-1972.4	244.3	7.4112 ug/L	7.4112 ppb	07:54:09
3	V 292.402†	-1263.2	62.3	0.5170 ug/L	0.5170 ppb	07:54:09
3	Zn 213.857†	568.9	-4.8	-0.0621 ug/L	-0.0621 ppb	07:54:29
3	SiO2†	526.0	23.4	1.8968 ug/L	1.8968 ppb	07:55:29

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	818657.3	99.980 %		0.9841			0.98%
Sc Radial	4241.2	96.5 %		0.42			0.43%
Y 371.029	691970.7	100.05 %		1.010			1.01%
Y RADIAL	4735.7	99.48 %		0.719			0.72%
Ag 328.068†	10.5	0.0537 ug/L		0.40263	0.0537 ppb	0.40263	749.28%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-0.0	-0.0351 ug/L		6.42850	-0.0351 ppb	6.42850	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	5.1	2.7906 ug/L		3.63190	2.7906 ppb	3.63190	130.15%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	400.5	11.235 ug/L		0.1403	11.235 ppb	0.1403	1.25%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	6.8	0.0642 ug/L		0.16504	0.0642 ppb	0.16504	257.23%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	56.0	0.0239 ug/L		0.04720	0.0239 ppb	0.04720	197.83%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	1.9	3.5386 ug/L		3.55694	3.5386 ppb	3.55694	100.52%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	0.7	0.0108 ug/L	0.10245	0.0108 ppb	0.10245	947.92%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-6.3	-0.1604 ug/L	0.07575	-0.1604 ppb	0.07575	47.21%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	7.1	0.0947 ug/L	0.03391	0.0947 ppb	0.03391	35.82%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-10.5	-0.0367 ug/L	0.41001	-0.0367 ppb	0.41001	>999.9%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.7	8.5999 ug/L	8.76910	8.5999 ppb	8.76910	101.97%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	62.2	11.854 ug/L	7.4269	11.854 ppb	7.4269	62.65%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.5	21.237 ug/L	89.6187	21.237 ppb	89.6187	422.00%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	32.5	0.0427 ug/L	0.01531	0.0427 ppb	0.01531	35.88%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	7.4	0.6588 ug/L	0.55759	0.6588 ppb	0.55759	84.64%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-54.1	-19.066 ug/L	5.8042	-19.066 ppb	5.8042	30.44%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-1.2	-0.0366 ug/L	0.29096	-0.0366 ppb	0.29096	795.90%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-0.1	-0.0648 ug/L	7.46648	-0.0648 ppb	7.46648	>999.9%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	1.5	0.2372 ug/L	1.09140	0.2372 ppb	1.09140	460.05%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-2.8	-4.9504 ug/L	3.20920	-4.9504 ppb	3.20920	64.83%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	1.6	0.7052 ug/L	0.55515	0.7052 ppb	0.55515	78.72%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-3.5	-2.8777 ug/L	4.63988	-2.8777 ppb	4.63988	161.23%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	31.0	1.1694 ug/L	0.07358	1.1694 ppb	0.07358	6.29%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	3.3	0.7480 ug/L	0.75332	0.7480 ppb	0.75332	100.71%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-3.4	-0.0272 ug/L	0.25907	-0.0272 ppb	0.25907	952.37%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	6.9	0.0088 ug/L	0.12217	0.0088 ppb	0.12217	>999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.2	-0.0889 ug/L	0.98302	-0.0889 ppb	0.98302	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	147.2	4.4637 ug/L	2.56816	4.4637 ppb	2.56816	57.53%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	6.6	0.0698 ug/L	0.46509	0.0698 ppb	0.46509	666.11%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-5.9	-0.0723 ug/L	0.03665	-0.0723 ppb	0.03665	50.72%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	35.1	2.8447 ug/L	0.82097	2.8447 ppb	0.82097	28.86%
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: 3/19/2010 07:57:41

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	4245.6	4245.6	96.6 %		07:59:54
1	Y RADIAL	4767.8	4767.8	100.2 %		07:59:34
1	Al 396.153Radial†	133.0	215.8	211.49 ug/L	211.49 ppb	07:59:54
1	Ca 317.933Radial†	126.9	115.7	218.92 ug/L	218.92 ppb	07:59:54
1	Fe 238.204 Radial†	17.7	9.9	114.61 ug/L	114.61 ppb	07:59:54
1	K 766.490 Radial†	3386.5	907.0	172.60 ug/L	172.60 ppb	07:59:34
1	Mg 279.077 IEC†	8.9	7.7	318.80 ug/L	318.80 ppb	07:59:54
1	Na 589.592 Radial†	-60.9	812.1	286.28 ug/L	286.28 ppb	07:59:34
1	Sr 421.552†	640.5	642.3	5.1465 ug/L	5.1465 ppb	07:59:34
1	Sc 361.383	812136.9	812136.9	99.183 %		08:00:50
1	Y 371.029	686807.1	686807.1	99.300 %		08:00:50
1	Ag 328.068†	1209.8	1034.6	5.3773 ug/L	5.3773 ppb	08:00:50
1	As 188.979†	35.4	62.5	34.339 ug/L	34.339 ppb	08:01:10
1	B 249.677†	1543.2	2093.3	58.692 ug/L	58.692 ppb	08:00:50
1	Ba 233.527†	549.9	555.1	5.2128 ug/L	5.2128 ppb	08:01:10
1	Be 313.107†	8135.1	11933.1	5.0926 ug/L	5.0926 ppb	08:00:50
1	Cd 226.502†	189.2	361.4	5.2462 ug/L	5.2462 ppb	08:01:10
1	Co 228.616†	146.1	193.5	5.0142 ug/L	5.0142 ppb	08:01:10
1	Cr 267.716†	456.1	388.3	5.2039 ug/L	5.2039 ppb	08:01:10
1	Cu 324.752†	8656.8	3176.1	10.462 ug/L	10.462 ppb	08:00:50
1	Mn 257.610†	8403.4	8083.6	10.627 ug/L	10.627 ppb	08:00:50
1	Mo 202.031†	123.8	116.3	10.352 ug/L	10.352 ppb	08:01:10
1	Ni 231.604†	241.6	159.5	5.0629 ug/L	5.0629 ppb	08:01:10
1	P 214.914†	390.7	206.6	151.89 ug/L	151.89 ppb	08:01:10
1	Pb 220.353†	30.8	89.3	13.777 ug/L	13.777 ppb	08:01:10
1	S 181.975 Axial†	80.2	50.7	90.708 ug/L	90.708 ppb	08:01:10
1	Sb 206.836†	48.7	25.4	10.975 ug/L	10.975 ppb	08:01:10
1	Se 196.026†	23.6	40.7	34.377 ug/L	34.377 ppb	08:01:10
1	Si 251.611†	3086.7	2623.9	99.485 ug/L	99.485 ppb	08:01:10
1	Sn 189.927†	45.2	38.4	8.7521 ug/L	8.7521 ppb	08:01:10
1	Ti 334.940†	1751.7	2887.3	4.9985 ug/L	4.9985 ppb	08:00:50
1	Tl 190.801†	25.5	54.8	21.246 ug/L	21.246 ppb	08:01:10
1	U 409.014†	-392.1	1808.8	54.852 ug/L	54.852 ppb	08:00:50
1	V 292.402†	-753.3	557.9	4.6884 ug/L	4.6884 ppb	08:00:50
1	Zn 213.857†	1676.7	1120.5	13.513 ug/L	13.513 ppb	08:01:10
1	SiO2†	3159.0	2685.6	218.90 ug/L	218.90 ppb	08:02:07
2	Sc Radial	4256.7	4256.7	96.9 %		08:00:19
2	Y RADIAL	4740.6	4740.6	99.58 %		07:59:59
2	Al 396.153Radial†	133.7	216.1	211.76 ug/L	211.76 ppb	08:00:19
2	Ca 317.933Radial†	133.1	121.7	230.30 ug/L	230.30 ppb	08:00:19
2	Fe 238.204 Radial†	19.0	11.2	129.88 ug/L	129.88 ppb	08:00:19
2	K 766.490 Radial†	3378.3	889.3	169.24 ug/L	169.24 ppb	07:59:59
2	Mg 279.077 IEC†	10.6	9.4	386.96 ug/L	386.96 ppb	08:00:19
2	Na 589.592 Radial†	-44.7	829.0	292.24 ug/L	292.24 ppb	07:59:59
2	Sr 421.552†	676.8	678.0	5.4327 ug/L	5.4327 ppb	07:59:59
2	Sc 361.383	801259.4	801259.4	97.855 %		08:01:16
2	Y 371.029	678307.1	678307.1	98.071 %		08:01:16
2	Ag 328.068†	1161.0	1001.3	5.2110 ug/L	5.2110 ppb	08:01:16
2	As 188.979†	31.1	58.6	32.207 ug/L	32.207 ppb	08:01:36
2	B 249.677†	1398.3	1966.3	55.127 ug/L	55.127 ppb	08:01:16
2	Ba 233.527†	552.1	564.9	5.3055 ug/L	5.3055 ppb	08:01:36
2	Be 313.107†	7983.7	11889.7	5.0737 ug/L	5.0737 ppb	08:01:16
2	Cd 226.502†	167.9	342.2	4.9656 ug/L	4.9656 ppb	08:01:36
2	Co 228.616†	157.6	207.3	5.3712 ug/L	5.3712 ppb	08:01:36
2	Cr 267.716†	439.2	377.4	5.0596 ug/L	5.0596 ppb	08:01:36
2	Cu 324.752†	8568.0	3203.8	10.554 ug/L	10.554 ppb	08:01:16
2	Mn 257.610†	8238.3	8029.8	10.555 ug/L	10.555 ppb	08:01:16
2	Mo 202.031†	129.4	123.7	11.006 ug/L	11.006 ppb	08:01:36
2	Ni 231.604†	255.4	176.9	5.6155 ug/L	5.6155 ppb	08:01:36

2	P 214.914†	384.2	205.3	150.90 ug/L	150.90 ppb	08:01:36
2	Pb 220.353†	12.7	71.3	11.005 ug/L	11.005 ppb	08:01:36
2	S 181.975 Axial†	79.4	50.9	91.168 ug/L	91.168 ppb	08:01:36
2	Sb 206.836†	45.8	23.1	10.044 ug/L	10.044 ppb	08:01:36
2	Se 196.026†	19.7	37.1	31.393 ug/L	31.393 ppb	08:01:36
2	Si 251.611†	3082.1	2661.5	100.90 ug/L	100.90 ppb	08:01:36
2	Sn 189.927†	45.7	39.6	9.0109 ug/L	9.0109 ppb	08:01:36
2	Ti 334.940†	1629.0	2785.9	4.8185 ug/L	4.8185 ppb	08:01:16
2	Tl 190.801†	25.8	55.4	21.494 ug/L	21.494 ppb	08:01:36
2	U 409.014†	-410.1	1785.1	54.130 ug/L	54.130 ppb	08:01:16
2	V 292.402†	-698.7	603.5	5.0593 ug/L	5.0593 ppb	08:01:16
2	Zn 213.857†	1690.2	1157.1	13.951 ug/L	13.951 ppb	08:01:36
2	SiO2†	3155.7	2725.5	222.13 ug/L	222.13 ppb	08:02:12
3	Sc Radial	4251.9	4251.9	96.7 %		08:00:44
3	Y RADIAL	4745.3	4745.3	99.68 %		08:00:24
3	Al 396.153Radial†	131.9	214.4	210.14 ug/L	210.14 ppb	08:00:44
3	Ca 317.933Radial†	128.1	116.7	220.87 ug/L	220.87 ppb	08:00:44
3	Fe 238.204 Radial†	17.0	9.1	105.35 ug/L	105.35 ppb	08:00:44
3	K 766.490 Radial†	3366.8	881.4	167.74 ug/L	167.74 ppb	08:00:24
3	Mg 279.077 IEC†	9.2	7.9	327.36 ug/L	327.36 ppb	08:00:44
3	Na 589.592 Radial†	-82.1	790.3	278.59 ug/L	278.59 ppb	08:00:24
3	Sr 421.552†	676.9	678.9	5.4400 ug/L	5.4400 ppb	08:00:24
3	Sc 361.383	809668.4	809668.4	98.882 %		08:01:41
3	Y 371.029	684999.1	684999.1	99.039 %		08:01:41
3	Ag 328.068†	1111.9	939.3	4.8848 ug/L	4.8848 ppb	08:01:41
3	As 188.979†	39.5	66.8	36.695 ug/L	36.695 ppb	08:02:01
3	B 249.677†	1432.9	1986.5	55.697 ug/L	55.697 ppb	08:01:41
3	Ba 233.527†	543.7	550.5	5.1700 ug/L	5.1700 ppb	08:02:01
3	Be 313.107†	8221.7	12045.7	5.1405 ug/L	5.1405 ppb	08:01:41
3	Cd 226.502†	183.8	356.5	5.1759 ug/L	5.1759 ppb	08:02:01
3	Co 228.616†	148.7	196.6	5.0937 ug/L	5.0937 ppb	08:02:01
3	Cr 267.716†	443.8	377.3	5.0573 ug/L	5.0573 ppb	08:02:01
3	Cu 324.752†	8543.8	3088.5	10.174 ug/L	10.174 ppb	08:01:41
3	Mn 257.610†	8388.1	8093.9	10.639 ug/L	10.639 ppb	08:01:41
3	Mo 202.031†	121.9	114.7	10.207 ug/L	10.207 ppb	08:02:01
3	Ni 231.604†	260.7	179.6	5.7006 ug/L	5.7006 ppb	08:02:01
3	P 214.914†	386.5	203.6	149.69 ug/L	149.69 ppb	08:02:01
3	Pb 220.353†	18.8	77.4	11.941 ug/L	11.941 ppb	08:02:01
3	S 181.975 Axial†	81.1	51.8	92.740 ug/L	92.740 ppb	08:02:01
3	Sb 206.836†	47.2	24.0	10.393 ug/L	10.393 ppb	08:02:01
3	Se 196.026†	12.7	29.8	25.236 ug/L	25.236 ppb	08:02:01
3	Si 251.611†	3109.9	2656.9	100.74 ug/L	100.74 ppb	08:02:01
3	Sn 189.927†	47.7	41.0	9.3474 ug/L	9.3474 ppb	08:02:01
3	Ti 334.940†	1745.7	2886.7	4.9992 ug/L	4.9992 ppb	08:01:41
3	Tl 190.801†	26.8	56.2	21.792 ug/L	21.792 ppb	08:02:01
3	U 409.014†	-546.4	1651.6	50.085 ug/L	50.085 ppb	08:01:41
3	V 292.402†	-711.5	597.9	4.9984 ug/L	4.9984 ppb	08:01:41
3	Zn 213.857†	1689.0	1138.0	13.723 ug/L	13.723 ppb	08:02:01
3	SiO2†	3182.7	2719.4	221.65 ug/L	221.65 ppb	08:02:17

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	807688.2	98.640 %		0.6965			0.71%
Sc Radial	4251.4	96.7 %		0.13			0.13%
Y 371.029	683371.1	98.803 %		0.6474			0.66%
Y RADIAL	4751.3	99.80 %		0.306			0.31%
Ag 328.068†	991.8	5.1577 ug/L		0.25053	5.1577 ppb	0.25053	4.86%
QC value within limits for Ag 328.068 Recovery = 103.15%							
Al 396.153Radial†	215.5	211.13 ug/L		0.870	211.13 ppb	0.870	0.41%
QC value within limits for Al 396.153Radial Recovery = 105.57%							
As 188.979†	62.6	34.414 ug/L		2.2453	34.414 ppb	2.2453	6.52%
QC value within limits for As 188.979 Recovery = 114.71%							
B 249.677†	2015.4	56.505 ug/L		1.9154	56.505 ppb	1.9154	3.39%
QC value within limits for B 249.677 Recovery = 113.01%							
Ba 233.527†	556.8	5.2294 ug/L		0.06925	5.2294 ppb	0.06925	1.32%
QC value within limits for Ba 233.527 Recovery = 104.59%							
Be 313.107†	11956.2	5.1023 ug/L		0.03444	5.1023 ppb	0.03444	0.68%
QC value within limits for Be 313.107 Recovery = 102.05%							
Ca 317.933Radial†	118.0	223.36 ug/L		6.081	223.36 ppb	6.081	2.72%

QC value within limits for Ca 317.933 Radial Recovery = 111.68%							
Cd 226.502†	353.4	5.1292 ug/L	0.14600	5.1292 ppb	0.14600	2.85%	
QC value within limits for Cd 226.502 Recovery = 102.58%							
Co 228.616†	199.1	5.1597 ug/L	0.18742	5.1597 ppb	0.18742	3.63%	
QC value within limits for Co 228.616 Recovery = 103.19%							
Cr 267.716†	381.0	5.1070 ug/L	0.08399	5.1070 ppb	0.08399	1.64%	
QC value within limits for Cr 267.716 Recovery = 102.14%							
Cu 324.752†	3156.1	10.397 ug/L	0.1981	10.397 ppb	0.1981	1.91%	
QC value within limits for Cu 324.752 Recovery = 103.97%							
Fe 238.204 Radial†	10.1	116.61 ug/L	12.388	116.61 ppb	12.388	10.62%	
QC value within limits for Fe 238.204 Radial Recovery = 116.61%							
K 766.490 Radial†	892.6	169.86 ug/L	2.490	169.86 ppb	2.490	1.47%	
QC value within limits for K 766.490 Radial Recovery = 113.24%							
Mg 279.077 IEC†	8.3	344.37 ug/L	37.126	344.37 ppb	37.126	10.78%	
QC value within limits for Mg 279.077 IEC Recovery = 114.79%							
Mn 257.610†	8069.1	10.607 ug/L	0.0455	10.607 ppb	0.0455	0.43%	
QC value within limits for Mn 257.610 Recovery = 106.07%							
Mo 202.031†	118.2	10.522 ug/L	0.4257	10.522 ppb	0.4257	4.05%	
QC value within limits for Mo 202.031 Recovery = 105.22%							
Na 589.592 Radial†	810.5	285.70 ug/L	6.845	285.70 ppb	6.845	2.40%	
QC value within limits for Na 589.592 Radial Recovery = 95.23%							
Ni 231.604†	172.0	5.4597 ug/L	0.34627	5.4597 ppb	0.34627	6.34%	
QC value within limits for Ni 231.604 Recovery = 109.19%							
P 214.914†	205.2	150.83 ug/L	1.104	150.83 ppb	1.104	0.73%	
QC value within limits for P 214.914 Recovery = 100.55%							
Pb 220.353†	79.3	12.241 ug/L	1.4102	12.241 ppb	1.4102	11.52%	
QC value within limits for Pb 220.353 Recovery = 122.41%							
S 181.975 Axial†	51.2	91.538 ug/L	1.0656	91.538 ppb	1.0656	1.16%	
QC value within limits for S 181.975 Axial Recovery = 91.54%							
Sb 206.836†	24.2	10.471 ug/L	0.4701	10.471 ppb	0.4701	4.49%	
QC value within limits for Sb 206.836 Recovery = 104.71%							
Se 196.026†	35.9	30.335 ug/L	4.6611	30.335 ppb	4.6611	15.37%	
QC value within limits for Se 196.026 Recovery = 101.12%							
Si 251.611†	2647.5	100.38 ug/L	0.775	100.38 ppb	0.775	0.77%	
QC value within limits for Si 251.611 Recovery = 100.38%							
Sn 189.927†	39.7	9.0368 ug/L	0.29853	9.0368 ppb	0.29853	3.30%	
QC value within limits for Sn 189.927 Recovery = 90.37%							
Sr 421.552†	666.4	5.3397 ug/L	0.16737	5.3397 ppb	0.16737	3.13%	
QC value within limits for Sr 421.552 Recovery = 106.79%							
Ti 334.940†	2853.3	4.9388 ug/L	0.10410	4.9388 ppb	0.10410	2.11%	
QC value within limits for Ti 334.940 Recovery = 98.78%							
Tl 190.801†	55.4	21.511 ug/L	0.2730	21.511 ppb	0.2730	1.27%	
QC value within limits for Tl 190.801 Recovery = 107.55%							
U 409.014†	1748.5	53.022 ug/L	2.5696	53.022 ppb	2.5696	4.85%	
QC value within limits for U 409.014 Recovery = 106.04%							
V 292.402†	586.4	4.9153 ug/L	0.19891	4.9153 ppb	0.19891	4.05%	
QC value within limits for V 292.402 Recovery = 98.31%							
Zn 213.857†	1138.5	13.729 ug/L	0.2193	13.729 ppb	0.2193	1.60%	
QC value greater than the upper limit for Zn 213.857 Recovery = 137.29%							
SiO2†	2710.2	220.90 ug/L	1.746	220.90 ppb	1.746	0.79%	
QC value within limits for SiO2 Recovery = 103.71%							
QC Failed. Continue with analysis.							

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 13

Date Collected: 3/19/2010 08:04:28

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	3920.8	3920.8	89.2 %		08:06:41
1	Y RADIAL	4255.0	4255.0	89.38 %		08:06:41
1	Al 396.153Radial†	468586.1	525352.2	516040 ug/L	516040 ppb	08:06:21
1	Ca 317.933Radial†	224935.9	252132.2	477090 ug/L	477090 ppb	08:06:21
1	Fe 238.204 Radial†	14279.3	15998.3	185370 ug/L	185370 ppb	08:06:41
1	K 766.490 Radial†	2233.0	-95.6	-177.79 ug/L	-177.79 ppb	08:06:21
1	Mg 279.077 IEC†	10594.3	11874.5	489650 ug/L	489650 ppb	08:06:41
1	Na 589.592 Radial†	-736.1	50.0	17.626 ug/L	17.626 ppb	08:06:41
1	Sr 421.552†	455.0	489.2	0.3587 ug/L	0.3587 ppb	08:06:41
1	Sc 361.383	711859.2	711859.2	86.937 %		08:07:38
1	Y 371.029	589005.7	589005.7	85.160 %		08:07:38
1	Ag 328.068†	-8544.0	-10013.0	-1.1206 ug/L	-1.1206 ppb	08:07:38
1	As 188.979†	-91.2	-78.1	0.3558 ug/L	0.3558 ppb	08:07:58
1	B 249.677†	234.3	806.9	-7.4693 ug/L	-7.4693 ppb	08:07:38
1	Ba 233.527†	-483.4	-555.4	0.4708 ug/L	0.4708 ppb	08:07:58
1	Be 313.107†	-3961.7	-826.0	-0.4074 ug/L	-0.4074 ppb	08:07:38
1	Cd 226.502†	1036.4	1362.8	0.6368 ug/L	0.6368 ppb	08:07:58
1	Co 228.616†	-1.8	44.2	-1.5292 ug/L	-1.5292 ppb	08:07:58
1	Cr 267.716†	-1170.5	-1417.9	0.6295 ug/L	0.6295 ppb	08:07:58
1	Cu 324.752†	2762.6	-2374.2	1.9508 ug/L	1.9508 ppb	08:07:58
1	Mn 257.610†	-266.0	-695.1	-2.6341 ug/L	-2.6341 ppb	08:07:38
1	Mo 202.031†	-207.6	-247.3	-1.9158 ug/L	-1.9158 ppb	08:07:58
1	Ni 231.604†	165.6	106.5	3.3806 ug/L	3.3806 ppb	08:07:58
1	P 214.914†	163.7	1.0	-19.106 ug/L	-19.106 ppb	08:07:58
1	Pb 220.353†	-643.0	-681.3	-10.248 ug/L	-10.248 ppb	08:07:58
1	S 181.975 Axial†	34.7	9.8	-79.226 ug/L	-79.226 ppb	08:07:58
1	Sb 206.836†	61.2	46.7	1.8899 ug/L	1.8899 ppb	08:07:58
1	Se 196.026†	-737.5	-831.3	4.6258 ug/L	4.6258 ppb	08:07:58
1	Si 251.611†	353.1	-82.0	-2.8425 ug/L	-2.8425 ppb	08:07:58
1	Sn 189.927†	-323.4	-379.2	-11.932 ug/L	-11.932 ppb	08:07:58
1	Ti 334.940†	-13245.3	-14114.4	-0.5760 ug/L	-0.5760 ppb	08:07:38
1	Tl 190.801†	-56.4	-35.8	-14.081 ug/L	-14.081 ppb	08:07:58
1	U 409.014†	-766.4	1322.6	19.037 ug/L	19.037 ppb	08:07:38
1	V 292.402†	470.2	1858.3	-2.8990 ug/L	-2.8990 ppb	08:07:58
1	Zn 213.857†	2564.8	2380.1	1.0881 ug/L	1.0881 ppb	08:07:58
1	SiO2†	380.9	-61.2	-4.3969 ug/L	-4.3969 ppb	08:08:55
2	Sc Radial	3895.3	3895.3	88.6 %		08:07:06
2	Y RADIAL	4206.8	4206.8	88.37 %		08:07:06
2	Al 396.153Radial†	461570.8	520869.5	511640 ug/L	511640 ppb	08:06:46
2	Ca 317.933Radial†	221149.1	249507.4	472120 ug/L	472120 ppb	08:06:46
2	Fe 238.204 Radial†	14177.3	15987.8	185250 ug/L	185250 ppb	08:07:06
2	K 766.490 Radial†	2093.1	-237.1	-203.08 ug/L	-203.08 ppb	08:06:46
2	Mg 279.077 IEC†	10491.8	11836.4	488080 ug/L	488080 ppb	08:07:06
2	Na 589.592 Radial†	-755.5	22.6	7.9842 ug/L	7.9842 ppb	08:07:06
2	Sr 421.552†	436.5	471.7	0.2555 ug/L	0.2555 ppb	08:07:06
2	Sc 361.383	718309.4	718309.4	87.724 %		08:08:04
2	Y 371.029	594864.3	594864.3	86.007 %		08:08:04
2	Ag 328.068†	-8802.7	-10219.6	-2.1639 ug/L	-2.1639 ppb	08:08:04
2	As 188.979†	-71.1	-54.2	13.461 ug/L	13.461 ppb	08:08:24
2	B 249.677†	320.1	902.3	-4.7766 ug/L	-4.7766 ppb	08:08:04
2	Ba 233.527†	-494.1	-562.5	0.3993 ug/L	0.3993 ppb	08:08:24
2	Be 313.107†	-3916.5	-733.5	-0.3687 ug/L	-0.3687 ppb	08:08:04
2	Cd 226.502†	1052.8	1370.8	0.7640 ug/L	0.7640 ppb	08:08:24
2	Co 228.616†	24.8	74.5	-0.7426 ug/L	-0.7426 ppb	08:08:24
2	Cr 267.716†	-1176.9	-1413.1	0.6812 ug/L	0.6812 ppb	08:08:24
2	Cu 324.752†	2830.9	-2325.0	2.1075 ug/L	2.1075 ppb	08:08:24
2	Mn 257.610†	-401.1	-846.3	-2.7806 ug/L	-2.7806 ppb	08:08:04
2	Mo 202.031†	-202.8	-239.7	-1.3101 ug/L	-1.3101 ppb	08:08:24
2	Ni 231.604†	157.8	95.8	3.0425 ug/L	3.0425 ppb	08:08:24

2	P 214.914†	142.0	-25.4	-39.810 ug/L	-39.810 ppb	08:08:24
2	Pb 220.353†	-626.2	-655.5	-7.3083 ug/L	-7.3083 ppb	08:08:24
2	S 181.975 Axial†	33.1	7.6	-82.324 ug/L	-82.324 ppb	08:08:24
2	Sb 206.836†	57.9	42.3	0.2175 ug/L	0.2175 ppb	08:08:24
2	Se 196.026†	-747.2	-834.8	-0.0402 ug/L	-0.0402 ppb	08:08:24
2	Si 251.611†	394.3	-38.6	-1.2048 ug/L	-1.2048 ppb	08:08:24
2	Sn 189.927†	-320.8	-372.8	-11.367 ug/L	-11.367 ppb	08:08:24
2	Ti 334.940†	-13503.6	-14272.0	-1.3874 ug/L	-1.3874 ppb	08:08:04
2	Tl 190.801†	-66.2	-46.4	-18.205 ug/L	-18.205 ppb	08:08:24
2	U 409.014†	-803.9	1287.9	17.995 ug/L	17.995 ppb	08:08:04
2	V 292.402†	431.2	1808.9	-3.2983 ug/L	-3.2983 ppb	08:08:24
2	Zn 213.857†	2544.3	2330.3	0.5041 ug/L	0.5041 ppb	08:08:24
2	SiO2†	365.5	-82.7	-6.1658 ug/L	-6.1658 ppb	08:09:00
3	Sc Radial	3942.4	3942.4	89.7 %		08:07:32
3	Y RADIAL	4260.7	4260.7	89.50 %		08:07:32
3	Al 396.153Radial†	465460.7	518986.8	509790 ug/L	509790 ppb	08:07:12
3	Ca 317.933Radial†	222404.3	247926.9	469130 ug/L	469130 ppb	08:07:12
3	Fe 238.204 Radial†	14272.6	15903.0	184260 ug/L	184260 ppb	08:07:32
3	K 766.490 Radial†	2182.7	-165.4	-188.41 ug/L	-188.41 ppb	08:07:12
3	Mg 279.077 IEC†	10595.7	11810.8	487020 ug/L	487020 ppb	08:07:32
3	Na 589.592 Radial†	-778.4	7.4	2.5977 ug/L	2.5977 ppb	08:07:32
3	Sr 421.552†	437.6	467.0	0.2402 ug/L	0.2402 ppb	08:07:32
3	Sc 361.383	710682.9	710682.9	86.793 %		08:08:29
3	Y 371.029	587564.2	587564.2	84.951 %		08:08:29
3	Ag 328.068†	-8544.3	-10029.6	-1.4420 ug/L	-1.4420 ppb	08:08:29
3	As 188.979†	-70.5	-54.5	13.089 ug/L	13.089 ppb	08:08:49
3	B 249.677†	259.8	836.6	-6.4560 ug/L	-6.4560 ppb	08:08:29
3	Ba 233.527†	-457.9	-526.8	0.7037 ug/L	0.7037 ppb	08:08:49
3	Be 313.107†	-3965.0	-837.3	-0.4118 ug/L	-0.4118 ppb	08:08:29
3	Cd 226.502†	1043.0	1372.4	0.8901 ug/L	0.8901 ppb	08:08:49
3	Co 228.616†	-1.0	45.0	-1.4890 ug/L	-1.4890 ppb	08:08:49
3	Cr 267.716†	-1159.4	-1407.3	0.6536 ug/L	0.6536 ppb	08:08:49
3	Cu 324.752†	2863.3	-2253.0	2.2920 ug/L	2.2920 ppb	08:08:49
3	Mn 257.610†	-330.0	-769.3	-2.7332 ug/L	-2.7332 ppb	08:08:29
3	Mo 202.031†	-196.9	-235.4	-1.0397 ug/L	-1.0397 ppb	08:08:49
3	Ni 231.604†	178.7	121.9	3.8690 ug/L	3.8690 ppb	08:08:49
3	P 214.914†	162.7	0.1	-20.545 ug/L	-20.545 ppb	08:08:49
3	Pb 220.353†	-656.2	-697.7	-14.099 ug/L	-14.099 ppb	08:08:49
3	S 181.975 Axial†	42.3	18.6	-62.284 ug/L	-62.284 ppb	08:08:49
3	Sb 206.836†	52.8	37.1	-1.9255 ug/L	-1.9255 ppb	08:08:49
3	Se 196.026†	-745.0	-841.4	-8.9102 ug/L	-8.9102 ppb	08:08:49
3	Si 251.611†	372.9	-58.6	-1.9659 ug/L	-1.9659 ppb	08:08:49
3	Sn 189.927†	-328.8	-386.0	-14.835 ug/L	-14.835 ppb	08:08:49
3	Ti 334.940†	-13136.3	-14014.0	-1.2548 ug/L	-1.2548 ppb	08:08:29
3	Tl 190.801†	-69.7	-51.2	-20.066 ug/L	-20.066 ppb	08:08:49
3	U 409.014†	-736.8	1355.3	20.153 ug/L	20.153 ppb	08:08:29
3	V 292.402†	426.1	1808.4	-3.1711 ug/L	-3.1711 ppb	08:08:49
3	Zn 213.857†	2566.5	2386.9	1.3317 ug/L	1.3317 ppb	08:08:49
3	SiO2†	334.0	-114.6	-8.7798 ug/L	-8.7798 ppb	08:09:05

Mean Data: ICSEA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	713617.2	87.151 %	0.5014			0.58%
Sc Radial	3919.5	89.2 %	0.54			0.60%
Y 371.029	590478.1	85.373 %	0.5590			0.65%
Y RADIAL	4240.8	89.08 %	0.622			0.70%
Ag 328.068†	-10087.4	-1.5755 ug/L	0.53429	-1.5755 ppb	0.53429	33.91%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	521736.2	512490 ug/L	3212.1	512490 ppb	3212.1	0.63%
QC value within limits for Al 396.153Radial Recovery = 102.50%						
As 188.979†	-62.3	8.9685 ug/L	7.46115	8.9685 ppb	7.46115	83.19%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	848.6	-6.2340 ug/L	1.36000	-6.2340 ppb	1.36000	21.82%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-548.2	0.5246 ug/L	0.15915	0.5246 ppb	0.15915	30.34%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-798.9	-0.3960 ug/L	0.02374	-0.3960 ppb	0.02374	5.99%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	249855.5	472780 ug/L	4019.3	472780 ppb	4019.3	0.85%

QC value within limits for Ca 317.933 Radial Recovery = 94.56%							
Cd 226.502†	1368.7	0.7636 ug/L	0.12665	0.7636 ppb	0.12665	16.59%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	54.6	-1.2536 ug/L	0.44296	-1.2536 ppb	0.44296	35.33%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-1412.8	0.6548 ug/L	0.02586	0.6548 ppb	0.02586	3.95%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-2317.4	2.1168 ug/L	0.17081	2.1168 ppb	0.17081	8.07%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	15963.0	184960 ug/L	605.0	184960 ppb	605.0	0.33%	
QC value within limits for Fe 238.204 Radial Recovery = 92.48%							
K 766.490 Radial†	-166.0	-189.76 ug/L	12.700	-189.76 ppb	12.700	6.69%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	11840.6	488250 ug/L	1320.7	488250 ppb	1320.7	0.27%	
QC value within limits for Mg 279.077 IEC Recovery = 97.65%							
Mn 257.610†	-770.2	-2.7160 ug/L	0.07477	-2.7160 ppb	0.07477	2.75%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-240.8	-1.4219 ug/L	0.44861	-1.4219 ppb	0.44861	31.55%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	26.7	9.4025 ug/L	7.61365	9.4025 ppb	7.61365	80.97%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	108.1	3.4307 ug/L	0.41549	3.4307 ppb	0.41549	12.11%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-8.1	-26.487 ug/L	11.5606	-26.487 ppb	11.5606	43.65%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-678.2	-10.552 ug/L	3.4057	-10.552 ppb	3.4057	32.28%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	12.0	-74.612 ug/L	10.7874	-74.612 ppb	10.7874	14.46%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	42.0	0.0607 ug/L	1.91250	0.0607 ppb	1.91250	>999.9%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-835.9	-1.4415 ug/L	6.87597	-1.4415 ppb	6.87597	476.99%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-59.7	-2.0044 ug/L	0.81955	-2.0044 ppb	0.81955	40.89%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-379.4	-12.711 ug/L	1.8610	-12.711 ppb	1.8610	14.64%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	475.9	0.2848 ug/L	0.06445	0.2848 ppb	0.06445	22.63%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-14133.4	-1.0727 ug/L	0.43523	-1.0727 ppb	0.43523	40.57%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-44.5	-17.450 ug/L	3.0630	-17.450 ppb	3.0630	17.55%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	1321.9	19.062 ug/L	1.0788	19.062 ppb	1.0788	5.66%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	1825.2	-3.1228 ug/L	0.20398	-3.1228 ppb	0.20398	6.53%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	2365.8	0.9747 ug/L	0.42531	0.9747 ppb	0.42531	43.64%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
Sio2†	-86.1	-6.4475 ug/L	2.20499	-6.4475 ppb	2.20499	34.20%	
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: 3/19/2010 08:11:16
 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	3929.4	3929.4	89.4 %		08:13:28
1	Y RADIAL	4274.8	4274.8	89.80 %		08:13:28
1	Al 396.153Radial†	461471.5	516235.9	507060 ug/L	507060 ppb	08:13:08
1	Ca 317.933Radial†	222675.9	249048.2	471250 ug/L	471250 ppb	08:13:08
1	Fe 238.204 Radial†	14573.7	16292.3	188790 ug/L	188790 ppb	08:13:28
1	K 766.490 Radial†	27582.5	28252.3	5222.4 ug/L	5222.4 ppb	08:13:08
1	Mg 279.077 IEC†	10715.6	11983.9	494160 ug/L	494160 ppb	08:13:28
1	Na 589.592 Radial†	12902.7	15306.9	5396.0 ug/L	5396.0 ppb	08:13:08
1	Sr 421.552†	56906.9	63629.8	506.52 ug/L	506.52 ppb	08:13:08
1	Sc 361.383	720288.2	720288.2	87.966 %		08:14:26
1	Y 371.029	594435.6	594435.6	85.945 %		08:14:26
1	Ag 328.068†	37624.4	42586.3	274.73 ug/L	274.73 ppb	08:14:26
1	As 188.979†	754.1	884.0	532.66 ug/L	532.66 ppb	08:14:46
1	B 249.677†	16639.1	19452.7	513.79 ug/L	513.79 ppb	08:14:26
1	Ba 233.527†	45572.8	51808.0	492.14 ug/L	492.14 ppb	08:14:26
1	Be 313.107†	509360.8	582773.2	249.25 ug/L	249.25 ppb	08:14:26
1	Cd 226.502†	29115.2	33268.9	463.61 ug/L	463.61 ppb	08:14:46
1	Co 228.616†	15201.6	17327.4	445.24 ug/L	445.24 ppb	08:14:46
1	Cr 267.716†	30631.0	34749.9	486.52 ug/L	486.52 ppb	08:14:26
1	Cu 324.752†	148588.6	163363.8	549.04 ug/L	549.04 ppb	08:14:26
1	Mn 257.610†	320306.8	363736.2	476.68 ug/L	476.68 ppb	08:14:26
1	Mo 202.031†	4633.3	5258.6	487.71 ug/L	487.71 ppb	08:14:46
1	Ni 231.604†	12601.2	14241.0	451.98 ug/L	451.98 ppb	08:14:46
1	P 214.914†	3139.5	3381.7	2390.1 ug/L	2390.1 ppb	08:14:46
1	Pb 220.353†	1997.6	2329.2	450.62 ug/L	450.62 ppb	08:14:46
1	S 181.975 Axial†	1333.5	1485.8	2564.9 ug/L	2564.9 ppb	08:14:46
1	Sb 206.836†	1162.5	1297.9	543.31 ug/L	543.31 ppb	08:14:46
1	Se 196.026†	1939.8	2222.1	2556.9 ug/L	2556.9 ppb	08:14:46
1	Si 251.611†	121964.3	138161.0	5239.2 ug/L	5239.2 ppb	08:14:26
1	Sn 189.927†	1579.3	1788.2	478.67 ug/L	478.67 ppb	08:14:46
1	Ti 334.940†	244598.2	279180.8	507.93 ug/L	507.93 ppb	08:14:26
1	Tl 190.801†	961.9	1122.5	437.65 ug/L	437.65 ppb	08:14:46
1	U 409.014†	13648.4	17719.7	515.02 ug/L	515.02 ppb	08:14:26
1	V 292.402†	56031.7	65014.4	508.15 ug/L	508.15 ppb	08:14:26
1	Zn 213.857†	38636.8	43352.3	493.43 ug/L	493.43 ppb	08:14:26
1	SiO2†	120760.5	136781.4	11150 ug/L	11150 ppb	08:15:44
2	Sc Radial	3946.5	3946.5	89.8 %		08:13:54
2	Y RADIAL	4277.8	4277.8	89.86 %		08:13:54
2	Al 396.153Radial†	472937.5	526772.2	517410 ug/L	517410 ppb	08:13:34
2	Ca 317.933Radial†	228578.7	254544.5	481650 ug/L	481650 ppb	08:13:34
2	Fe 238.204 Radial†	14556.7	16202.9	187750 ug/L	187750 ppb	08:13:54
2	K 766.490 Radial†	28173.1	28776.6	5318.7 ug/L	5318.7 ppb	08:13:34
2	Mg 279.077 IEC†	10699.3	11913.9	491280 ug/L	491280 ppb	08:13:54
2	Na 589.592 Radial†	13381.9	15778.1	5562.1 ug/L	5562.1 ppb	08:13:34
2	Sr 421.552†	58340.8	64951.3	517.04 ug/L	517.04 ppb	08:13:34
2	Sc 361.383	719730.9	719730.9	87.898 %		08:14:52
2	Y 371.029	594594.5	594594.5	85.968 %		08:14:52
2	Ag 328.068†	37665.4	42666.1	274.69 ug/L	274.69 ppb	08:14:52
2	As 188.979†	733.5	861.3	519.90 ug/L	519.90 ppb	08:15:12
2	B 249.677†	16494.5	19302.8	509.76 ug/L	509.76 ppb	08:14:52
2	Ba 233.527†	45632.5	51915.9	493.12 ug/L	493.12 ppb	08:14:52
2	Be 313.107†	509580.7	583471.7	249.55 ug/L	249.55 ppb	08:14:52
2	Cd 226.502†	29008.1	33172.6	462.32 ug/L	462.32 ppb	08:15:12
2	Co 228.616†	15102.4	17227.9	442.69 ug/L	442.69 ppb	08:15:12
2	Cr 267.716†	30639.4	34786.4	486.90 ug/L	486.90 ppb	08:14:52
2	Cu 324.752†	148069.9	162904.5	547.47 ug/L	547.47 ppb	08:14:52
2	Mn 257.610†	319951.8	363614.3	476.54 ug/L	476.54 ppb	08:14:52
2	Mo 202.031†	4644.0	5274.9	489.20 ug/L	489.20 ppb	08:15:12
2	Ni 231.604†	12562.9	14208.5	450.95 ug/L	450.95 ppb	08:15:12

2	P 214.914†	3115.9	3357.6	2375.9 ug/L	2375.9 ppb	08:15:12
2	Pb 220.353†	1987.6	2319.6	451.73 ug/L	451.73 ppb	08:15:12
2	S 181.975 Axial†	1323.2	1475.2	2544.0 ug/L	2544.0 ppb	08:15:12
2	Sb 206.836†	1137.8	1270.8	531.74 ug/L	531.74 ppb	08:15:12
2	Se 196.026†	1929.4	2212.0	2548.8 ug/L	2548.8 ppb	08:15:12
2	Si 251.611†	121859.8	138149.5	5238.8 ug/L	5238.8 ppb	08:14:52
2	Sn 189.927†	1577.9	1788.0	480.53 ug/L	480.53 ppb	08:15:12
2	Ti 334.940†	244000.0	278715.6	508.76 ug/L	508.76 ppb	08:14:52
2	Tl 190.801†	973.5	1136.6	443.10 ug/L	443.10 ppb	08:15:12
2	U 409.014†	13501.3	17564.4	510.42 ug/L	510.42 ppb	08:14:52
2	V 292.402†	56069.0	65106.1	508.99 ug/L	508.99 ppb	08:14:52
2	Zn 213.857†	38575.9	43317.0	493.16 ug/L	493.16 ppb	08:14:52
2	SiO2†	121690.4	137945.6	11245 ug/L	11245 ppb	08:15:49
3	Sc Radial	3955.1	3955.1	90.0 %		08:14:19
3	Y RADIAL	4282.0	4282.0	89.95 %		08:14:19
3	Al 396.153Radial†	473789.5	526577.2	517220 ug/L	517220 ppb	08:13:59
3	Ca 317.933Radial†	228286.7	253668.2	479990 ug/L	479990 ppb	08:13:59
3	Fe 238.204 Radial†	14574.2	16187.1	187570 ug/L	187570 ppb	08:14:19
3	K 766.490 Radial†	28154.5	28687.9	5302.4 ug/L	5302.4 ppb	08:13:59
3	Mg 279.077 IEC†	10706.9	11896.6	490560 ug/L	490560 ppb	08:14:19
3	Na 589.592 Radial†	13327.1	15684.9	5529.2 ug/L	5529.2 ppb	08:13:59
3	Sr 421.552†	58635.9	65138.4	518.55 ug/L	518.55 ppb	08:13:59
3	Sc 361.383	717692.3	717692.3	87.649 %		08:15:18
3	Y 371.029	592016.4	592016.4	85.595 %		08:15:18
3	Ag 328.068†	37419.2	42507.0	273.82 ug/L	273.82 ppb	08:15:18
3	As 188.979†	734.9	865.3	522.04 ug/L	522.04 ppb	08:15:38
3	B 249.677†	16478.1	19337.4	510.75 ug/L	510.75 ppb	08:15:18
3	Ba 233.527†	45400.4	51798.6	492.01 ug/L	492.01 ppb	08:15:18
3	Be 313.107†	505147.9	580061.1	248.09 ug/L	248.09 ppb	08:15:18
3	Cd 226.502†	29070.9	33338.0	464.74 ug/L	464.74 ppb	08:15:38
3	Co 228.616†	15202.6	17391.1	446.92 ug/L	446.92 ppb	08:15:38
3	Cr 267.716†	30397.7	34609.6	484.51 ug/L	484.51 ppb	08:15:18
3	Cu 324.752†	147241.9	162438.3	545.92 ug/L	545.92 ppb	08:15:18
3	Mn 257.610†	318560.0	363060.3	475.82 ug/L	475.82 ppb	08:15:18
3	Mo 202.031†	4659.6	5307.7	492.08 ug/L	492.08 ppb	08:15:38
3	Ni 231.604†	12615.1	14308.6	454.13 ug/L	454.13 ppb	08:15:38
3	P 214.914†	3126.1	3379.3	2392.5 ug/L	2392.5 ppb	08:15:38
3	Pb 220.353†	1981.7	2319.2	451.65 ug/L	451.65 ppb	08:15:38
3	S 181.975 Axial†	1326.1	1482.7	2557.5 ug/L	2557.5 ppb	08:15:38
3	Sb 206.836†	1177.2	1319.5	552.20 ug/L	552.20 ppb	08:15:38
3	Se 196.026†	1947.1	2238.4	2570.2 ug/L	2570.2 ppb	08:15:38
3	Si 251.611†	121149.0	137732.4	5222.9 ug/L	5222.9 ppb	08:15:18
3	Sn 189.927†	1579.5	1795.0	481.83 ug/L	481.83 ppb	08:15:38
3	Ti 334.940†	242971.7	278330.9	507.93 ug/L	507.93 ppb	08:15:18
3	Tl 190.801†	945.2	1107.5	431.81 ug/L	431.81 ppb	08:15:38
3	U 409.014†	13527.8	17638.3	512.69 ug/L	512.69 ppb	08:15:18
3	V 292.402†	55602.3	64754.9	506.25 ug/L	506.25 ppb	08:15:18
3	Zn 213.857†	38305.4	43133.0	490.94 ug/L	490.94 ppb	08:15:18
3	SiO2†	121243.0	137828.4	11236 ug/L	11236 ppb	08:15:54

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	719237.2	87.838 %	0.1669			0.19%
Sc Radial	3943.7	89.7 %	0.30			0.33%
Y 371.029	593682.2	85.836 %	0.2089			0.24%
Y RADIAL	4278.2	89.87 %	0.076			0.08%
Ag 328.068†	42586.5	274.42 ug/L	0.516	274.42 ppb	0.516	0.19%
QC value within limits for Ag 328.068 Recovery = 109.77%						
Al 396.153Radial†	523195.1	513900 ug/L	5920.7	513900 ppb	5920.7	1.15%
QC value within limits for Al 396.153Radial Recovery = 102.78%						
As 188.979†	870.2	524.87 ug/L	6.835	524.87 ppb	6.835	1.30%
QC value within limits for As 188.979 Recovery = 104.97%						
B 249.677†	19364.3	511.43 ug/L	2.100	511.43 ppb	2.100	0.41%
QC value within limits for B 249.677 Recovery = 102.29%						
Ba 233.527†	51840.8	492.43 ug/L	0.607	492.43 ppb	0.607	0.12%
QC value within limits for Ba 233.527 Recovery = 98.49%						
Be 313.107†	582102.0	248.96 ug/L	0.768	248.96 ppb	0.768	0.31%
QC value within limits for Be 313.107 Recovery = 99.59%						
Ca 317.933Radial†	252420.3	477630 ug/L	5587.7	477630 ppb	5587.7	1.17%

QC value within limits for Ca 317.933Radial Recovery = 95.53%							
Cd	226.502†	33259.8	463.56 ug/L	1.211	463.56 ppb	1.211	0.26%
QC value within limits for Cd 226.502 Recovery = 92.71%							
Co	228.616†	17315.5	444.95 ug/L	2.129	444.95 ppb	2.129	0.48%
QC value within limits for Co 228.616 Recovery = 88.99%							
Cr	267.716†	34715.3	485.98 ug/L	1.287	485.98 ppb	1.287	0.26%
QC value within limits for Cr 267.716 Recovery = 97.20%							
Cu	324.752†	162902.2	547.48 ug/L	1.559	547.48 ppb	1.559	0.28%
QC value within limits for Cu 324.752 Recovery = 109.50%							
Fe	238.204 Radial†	16227.4	188040 ug/L	657.2	188040 ppb	657.2	0.35%
QC value within limits for Fe 238.204 Radial Recovery = 94.02%							
K	766.490 Radial†	28572.3	5281.2 ug/L	51.56	5281.2 ppb	51.56	0.98%
QC value within limits for K 766.490 Radial Recovery = 105.62%							
Mg	279.077 IEC†	11931.5	492000 ug/L	1907.0	492000 ppb	1907.0	0.39%
QC value within limits for Mg 279.077 IEC Recovery = 98.40%							
Mn	257.610†	363470.3	476.34 ug/L	0.461	476.34 ppb	0.461	0.10%
QC value within limits for Mn 257.610 Recovery = 95.27%							
Mo	202.031†	5280.4	489.66 ug/L	2.224	489.66 ppb	2.224	0.45%
QC value within limits for Mo 202.031 Recovery = 97.93%							
Na	589.592 Radial†	15589.9	5495.8 ug/L	87.97	5495.8 ppb	87.97	1.60%
QC value within limits for Na 589.592 Radial Recovery = 109.92%							
Ni	231.604†	14252.7	452.36 ug/L	1.621	452.36 ppb	1.621	0.36%
QC value within limits for Ni 231.604 Recovery = 90.47%							
P	214.914†	3372.9	2386.2 ug/L	8.95	2386.2 ppb	8.95	0.38%
QC value within limits for P 214.914 Recovery = 95.45%							
Pb	220.353†	2322.7	451.34 ug/L	0.618	451.34 ppb	0.618	0.14%
QC value within limits for Pb 220.353 Recovery = 90.27%							
S	181.975 Axial†	1481.2	2555.4 ug/L	10.60	2555.4 ppb	10.60	0.41%
QC value within limits for S 181.975 Axial Recovery = 102.22%							
Sb	206.836†	1296.0	542.42 ug/L	10.256	542.42 ppb	10.256	1.89%
QC value within limits for Sb 206.836 Recovery = 108.48%							
Se	196.026†	2224.2	2558.7 ug/L	10.81	2558.7 ppb	10.81	0.42%
QC value within limits for Se 196.026 Recovery = 102.35%							
Si	251.611†	138014.3	5233.7 ug/L	9.30	5233.7 ppb	9.30	0.18%
QC value within limits for Si 251.611 Recovery = 104.67%							
Sn	189.927†	1790.4	480.34 ug/L	1.588	480.34 ppb	1.588	0.33%
QC value within limits for Sn 189.927 Recovery = 96.07%							
Sr	421.552†	64573.1	514.03 ug/L	6.551	514.03 ppb	6.551	1.27%
QC value within limits for Sr 421.552 Recovery = 102.81%							
Ti	334.940†	278742.4	508.21 ug/L	0.478	508.21 ppb	0.478	0.09%
QC value within limits for Ti 334.940 Recovery = 101.64%							
Tl	190.801†	1122.2	437.52 ug/L	5.646	437.52 ppb	5.646	1.29%
QC value within limits for Tl 190.801 Recovery = 87.50%							
U	409.014†	17640.8	512.71 ug/L	2.298	512.71 ppb	2.298	0.45%
QC value within limits for U 409.014 Recovery = 102.54%							
V	292.402†	64958.4	507.80 ug/L	1.406	507.80 ppb	1.406	0.28%
QC value within limits for V 292.402 Recovery = 101.56%							
Zn	213.857†	43267.4	492.51 ug/L	1.364	492.51 ppb	1.364	0.28%
QC value within limits for Zn 213.857 Recovery = 98.50%							
SiO2†		137518.5	11210 ug/L	52.3	11210 ppb	52.3	0.47%
QC value within limits for SiO2 Recovery = 104.82%							
All analyte(s) passed QC.							

Sequence No.: 11

Sample ID: LR1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 15

Date Collected: 3/19/2010 08:18:04

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	3858.3	3858.3	87.8 %		08:20:17
1	Y RADIAL	4204.0	4204.0	88.31 %		08:20:17
1	Al 396.153Radial†	464225.3	528893.5	519520 ug/L	519520 ppb	08:19:57
1	Ca 317.933Radial†	223881.2	255015.3	482540 ug/L	482540 ppb	08:19:57
1	Fe 238.204 Radial†	33047.8	37637.5	436100 ug/L	436100 ppb	08:20:17
1	K 766.490 Radial†	2465.2	209.4	-328.44 ug/L	-328.44 ppb	08:19:57
1	Mg 279.077 IEC†	10432.1	11882.0	489700 ug/L	489700 ppb	08:20:17
1	Na 589.592 Radial†	1320643.5	1505266.9	530640 ug/L	530640 ppb	08:19:57
1	Sr 421.552†	1394.9	1568.2	8.9670 ug/L	8.9670 ppb	08:20:17
1	Sc 361.383	692124.4	692124.4	84.527 %		08:21:15
1	Y 371.029	573747.0	573747.0	82.954 %		08:21:15
1	Ag 328.068†	-19613.3	-23388.8	-5.2352 ug/L	-5.2352 ppb	08:21:15
1	As 188.979†	-142.9	-142.3	23.974 ug/L	23.974 ppb	08:21:35
1	B 249.677†	872.5	1569.6	-26.808 ug/L	-26.808 ppb	08:21:15
1	Ba 233.527†	-1321.0	-1562.1	-1.3183 ug/L	-1.3183 ppb	08:21:35
1	Be 313.107†	-9468.2	-7470.4	-3.2304 ug/L	-3.2304 ppb	08:21:15
1	Cd 226.502†	2655.0	3311.7	5.9163 ug/L	5.9163 ppb	08:21:35
1	Co 228.616†	194.4	276.1	0.7761 ug/L	0.7761 ppb	08:21:35
1	Cr 267.716†	-1023.6	-1282.5	23.115 ug/L	23.115 ppb	08:21:35
1	Cu 324.752†	582.4	-4862.9	-1.2373 ug/L	-1.2373 ppb	08:21:15
1	Mn 257.610†	-20079.9	-24144.8	-8.7155 ug/L	-8.7155 ppb	08:21:15
1	Mo 202.031†	-437.4	-526.0	-7.1607 ug/L	-7.1607 ppb	08:21:35
1	Ni 231.604†	224.5	181.6	5.7615 ug/L	5.7615 ppb	08:21:35
1	P 214.914†	473.6	373.1	58.508 ug/L	58.508 ppb	08:21:35
1	Pb 220.353†	-449.8	-473.9	-13.265 ug/L	-13.265 ppb	08:21:35
1	S 181.975 Axial†	45.7	23.9	-54.613 ug/L	-54.613 ppb	08:21:35
1	Sb 206.836†	49.4	34.7	-6.5923 ug/L	-6.5923 ppb	08:21:35
1	Se 196.026†	-1806.4	-2120.1	-347.16 ug/L	-347.16 ppb	08:21:35
1	Si 251.611†	-299.5	-842.5	-31.407 ug/L	-31.407 ppb	08:21:35
1	Sn 189.927†	-339.4	-408.7	-32.054 ug/L	-32.054 ppb	08:21:35
1	Ti 334.940†	-11536.9	-12527.6	-3.6494 ug/L	-3.6494 ppb	08:21:15
1	Tl 190.801†	-84.5	-70.9	-27.844 ug/L	-27.844 ppb	08:21:35
1	U 409.014†	414094.0	492102.3	14880 ug/L	14880 ppb	08:21:15
1	V 292.402†	1055.9	2566.7	-5.6116 ug/L	-5.6116 ppb	08:21:35
1	Zn 213.857†	4619.7	4895.3	-5.9615 ug/L	-5.9615 ppb	08:21:35
1	SiO2†	-253.8	-799.6	-63.985 ug/L	-63.985 ppb	08:22:32
2	Sc Radial	3862.7	3862.7	87.9 %		08:20:43
2	Y RADIAL	4199.0	4199.0	88.20 %		08:20:43
2	Al 396.153Radial†	461838.3	525564.2	516250 ug/L	516250 ppb	08:20:23
2	Ca 317.933Radial†	223024.1	253744.3	480140 ug/L	480140 ppb	08:20:23
2	Fe 238.204 Radial†	33136.1	37694.2	436750 ug/L	436750 ppb	08:20:43
2	K 766.490 Radial†	2317.4	38.0	-359.39 ug/L	-359.39 ppb	08:20:23
2	Mg 279.077 IEC†	10466.5	11907.4	490740 ug/L	490740 ppb	08:20:43
2	Na 589.592 Radial†	1316291.1	1498569.5	528280 ug/L	528280 ppb	08:20:23
2	Sr 421.552†	1406.5	1579.6	9.0762 ug/L	9.0762 ppb	08:20:43
2	Sc 361.383	730532.2	730532.2	89.217 %		08:21:41
2	Y 371.029	605265.0	605265.0	87.511 %		08:21:41
2	Ag 328.068†	-19445.3	-21980.6	2.9810 ug/L	2.9810 ppb	08:21:41
2	As 188.979†	-136.7	-126.4	32.829 ug/L	32.829 ppb	08:22:01
2	B 249.677†	952.3	1604.8	-25.925 ug/L	-25.925 ppb	08:21:41
2	Ba 233.527†	-1364.7	-1528.9	-0.9888 ug/L	-0.9888 ppb	08:22:01
2	Be 313.107†	-9512.7	-6931.4	-3.0000 ug/L	-3.0000 ppb	08:21:41
2	Cd 226.502†	2640.5	3130.3	3.0561 ug/L	3.0561 ppb	08:22:01
2	Co 228.616†	193.3	262.9	0.4413 ug/L	0.4413 ppb	08:22:01
2	Cr 267.716†	-1053.2	-1252.0	23.918 ug/L	23.918 ppb	08:22:01
2	Cu 324.752†	530.5	-4957.4	-1.0589 ug/L	-1.0589 ppb	08:21:41
2	Mn 257.610†	-20279.0	-23119.0	-7.3448 ug/L	-7.3448 ppb	08:21:41
2	Mo 202.031†	-388.0	-443.4	0.2051 ug/L	0.2051 ppb	08:22:01
2	Ni 231.604†	244.4	189.9	6.0255 ug/L	6.0255 ppb	08:22:01

2	P 214.914†	460.8	329.2	24.570 ug/L	24.570 ppb	08:22:01
2	Pb 220.353†	-451.1	-447.3	-10.020 ug/L	-10.020 ppb	08:22:01
2	S 181.975 Axial†	65.6	43.3	-19.239 ug/L	-19.239 ppb	08:22:01
2	Sb 206.836†	71.3	56.2	2.7172 ug/L	2.7172 ppb	08:22:01
2	Se 196.026†	-1799.4	-2000.0	-246.22 ug/L	-246.22 ppb	08:22:01
2	Si 251.611†	-238.1	-755.1	-28.180 ug/L	-28.180 ppb	08:22:01
2	Sn 189.927†	-334.8	-382.4	-26.547 ug/L	-26.547 ppb	08:22:01
2	Ti 334.940†	-11966.2	-12291.2	-3.2854 ug/L	-3.2854 ppb	08:21:41
2	Tl 190.801†	-81.0	-61.7	-24.259 ug/L	-24.259 ppb	08:22:01
2	U 409.014†	412871.2	464975.3	14057 ug/L	14057 ppb	08:21:41
2	V 292.402†	1032.4	2474.6	-7.8937 ug/L	-7.8937 ppb	08:22:01
2	Zn 213.857†	4602.5	4588.7	-9.7762 ug/L	-9.7762 ppb	08:22:01
2	SiO2†	-292.8	-827.5	-66.459 ug/L	-66.459 ppb	08:22:37
3	Sc Radial	3792.3	3792.3	86.3 %		08:21:08
3	Y RADIAL	4133.1	4133.1	86.82 %		08:21:08
3	Al 396.153Radial†	464025.1	537857.3	528320 ug/L	528320 ppb	08:20:48
3	Ca 317.933Radial†	223657.0	259190.2	490440 ug/L	490440 ppb	08:20:48
3	Fe 238.204 Radial†	32562.1	37729.2	437160 ug/L	437160 ppb	08:21:08
3	K 766.490 Radial†	2391.3	172.7	-341.14 ug/L	-341.14 ppb	08:20:48
3	Mg 279.077 IEC†	10258.7	11887.7	489930 ug/L	489930 ppb	08:21:08
3	Na 589.592 Radial†	1317202.9	1527439.6	538460 ug/L	538460 ppb	08:20:48
3	Sr 421.552†	1379.4	1577.8	8.9853 ug/L	8.9853 ppb	08:21:08
3	Sc 361.383	694267.4	694267.4	84.788 %		08:22:07
3	Y 371.029	575265.2	575265.2	83.173 %		08:22:07
3	Ag 328.068†	-19833.7	-23577.2	-6.0148 ug/L	-6.0148 ppb	08:22:07
3	As 188.979†	-136.5	-134.2	28.664 ug/L	28.664 ppb	08:22:27
3	B 249.677†	971.8	1683.5	-23.784 ug/L	-23.784 ppb	08:22:07
3	Ba 233.527†	-1352.4	-1594.4	-1.5876 ug/L	-1.5876 ppb	08:22:27
3	Be 313.107†	-9518.2	-7494.8	-3.2398 ug/L	-3.2398 ppb	08:22:07
3	Cd 226.502†	2641.5	3286.0	5.4396 ug/L	5.4396 ppb	08:22:27
3	Co 228.616†	198.7	280.6	0.8817 ug/L	0.8817 ppb	08:22:27
3	Cr 267.716†	-1048.2	-1307.7	22.878 ug/L	22.878 ppb	08:22:27
3	Cu 324.752†	478.2	-4988.0	-1.6100 ug/L	-1.6100 ppb	08:22:07
3	Mn 257.610†	-20061.9	-24050.2	-8.4958 ug/L	-8.4958 ppb	08:22:07
3	Mo 202.031†	-407.4	-489.1	-3.7020 ug/L	-3.7020 ppb	08:22:27
3	Ni 231.604†	237.1	195.5	6.2055 ug/L	6.2055 ppb	08:22:27
3	P 214.914†	471.4	368.6	56.630 ug/L	56.630 ppb	08:22:27
3	Pb 220.353†	-461.8	-486.3	-13.261 ug/L	-13.261 ppb	08:22:27
3	S 181.975 Axial†	57.5	37.6	-31.678 ug/L	-31.678 ppb	08:22:27
3	Sb 206.836†	68.6	57.3	2.6559 ug/L	2.6559 ppb	08:22:27
3	Se 196.026†	-1780.3	-2082.7	-310.14 ug/L	-310.14 ppb	08:22:27
3	Si 251.611†	-272.2	-809.2	-30.184 ug/L	-30.184 ppb	08:22:27
3	Sn 189.927†	-340.5	-408.7	-30.723 ug/L	-30.723 ppb	08:22:27
3	Ti 334.940†	-11350.1	-12265.2	-2.1655 ug/L	-2.1655 ppb	08:22:07
3	Tl 190.801†	-95.1	-83.0	-32.522 ug/L	-32.522 ppb	08:22:27
3	U 409.014†	416181.0	493051.5	14909 ug/L	14909 ppb	08:22:07
3	V 292.402†	1073.7	2583.8	-5.5239 ug/L	-5.5239 ppb	08:22:27
3	Zn 213.857†	4591.0	4844.6	-6.7377 ug/L	-6.7377 ppb	08:22:27
3	SiO2†	-295.7	-848.1	-68.030 ug/L	-68.030 ppb	08:22:42

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	705641.3	86.177 %	2.6358			3.06%
Sc Radial	3837.8	87.3 %	0.90			1.03%
Y 371.029	584759.1	84.546 %	2.5699			3.04%
Y RADIAL	4178.7	87.78 %	0.831			0.95%
Ag 328.068†	-22982.2	-2.7564 ug/L	4.98395	-2.7564 ppb	4.98395	180.82%
Al 396.153Radial†	530771.7	521360 ug/L	6245.4	521360 ppb	6245.4	1.20%
QC value within limits for Al 396.153Radial Recovery = 104.27%						
As 188.979†	-134.3	28.489 ug/L	4.4300	28.489 ppb	4.4300	15.55%
B 249.677†	1619.3	-25.506 ug/L	1.5552	-25.506 ppb	1.5552	6.10%
Ba 233.527†	-1561.8	-1.2983 ug/L	0.29988	-1.2983 ppb	0.29988	23.10%
Be 313.107†	-7298.9	-3.1567 ug/L	0.13583	-3.1567 ppb	0.13583	4.30%
Ca 317.933Radial†	255983.3	484370 ug/L	5391.1	484370 ppb	5391.1	1.11%
QC value within limits for Ca 317.933Radial Recovery = 96.87%						
Cd 226.502†	3242.6	4.8040 ug/L	1.53236	4.8040 ppb	1.53236	31.90%
Co 228.616†	273.2	0.6997 ug/L	0.22995	0.6997 ppb	0.22995	32.86%
Cr 267.716†	-1280.7	23.303 ug/L	0.5453	23.303 ppb	0.5453	2.34%
Cu 324.752†	-4936.1	-1.3021 ug/L	0.28121	-1.3021 ppb	0.28121	21.60%

Fe 238.204 Radial†	37687.0	436670 ug/L	536.3	436670 ppb	536.3	0.12%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.33%						
K 766.490 Radial†	140.0	-342.99 ug/L	15.557	-342.99 ppb	15.557	4.54%
Mg 279.077 IEC†	11892.4	490120 ug/L	550.1	490120 ppb	550.1	0.11%
QC value within limits for Mg 279.077 IEC Recovery = 98.02%						
Mn 257.610†	-23771.3	-8.1853 ug/L	0.73620	-8.1853 ppb	0.73620	8.99%
Mo 202.031†	-486.1	-3.5526 ug/L	3.68516	-3.5526 ppb	3.68516	103.73%
Na 589.592 Radial†	1510425.3	532460 ug/L	5326.8	532460 ppb	5326.8	1.00%
QC value within limits for Na 589.592 Radial Recovery = 106.49%						
Ni 231.604†	189.0	5.9975 ug/L	0.22333	5.9975 ppb	0.22333	3.72%
P 214.914†	357.0	46.570 ug/L	19.0751	46.570 ppb	19.0751	40.96%
Pb 220.353†	-469.2	-12.182 ug/L	1.8719	-12.182 ppb	1.8719	15.37%
S 181.975 Axial†	34.9	-35.177 ug/L	17.9448	-35.177 ppb	17.9448	51.01%
Sb 206.836†	49.4	-0.4064 ug/L	5.35721	-0.4064 ppb	5.35721	>999.9%
Se 196.026†	-2067.6	-301.17 ug/L	51.066	-301.17 ppb	51.066	16.96%
Si 251.611†	-802.2	-29.924 ug/L	1.6288	-29.924 ppb	1.6288	5.44%
Sn 189.927†	-399.9	-29.775 ug/L	2.8732	-29.775 ppb	2.8732	9.65%
Sr 421.552†	1575.2	9.0095 ug/L	0.05848	9.0095 ppb	0.05848	0.65%
Ti 334.940†	-12361.3	-3.0334 ug/L	0.77339	-3.0334 ppb	0.77339	25.50%
Tl 190.801†	-71.9	-28.208 ug/L	4.1435	-28.208 ppb	4.1435	14.69%
U 409.014†	483376.4	14615 ug/L	483.7	14615 ppb	483.7	3.31%
QC value within limits for U 409.014 Recovery = 97.43%						
V 292.402†	2541.7	-6.3431 ug/L	1.34363	-6.3431 ppb	1.34363	21.18%
Zn 213.857†	4776.2	-7.4918 ug/L	2.01607	-7.4918 ppb	2.01607	26.91%
SiO2†	-825.1	-66.158 ug/L	2.0394	-66.158 ppb	2.0394	3.08%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 16

Date Collected: 3/19/2010 08:24:52

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	4137.8	4137.8	94.1 %		08:27:10
1	Y RADIAL	4644.1	4644.1	97.55 %		08:26:50
1	Al 396.153Radial†	390.0	492.3	15.191 ug/L	15.191 ppb	08:26:50
1	Ca 317.933Radial†	33.8	20.2	38.282 ug/L	38.282 ppb	08:27:10
1	Fe 238.204 Radial†	-17.3	-26.9	-23.574 ug/L	-23.574 ppb	08:27:10
1	K 766.490 Radial†	1547401.2	1641029.2	312650 ug/L	312650 ppb	08:26:45
1	Mg 279.077 IEC†	-3.3	-5.0	-105.68 ug/L	-105.68 ppb	08:27:10
1	Na 589.592 Radial†	-347.1	506.4	178.52 ug/L	178.52 ppb	08:26:50
1	Sr 421.552†	1216543.4	1292174.6	10358 ug/L	10358 ppb	08:26:45
1	Sc 361.383	804970.1	804970.1	98.308 %		08:28:28
1	Y 371.029	666238.5	666238.5	96.326 %		08:28:28
1	Ag 328.068†	-6177.1	-6468.5	7.0301 ug/L	7.0301 ppb	08:28:33
1	As 188.979†	17708.3	18039.8	9966.6 ug/L	9966.6 ppb	08:28:33
1	B 249.677†	175916.7	179481.8	5007.7 ug/L	5007.7 ppb	08:28:28
1	Ba 233.527†	1479029.4	1504486.3	14114 ug/L	14114 ppb	08:28:28
1	Be 313.107†	6728544.3	6848082.8	2938.4 ug/L	2938.4 ppb	08:28:21
1	Cd 226.502†	658581.0	670086.7	9729.0 ug/L	9729.0 ppb	08:28:28
1	Co 228.616†	365808.7	372151.0	9616.9 ug/L	9616.9 ppb	08:28:28
1	Cr 267.716†	1773359.1	1803809.5	24204 ug/L	24204 ppb	08:28:28
1	Cu 324.752†	6042194.5	6140637.0	20273 ug/L	20273 ppb	08:28:21
1	Mn 257.610†	7074413.2	7195784.5	9461.1 ug/L	9461.1 ppb	08:28:21
1	Mo 202.031†	106826.9	108657.0	9658.6 ug/L	9658.6 ppb	08:28:33
1	Ni 231.604†	306782.5	311978.6	9901.8 ug/L	9901.8 ppb	08:28:28
1	P 214.914†	23485.0	23701.9	13724 ug/L	13724 ppb	08:28:33
1	Pb 220.353†	155065.2	157792.4	24255 ug/L	24255 ppb	08:28:28
1	S 181.975 Axial†	28593.5	29055.4	52015 ug/L	52015 ppb	08:28:33
1	Sb 206.836†	24495.7	24893.6	10774 ug/L	10774 ppb	08:28:33
1	Se 196.026†	12052.6	12277.0	10257 ug/L	10257 ppb	08:28:33
1	Si 251.611†	1232990.0	1253723.3	47476 ug/L	47476 ppb	08:28:28
1	Sn 189.927†	43906.6	44655.1	10133 ug/L	10133 ppb	08:28:33
1	Ti 334.940†	5587153.3	5684437.1	9876.8 ug/L	9876.8 ppb	08:28:21
1	Tl 190.801†	24418.9	24868.3	9687.0 ug/L	9687.0 ppb	08:28:33
1	U 409.014†	-1200.6	983.0	-24.275 ug/L	-24.275 ppb	08:28:28
1	V 292.402†	1238824.8	1261464.1	10190 ug/L	10190 ppb	08:28:28
1	Zn 213.857†	1148798.8	1168001.2	14062 ug/L	14062 ppb	08:28:28
1	SiO2†	1231318.9	1252012.3	101920 ug/L	101920 ppb	08:29:19
2	Sc Radial	4145.5	4145.5	94.3 %		08:27:41
2	Y RADIAL	4527.2	4527.2	95.10 %		08:27:21
2	Al 396.153Radial†	369.2	469.5	-8.7245 ug/L	-8.7245 ppb	08:27:21
2	Ca 317.933Radial†	32.2	18.5	34.943 ug/L	34.943 ppb	08:27:41
2	Fe 238.204 Radial†	-18.2	-27.8	-32.856 ug/L	-32.856 ppb	08:27:41
2	K 766.490 Radial†	1542370.3	1632628.8	311050 ug/L	311050 ppb	08:27:16
2	Mg 279.077 IEC†	-5.6	-7.4	-205.17 ug/L	-205.17 ppb	08:27:41
2	Na 589.592 Radial†	-354.2	499.6	176.11 ug/L	176.11 ppb	08:27:21
2	Sr 421.552†	1209601.5	1282403.8	10279 ug/L	10279 ppb	08:27:16
2	Sc 361.383	811868.5	811868.5	99.150 %		08:28:48
2	Y 371.029	670978.1	670978.1	97.012 %		08:28:48
2	Ag 328.068†	-6279.8	-6518.8	6.8157 ug/L	6.8157 ppb	08:28:53
2	As 188.979†	17949.0	18129.6	10015 ug/L	10015 ppb	08:28:53
2	B 249.677†	177983.5	180045.9	5023.5 ug/L	5023.5 ppb	08:28:48
2	Ba 233.527†	1494980.9	1507790.9	14145 ug/L	14145 ppb	08:28:48
2	Be 313.107†	6732933.5	6794353.7	2915.3 ug/L	2915.3 ppb	08:28:41
2	Cd 226.502†	666918.4	672803.4	9768.4 ug/L	9768.4 ppb	08:28:48
2	Co 228.616†	370193.2	373411.3	9649.8 ug/L	9649.8 ppb	08:28:48
2	Cr 267.716†	1791743.9	1807024.5	24247 ug/L	24247 ppb	08:28:48
2	Cu 324.752†	6030940.7	6077063.1	20063 ug/L	20063 ppb	08:28:41
2	Mn 257.610†	7074899.8	7135130.0	9381.4 ug/L	9381.4 ppb	08:28:41
2	Mo 202.031†	108087.3	109004.9	9689.6 ug/L	9689.6 ppb	08:28:53
2	Ni 231.604†	310630.5	313208.0	9940.8 ug/L	9940.8 ppb	08:28:48

2	P 214.914†	23794.6	23811.2	13848 ug/L	13848 ppb	08:28:53
2	Pb 220.353†	156895.5	158298.2	24333 ug/L	24333 ppb	08:28:48
2	S 181.975 Axial†	29039.9	29258.5	52379 ug/L	52379 ppb	08:28:53
2	Sb 206.836†	24818.6	25007.5	10823 ug/L	10823 ppb	08:28:53
2	Se 196.026†	12224.9	12346.6	10315 ug/L	10315 ppb	08:28:53
2	Si 251.611†	1246148.3	1256337.3	47575 ug/L	47575 ppb	08:28:48
2	Sn 189.927†	44475.4	44849.3	10178 ug/L	10178 ppb	08:28:53
2	Ti 334.940†	5582866.5	5631822.9	9785.3 ug/L	9785.3 ppb	08:28:41
2	Tl 190.801†	24653.6	24894.0	9695.6 ug/L	9695.6 ppb	08:28:53
2	U 409.014†	-1298.1	895.0	-27.040 ug/L	-27.040 ppb	08:28:48
2	V 292.402†	1250891.0	1262926.4	10202 ug/L	10202 ppb	08:28:48
2	Zn 213.857†	1161089.0	1170467.4	14092 ug/L	14092 ppb	08:28:48
2	SiO2†	1234688.1	1244767.8	101320 ug/L	101320 ppb	08:29:25
3	Sc Radial	4156.1	4156.1	94.6 %		08:28:11
3	Y RADIAL	4593.1	4593.1	96.48 %		08:27:51
3	Al 396.153Radial†	406.4	507.9	24.084 ug/L	24.084 ppb	08:27:51
3	Ca 317.933Radial†	32.6	18.8	35.616 ug/L	35.616 ppb	08:28:11
3	Fe 238.204 Radial†	-11.3	-20.4	53.420 ug/L	53.420 ppb	08:28:11
3	K 766.490 Radial†	1534339.9	1619978.5	308640 ug/L	308640 ppb	08:27:46
3	Mg 279.077 IEC†	-5.4	-7.2	-196.31 ug/L	-196.31 ppb	08:28:11
3	Na 589.592 Radial†	-370.0	483.8	170.55 ug/L	170.55 ppb	08:27:51
3	Sr 421.552†	1205944.7	1275275.8	10222 ug/L	10222 ppb	08:27:46
3	Sc 361.383	799541.9	799541.9	97.645 %		08:29:08
3	Y 371.029	660328.4	660328.4	95.472 %		08:29:08
3	Ag 328.068†	-6237.4	-6572.9	6.6426 ug/L	6.6426 ppb	08:29:13
3	As 188.979†	17849.2	18306.5	10114 ug/L	10114 ppb	08:29:13
3	B 249.677†	175494.5	180264.3	5029.5 ug/L	5029.5 ppb	08:29:08
3	Ba 233.527†	1476470.2	1512079.6	14185 ug/L	14185 ppb	08:29:08
3	Be 313.107†	6787317.6	6954741.4	2984.1 ug/L	2984.1 ppb	08:29:01
3	Cd 226.502†	659516.8	675593.3	9808.9 ug/L	9808.9 ppb	08:29:08
3	Co 228.616†	365913.6	374784.7	9685.0 ug/L	9685.0 ppb	08:29:08
3	Cr 267.716†	1770674.5	1813307.1	24331 ug/L	24331 ppb	08:29:08
3	Cu 324.752†	6079322.5	6220388.3	20537 ug/L	20537 ppb	08:29:01
3	Mn 257.610†	7133186.6	7304831.8	9604.5 ug/L	9604.5 ppb	08:29:01
3	Mo 202.031†	107562.7	110148.3	9791.2 ug/L	9791.2 ppb	08:29:13
3	Ni 231.604†	306847.3	314163.7	9971.1 ug/L	9971.1 ppb	08:29:08
3	P 214.914†	23753.0	24138.6	13999 ug/L	13999 ppb	08:29:13
3	Pb 220.353†	155100.2	158899.1	24425 ug/L	24425 ppb	08:29:08
3	S 181.975 Axial†	28855.2	29520.9	52849 ug/L	52849 ppb	08:29:13
3	Sb 206.836†	24631.3	25201.6	10908 ug/L	10908 ppb	08:29:13
3	Se 196.026†	12064.9	12372.8	10337 ug/L	10337 ppb	08:29:13
3	Si 251.611†	1229504.0	1258668.3	47662 ug/L	47662 ppb	08:29:08
3	Sn 189.927†	44342.4	45404.7	10304 ug/L	10304 ppb	08:29:13
3	Ti 334.940†	5623242.8	5759982.3	10008 ug/L	10008 ppb	08:29:01
3	Tl 190.801†	24541.9	25162.9	9802.4 ug/L	9802.4 ppb	08:29:13
3	U 409.014†	-1135.1	1041.7	-22.786 ug/L	-22.786 ppb	08:29:08
3	V 292.402†	1234480.5	1265570.5	10225 ug/L	10225 ppb	08:29:08
3	Zn 213.857†	1148149.8	1175270.1	14149 ug/L	14149 ppb	08:29:08
3	SiO2†	1217210.0	1246066.7	101430 ug/L	101430 ppb	08:29:31

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	805460.2	98.368 %	0.7545			0.77%
Sc Radial	4146.4	94.3 %	0.21			0.22%
Y 371.029	665848.3	96.270 %	0.7714			0.80%
Y RADIAL	4588.1	96.38 %	1.231			1.28%
Ag 328.068†	-6520.1	6.8295 ug/L	0.19414	6.8295 ppb	0.19414	2.84%
Al 396.153Radial†	489.9	10.184 ug/L	16.9680	10.184 ppb	16.9680	166.62%
As 188.979†	18158.6	10032 ug/L	75.0	10032 ppb	75.0	0.75%
QC value within limits for As 188.979 Recovery = 100.32%						
B 249.677†	179930.7	5020.2 ug/L	11.23	5020.2 ppb	11.23	0.22%
QC value within limits for B 249.677 Recovery = 100.40%						
Ba 233.527†	1508118.9	14148 ug/L	35.7	14148 ppb	35.7	0.25%
QC value within limits for Ba 233.527 Recovery = 94.32%						
Be 313.107†	6865726.0	2945.9 ug/L	35.01	2945.9 ppb	35.01	1.19%
QC value within limits for Be 313.107 Recovery = 98.20%						
Ca 317.933Radial†	19.2	36.280 ug/L	1.7659	36.280 ppb	1.7659	4.87%
Cd 226.502†	672827.8	9768.8 ug/L	39.97	9768.8 ppb	39.97	0.41%
QC value within limits for Cd 226.502 Recovery = 97.69%						

Co 228.616†	373449.0	9650.6 ug/L	34.05	9650.6 ppb	34.05	0.35%
QC value within limits for Co 228.616 Recovery = 96.51%						
Cr 267.716†	1808047.0	24260 ug/L	64.8	24260 ppb	64.8	0.27%
QC value within limits for Cr 267.716 Recovery = 97.04%						
Cu 324.752†	6146029.5	20291 ug/L	237.1	20291 ppb	237.1	1.17%
QC value within limits for Cu 324.752 Recovery = 101.46%						
Fe 238.204 Radial†	-25.0	-1.0033 ug/L	47.36013	-1.0033 ppb	47.36013	>999.9%
K 766.490 Radial†	1631212.1	310780 ug/L	2019.1	310780 ppb	2019.1	0.65%
QC value within limits for K 766.490 Radial Recovery = 103.59%						
Mg 279.077 IEC†	-6.6	-169.05 ug/L	55.058	-169.05 ppb	55.058	32.57%
Mn 257.610†	7211915.4	9482.4 ug/L	113.07	9482.4 ppb	113.07	1.19%
QC value within limits for Mn 257.610 Recovery = 94.82%						
Mo 202.031†	109270.1	9713.1 ug/L	69.35	9713.1 ppb	69.35	0.71%
QC value within limits for Mo 202.031 Recovery = 97.13%						
Na 589.592 Radial†	496.6	175.06 ug/L	4.087	175.06 ppb	4.087	2.33%
Ni 231.604†	313116.8	9937.9 ug/L	34.77	9937.9 ppb	34.77	0.35%
QC value within limits for Ni 231.604 Recovery = 99.38%						
P 214.914†	23883.9	13857 ug/L	137.5	13857 ppb	137.5	0.99%
QC value within limits for P 214.914 Recovery = 92.38%						
Pb 220.353†	158329.9	24337 ug/L	85.2	24337 ppb	85.2	0.35%
QC value within limits for Pb 220.353 Recovery = 97.35%						
S 181.975 Axial†	29278.3	52414 ug/L	417.8	52414 ppb	417.8	0.80%
QC value within limits for S 181.975 Axial Recovery = 104.83%						
Sb 206.836†	25034.3	10835 ug/L	67.7	10835 ppb	67.7	0.63%
QC value within limits for Sb 206.836 Recovery = 108.35%						
Se 196.026†	12332.1	10303 ug/L	41.5	10303 ppb	41.5	0.40%
QC value within limits for Se 196.026 Recovery = 103.03%						
Si 251.611†	1256243.0	47571 ug/L	93.1	47571 ppb	93.1	0.20%
QC value within limits for Si 251.611 Recovery = 95.14%						
Sn 189.927†	44969.7	10205 ug/L	88.3	10205 ppb	88.3	0.87%
QC value within limits for Sn 189.927 Recovery = 102.05%						
Sr 421.552†	1283284.7	10286 ug/L	68.0	10286 ppb	68.0	0.66%
QC value within limits for Sr 421.552 Recovery = 102.86%						
Ti 334.940†	5692080.8	9890.1 ug/L	112.01	9890.1 ppb	112.01	1.13%
QC value within limits for Ti 334.940 Recovery = 98.90%						
Tl 190.801†	24975.1	9728.3 ug/L	64.27	9728.3 ppb	64.27	0.66%
QC value within limits for Tl 190.801 Recovery = 97.28%						
U 409.014†	973.2	-24.700 ug/L	2.1584	-24.700 ppb	2.1584	8.74%
V 292.402†	1263320.3	10206 ug/L	17.5	10206 ppb	17.5	0.17%
QC value within limits for V 292.402 Recovery = 102.06%						
Zn 213.857†	1171246.2	14101 ug/L	44.3	14101 ppb	44.3	0.31%
QC value within limits for Zn 213.857 Recovery = 94.01%						
SiO2†	1247615.6	101560 ug/L	316.3	101560 ppb	316.3	0.31%
QC value within limits for SiO2 Recovery = 94.91%						
All analyte(s) passed QC.						

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Analysis Begun

Start Time: 3/19/2010 08:47:07

Plasma On Time: 3/15/2010 06:51:19

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\031910.sif

Batch ID:

Results Data Set: 031910

Results Library: C:\pe\Optima3\Results\Results.mdb

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Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 3/19/2010 07:15:37

IEC File: 011110.iec

MSF File:

Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/19/2010 08:47:08

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

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Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4305.8	4305.8	98.0 %		08:49:20
1	Y RADIAL	4716.7	4716.7	99.08 %		08:49:00
1	Al 396.153Radial†	4931.5	5111.8	4997.3 ug/L	4997.3 ppb	08:49:00

1	Ca 317.933Radial†	2710.1	2750.6	5204.7 ug/L	5204.7 ppb	08:49:20
1	Fe 238.204 Radial†	455.7	456.7	5306.4 ug/L	5306.4 ppb	08:49:20
1	K 766.490 Radial†	29165.1	27171.3	5170.4 ug/L	5170.4 ppb	08:49:00
1	Mg 279.077 IEC†	127.8	129.0	5319.9 ug/L	5319.9 ppb	08:49:20
1	Na 589.592 Radial†	27601.2	29048.8	10240 ug/L	10240 ppb	08:49:00
1	Sr 421.552†	62875.2	64158.5	514.24 ug/L	514.24 ppb	08:49:00
1	Sc 361.383	842688.6	842688.6	102.91 %		08:50:18
1	Y 371.029	702082.9	702082.9	101.51 %		08:50:18
1	Ag 328.068†	97152.7	94216.3	492.30 ug/L	492.30 ppb	08:50:23
1	As 188.979†	915.3	916.2	507.22 ug/L	507.22 ppb	08:50:43
1	B 249.677†	17731.7	17766.9	496.15 ug/L	496.15 ppb	08:50:23
1	Ba 233.527†	53823.5	52300.0	491.10 ug/L	491.10 ppb	08:50:23
1	Be 313.107†	1211376.0	1180802.4	503.88 ug/L	503.88 ppb	08:50:18
1	Cd 226.502†	34646.6	33836.1	490.81 ug/L	490.81 ppb	08:50:23
1	Co 228.616†	19740.5	19227.7	497.07 ug/L	497.07 ppb	08:50:23
1	Cr 267.716†	37683.1	36544.5	491.12 ug/L	491.12 ppb	08:50:23
1	Cu 324.752†	156492.6	146509.0	483.70 ug/L	483.70 ppb	08:50:23
1	Mn 257.610†	390297.8	378856.0	498.43 ug/L	498.43 ppb	08:50:18
1	Mo 202.031†	5708.4	5538.2	492.77 ug/L	492.77 ppb	08:50:43
1	Ni 231.604†	16164.2	15622.4	495.83 ug/L	495.83 ppb	08:50:23
1	P 214.914†	3592.6	3303.6	2366.4 ug/L	2366.4 ppb	08:50:43
1	Pb 220.353†	3247.3	3213.6	495.10 ug/L	495.10 ppb	08:50:43
1	S 181.975 Axial†	591.1	544.2	973.26 ug/L	973.26 ppb	08:50:43
1	Sb 206.836†	1250.0	1190.9	516.03 ug/L	516.03 ppb	08:50:43
1	Se 196.026†	596.8	596.8	515.55 ug/L	515.55 ppb	08:50:43
1	Si 251.611†	66710.0	64332.6	2436.2 ug/L	2436.2 ppb	08:50:23
1	Sn 189.927†	2261.3	2190.1	497.61 ug/L	497.61 ppb	08:50:43
1	Ti 334.940†	283251.6	276351.5	480.46 ug/L	480.46 ppb	08:50:23
1	Tl 190.801†	1282.3	1275.1	496.57 ug/L	496.57 ppb	08:50:43
1	U 409.014†	14644.3	16433.8	496.87 ug/L	496.87 ppb	08:50:23
1	V 292.402†	61720.7	61290.3	495.97 ug/L	495.97 ppb	08:50:23
1	Zn 213.857†	42521.3	40747.1	489.11 ug/L	489.11 ppb	08:50:23
1	SiO2†	66780.4	64389.9	5241.6 ug/L	5241.6 ppb	08:51:50
2	Sc Radial	4310.3	4310.3	98.1 %		08:49:46
2	Y RADIAL	4803.0	4803.0	100.9 %		08:49:26
2	Al 396.153Radial†	5008.9	5185.5	5069.2 ug/L	5069.2 ppb	08:49:26
2	Ca 317.933Radial†	2706.8	2744.3	5192.8 ug/L	5192.8 ppb	08:49:46
2	Fe 238.204 Radial†	454.3	454.8	5284.6 ug/L	5284.6 ppb	08:49:46
2	K 766.490 Radial†	29710.5	27696.0	5270.2 ug/L	5270.2 ppb	08:49:26
2	Mg 279.077 IEC†	130.0	131.0	5404.3 ug/L	5404.3 ppb	08:49:46
2	Na 589.592 Radial†	28243.8	29674.3	10461 ug/L	10461 ppb	08:49:26
2	Sr 421.552†	64090.9	65330.4	523.63 ug/L	523.63 ppb	08:49:26
2	Sc 361.383	835415.1	835415.1	102.03 %		08:50:49
2	Y 371.029	696746.4	696746.4	100.74 %		08:50:49
2	Ag 328.068†	98655.9	96511.5	504.24 ug/L	504.24 ppb	08:50:54
2	As 188.979†	915.8	924.4	511.79 ug/L	511.79 ppb	08:51:14
2	B 249.677†	18161.0	18337.7	512.14 ug/L	512.14 ppb	08:50:54
2	Ba 233.527†	54512.5	53430.6	501.72 ug/L	501.72 ppb	08:50:54
2	Be 313.107†	1202410.4	1182263.0	504.53 ug/L	504.53 ppb	08:50:49
2	Cd 226.502†	35172.4	34644.5	502.56 ug/L	502.56 ppb	08:50:54
2	Co 228.616†	20017.6	19666.3	508.40 ug/L	508.40 ppb	08:50:54
2	Cr 267.716†	38195.4	37365.3	502.14 ug/L	502.14 ppb	08:50:54
2	Cu 324.752†	159175.9	150462.8	496.75 ug/L	496.75 ppb	08:50:54
2	Mn 257.610†	387381.3	379299.3	499.01 ug/L	499.01 ppb	08:50:49
2	Mo 202.031†	5767.0	5643.9	502.17 ug/L	502.17 ppb	08:51:14
2	Ni 231.604†	16383.4	15974.0	506.99 ug/L	506.99 ppb	08:50:54
2	P 214.914†	3601.9	3343.1	2393.4 ug/L	2393.4 ppb	08:51:14
2	Pb 220.353†	3277.1	3270.3	503.85 ug/L	503.85 ppb	08:51:14
2	S 181.975 Axial†	602.5	560.3	1002.1 ug/L	1002.1 ppb	08:51:14
2	Sb 206.836†	1254.1	1205.5	522.43 ug/L	522.43 ppb	08:51:14
2	Se 196.026†	611.7	616.6	531.97 ug/L	531.97 ppb	08:51:14
2	Si 251.611†	67838.4	66003.0	2499.5 ug/L	2499.5 ppb	08:50:54
2	Sn 189.927†	2268.7	2216.5	503.59 ug/L	503.59 ppb	08:51:14
2	Ti 334.940†	287345.1	282760.0	491.58 ug/L	491.58 ppb	08:50:54
2	Tl 190.801†	1298.2	1301.6	506.83 ug/L	506.83 ppb	08:51:14
2	U 409.014†	15075.3	16980.2	513.43 ug/L	513.43 ppb	08:50:54
2	V 292.402†	62616.3	62690.3	507.30 ug/L	507.30 ppb	08:50:54
2	Zn 213.857†	43043.2	41618.3	499.58 ug/L	499.58 ppb	08:50:54
2	SiO2†	67536.8	65696.3	5347.9 ug/L	5347.9 ppb	08:51:56
3	Sc Radial	4320.9	4320.9	98.3 %		08:50:11
3	Y RADIAL	4722.3	4722.3	99.20 %		08:49:51

3	Al 396.153Radial†	4930.1	5092.8	4978.3 ug/L	4978.3 ppb	08:49:51
3	Ca 317.933Radial†	2709.3	2740.1	5184.9 ug/L	5184.9 ppb	08:50:11
3	Fe 238.204 Radial†	457.4	456.8	5308.2 ug/L	5308.2 ppb	08:50:11
3	K 766.490 Radial†	29302.8	27207.3	5177.2 ug/L	5177.2 ppb	08:49:51
3	Mg 279.077 IEC†	130.2	130.9	5398.3 ug/L	5398.3 ppb	08:50:11
3	Na 589.592 Radial†	27688.5	29039.1	10237 ug/L	10237 ppb	08:49:51
3	Sr 421.552†	62909.5	63969.0	512.72 ug/L	512.72 ppb	08:49:51
3	Sc 361.383	833064.0	833064.0	101.74 %		08:51:20
3	Y 371.029	694093.3	694093.3	100.35 %		08:51:20
3	Ag 328.068†	96658.0	94820.7	495.44 ug/L	495.44 ppb	08:51:25
3	As 188.979†	909.2	920.4	509.56 ug/L	509.56 ppb	08:51:45
3	B 249.677†	17772.0	18005.6	502.84 ug/L	502.84 ppb	08:51:25
3	Ba 233.527†	53540.6	52626.1	494.16 ug/L	494.16 ppb	08:51:25
3	Be 313.107†	1198980.6	1182217.9	504.49 ug/L	504.49 ppb	08:51:20
3	Cd 226.502†	34489.0	34070.1	494.21 ug/L	494.21 ppb	08:51:25
3	Co 228.616†	19647.2	19357.6	500.44 ug/L	500.44 ppb	08:51:25
3	Cr 267.716†	37544.8	36831.6	494.97 ug/L	494.97 ppb	08:51:25
3	Cu 324.752†	155601.0	147389.4	486.61 ug/L	486.61 ppb	08:51:25
3	Mn 257.610†	386953.3	379950.2	499.87 ug/L	499.87 ppb	08:51:20
3	Mo 202.031†	5728.1	5621.6	500.19 ug/L	500.19 ppb	08:51:45
3	Ni 231.604†	16137.8	15777.9	500.76 ug/L	500.76 ppb	08:51:25
3	P 214.914†	3584.6	3336.0	2390.0 ug/L	2390.0 ppb	08:51:45
3	Pb 220.353†	3264.9	3267.4	503.37 ug/L	503.37 ppb	08:51:45
3	S 181.975 Axial†	592.3	552.0	987.22 ug/L	987.22 ppb	08:51:45
3	Sb 206.836†	1243.0	1198.1	519.27 ug/L	519.27 ppb	08:51:45
3	Se 196.026†	592.4	599.2	517.57 ug/L	517.57 ppb	08:51:45
3	Si 251.611†	66318.2	64696.5	2449.9 ug/L	2449.9 ppb	08:51:25
3	Sn 189.927†	2253.3	2207.6	501.58 ug/L	501.58 ppb	08:51:45
3	Ti 334.940†	281695.2	278001.5	483.32 ug/L	483.32 ppb	08:51:25
3	Tl 190.801†	1289.9	1297.0	505.05 ug/L	505.05 ppb	08:51:45
3	U 409.014†	14513.9	16470.0	497.96 ug/L	497.96 ppb	08:51:25
3	V 292.402†	61261.2	61531.5	498.00 ug/L	498.00 ppb	08:51:25
3	Zn 213.857†	42320.7	41027.2	492.47 ug/L	492.47 ppb	08:51:25
3	SiO2†	66750.8	65110.6	5300.2 ug/L	5300.2 ppb	08:52:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	837055.9	102.23 %		0.613			0.60%
Sc Radial	4312.3	98.1 %		0.18			0.18%
Y 371.029	697640.9	100.87 %		0.588			0.58%
Y RADIAL	4747.3	99.72 %		1.014			1.02%
Ag 328.068†	95182.9	497.33 ug/L		6.190	497.33 ppb	6.190	1.24%
QC value within limits for Ag 328.068 Recovery = 99.47%							
Al 396.153Radial†	5130.0	5014.9 ug/L		47.95	5014.9 ppb	47.95	0.96%
QC value within limits for Al 396.153Radial Recovery = 100.30%							
As 188.979†	920.3	509.52 ug/L		2.282	509.52 ppb	2.282	0.45%
QC value within limits for As 188.979 Recovery = 101.90%							
B 249.677†	18036.7	503.71 ug/L		8.027	503.71 ppb	8.027	1.59%
QC value within limits for B 249.677 Recovery = 100.74%							
Ba 233.527†	52785.6	495.66 ug/L		5.463	495.66 ppb	5.463	1.10%
QC value within limits for Ba 233.527 Recovery = 99.13%							
Be 313.107†	1181761.1	504.30 ug/L		0.363	504.30 ppb	0.363	0.07%
QC value within limits for Be 313.107 Recovery = 100.86%							
Ca 317.933Radial†	2745.0	5194.1 ug/L		9.96	5194.1 ppb	9.96	0.19%
QC value within limits for Ca 317.933Radial Recovery = 103.88%							
Cd 226.502†	34183.6	495.86 ug/L		6.043	495.86 ppb	6.043	1.22%
QC value within limits for Cd 226.502 Recovery = 99.17%							
Co 228.616†	19417.2	501.97 ug/L		5.822	501.97 ppb	5.822	1.16%
QC value within limits for Co 228.616 Recovery = 100.39%							
Cr 267.716†	36913.8	496.08 ug/L		5.590	496.08 ppb	5.590	1.13%
QC value within limits for Cr 267.716 Recovery = 99.22%							
Cu 324.752†	148120.4	489.02 ug/L		6.848	489.02 ppb	6.848	1.40%
QC value within limits for Cu 324.752 Recovery = 97.80%							
Fe 238.204 Radial†	456.1	5299.7 ug/L		13.14	5299.7 ppb	13.14	0.25%
QC value within limits for Fe 238.204 Radial Recovery = 105.99%							
K 766.490 Radial†	27358.2	5205.9 ug/L		55.79	5205.9 ppb	55.79	1.07%
QC value within limits for K 766.490 Radial Recovery = 104.12%							
Mg 279.077 IEC†	130.3	5374.1 ug/L		47.09	5374.1 ppb	47.09	0.88%
QC value within limits for Mg 279.077 IEC Recovery = 107.48%							

Mn 257.610†	379368.5	499.10 ug/L	0.722	499.10 ppb	0.722	0.14%
QC value within limits for Mn 257.610 Recovery = 99.82%						
Mo 202.031†	5601.2	498.37 ug/L	4.955	498.37 ppb	4.955	0.99%
QC value within limits for Mo 202.031 Recovery = 99.67%						
Na 589.592 Radial†	29254.1	10313 ug/L	128.3	10313 ppb	128.3	1.24%
QC value within limits for Na 589.592 Radial Recovery = 103.13%						
Ni 231.604†	15791.4	501.19 ug/L	5.592	501.19 ppb	5.592	1.12%
QC value within limits for Ni 231.604 Recovery = 100.24%						
P 214.914†	3327.6	2383.3 ug/L	14.70	2383.3 ppb	14.70	0.62%
QC value within limits for P 214.914 Recovery = 95.33%						
Pb 220.353†	3250.5	500.77 ug/L	4.917	500.77 ppb	4.917	0.98%
QC value within limits for Pb 220.353 Recovery = 100.15%						
S 181.975 Axial†	552.2	987.54 ug/L	14.439	987.54 ppb	14.439	1.46%
QC value within limits for S 181.975 Axial Recovery = 98.75%						
Sb 206.836†	1198.2	519.24 ug/L	3.201	519.24 ppb	3.201	0.62%
QC value within limits for Sb 206.836 Recovery = 103.85%						
Se 196.026†	604.2	521.70 ug/L	8.953	521.70 ppb	8.953	1.72%
QC value within limits for Se 196.026 Recovery = 104.34%						
Si 251.611†	65010.7	2461.9 ug/L	33.30	2461.9 ppb	33.30	1.35%
QC value within limits for Si 251.611 Recovery = 98.47%						
Sn 189.927†	2204.7	500.93 ug/L	3.046	500.93 ppb	3.046	0.61%
QC value within limits for Sn 189.927 Recovery = 100.19%						
Sr 421.552†	64486.0	516.86 ug/L	5.911	516.86 ppb	5.911	1.14%
QC value within limits for Sr 421.552 Recovery = 103.37%						
Ti 334.940†	279037.7	485.12 ug/L	5.777	485.12 ppb	5.777	1.19%
QC value within limits for Ti 334.940 Recovery = 97.02%						
Tl 190.801†	1291.2	502.82 ug/L	5.485	502.82 ppb	5.485	1.09%
QC value within limits for Tl 190.801 Recovery = 100.56%						
U 409.014†	16628.0	502.75 ug/L	9.259	502.75 ppb	9.259	1.84%
QC value within limits for U 409.014 Recovery = 100.55%						
V 292.402†	61837.4	500.42 ug/L	6.043	500.42 ppb	6.043	1.21%
QC value within limits for V 292.402 Recovery = 100.08%						
Zn 213.857†	41130.9	493.72 ug/L	5.346	493.72 ppb	5.346	1.08%
QC value within limits for Zn 213.857 Recovery = 98.74%						
SiO2†	65065.6	5296.6 ug/L	53.27	5296.6 ppb	53.27	1.01%
QC value within limits for SiO2 Recovery = 99.05%						
All analyte(s) passed QC.						

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 08:54:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4278.0	4278.0	97.3 %		08:56:23
1	Y RADIAL	4838.9	4838.9	101.6 %		08:56:03
1	Al 396.153Radial†	-75.6	0.4	0.3184 ug/L	0.3184 ppb	08:56:23
1	Ca 317.933Radial†	23.5	8.5	16.044 ug/L	16.044 ppb	08:56:23
1	Fe 238.204 Radial†	8.5	0.3	3.4993 ug/L	3.4993 ppb	08:56:23
1	K 766.490 Radial†	2965.1	447.5	85.252 ug/L	85.252 ppb	08:56:03
1	Mg 279.077 IEC†	0.2	-1.3	-54.781 ug/L	-54.781 ppb	08:56:23
1	Na 589.592 Radial†	-832.8	19.5	6.8849 ug/L	6.8849 ppb	08:56:03
1	Sr 421.552†	5.5	-15.1	-0.1214 ug/L	-0.1214 ppb	08:56:03
1	Sc 361.383	825108.5	825108.5	100.77 %		08:57:20
1	Y 371.029	697408.9	697408.9	100.83 %		08:57:20
1	Ag 328.068†	183.8	-2.8	-0.0178 ug/L	-0.0178 ppb	08:57:20
1	As 188.979†	-22.6	4.4	2.4163 ug/L	2.4163 ppb	08:57:40
1	B 249.677†	152.9	689.1	19.332 ug/L	19.332 ppb	08:57:40
1	Ba 233.527†	8.3	9.0	0.0838 ug/L	0.0838 ppb	08:57:40
1	Be 313.107†	-3650.8	108.0	0.0460 ug/L	0.0460 ppb	08:57:20
1	Cd 226.502†	-153.3	18.5	0.2683 ug/L	0.2683 ppb	08:57:40
1	Co 228.616†	-54.3	-7.7	-0.1957 ug/L	-0.1957 ppb	08:57:40
1	Cr 267.716†	76.4	4.3	0.0557 ug/L	0.0557 ppb	08:57:40
1	Cu 324.752†	5642.6	47.6	0.1550 ug/L	0.1550 ppb	08:57:20
1	Mn 257.610†	411.6	19.4	0.0280 ug/L	0.0280 ppb	08:57:40
1	Mo 202.031†	21.9	13.2	1.1724 ug/L	1.1724 ppb	08:57:40
1	Ni 231.604†	74.1	-10.5	-0.3340 ug/L	-0.3340 ppb	08:57:40
1	P 214.914†	178.9	-9.7	-7.2705 ug/L	-7.2705 ppb	08:57:40
1	Pb 220.353†	-46.9	11.7	1.8038 ug/L	1.8038 ppb	08:57:40
1	S 181.975 Axial†	20.4	-10.0	-17.833 ug/L	-17.833 ppb	08:57:40
1	Sb 206.836†	27.2	3.4	1.4349 ug/L	1.4349 ppb	08:57:40
1	Se 196.026†	-14.3	2.8	2.3246 ug/L	2.3246 ppb	08:57:40
1	Si 251.611†	553.7	61.4	2.3149 ug/L	2.3149 ppb	08:57:40
1	Sn 189.927†	9.9	2.6	0.6033 ug/L	0.6033 ppb	08:57:40
1	Ti 334.940†	-1116.7	13.0	0.0274 ug/L	0.0274 ppb	08:57:20
1	Tl 190.801†	-32.2	-2.9	-1.1249 ug/L	-1.1249 ppb	08:57:40
1	U 409.014†	-2076.1	144.0	4.3671 ug/L	4.3671 ppb	08:57:20
1	V 292.402†	-1348.4	-20.7	-0.1418 ug/L	-0.1418 ppb	08:57:20
1	Zn 213.857†	714.3	138.7	1.6825 ug/L	1.6825 ppb	08:57:40
1	SiO2†	559.1	55.5	4.4993 ug/L	4.4993 ppb	08:58:51
2	Sc Radial	4424.5	4424.5	101 %		08:56:48
2	Y RADIAL	4835.4	4835.4	101.6 %		08:56:28
2	Al 396.153Radial†	-71.2	7.3	7.2099 ug/L	7.2099 ppb	08:56:48
2	Ca 317.933Radial†	25.5	9.7	18.317 ug/L	18.317 ppb	08:56:48
2	Fe 238.204 Radial†	8.6	0.1	0.7604 ug/L	0.7604 ppb	08:56:48
2	K 766.490 Radial†	2915.1	296.9	56.563 ug/L	56.563 ppb	08:56:28
2	Mg 279.077 IEC†	3.1	1.5	63.159 ug/L	63.159 ppb	08:56:48
2	Na 589.592 Radial†	-851.2	29.6	10.439 ug/L	10.439 ppb	08:56:28
2	Sr 421.552†	16.7	-4.2	-0.0342 ug/L	-0.0342 ppb	08:56:28
2	Sc 361.383	825546.1	825546.1	100.82 %		08:57:45
2	Y 371.029	698004.5	698004.5	100.92 %		08:57:45
2	Ag 328.068†	154.1	-32.2	-0.1736 ug/L	-0.1736 ppb	08:57:45
2	As 188.979†	-11.3	15.6	8.5484 ug/L	8.5484 ppb	08:58:05
2	B 249.677†	122.5	658.9	18.485 ug/L	18.485 ppb	08:58:05
2	Ba 233.527†	17.0	17.6	0.1635 ug/L	0.1635 ppb	08:58:05
2	Be 313.107†	-3632.3	128.3	0.0547 ug/L	0.0547 ppb	08:57:45
2	Cd 226.502†	-153.8	18.0	0.2625 ug/L	0.2625 ppb	08:58:05
2	Co 228.616†	-45.7	0.9	0.0233 ug/L	0.0233 ppb	08:58:05
2	Cr 267.716†	76.5	4.4	0.0564 ug/L	0.0564 ppb	08:58:05
2	Cu 324.752†	5580.6	-16.8	-0.0581 ug/L	-0.0581 ppb	08:57:45
2	Mn 257.610†	421.9	29.4	0.0362 ug/L	0.0362 ppb	08:58:05
2	Mo 202.031†	10.0	1.3	0.1193 ug/L	0.1193 ppb	08:58:05
2	Ni 231.604†	82.3	-2.4	-0.0773 ug/L	-0.0773 ppb	08:58:05

2	P 214.914†	185.7	-3.1	-2.2742 ug/L	-2.2742 ppb	08:58:05
2	Pb 220.353†	-49.8	8.9	1.3690 ug/L	1.3690 ppb	08:58:05
2	S 181.975 Axial†	27.7	-2.8	-4.9384 ug/L	-4.9384 ppb	08:58:05
2	Sb 206.836†	29.2	5.3	2.2297 ug/L	2.2297 ppb	08:58:05
2	Se 196.026†	-19.2	-2.0	-1.6916 ug/L	-1.6916 ppb	08:58:05
2	Si 251.611†	540.1	47.5	1.8023 ug/L	1.8023 ppb	08:58:05
2	Sn 189.927†	16.4	9.1	2.0790 ug/L	2.0790 ppb	08:58:05
2	Ti 334.940†	-1116.9	13.4	0.0185 ug/L	0.0185 ppb	08:57:45
2	Tl 190.801†	-24.0	5.3	2.0373 ug/L	2.0373 ppb	08:58:05
2	U 409.014†	-2063.9	157.2	4.7674 ug/L	4.7674 ppb	08:57:45
2	V 292.402†	-1400.4	-71.6	-0.5599 ug/L	-0.5599 ppb	08:57:45
2	Zn 213.857†	717.9	141.9	1.7202 ug/L	1.7202 ppb	08:58:05
2	SiO2†	559.9	56.0	4.5655 ug/L	4.5655 ppb	08:59:11
3	Sc Radial	4211.4	4211.4	95.8 %		08:57:13
3	Y RADIAL	4686.7	4686.7	98.45 %		08:56:53
3	Al 396.153Radial†	-80.5	-5.9	-5.8397 ug/L	-5.8397 ppb	08:57:13
3	Ca 317.933Radial†	17.0	2.1	3.9096 ug/L	3.9096 ppb	08:57:13
3	Fe 238.204 Radial†	8.0	-0.1	-1.4023 ug/L	-1.4023 ppb	08:57:13
3	K 766.490 Radial†	2980.9	512.2	97.574 ug/L	97.574 ppb	08:56:53
3	Mg 279.077 IEC†	0.9	-0.6	-23.241 ug/L	-23.241 ppb	08:57:13
3	Na 589.592 Radial†	-766.9	74.7	26.347 ug/L	26.347 ppb	08:56:53
3	Sr 421.552†	23.5	3.7	0.0298 ug/L	0.0298 ppb	08:56:53
3	Sc 361.383	820504.7	820504.7	100.21 %		08:58:10
3	Y 371.029	693341.7	693341.7	100.25 %		08:58:10
3	Ag 328.068†	152.8	-32.7	-0.1715 ug/L	-0.1715 ppb	08:58:10
3	As 188.979†	-18.3	8.5	4.6781 ug/L	4.6781 ppb	08:58:30
3	B 249.677†	121.5	658.6	18.475 ug/L	18.475 ppb	08:58:30
3	Ba 233.527†	8.5	9.2	0.0850 ug/L	0.0850 ppb	08:58:30
3	Be 313.107†	-3659.6	78.9	0.0335 ug/L	0.0335 ppb	08:58:10
3	Cd 226.502†	-158.0	13.0	0.1883 ug/L	0.1883 ppb	08:58:30
3	Co 228.616†	-37.5	8.8	0.2269 ug/L	0.2269 ppb	08:58:30
3	Cr 267.716†	79.8	8.1	0.1083 ug/L	0.1083 ppb	08:58:30
3	Cu 324.752†	5690.0	126.4	0.4174 ug/L	0.4174 ppb	08:58:10
3	Mn 257.610†	401.9	12.0	0.0166 ug/L	0.0166 ppb	08:58:30
3	Mo 202.031†	9.7	1.2	0.1027 ug/L	0.1027 ppb	08:58:30
3	Ni 231.604†	74.0	-10.2	-0.3245 ug/L	-0.3245 ppb	08:58:30
3	P 214.914†	199.3	11.7	8.5967 ug/L	8.5967 ppb	08:58:30
3	Pb 220.353†	-37.5	20.9	3.2128 ug/L	3.2128 ppb	08:58:30
3	S 181.975 Axial†	33.5	3.2	5.7488 ug/L	5.7488 ppb	08:58:30
3	Sb 206.836†	23.2	-0.5	-0.2012 ug/L	-0.2012 ppb	08:58:30
3	Se 196.026†	-15.7	1.3	1.0768 ug/L	1.0768 ppb	08:58:30
3	Si 251.611†	542.7	53.5	2.0283 ug/L	2.0283 ppb	08:58:30
3	Sn 189.927†	7.9	0.8	0.1757 ug/L	0.1757 ppb	08:58:30
3	Ti 334.940†	-1147.9	-24.4	-0.0399 ug/L	-0.0399 ppb	08:58:10
3	Tl 190.801†	-29.0	0.2	0.0650 ug/L	0.0650 ppb	08:58:30
3	U 409.014†	-2219.3	-10.6	-0.3213 ug/L	-0.3213 ppb	08:58:10
3	V 292.402†	-1372.5	-52.2	-0.4166 ug/L	-0.4166 ppb	08:58:10
3	Zn 213.857†	704.0	132.5	1.6069 ug/L	1.6069 ppb	08:58:30
3	SiO2†	572.1	71.6	5.8426 ug/L	5.8426 ppb	08:59:31

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	823719.8	100.60 %		0.341			0.34%
Sc Radial	4304.6	97.9 %		2.48			2.53%
Y 371.029	696251.7	100.67 %		0.367			0.36%
Y RADIAL	4787.0	100.6 %		1.83			1.82%
Ag 328.068†	-22.6	-0.1210 ug/L		0.08936	-0.1210 ppb	0.08936	73.87%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	0.6	0.5629 ug/L		6.52825	0.5629 ppb	6.52825	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	9.5	5.2142 ug/L		3.10101	5.2142 ppb	3.10101	59.47%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	668.9	18.764 ug/L		0.4917	18.764 ppb	0.4917	2.62%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	11.9	0.1107 ug/L		0.04564	0.1107 ppb	0.04564	41.21%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	105.1	0.0447 ug/L		0.01065	0.0447 ppb	0.01065	23.81%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	6.7	12.757 ug/L		7.7459	12.757 ppb	7.7459	60.72%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	16.5	0.2397 ug/L	0.04458	0.2397 ppb	0.04458	18.60%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	0.7	0.0182 ug/L	0.21136	0.0182 ppb	0.21136	>999.9%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	5.6	0.0734 ug/L	0.03018	0.0734 ppb	0.03018	41.09%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	52.4	0.1714 ug/L	0.23815	0.1714 ppb	0.23815	138.91%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.1	0.9525 ug/L	2.45646	0.9525 ppb	2.45646	257.90%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	418.9	79.796 ug/L	21.0429	79.796 ppb	21.0429	26.37%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.1	-4.9541 ug/L	61.05970	-4.9541 ppb	61.05970	>999.9%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	20.3	0.0269 ug/L	0.00982	0.0269 ppb	0.00982	36.45%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	5.2	0.4648 ug/L	0.61286	0.4648 ppb	0.61286	131.86%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	41.3	14.557 ug/L	10.3641	14.557 ppb	10.3641	71.20%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-7.7	-0.2453 ug/L	0.14554	-0.2453 ppb	0.14554	59.34%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-0.4	-0.3160 ug/L	8.11280	-0.3160 ppb	8.11280	>999.9%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	13.8	2.1285 ug/L	0.96384	2.1285 ppb	0.96384	45.28%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-3.2	-5.6743 ug/L	11.80827	-5.6743 ppb	11.80827	208.10%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	2.7	1.1544 ug/L	1.23947	1.1544 ppb	1.23947	107.37%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	0.7	0.5699 ug/L	2.05554	0.5699 ppb	2.05554	360.68%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	54.1	2.0485 ug/L	0.25687	2.0485 ppb	0.25687	12.54%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	4.2	0.9526 ug/L	0.99861	0.9526 ppb	0.99861	104.83%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-5.2	-0.0419 ug/L	0.07592	-0.0419 ppb	0.07592	181.15%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	0.7	0.0020 ug/L	0.03653	0.0020 ppb	0.03653	>999.9%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	0.8	0.3258 ug/L	1.59716	0.3258 ppb	1.59716	490.27%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	96.8	2.9377 ug/L	2.82949	2.9377 ppb	2.82949	96.32%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-48.2	-0.3728 ug/L	0.21249	-0.3728 ppb	0.21249	57.01%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	137.7	1.6699 ug/L	0.05769	1.6699 ppb	0.05769	3.45%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	61.0	4.9691 ug/L	0.75715	4.9691 ppb	0.75715	15.24%	
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: 3/19/2010 09:01:41

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	4168.4	4168.4	94.8 %		09:03:54
1	Y RADIAL	4671.2	4671.2	98.12 %		09:03:34
1	Al 396.153Radial†	-95.9	-23.0	-21.536 ug/L	-21.536 ppb	09:03:54
1	Ca 317.933Radial†	10.9	-4.2	-7.9891 ug/L	-7.9891 ppb	09:03:54
1	Fe 238.204 Radial†	31552.6	33259.8	385370 ug/L	385370 ppb	09:03:34
1	K 766.490 Radial†	2463.6	-1.2	-0.1828 ug/L	-0.1828 ppb	09:03:34
1	Mg 279.077 IEC†	8.2	7.1	-111.04 ug/L	-111.04 ppb	09:03:54
1	Na 589.592 Radial†	-839.1	-9.6	-3.3743 ug/L	-3.3743 ppb	09:03:34
1	Sr 421.552†	108.5	93.6	0.7503 ug/L	0.7503 ppb	09:03:34
1	Sc 361.383	804663.0	804663.0	98.270 %		09:04:52
1	Y 371.029	675570.8	675570.8	97.676 %		09:04:52
1	Ag 328.068†	-22147.7	-22722.6	1.3619 ug/L	1.3619 ppb	09:04:52
1	As 188.979†	-157.8	-133.8	16.851 ug/L	16.851 ppb	09:05:12
1	B 249.677†	1573.3	2138.4	-2.6414 ug/L	-2.6414 ppb	09:04:52
1	Ba 233.527†	-1501.1	-1526.9	-2.4607 ug/L	-2.4607 ppb	09:04:52
1	Be 313.107†	-3547.0	121.6	0.0516 ug/L	0.0516 ppb	09:04:52
1	Cd 226.502†	2545.1	2760.5	0.2621 ug/L	0.2621 ppb	09:04:52
1	Co 228.616†	597.4	654.1	11.286 ug/L	11.286 ppb	09:05:12
1	Cr 267.716†	-466.6	-546.3	33.551 ug/L	33.551 ppb	09:05:12
1	Cu 324.752†	-1345.0	-6920.6	-2.4866 ug/L	-2.4866 ppb	09:04:52
1	Mn 257.610†	-31215.4	-32153.8	-4.2266 ug/L	-4.2266 ppb	09:04:52
1	Mo 202.031†	-238.6	-251.3	7.5762 ug/L	7.5762 ppb	09:04:52
1	Ni 231.604†	179.0	98.1	3.1049 ug/L	3.1049 ppb	09:05:12
1	P 214.914†	594.2	417.4	5.0000 ug/L	5.0000 ppb	09:05:12
1	Pb 220.353†	167.3	228.6	-19.764 ug/L	-19.764 ppb	09:05:12
1	S 181.975 Axial†	39.8	10.3	18.462 ug/L	18.462 ppb	09:05:12
1	Sb 206.836†	21.4	-1.9	-5.4959 ug/L	-5.4959 ppb	09:05:12
1	Se 196.026†	-1587.1	-1598.1	-223.50 ug/L	-223.50 ppb	09:05:12
1	Si 251.611†	-466.5	-962.8	-36.277 ug/L	-36.277 ppb	09:04:52
1	Sn 189.927†	-22.6	-30.2	-28.971 ug/L	-28.971 ppb	09:05:12
1	Ti 334.940†	-1147.3	-46.2	-0.1313 ug/L	-0.1313 ppb	09:04:52
1	Tl 190.801†	-24.1	4.6	1.3905 ug/L	1.3905 ppb	09:05:12
1	U 409.014†	-57.2	2146.0	21.189 ug/L	21.189 ppb	09:04:52
1	V 292.402†	5156.9	6565.1	-3.8861 ug/L	-3.8861 ppb	09:04:52
1	Zn 213.857†	3563.3	3056.0	-20.632 ug/L	-20.632 ppb	09:05:12
1	SiO2†	-531.6	-1040.3	-84.290 ug/L	-84.290 ppb	09:06:09
2	Sc Radial	4220.4	4220.4	96.0 %		09:04:19
2	Y RADIAL	4695.8	4695.8	98.64 %		09:03:59
2	Al 396.153Radial†	-97.7	-23.6	-22.030 ug/L	-22.030 ppb	09:04:19
2	Ca 317.933Radial†	15.8	0.8	1.4196 ug/L	1.4196 ppb	09:04:19
2	Fe 238.204 Radial†	31639.3	32940.5	381670 ug/L	381670 ppb	09:03:59
2	K 766.490 Radial†	2419.9	-78.7	-14.957 ug/L	-14.957 ppb	09:03:59
2	Mg 279.077 IEC†	9.6	8.5	-49.042 ug/L	-49.042 ppb	09:04:19
2	Na 589.592 Radial†	-819.9	21.3	7.4941 ug/L	7.4941 ppb	09:03:59
2	Sr 421.552†	73.1	55.3	0.4436 ug/L	0.4436 ppb	09:03:59
2	Sc 361.383	814772.9	814772.9	99.505 %		09:05:18
2	Y 371.029	684115.4	684115.4	98.911 %		09:05:18
2	Ag 328.068†	-22528.6	-22825.8	-0.3166 ug/L	-0.3166 ppb	09:05:18
2	As 188.979†	-170.1	-144.2	10.308 ug/L	10.308 ppb	09:05:38
2	B 249.677†	1557.8	2102.9	-3.0390 ug/L	-3.0390 ppb	09:05:18
2	Ba 233.527†	-1537.5	-1544.4	-2.7386 ug/L	-2.7386 ppb	09:05:18
2	Be 313.107†	-3576.5	136.7	0.0579 ug/L	0.0579 ppb	09:05:18
2	Cd 226.502†	2505.0	2688.1	-0.4074 ug/L	-0.4074 ppb	09:05:18
2	Co 228.616†	636.8	686.2	12.164 ug/L	12.164 ppb	09:05:38
2	Cr 267.716†	-490.7	-564.7	32.914 ug/L	32.914 ppb	09:05:38
2	Cu 324.752†	-1389.0	-6947.9	-2.7705 ug/L	-2.7705 ppb	09:05:18
2	Mn 257.610†	-31480.4	-32026.0	-4.4264 ug/L	-4.4264 ppb	09:05:18
2	Mo 202.031†	-265.9	-275.8	5.1133 ug/L	5.1133 ppb	09:05:18
2	Ni 231.604†	160.0	76.7	2.4260 ug/L	2.4260 ppb	09:05:38

2	P 214.914†	604.0	419.7	9.7533 ug/L	9.7533 ppb	09:05:38
2	Pb 220.353†	148.9	207.9	-22.419 ug/L	-22.419 ppb	09:05:38
2	S 181.975 Axial†	36.7	6.7	12.001 ug/L	12.001 ppb	09:05:38
2	Sb 206.836†	26.7	3.2	-3.3702 ug/L	-3.3702 ppb	09:05:38
2	Se 196.026†	-1602.6	-1593.6	-230.43 ug/L	-230.43 ppb	09:05:38
2	Si 251.611†	-451.6	-942.0	-35.459 ug/L	-35.459 ppb	09:05:18
2	Sn 189.927†	-21.3	-28.6	-28.391 ug/L	-28.391 ppb	09:05:38
2	Ti 334.940†	-1185.9	-70.6	-0.1755 ug/L	-0.1755 ppb	09:05:18
2	Tl 190.801†	-35.9	-7.0	-3.0798 ug/L	-3.0798 ppb	09:05:38
2	U 409.014†	-170.3	2033.0	18.184 ug/L	18.184 ppb	09:05:18
2	V 292.402†	5184.7	6527.9	-3.6800 ug/L	-3.6800 ppb	09:05:18
2	Zn 213.857†	3582.0	3029.7	-20.392 ug/L	-20.392 ppb	09:05:38
2	SiO2†	-332.9	-833.9	-67.390 ug/L	-67.390 ppb	09:06:14
3	Sc Radial	4150.7	4150.7	94.4 %		09:04:44
3	Y RADIAL	4717.7	4717.7	99.10 %		09:04:24
3	Al 396.153Radial†	-105.7	-33.8	-31.932 ug/L	-31.932 ppb	09:04:44
3	Ca 317.933Radial†	13.3	-1.6	-3.0737 ug/L	-3.0737 ppb	09:04:44
3	Fe 238.204 Radial†	31506.1	33352.3	386440 ug/L	386440 ppb	09:04:24
3	K 766.490 Radial†	2562.8	114.9	21.945 ug/L	21.945 ppb	09:04:24
3	Mg 279.077 IEC†	10.3	9.3	-19.131 ug/L	-19.131 ppb	09:04:44
3	Na 589.592 Radial†	-841.1	-15.4	-5.4450 ug/L	-5.4450 ppb	09:04:24
3	Sr 421.552†	63.7	46.6	0.3735 ug/L	0.3735 ppb	09:04:24
3	Sc 361.383	818472.2	818472.2	99.957 %		09:05:44
3	Y 371.029	686196.9	686196.9	99.212 %		09:05:44
3	Ag 328.068†	-22590.8	-22785.7	1.3597 ug/L	1.3597 ppb	09:05:44
3	As 188.979†	-159.6	-132.8	17.658 ug/L	17.658 ppb	09:06:04
3	B 249.677†	1700.5	2238.6	-0.0015 ug/L	-0.0015 ppb	09:05:44
3	Ba 233.527†	-1597.3	-1597.3	-3.0907 ug/L	-3.0907 ppb	09:05:44
3	Be 313.107†	-3601.1	128.4	0.0547 ug/L	0.0547 ppb	09:05:44
3	Cd 226.502†	2563.1	2734.9	-0.2206 ug/L	-0.2206 ppb	09:05:44
3	Co 228.616†	596.2	642.6	10.963 ug/L	10.963 ppb	09:06:04
3	Cr 267.716†	-477.4	-549.1	33.624 ug/L	33.624 ppb	09:06:04
3	Cu 324.752†	-1475.3	-7027.9	-2.7850 ug/L	-2.7850 ppb	09:05:44
3	Mn 257.610†	-31871.3	-32274.1	-4.2829 ug/L	-4.2829 ppb	09:05:44
3	Mo 202.031†	-289.1	-297.8	3.5310 ug/L	3.5310 ppb	09:05:44
3	Ni 231.604†	163.4	79.4	2.5118 ug/L	2.5118 ppb	09:06:04
3	P 214.914†	601.0	414.0	1.6780 ug/L	1.6780 ppb	09:06:04
3	Pb 220.353†	165.2	223.6	-20.698 ug/L	-20.698 ppb	09:06:04
3	S 181.975 Axial†	38.6	8.5	15.150 ug/L	15.150 ppb	09:06:04
3	Sb 206.836†	22.5	-1.2	-5.3079 ug/L	-5.3079 ppb	09:06:04
3	Se 196.026†	-1604.4	-1588.1	-212.13 ug/L	-212.13 ppb	09:06:04
3	Si 251.611†	-406.7	-895.1	-33.654 ug/L	-33.654 ppb	09:05:44
3	Sn 189.927†	-25.3	-32.4	-29.546 ug/L	-29.546 ppb	09:06:04
3	Ti 334.940†	-1114.8	5.9	-0.0482 ug/L	-0.0482 ppb	09:05:44
3	Tl 190.801†	-40.4	-11.4	-4.7656 ug/L	-4.7656 ppb	09:06:04
3	U 409.014†	-3.7	2200.5	22.719 ug/L	22.719 ppb	09:05:44
3	V 292.402†	5104.1	6423.7	-5.2245 ug/L	-5.2245 ppb	09:05:44
3	Zn 213.857†	3569.3	3000.7	-21.457 ug/L	-21.457 ppb	09:06:04
3	SiO2†	-395.4	-894.9	-72.310 ug/L	-72.310 ppb	09:06:19

Mean Data: LRL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	812636.0	99.244 %		0.8730				0.88%
Sc Radial	4179.8	95.1 %		0.82				0.87%
Y 371.029	681961.1	98.600 %		0.8142				0.83%
Y RADIAL	4694.9	98.62 %		0.488				0.49%
Ag 328.068†	-22778.0	0.8017 ug/L		0.96844	0.8017 ppb		0.96844	120.80%
Al 396.153Radial†	-26.8	-25.166 ug/L		5.8648	-25.166 ppb		5.8648	23.30%
As 188.979†	-136.9	14.939 ug/L		4.0310	14.939 ppb		4.0310	26.98%
B 249.677†	2160.0	-1.8940 ug/L		1.65089	-1.8940 ppb		1.65089	87.17%
Ba 233.527†	-1556.2	-2.7633 ug/L		0.31570	-2.7633 ppb		0.31570	11.42%
Be 313.107†	128.9	0.0547 ug/L		0.00317	0.0547 ppb		0.00317	5.79%
Ca 317.933Radial†	-1.7	-3.2144 ug/L		4.70597	-3.2144 ppb		4.70597	146.40%
Cd 226.502†	2727.8	-0.1220 ug/L		0.34551	-0.1220 ppb		0.34551	283.27%
Co 228.616†	661.0	11.471 ug/L		0.6212	11.471 ppb		0.6212	5.42%
Cr 267.716†	-553.4	33.363 ug/L		0.3909	33.363 ppb		0.3909	1.17%
Cu 324.752†	-6965.5	-2.6807 ug/L		0.16824	-2.6807 ppb		0.16824	6.28%
Fe 238.204 Radial†	33184.2	384500 ug/L		2503.3	384500 ppb		2503.3	0.65%
K 766.490 Radial†	11.7	2.2685 ug/L		18.57239	2.2685 ppb		18.57239	818.72%

Mg 279.077 IEC†	8.3	-59.738 ug/L	46.8800	-59.738 ppb	46.8800	78.48%
Mn 257.610†	-32151.3	-4.3119 ug/L	0.10299	-4.3119 ppb	0.10299	2.39%
Mo 202.031†	-275.0	5.4068 ug/L	2.03849	5.4068 ppb	2.03849	37.70%
Na 589.592 Radial†	-1.3	-0.4417 ug/L	6.95019	-0.4417 ppb	6.95019	>999.9%
Ni 231.604†	84.7	2.6809 ug/L	0.36971	2.6809 ppb	0.36971	13.79%
P 214.914†	417.1	5.4771 ug/L	4.05878	5.4771 ppb	4.05878	74.10%
Pb 220.353†	220.0	-20.960 ug/L	1.3465	-20.960 ppb	1.3465	6.42%
S 181.975 Axial†	8.5	15.204 ug/L	3.2307	15.204 ppb	3.2307	21.25%
Sb 206.836†	0.0	-4.7247 ug/L	1.17674	-4.7247 ppb	1.17674	24.91%
Se 196.026†	-1593.3	-222.02 ug/L	9.239	-222.02 ppb	9.239	4.16%
Si 251.611†	-933.3	-35.130 ug/L	1.3424	-35.130 ppb	1.3424	3.82%
Sn 189.927†	-30.4	-28.970 ug/L	0.5777	-28.970 ppb	0.5777	1.99%
Sr 421.552†	65.2	0.5225 ug/L	0.20038	0.5225 ppb	0.20038	38.35%
Ti 334.940†	-37.0	-0.1184 ug/L	0.06463	-0.1184 ppb	0.06463	54.61%
Tl 190.801†	-4.6	-2.1516 ug/L	3.18128	-2.1516 ppb	3.18128	147.86%
U 409.014†	2126.5	20.697 ug/L	2.3074	20.697 ppb	2.3074	11.15%
V 292.402†	6505.6	-4.2635 ug/L	0.83854	-4.2635 ppb	0.83854	19.67%
Zn 213.857†	3028.8	-20.827 ug/L	0.5589	-20.827 ppb	0.5589	2.68%
SiO2†	-923.0	-74.663 ug/L	8.6924	-74.663 ppb	8.6924	11.64%

Sequence No.: 4
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 3/19/2010 09:08:31
 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	4270.1	4270.1	97.2 %		09:10:44
1	Y RADIAL	4722.2	4722.2	99.19 %		09:10:24
1	Al 396.153Radial†	5015.6	5240.5	5123.3 ug/L	5123.3 ppb	09:10:24
1	Ca 317.933Radial†	2685.2	2748.1	5200.0 ug/L	5200.0 ppb	09:10:44
1	Fe 238.204 Radial†	444.5	449.0	5218.2 ug/L	5218.2 ppb	09:10:44
1	K 766.490 Radial†	29180.3	27435.6	5220.8 ug/L	5220.8 ppb	09:10:24
1	Mg 279.077 IEC†	125.9	128.1	5282.8 ug/L	5282.8 ppb	09:10:44
1	Na 589.592 Radial†	26587.3	28240.6	9955.4 ug/L	9955.4 ppb	09:10:24
1	Sr 421.552†	62098.4	63895.1	512.13 ug/L	512.13 ppb	09:10:24
1	Sc 361.383	835263.3	835263.3	102.01 %		09:11:41
1	Y 371.029	695826.9	695826.9	100.60 %		09:11:41
1	Ag 328.068†	98312.6	96192.6	502.56 ug/L	502.56 ppb	09:11:46
1	As 188.979†	917.6	926.3	512.83 ug/L	512.83 ppb	09:12:06
1	B 249.677†	17862.9	18048.7	504.04 ug/L	504.04 ppb	09:11:46
1	Ba 233.527†	54434.3	53363.7	501.08 ug/L	501.08 ppb	09:11:46
1	Be 313.107†	1200300.9	1180409.2	503.74 ug/L	503.74 ppb	09:11:41
1	Cd 226.502†	35059.9	34540.6	501.05 ug/L	501.05 ppb	09:11:46
1	Co 228.616†	20023.4	19675.5	508.65 ug/L	508.65 ppb	09:11:46
1	Cr 267.716†	38027.8	37207.9	500.02 ug/L	500.02 ppb	09:11:46
1	Cu 324.752†	158463.8	149793.1	494.54 ug/L	494.54 ppb	09:11:46
1	Mn 257.610†	382150.2	374240.2	492.36 ug/L	492.36 ppb	09:11:46
1	Mo 202.031†	5765.9	5643.9	502.16 ug/L	502.16 ppb	09:12:06
1	Ni 231.604†	16343.9	15938.2	505.85 ug/L	505.85 ppb	09:11:46
1	P 214.914†	3636.1	3377.2	2419.3 ug/L	2419.3 ppb	09:12:06
1	Pb 220.353†	3269.8	3263.8	502.86 ug/L	502.86 ppb	09:12:06
1	S 181.975 Axial†	600.7	558.7	999.26 ug/L	999.26 ppb	09:12:06
1	Sb 206.836†	1248.4	1200.2	520.17 ug/L	520.17 ppb	09:12:06
1	Se 196.026†	601.5	606.7	523.56 ug/L	523.56 ppb	09:12:06
1	Si 251.611†	67607.5	65788.7	2491.4 ug/L	2491.4 ppb	09:11:46
1	Sn 189.927†	2258.0	2206.4	501.31 ug/L	501.31 ppb	09:12:06
1	Ti 334.940†	286341.1	281827.0	489.97 ug/L	489.97 ppb	09:11:46
1	Tl 190.801†	1304.7	1308.1	509.32 ug/L	509.32 ppb	09:12:06
1	U 409.014†	14816.5	16729.1	505.82 ug/L	505.82 ppb	09:11:46
1	V 292.402†	62225.1	62317.9	504.32 ug/L	504.32 ppb	09:11:46
1	Zn 213.857†	42974.6	41558.7	498.88 ug/L	498.88 ppb	09:11:46
1	SiO2†	67784.3	65950.9	5368.7 ug/L	5368.7 ppb	09:13:13
2	Sc Radial	4267.1	4267.1	97.1 %		09:11:09
2	Y RADIAL	4754.5	4754.5	99.87 %		09:10:49
2	Al 396.153Radial†	5038.4	5267.6	5150.2 ug/L	5150.2 ppb	09:10:49
2	Ca 317.933Radial†	2668.0	2732.4	5170.2 ug/L	5170.2 ppb	09:11:09
2	Fe 238.204 Radial†	442.2	447.0	5194.2 ug/L	5194.2 ppb	09:11:09
2	K 766.490 Radial†	29100.8	27375.1	5209.4 ug/L	5209.4 ppb	09:10:49
2	Mg 279.077 IEC†	129.6	131.9	5441.6 ug/L	5441.6 ppb	09:11:09
2	Na 589.592 Radial†	26364.9	28031.0	9881.5 ug/L	9881.5 ppb	09:10:49
2	Sr 421.552†	62039.1	63879.7	512.00 ug/L	512.00 ppb	09:10:49
2	Sc 361.383	836951.4	836951.4	102.21 %		09:12:12
2	Y 371.029	697139.4	697139.4	100.79 %		09:12:12
2	Ag 328.068†	97894.3	95589.0	499.41 ug/L	499.41 ppb	09:12:17
2	As 188.979†	901.5	908.8	503.18 ug/L	503.18 ppb	09:12:37
2	B 249.677†	17816.6	17968.1	501.79 ug/L	501.79 ppb	09:12:17
2	Ba 233.527†	54115.2	52943.9	497.14 ug/L	497.14 ppb	09:12:17
2	Be 313.107†	1204879.6	1182515.5	504.63 ug/L	504.63 ppb	09:12:12
2	Cd 226.502†	34879.3	34294.5	497.48 ug/L	497.48 ppb	09:12:17
2	Co 228.616†	19921.4	19536.2	505.04 ug/L	505.04 ppb	09:12:17
2	Cr 267.716†	37895.4	37003.2	497.27 ug/L	497.27 ppb	09:12:17
2	Cu 324.752†	157529.2	148565.4	490.48 ug/L	490.48 ppb	09:12:17
2	Mn 257.610†	380465.2	371836.1	489.19 ug/L	489.19 ppb	09:12:17
2	Mo 202.031†	5705.9	5573.8	495.93 ug/L	495.93 ppb	09:12:37
2	Ni 231.604†	16330.3	15892.5	504.40 ug/L	504.40 ppb	09:12:17

2	P 214.914†	3580.1	3315.3	2373.9 ug/L	2373.9 ppb	09:12:37
2	Pb 220.353†	3237.2	3225.4	496.97 ug/L	496.97 ppb	09:12:37
2	S 181.975 Axial†	591.9	548.9	981.65 ug/L	981.65 ppb	09:12:37
2	Sb 206.836†	1238.0	1187.5	514.66 ug/L	514.66 ppb	09:12:37
2	Se 196.026†	596.5	600.5	518.35 ug/L	518.35 ppb	09:12:37
2	Si 251.611†	67153.8	65211.2	2469.5 ug/L	2469.5 ppb	09:12:17
2	Sn 189.927†	2240.3	2184.6	496.37 ug/L	496.37 ppb	09:12:37
2	Ti 334.940†	284868.9	279820.4	486.47 ug/L	486.47 ppb	09:12:17
2	Tl 190.801†	1280.9	1282.3	499.31 ug/L	499.31 ppb	09:12:37
2	U 409.014†	14705.3	16591.0	501.64 ug/L	501.64 ppb	09:12:17
2	V 292.402†	62071.6	62044.7	502.05 ug/L	502.05 ppb	09:12:17
2	Zn 213.857†	42755.3	41259.3	495.27 ug/L	495.27 ppb	09:12:17
2	SiO2†	68107.0	66132.6	5383.7 ug/L	5383.7 ppb	09:13:18
3	Sc Radial	4261.7	4261.7	97.0 %		09:11:34
3	Y RADIAL	4762.6	4762.6	100.0 %		09:11:14
3	Al 396.153Radial†	5041.6	5277.5	5159.8 ug/L	5159.8 ppb	09:11:14
3	Ca 317.933Radial†	2678.0	2746.1	5196.2 ug/L	5196.2 ppb	09:11:34
3	Fe 238.204 Radial†	449.7	455.3	5290.6 ug/L	5290.6 ppb	09:11:34
3	K 766.490 Radial†	29132.2	27445.0	5222.7 ug/L	5222.7 ppb	09:11:14
3	Mg 279.077 IEC†	130.7	133.3	5498.4 ug/L	5498.4 ppb	09:11:34
3	Na 589.592 Radial†	26247.0	27943.4	9850.6 ug/L	9850.6 ppb	09:11:14
3	Sr 421.552†	62138.9	64062.5	513.47 ug/L	513.47 ppb	09:11:14
3	Sc 361.383	831297.4	831297.4	101.52 %		09:12:42
3	Y 371.029	692170.0	692170.0	100.08 %		09:12:42
3	Ag 328.068†	98276.5	96616.8	504.80 ug/L	504.80 ppb	09:12:48
3	As 188.979†	900.4	913.7	505.94 ug/L	505.94 ppb	09:13:08
3	B 249.677†	17875.0	18144.2	506.70 ug/L	506.70 ppb	09:12:48
3	Ba 233.527†	54411.2	53595.5	503.26 ug/L	503.26 ppb	09:12:48
3	Be 313.107†	1194741.7	1180547.0	503.80 ug/L	503.80 ppb	09:12:42
3	Cd 226.502†	35068.4	34712.9	503.55 ug/L	503.55 ppb	09:12:48
3	Co 228.616†	19944.2	19691.1	509.03 ug/L	509.03 ppb	09:12:48
3	Cr 267.716†	38090.4	37447.4	503.24 ug/L	503.24 ppb	09:12:48
3	Cu 324.752†	158408.5	150479.8	496.81 ug/L	496.81 ppb	09:12:48
3	Mn 257.610†	381751.2	375634.4	494.19 ug/L	494.19 ppb	09:12:48
3	Mo 202.031†	5698.4	5604.4	498.66 ug/L	498.66 ppb	09:13:08
3	Ni 231.604†	16336.3	16007.2	508.04 ug/L	508.04 ppb	09:12:48
3	P 214.914†	3559.0	3318.3	2374.9 ug/L	2374.9 ppb	09:13:08
3	Pb 220.353†	3230.4	3240.2	499.23 ug/L	499.23 ppb	09:13:08
3	S 181.975 Axial†	591.9	552.9	988.76 ug/L	988.76 ppb	09:13:08
3	Sb 206.836†	1233.3	1191.2	516.26 ug/L	516.26 ppb	09:13:08
3	Se 196.026†	600.5	608.5	525.25 ug/L	525.25 ppb	09:13:08
3	Si 251.611†	67511.8	66010.7	2499.8 ug/L	2499.8 ppb	09:12:48
3	Sn 189.927†	2230.4	2189.7	497.53 ug/L	497.53 ppb	09:13:08
3	Ti 334.940†	286639.6	283460.1	492.80 ug/L	492.80 ppb	09:12:48
3	Tl 190.801†	1274.1	1284.1	500.05 ug/L	500.05 ppb	09:13:08
3	U 409.014†	14726.7	16710.0	505.23 ug/L	505.23 ppb	09:12:48
3	V 292.402†	62390.5	62771.8	507.88 ug/L	507.88 ppb	09:12:48
3	Zn 213.857†	42899.3	41685.6	500.39 ug/L	500.39 ppb	09:12:48
3	SiO2†	68263.8	66740.2	5433.2 ug/L	5433.2 ppb	09:13:23

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	834504.1	101.91 %	0.354			0.35%
Sc Radial	4266.3	97.1 %	0.10			0.10%
Y 371.029	695045.4	100.49 %	0.372			0.37%
Y RADIAL	4746.4	99.70 %	0.449			0.45%
Ag 328.068†	96132.8	502.25 ug/L	2.706	502.25 ppb	2.706	0.54%
QC value within limits for Ag 328.068 Recovery = 100.45%						
Al 396.153Radial†	5261.9	5144.4 ug/L	18.91	5144.4 ppb	18.91	0.37%
QC value within limits for Al 396.153Radial Recovery = 102.89%						
As 188.979†	916.3	507.32 ug/L	4.968	507.32 ppb	4.968	0.98%
QC value within limits for As 188.979 Recovery = 101.46%						
B 249.677†	18053.7	504.18 ug/L	2.459	504.18 ppb	2.459	0.49%
QC value within limits for B 249.677 Recovery = 100.84%						
Ba 233.527†	53301.0	500.49 ug/L	3.101	500.49 ppb	3.101	0.62%
QC value within limits for Ba 233.527 Recovery = 100.10%						
Be 313.107†	1181157.2	504.06 ug/L	0.496	504.06 ppb	0.496	0.10%
QC value within limits for Be 313.107 Recovery = 100.81%						
Ca 317.933Radial†	2742.2	5188.8 ug/L	16.23	5188.8 ppb	16.23	0.31%

QC value within limits for Ca 317.933 Radial Recovery = 103.78%							
Cd 226.502†	34516.0	500.69 ug/L	3.048	500.69 ppb	3.048	0.61%	
QC value within limits for Cd 226.502 Recovery = 100.14%							
Co 228.616†	19634.3	507.57 ug/L	2.204	507.57 ppb	2.204	0.43%	
QC value within limits for Co 228.616 Recovery = 101.51%							
Cr 267.716†	37219.5	500.17 ug/L	2.991	500.17 ppb	2.991	0.60%	
QC value within limits for Cr 267.716 Recovery = 100.03%							
Cu 324.752†	149612.8	493.94 ug/L	3.203	493.94 ppb	3.203	0.65%	
QC value within limits for Cu 324.752 Recovery = 98.79%							
Fe 238.204 Radial†	450.4	5234.3 ug/L	50.20	5234.3 ppb	50.20	0.96%	
QC value within limits for Fe 238.204 Radial Recovery = 104.69%							
K 766.490 Radial†	27418.6	5217.6 ug/L	7.22	5217.6 ppb	7.22	0.14%	
QC value within limits for K 766.490 Radial Recovery = 104.35%							
Mg 279.077 IEC†	131.1	5407.6 ug/L	111.73	5407.6 ppb	111.73	2.07%	
QC value within limits for Mg 279.077 IEC Recovery = 108.15%							
Mn 257.610†	373903.6	491.91 ug/L	2.530	491.91 ppb	2.530	0.51%	
QC value within limits for Mn 257.610 Recovery = 98.38%							
Mo 202.031†	5607.4	498.92 ug/L	3.125	498.92 ppb	3.125	0.63%	
QC value within limits for Mo 202.031 Recovery = 99.78%							
Na 589.592 Radial†	28071.7	9895.9 ug/L	53.83	9895.9 ppb	53.83	0.54%	
QC value within limits for Na 589.592 Radial Recovery = 98.96%							
Ni 231.604†	15946.0	506.09 ug/L	1.832	506.09 ppb	1.832	0.36%	
QC value within limits for Ni 231.604 Recovery = 101.22%							
P 214.914†	3336.9	2389.4 ug/L	25.93	2389.4 ppb	25.93	1.09%	
QC value within limits for P 214.914 Recovery = 95.57%							
Pb 220.353†	3243.1	499.68 ug/L	2.973	499.68 ppb	2.973	0.59%	
QC value within limits for Pb 220.353 Recovery = 99.94%							
S 181.975 Axial†	553.5	989.89 ug/L	8.861	989.89 ppb	8.861	0.90%	
QC value within limits for S 181.975 Axial Recovery = 98.99%							
Sb 206.836†	1193.0	517.03 ug/L	2.832	517.03 ppb	2.832	0.55%	
QC value within limits for Sb 206.836 Recovery = 103.41%							
Se 196.026†	605.2	522.39 ug/L	3.594	522.39 ppb	3.594	0.69%	
QC value within limits for Se 196.026 Recovery = 104.48%							
Si 251.611†	65670.2	2486.9 ug/L	15.64	2486.9 ppb	15.64	0.63%	
QC value within limits for Si 251.611 Recovery = 99.48%							
Sn 189.927†	2193.6	498.40 ug/L	2.582	498.40 ppb	2.582	0.52%	
QC value within limits for Sn 189.927 Recovery = 99.68%							
Sr 421.552†	63945.7	512.53 ug/L	0.813	512.53 ppb	0.813	0.16%	
QC value within limits for Sr 421.552 Recovery = 102.51%							
Ti 334.940†	281702.5	489.75 ug/L	3.169	489.75 ppb	3.169	0.65%	
QC value within limits for Ti 334.940 Recovery = 97.95%							
Tl 190.801†	1291.5	502.89 ug/L	5.573	502.89 ppb	5.573	1.11%	
QC value within limits for Tl 190.801 Recovery = 100.58%							
U 409.014†	16676.7	504.23 ug/L	2.261	504.23 ppb	2.261	0.45%	
QC value within limits for U 409.014 Recovery = 100.85%							
V 292.402†	62378.1	504.75 ug/L	2.939	504.75 ppb	2.939	0.58%	
QC value within limits for V 292.402 Recovery = 100.95%							
Zn 213.857†	41501.2	498.18 ug/L	2.631	498.18 ppb	2.631	0.53%	
QC value within limits for Zn 213.857 Recovery = 99.64%							
SiO2†	66274.6	5395.2 ug/L	33.76	5395.2 ppb	33.76	0.63%	
QC value within limits for SiO2 Recovery = 100.89%							
All analyte(s) passed QC.							

Sequence No.: 5

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 09:15:34

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	4271.6	4271.6	97.2 %		09:17:46
1	Y RADIAL	4777.6	4777.6	100.4 %		09:17:26
1	Al 396.153Radial†	-79.6	-3.9	-3.8423 ug/L	-3.8423 ppb	09:17:46
1	Ca 317.933Radial†	19.6	4.5	8.4521 ug/L	8.4521 ppb	09:17:46
1	Fe 238.204 Radial†	6.5	-1.8	-20.460 ug/L	-20.460 ppb	09:17:46
1	K 766.490 Radial†	2764.2	245.3	46.730 ug/L	46.730 ppb	09:17:26
1	Mg 279.077 IEC†	2.5	1.0	42.322 ug/L	42.322 ppb	09:17:46
1	Na 589.592 Radial†	-782.7	69.8	24.603 ug/L	24.603 ppb	09:17:26
1	Sr 421.552†	33.1	13.2	0.1058 ug/L	0.1058 ppb	09:17:26
1	Sc 361.383	814482.5	814482.5	99.470 %		09:18:43
1	Y 371.029	687746.5	687746.5	99.436 %		09:18:43
1	Ag 328.068†	219.3	35.3	0.1775 ug/L	0.1775 ppb	09:18:43
1	As 188.979†	-17.3	9.4	5.1795 ug/L	5.1795 ppb	09:19:03
1	B 249.677†	-3.5	533.8	14.980 ug/L	14.980 ppb	09:19:03
1	Ba 233.527†	9.2	10.0	0.0933 ug/L	0.0933 ppb	09:19:03
1	Be 313.107†	-3582.3	129.6	0.0550 ug/L	0.0550 ppb	09:18:43
1	Cd 226.502†	-164.5	5.3	0.0788 ug/L	0.0788 ppb	09:19:03
1	Co 228.616†	-51.3	-5.3	-0.1349 ug/L	-0.1349 ppb	09:19:03
1	Cr 267.716†	75.2	4.1	0.0529 ug/L	0.0529 ppb	09:19:03
1	Cu 324.752†	5609.0	87.0	0.2858 ug/L	0.2858 ppb	09:18:43
1	Mn 257.610†	401.8	14.9	0.0159 ug/L	0.0159 ppb	09:19:03
1	Mo 202.031†	20.3	11.9	1.0542 ug/L	1.0542 ppb	09:19:03
1	Ni 231.604†	83.5	-0.1	-0.0036 ug/L	-0.0036 ppb	09:19:03
1	P 214.914†	187.8	1.5	1.0765 ug/L	1.0765 ppb	09:19:03
1	Pb 220.353†	-53.2	4.8	0.7489 ug/L	0.7489 ppb	09:19:03
1	S 181.975 Axial†	27.3	-2.7	-4.8368 ug/L	-4.8368 ppb	09:19:03
1	Sb 206.836†	39.0	15.5	6.5154 ug/L	6.5154 ppb	09:19:03
1	Se 196.026†	-12.3	4.6	3.7725 ug/L	3.7725 ppb	09:19:03
1	Si 251.611†	533.6	48.3	1.8197 ug/L	1.8197 ppb	09:19:03
1	Sn 189.927†	8.7	1.6	0.3694 ug/L	0.3694 ppb	09:19:03
1	Ti 334.940†	-1171.1	-56.1	-0.1001 ug/L	-0.1001 ppb	09:18:43
1	Tl 190.801†	-28.6	0.4	0.1418 ug/L	0.1418 ppb	09:19:03
1	U 409.014†	-2178.9	13.7	0.4170 ug/L	0.4170 ppb	09:18:43
1	V 292.402†	-1286.3	24.2	0.2131 ug/L	0.2131 ppb	09:18:43
1	Zn 213.857†	690.5	124.1	1.5064 ug/L	1.5064 ppb	09:19:03
1	SiO2†	541.5	45.1	3.6495 ug/L	3.6495 ppb	09:19:59
2	Sc Radial	4262.8	4262.8	97.0 %		09:18:11
2	Y RADIAL	4796.9	4796.9	100.8 %		09:17:51
2	Al 396.153Radial†	-78.0	-2.3	-2.3148 ug/L	-2.3148 ppb	09:18:11
2	Ca 317.933Radial†	19.3	4.3	8.0475 ug/L	8.0475 ppb	09:18:11
2	Fe 238.204 Radial†	7.2	-1.0	-11.440 ug/L	-11.440 ppb	09:18:11
2	K 766.490 Radial†	2748.7	235.2	44.821 ug/L	44.821 ppb	09:17:51
2	Mg 279.077 IEC†	2.8	1.3	55.437 ug/L	55.437 ppb	09:18:11
2	Na 589.592 Radial†	-871.9	-23.9	-8.4179 ug/L	-8.4179 ppb	09:17:51
2	Sr 421.552†	16.5	-3.9	-0.0310 ug/L	-0.0310 ppb	09:17:51
2	Sc 361.383	817570.3	817570.3	99.847 %		09:19:08
2	Y 371.029	690582.6	690582.6	99.846 %		09:19:08
2	Ag 328.068†	196.2	11.4	0.0530 ug/L	0.0530 ppb	09:19:08
2	As 188.979†	-27.6	-0.8	-0.4463 ug/L	-0.4463 ppb	09:19:28
2	B 249.677†	-4.1	533.3	14.962 ug/L	14.962 ppb	09:19:28
2	Ba 233.527†	26.6	27.4	0.2550 ug/L	0.2550 ppb	09:19:28
2	Be 313.107†	-3673.1	52.3	0.0223 ug/L	0.0223 ppb	09:19:08
2	Cd 226.502†	-163.4	7.0	0.1028 ug/L	0.1028 ppb	09:19:28
2	Co 228.616†	-52.3	-6.2	-0.1578 ug/L	-0.1578 ppb	09:19:28
2	Cr 267.716†	111.6	40.2	0.5373 ug/L	0.5373 ppb	09:19:28
2	Cu 324.752†	5650.1	106.8	0.3513 ug/L	0.3513 ppb	09:19:08
2	Mn 257.610†	409.8	21.4	0.0247 ug/L	0.0247 ppb	09:19:28
2	Mo 202.031†	15.6	7.1	0.6264 ug/L	0.6264 ppb	09:19:28
2	Ni 231.604†	69.7	-14.3	-0.4542 ug/L	-0.4542 ppb	09:19:28

2	P 214.914†	180.2	-6.8	-5.1075 ug/L	-5.1075 ppb	09:19:28
2	Pb 220.353†	-55.0	3.2	0.4903 ug/L	0.4903 ppb	09:19:28
2	S 181.975 Axial†	28.5	-1.6	-2.9431 ug/L	-2.9431 ppb	09:19:28
2	Sb 206.836†	34.7	11.1	4.6710 ug/L	4.6710 ppb	09:19:28
2	Se 196.026†	-15.5	1.4	1.1515 ug/L	1.1515 ppb	09:19:28
2	Si 251.611†	555.3	68.0	2.5719 ug/L	2.5719 ppb	09:19:28
2	Sn 189.927†	8.7	1.6	0.3569 ug/L	0.3569 ppb	09:19:28
2	Ti 334.940†	-1114.5	5.0	0.0047 ug/L	0.0047 ppb	09:19:08
2	Tl 190.801†	-19.5	9.5	3.6905 ug/L	3.6905 ppb	09:19:28
2	U 409.014†	-2170.8	30.1	0.9119 ug/L	0.9119 ppb	09:19:08
2	V 292.402†	-1366.1	-50.8	-0.3922 ug/L	-0.3922 ppb	09:19:08
2	Zn 213.857†	683.1	114.1	1.3864 ug/L	1.3864 ppb	09:19:28
2	SiO2†	541.1	42.6	3.4608 ug/L	3.4608 ppb	09:20:04
3	Sc Radial	4286.3	4286.3	97.5 %		09:18:36
3	Y RADIAL	4854.7	4854.7	102.0 %		09:18:16
3	Al 396.153Radial†	-90.4	-14.6	-14.360 ug/L	-14.360 ppb	09:18:36
3	Ca 317.933Radial†	24.9	9.9	18.648 ug/L	18.648 ppb	09:18:36
3	Fe 238.204 Radial†	7.6	-0.7	-7.7386 ug/L	-7.7386 ppb	09:18:36
3	K 766.490 Radial†	2787.2	259.2	49.398 ug/L	49.398 ppb	09:18:16
3	Mg 279.077 IEC†	3.8	2.3	96.474 ug/L	96.474 ppb	09:18:36
3	Na 589.592 Radial†	-957.9	-107.1	-37.767 ug/L	-37.767 ppb	09:18:16
3	Sr 421.552†	10.2	-10.4	-0.0832 ug/L	-0.0832 ppb	09:18:16
3	Sc 361.383	814846.7	814846.7	99.514 %		09:19:34
3	Y 371.029	688863.2	688863.2	99.598 %		09:19:34
3	Ag 328.068†	112.3	-72.3	-0.3809 ug/L	-0.3809 ppb	09:19:34
3	As 188.979†	-19.8	6.9	3.8016 ug/L	3.8016 ppb	09:19:54
3	B 249.677†	-11.6	525.7	14.748 ug/L	14.748 ppb	09:19:54
3	Ba 233.527†	13.2	14.0	0.1296 ug/L	0.1296 ppb	09:19:54
3	Be 313.107†	-3646.0	67.2	0.0286 ug/L	0.0286 ppb	09:19:34
3	Cd 226.502†	-174.8	-5.1	-0.0723 ug/L	-0.0723 ppb	09:19:54
3	Co 228.616†	-45.4	0.6	0.0137 ug/L	0.0137 ppb	09:19:54
3	Cr 267.716†	81.6	10.5	0.1380 ug/L	0.1380 ppb	09:19:54
3	Cu 324.752†	5635.8	111.3	0.3662 ug/L	0.3662 ppb	09:19:34
3	Mn 257.610†	399.2	12.1	0.0112 ug/L	0.0112 ppb	09:19:54
3	Mo 202.031†	4.4	-4.1	-0.3630 ug/L	-0.3630 ppb	09:19:54
3	Ni 231.604†	77.0	-6.7	-0.2117 ug/L	-0.2117 ppb	09:19:54
3	P 214.914†	186.2	-0.2	-0.1874 ug/L	-0.1874 ppb	09:19:54
3	Pb 220.353†	-67.8	-9.8	-1.5113 ug/L	-1.5113 ppb	09:19:54
3	S 181.975 Axial†	31.5	1.5	2.6801 ug/L	2.6801 ppb	09:19:54
3	Sb 206.836†	26.2	2.7	1.1279 ug/L	1.1279 ppb	09:19:54
3	Se 196.026†	-24.8	-7.9	-6.6490 ug/L	-6.6490 ppb	09:19:54
3	Si 251.611†	539.9	54.4	2.0696 ug/L	2.0696 ppb	09:19:54
3	Sn 189.927†	11.4	4.3	0.9890 ug/L	0.9890 ppb	09:19:54
3	Ti 334.940†	-1124.0	-8.2	-0.0205 ug/L	-0.0205 ppb	09:19:34
3	Tl 190.801†	-21.4	7.6	2.9459 ug/L	2.9459 ppb	09:19:54
3	U 409.014†	-2140.4	53.3	1.6188 ug/L	1.6188 ppb	09:19:34
3	V 292.402†	-1367.7	-56.9	-0.4537 ug/L	-0.4537 ppb	09:19:34
3	Zn 213.857†	679.6	112.8	1.3688 ug/L	1.3688 ppb	09:19:54
3	SiO2†	581.9	85.4	6.9819 ug/L	6.9819 ppb	09:20:09

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	815633.2	99.610 %		0.2061				0.21%
Sc Radial	4273.6	97.2 %		0.27				0.28%
Y 371.029	689064.1	99.627 %		0.2066				0.21%
Y RADIAL	4809.8	101.0 %		0.84				0.83%
Ag 328.068†	-8.5	-0.0502 ug/L		0.29315	-0.0502 ppb		0.29315	584.39%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-6.9	-6.8391 ug/L		6.55807	-6.8391 ppb		6.55807	95.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	5.2	2.8450 ug/L		2.93238	2.8450 ppb		2.93238	103.07%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	530.9	14.897 ug/L		0.1288	14.897 ppb		0.1288	0.86%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	17.1	0.1593 ug/L		0.08483	0.1593 ppb		0.08483	53.25%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	83.0	0.0353 ug/L		0.01733	0.0353 ppb		0.01733	49.14%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	6.2	11.716 ug/L		6.0069	11.716 ppb		6.0069	51.27%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	2.4	0.0364 ug/L	0.09492	0.0364 ppb	0.09492	260.66%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-3.6	-0.0930 ug/L	0.09311	-0.0930 ppb	0.09311	100.13%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	18.3	0.2428 ug/L	0.25864	0.2428 ppb	0.25864	106.54%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	101.7	0.3344 ug/L	0.04278	0.3344 ppb	0.04278	12.79%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.1	-13.213 ug/L	6.5433	-13.213 ppb	6.5433	49.52%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	246.6	46.983 ug/L	2.2993	46.983 ppb	2.2993	4.89%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.6	64.745 ug/L	28.2505	64.745 ppb	28.2505	43.63%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	16.1	0.0173 ug/L	0.00685	0.0173 ppb	0.00685	39.68%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	5.0	0.4392 ug/L	0.72693	0.4392 ppb	0.72693	165.51%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-20.4	-7.1939 ug/L	31.20291	-7.1939 ppb	31.20291	433.74%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-7.0	-0.2232 ug/L	0.22549	-0.2232 ppb	0.22549	101.04%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-1.8	-1.4062 ug/L	3.26718	-1.4062 ppb	3.26718	232.35%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-0.6	-0.0907 ug/L	1.23706	-0.0907 ppb	1.23706	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-1.0	-1.6999 ug/L	3.90961	-1.6999 ppb	3.90961	229.99%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	9.8	4.1048 ug/L	2.73805	4.1048 ppb	2.73805	66.70%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.6	-0.5750 ug/L	5.42099	-0.5750 ppb	5.42099	942.80%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	56.9	2.1537 ug/L	0.38312	2.1537 ppb	0.38312	17.79%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.5	0.5717 ug/L	0.36138	0.5717 ppb	0.36138	63.21%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-0.3	-0.0028 ug/L	0.09757	-0.0028 ppb	0.09757	>999.9%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-19.8	-0.0386 ug/L	0.05470	-0.0386 ppb	0.05470	141.60%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	5.8	2.2594 ug/L	1.87131	2.2594 ppb	1.87131	82.82%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	32.4	0.9826 ug/L	0.60400	0.9826 ppb	0.60400	61.47%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-27.8	-0.2109 ug/L	0.36853	-0.2109 ppb	0.36853	174.72%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	117.0	1.4205 ug/L	0.07489	1.4205 ppb	0.07489	5.27%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	57.7	4.6974 ug/L	1.98072	4.6974 ppb	1.98072	42.17%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 8

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 10:18:17

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	4308.1	4308.1	98.0 %		10:20:30
1	Y RADIAL	4796.2	4796.2	100.7 %		10:20:10
1	Al 396.153Radial†	5020.5	5200.0	5083.7 ug/L	5083.7 ppb	10:20:10
1	Ca 317.933Radial†	2703.2	2742.1	5188.6 ug/L	5188.6 ppb	10:20:30
1	Fe 238.204 Radial†	458.1	458.9	5332.4 ug/L	5332.4 ppb	10:20:30
1	K 766.490 Radial†	29265.8	27258.0	5186.8 ug/L	5186.8 ppb	10:20:10
1	Mg 279.077 IEC†	128.8	129.9	5357.8 ug/L	5357.8 ppb	10:20:30
1	Na 589.592 Radial†	28262.5	29708.3	10473 ug/L	10473 ppb	10:20:10
1	Sr 421.552†	64065.1	65338.0	523.69 ug/L	523.69 ppb	10:20:10
1	Sc 361.383	840877.0	840877.0	102.69 %		10:21:27
1	Y 371.029	700106.4	700106.4	101.22 %		10:21:27
1	Ag 328.068†	98277.1	95514.6	499.06 ug/L	499.06 ppb	10:21:32
1	As 188.979†	922.7	925.3	512.29 ug/L	512.29 ppb	10:21:52
1	B 249.677†	17605.6	17681.2	493.72 ug/L	493.72 ppb	10:21:32
1	Ba 233.527†	54539.2	53109.6	498.70 ug/L	498.70 ppb	10:21:32
1	Be 313.107†	1210018.3	1182016.3	504.42 ug/L	504.42 ppb	10:21:27
1	Cd 226.502†	35152.8	34401.5	499.02 ug/L	499.02 ppb	10:21:32
1	Co 228.616†	20041.6	19562.2	505.71 ug/L	505.71 ppb	10:21:32
1	Cr 267.716†	38225.6	37151.6	499.27 ug/L	499.27 ppb	10:21:32
1	Cu 324.752†	158350.9	148646.1	490.76 ug/L	490.76 ppb	10:21:32
1	Mn 257.610†	390746.5	380110.0	500.08 ug/L	500.08 ppb	10:21:27
1	Mo 202.031†	5748.3	5589.0	497.29 ug/L	497.29 ppb	10:21:52
1	Ni 231.604†	16393.2	15879.2	503.98 ug/L	503.98 ppb	10:21:32
1	P 214.914†	3610.4	3328.4	2383.6 ug/L	2383.6 ppb	10:21:52
1	Pb 220.353†	3267.4	3240.1	499.18 ug/L	499.18 ppb	10:21:52
1	S 181.975 Axial†	599.3	553.4	989.74 ug/L	989.74 ppb	10:21:52
1	Sb 206.836†	1241.7	1185.5	513.90 ug/L	513.90 ppb	10:21:52
1	Se 196.026†	601.0	602.2	520.13 ug/L	520.13 ppb	10:21:52
1	Si 251.611†	67756.7	65491.6	2480.1 ug/L	2480.1 ppb	10:21:32
1	Sn 189.927†	2265.7	2199.2	499.66 ug/L	499.66 ppb	10:21:52
1	Ti 334.940†	286425.2	280034.8	486.85 ug/L	486.85 ppb	10:21:32
1	Tl 190.801†	1289.6	1284.9	500.36 ug/L	500.36 ppb	10:21:52
1	U 409.014†	14815.8	16631.5	502.85 ug/L	502.85 ppb	10:21:32
1	V 292.402†	62323.9	62006.9	501.75 ug/L	501.75 ppb	10:21:32
1	Zn 213.857†	42998.2	41300.5	495.75 ug/L	495.75 ppb	10:21:32
1	SiO2†	68433.6	66139.6	5384.2 ug/L	5384.2 ppb	10:23:00
2	Sc Radial	4303.6	4303.6	97.9 %		10:20:55
2	Y RADIAL	4888.7	4888.7	102.7 %		10:20:35
2	Al 396.153Radial†	5077.0	5263.0	5145.6 ug/L	5145.6 ppb	10:20:35
2	Ca 317.933Radial†	2703.5	2745.3	5194.6 ug/L	5194.6 ppb	10:20:55
2	Fe 238.204 Radial†	454.5	455.7	5294.9 ug/L	5294.9 ppb	10:20:55
2	K 766.490 Radial†	29796.5	27831.0	5295.9 ug/L	5295.9 ppb	10:20:35
2	Mg 279.077 IEC†	129.3	130.5	5384.2 ug/L	5384.2 ppb	10:20:55
2	Na 589.592 Radial†	28793.9	30281.0	10675 ug/L	10675 ppb	10:20:35
2	Sr 421.552†	65177.3	66541.7	533.34 ug/L	533.34 ppb	10:20:35
2	Sc 361.383	841989.2	841989.2	102.83 %		10:21:58
2	Y 371.029	701176.2	701176.2	101.38 %		10:21:58
2	Ag 328.068†	98955.0	96047.5	501.82 ug/L	501.82 ppb	10:22:03
2	As 188.979†	911.1	912.8	505.43 ug/L	505.43 ppb	10:22:23
2	B 249.677†	17727.0	17776.7	496.40 ug/L	496.40 ppb	10:22:03
2	Ba 233.527†	54790.6	53284.0	500.33 ug/L	500.33 ppb	10:22:03
2	Be 313.107†	1215519.9	1185810.1	506.04 ug/L	506.04 ppb	10:21:58
2	Cd 226.502†	35405.2	34601.8	501.93 ug/L	501.93 ppb	10:22:03
2	Co 228.616†	20165.2	19656.6	508.15 ug/L	508.15 ppb	10:22:03
2	Cr 267.716†	38383.2	37255.7	500.66 ug/L	500.66 ppb	10:22:03
2	Cu 324.752†	159218.3	149285.9	492.87 ug/L	492.87 ppb	10:22:03
2	Mn 257.610†	392163.2	380985.2	501.23 ug/L	501.23 ppb	10:21:58
2	Mo 202.031†	5763.9	5596.8	497.98 ug/L	497.98 ppb	10:22:23
2	Ni 231.604†	16452.0	15915.3	505.12 ug/L	505.12 ppb	10:22:03

2	P 214.914†	3642.1	3354.6	2402.7 ug/L	2402.7 ppb	10:22:23
2	Pb 220.353†	3262.6	3231.1	497.83 ug/L	497.83 ppb	10:22:23
2	S 181.975 Axial†	607.5	560.6	1002.6 ug/L	1002.6 ppb	10:22:23
2	Sb 206.836†	1261.5	1203.1	521.27 ug/L	521.27 ppb	10:22:23
2	Se 196.026†	606.4	606.7	523.77 ug/L	523.77 ppb	10:22:23
2	Si 251.611†	68049.2	65688.9	2487.6 ug/L	2487.6 ppb	10:22:03
2	Sn 189.927†	2268.5	2198.9	499.61 ug/L	499.61 ppb	10:22:23
2	Ti 334.940†	288221.2	281413.1	489.25 ug/L	489.25 ppb	10:22:03
2	Tl 190.801†	1312.0	1305.0	508.15 ug/L	508.15 ppb	10:22:23
2	U 409.014†	14914.3	16708.1	505.18 ug/L	505.18 ppb	10:22:03
2	V 292.402†	62602.0	62197.1	503.29 ug/L	503.29 ppb	10:22:03
2	Zn 213.857†	43197.0	41438.5	497.42 ug/L	497.42 ppb	10:22:03
2	SiO2†	68330.5	65951.3	5368.8 ug/L	5368.8 ppb	10:23:05
3	Sc Radial	4308.5	4308.5	98.0 %		10:21:20
3	Y RADIAL	4759.8	4759.8	99.98 %		10:21:00
3	Al 396.153Radial†	4982.1	5160.3	5044.7 ug/L	5044.7 ppb	10:21:00
3	Ca 317.933Radial†	2717.2	2756.1	5215.0 ug/L	5215.0 ppb	10:21:20
3	Fe 238.204 Radial†	458.5	459.2	5336.0 ug/L	5336.0 ppb	10:21:20
3	K 766.490 Radial†	29151.9	27138.8	5164.1 ug/L	5164.1 ppb	10:21:00
3	Mg 279.077 IEC†	130.2	131.2	5413.8 ug/L	5413.8 ppb	10:21:20
3	Na 589.592 Radial†	27882.2	29317.5	10335 ug/L	10335 ppb	10:21:00
3	Sr 421.552†	63477.4	64731.9	518.84 ug/L	518.84 ppb	10:21:00
3	Sc 361.383	841584.9	841584.9	102.78 %		10:22:29
3	Y 371.029	700121.4	700121.4	101.23 %		10:22:29
3	Ag 328.068†	97908.8	95075.7	496.77 ug/L	496.77 ppb	10:22:34
3	As 188.979†	915.3	917.4	507.90 ug/L	507.90 ppb	10:22:54
3	B 249.677†	17549.2	17611.9	491.79 ug/L	491.79 ppb	10:22:34
3	Ba 233.527†	54162.2	52698.1	494.84 ug/L	494.84 ppb	10:22:34
3	Be 313.107†	1208532.2	1179579.3	503.37 ug/L	503.37 ppb	10:22:29
3	Cd 226.502†	34838.9	34067.3	494.17 ug/L	494.17 ppb	10:22:34
3	Co 228.616†	19861.8	19370.8	500.77 ug/L	500.77 ppb	10:22:34
3	Cr 267.716†	37945.5	36847.8	495.19 ug/L	495.19 ppb	10:22:34
3	Cu 324.752†	157797.9	147978.4	488.55 ug/L	488.55 ppb	10:22:34
3	Mn 257.610†	390735.5	379779.2	499.65 ug/L	499.65 ppb	10:22:29
3	Mo 202.031†	5752.3	5588.2	497.22 ug/L	497.22 ppb	10:22:54
3	Ni 231.604†	16284.0	15759.5	500.18 ug/L	500.18 ppb	10:22:34
3	P 214.914†	3613.2	3328.2	2383.8 ug/L	2383.8 ppb	10:22:54
3	Pb 220.353†	3273.8	3243.6	499.72 ug/L	499.72 ppb	10:22:54
3	S 181.975 Axial†	608.0	561.3	1004.0 ug/L	1004.0 ppb	10:22:54
3	Sb 206.836†	1261.0	1203.2	521.27 ug/L	521.27 ppb	10:22:54
3	Se 196.026†	609.0	609.5	526.24 ug/L	526.24 ppb	10:22:54
3	Si 251.611†	67209.5	64903.6	2457.8 ug/L	2457.8 ppb	10:22:34
3	Sn 189.927†	2261.1	2192.7	498.21 ug/L	498.21 ppb	10:22:54
3	Ti 334.940†	284900.4	278316.7	483.86 ug/L	483.86 ppb	10:22:34
3	Tl 190.801†	1308.4	1302.1	507.01 ug/L	507.01 ppb	10:22:54
3	U 409.014†	14819.6	16623.0	502.60 ug/L	502.60 ppb	10:22:34
3	V 292.402†	61893.7	61537.3	498.00 ug/L	498.00 ppb	10:22:34
3	Zn 213.857†	42671.0	40946.9	491.50 ug/L	491.50 ppb	10:22:34
3	SiO2†	68350.8	66003.0	5373.1 ug/L	5373.1 ppb	10:23:10

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	841483.7	102.77 %	0.069			0.07%
Sc Radial	4306.7	98.0 %	0.06			0.06%
Y 371.029	700468.0	101.28 %	0.089			0.09%
Y RADIAL	4814.9	101.1 %	1.40			1.38%
Ag 328.068†	95546.0	499.22 ug/L	2.529	499.22 ppb	2.529	0.51%
QC value within limits for Ag 328.068 Recovery = 99.84%						
Al 396.153Radial†	5207.8	5091.3 ug/L	50.85	5091.3 ppb	50.85	1.00%
QC value within limits for Al 396.153Radial Recovery = 101.83%						
As 188.979†	918.5	508.54 ug/L	3.473	508.54 ppb	3.473	0.68%
QC value within limits for As 188.979 Recovery = 101.71%						
B 249.677†	17689.9	493.97 ug/L	2.314	493.97 ppb	2.314	0.47%
QC value within limits for B 249.677 Recovery = 98.79%						
Ba 233.527†	53030.6	497.96 ug/L	2.823	497.96 ppb	2.823	0.57%
QC value within limits for Ba 233.527 Recovery = 99.59%						
Be 313.107†	1182468.6	504.61 ug/L	1.343	504.61 ppb	1.343	0.27%
QC value within limits for Be 313.107 Recovery = 100.92%						
Ca 317.933Radial†	2747.8	5199.4 ug/L	13.84	5199.4 ppb	13.84	0.27%

QC value within limits for Ca 317.933Radial Recovery = 103.99%							
Cd 226.502†	34356.9	498.37 ug/L	3.922	498.37 ppb	3.922	0.79%	
QC value within limits for Cd 226.502 Recovery = 99.67%							
Co 228.616†	19529.9	504.88 ug/L	3.759	504.88 ppb	3.759	0.74%	
QC value within limits for Co 228.616 Recovery = 100.98%							
Cr 267.716†	37085.1	498.38 ug/L	2.844	498.38 ppb	2.844	0.57%	
QC value within limits for Cr 267.716 Recovery = 99.68%							
Cu 324.752†	148636.8	490.73 ug/L	2.157	490.73 ppb	2.157	0.44%	
QC value within limits for Cu 324.752 Recovery = 98.15%							
Fe 238.204 Radial†	457.9	5321.1 ug/L	22.78	5321.1 ppb	22.78	0.43%	
QC value within limits for Fe 238.204 Radial Recovery = 106.42%							
K 766.490 Radial†	27409.3	5215.6 ug/L	70.44	5215.6 ppb	70.44	1.35%	
QC value within limits for K 766.490 Radial Recovery = 104.31%							
Mg 279.077 IEC†	130.6	5385.2 ug/L	28.03	5385.2 ppb	28.03	0.52%	
QC value within limits for Mg 279.077 IEC Recovery = 107.70%							
Mn 257.610†	380291.5	500.32 ug/L	0.817	500.32 ppb	0.817	0.16%	
QC value within limits for Mn 257.610 Recovery = 100.06%							
Mo 202.031†	5591.3	497.49 ug/L	0.422	497.49 ppb	0.422	0.08%	
QC value within limits for Mo 202.031 Recovery = 99.50%							
Na 589.592 Radial†	29768.9	10494 ug/L	170.8	10494 ppb	170.8	1.63%	
QC value within limits for Na 589.592 Radial Recovery = 104.94%							
Ni 231.604†	15851.3	503.09 ug/L	2.588	503.09 ppb	2.588	0.51%	
QC value within limits for Ni 231.604 Recovery = 100.62%							
P 214.914†	3337.1	2390.0 ug/L	10.97	2390.0 ppb	10.97	0.46%	
QC value within limits for P 214.914 Recovery = 95.60%							
Pb 220.353†	3238.3	498.91 ug/L	0.975	498.91 ppb	0.975	0.20%	
QC value within limits for Pb 220.353 Recovery = 99.78%							
S 181.975 Axial†	558.4	998.75 ug/L	7.834	998.75 ppb	7.834	0.78%	
QC value within limits for S 181.975 Axial Recovery = 99.88%							
Sb 206.836†	1197.3	518.82 ug/L	4.257	518.82 ppb	4.257	0.82%	
QC value within limits for Sb 206.836 Recovery = 103.76%							
Se 196.026†	606.1	523.38 ug/L	3.070	523.38 ppb	3.070	0.59%	
QC value within limits for Se 196.026 Recovery = 104.68%							
Si 251.611†	65361.4	2475.2 ug/L	15.50	2475.2 ppb	15.50	0.63%	
QC value within limits for Si 251.611 Recovery = 99.01%							
Sn 189.927†	2196.9	499.16 ug/L	0.823	499.16 ppb	0.823	0.16%	
QC value within limits for Sn 189.927 Recovery = 99.83%							
Sr 421.552†	65537.2	525.29 ug/L	7.384	525.29 ppb	7.384	1.41%	
QC value within limits for Sr 421.552 Recovery = 105.06%							
Ti 334.940†	279921.5	486.65 ug/L	2.696	486.65 ppb	2.696	0.55%	
QC value within limits for Ti 334.940 Recovery = 97.33%							
Tl 190.801†	1297.3	505.18 ug/L	4.211	505.18 ppb	4.211	0.83%	
QC value within limits for Tl 190.801 Recovery = 101.04%							
U 409.014†	16654.2	503.54 ug/L	1.421	503.54 ppb	1.421	0.28%	
QC value within limits for U 409.014 Recovery = 100.71%							
V 292.402†	61913.8	501.01 ug/L	2.717	501.01 ppb	2.717	0.54%	
QC value within limits for V 292.402 Recovery = 100.20%							
Zn 213.857†	41228.6	494.89 ug/L	3.055	494.89 ppb	3.055	0.62%	
QC value within limits for Zn 213.857 Recovery = 98.98%							
SiO2†	66031.3	5375.4 ug/L	7.95	5375.4 ppb	7.95	0.15%	
QC value within limits for SiO2 Recovery = 100.52%							
All analyte(s) passed QC.							

Sequence No.: 9

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 3/19/2010 10:25:21

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	4401.9	4401.9	100 %		10:27:15
1	Y RADIAL	4788.6	4788.6	100.6 %		10:27:15
1	Al 396.153Radial†	146.5	224.3	219.87 ug/L	219.87 ppb	10:27:35
1	Ca 317.933Radial†	136.1	120.2	227.52 ug/L	227.52 ppb	10:27:35
1	Fe 238.204 Radial†	19.2	10.7	124.60 ug/L	124.60 ppb	10:27:35
1	K 766.490 Radial†	3512.0	907.8	172.76 ug/L	172.76 ppb	10:27:15
1	Mg 279.077 IEC†	10.2	8.7	357.89 ug/L	357.89 ppb	10:27:35
1	Na 589.592 Radial†	-57.8	817.4	288.14 ug/L	288.14 ppb	10:27:15
1	Sr 421.552†	647.2	625.4	5.0111 ug/L	5.0111 ppb	10:27:15
1	Sc 361.383	822284.0	822284.0	100.42 %		10:28:32
1	Y 371.029	695589.3	695589.3	100.57 %		10:28:32
1	Ag 328.068†	1144.7	954.7	4.9620 ug/L	4.9620 ppb	10:28:32
1	As 188.979†	36.5	63.1	34.698 ug/L	34.698 ppb	10:28:52
1	B 249.677†	1493.9	2025.0	56.772 ug/L	56.772 ppb	10:28:32
1	Ba 233.527†	582.9	581.2	5.4571 ug/L	5.4571 ppb	10:28:52
1	Be 313.107†	8407.8	12103.5	5.1650 ug/L	5.1650 ppb	10:28:32
1	Cd 226.502†	205.0	374.8	5.4403 ug/L	5.4403 ppb	10:28:52
1	Co 228.616†	171.5	216.9	5.6192 ug/L	5.6192 ppb	10:28:52
1	Cr 267.716†	442.0	368.7	4.9398 ug/L	4.9398 ppb	10:28:52
1	Cu 324.752†	8629.8	3041.5	10.015 ug/L	10.015 ppb	10:28:32
1	Mn 257.610†	8561.3	8136.2	10.695 ug/L	10.695 ppb	10:28:32
1	Mo 202.031†	123.8	114.8	10.213 ug/L	10.213 ppb	10:28:52
1	Ni 231.604†	263.1	177.9	5.6471 ug/L	5.6471 ppb	10:28:52
1	P 214.914†	398.2	209.3	153.94 ug/L	153.94 ppb	10:28:52
1	Pb 220.353†	22.2	80.4	12.408 ug/L	12.408 ppb	10:28:52
1	S 181.975 Axial†	91.1	60.5	108.34 ug/L	108.34 ppb	10:28:52
1	Sb 206.836†	52.8	28.9	12.468 ug/L	12.468 ppb	10:28:52
1	Se 196.026†	20.4	37.2	31.477 ug/L	31.477 ppb	10:28:52
1	Si 251.611†	3185.3	2683.8	101.76 ug/L	101.76 ppb	10:28:52
1	Sn 189.927†	52.1	44.7	10.174 ug/L	10.174 ppb	10:28:52
1	Ti 334.940†	1753.5	2867.3	4.9598 ug/L	4.9598 ppb	10:28:32
1	Tl 190.801†	14.1	43.1	16.750 ug/L	16.750 ppb	10:28:52
1	U 409.014†	-246.9	1958.4	59.388 ug/L	59.388 ppb	10:28:32
1	V 292.402†	-752.2	568.4	4.7786 ug/L	4.7786 ppb	10:28:32
1	Zn 213.857†	1728.5	1151.2	13.880 ug/L	13.880 ppb	10:28:52
1	SiO2†	3288.3	2775.2	226.21 ug/L	226.21 ppb	10:29:48
2	Sc Radial	4445.8	4445.8	101 %		10:27:40
2	Y RADIAL	4794.0	4794.0	100.7 %		10:27:40
2	Al 396.153Radial†	128.3	204.9	200.78 ug/L	200.78 ppb	10:28:00
2	Ca 317.933Radial†	134.8	117.6	222.53 ug/L	222.53 ppb	10:28:00
2	Fe 238.204 Radial†	17.2	8.5	99.164 ug/L	99.164 ppb	10:28:00
2	K 766.490 Radial†	3570.5	931.1	177.19 ug/L	177.19 ppb	10:27:40
2	Mg 279.077 IEC†	10.9	9.3	382.08 ug/L	382.08 ppb	10:28:00
2	Na 589.592 Radial†	-46.0	829.6	292.46 ug/L	292.46 ppb	10:27:40
2	Sr 421.552†	645.8	617.6	4.9488 ug/L	4.9488 ppb	10:27:40
2	Sc 361.383	837271.4	837271.4	102.25 %		10:28:57
2	Y 371.029	706698.5	706698.5	102.18 %		10:28:57
2	Ag 328.068†	1173.1	962.1	4.9980 ug/L	4.9980 ppb	10:28:57
2	As 188.979†	26.2	52.4	28.810 ug/L	28.810 ppb	10:29:17
2	B 249.677†	1558.8	2061.8	57.810 ug/L	57.810 ppb	10:28:57
2	Ba 233.527†	574.9	562.9	5.2872 ug/L	5.2872 ppb	10:29:17
2	Be 313.107†	8476.9	12021.1	5.1302 ug/L	5.1302 ppb	10:28:57
2	Cd 226.502†	192.3	358.7	5.2089 ug/L	5.2089 ppb	10:29:17
2	Co 228.616†	160.2	202.9	5.2573 ug/L	5.2573 ppb	10:29:17
2	Cr 267.716†	476.6	394.6	5.2868 ug/L	5.2868 ppb	10:29:17
2	Cu 324.752†	8870.3	3122.9	10.284 ug/L	10.284 ppb	10:28:57
2	Mn 257.610†	8683.2	8102.8	10.648 ug/L	10.648 ppb	10:28:57
2	Mo 202.031†	129.1	117.7	10.475 ug/L	10.475 ppb	10:29:17
2	Ni 231.604†	264.0	174.1	5.5251 ug/L	5.5251 ppb	10:29:17

2	P 214.914†	395.3	199.3	146.52 ug/L	146.52 ppb	10:29:17
2	Pb 220.353†	27.6	85.3	13.165 ug/L	13.165 ppb	10:29:17
2	S 181.975 Axial†	84.9	52.8	94.531 ug/L	94.531 ppb	10:29:17
2	Sb 206.836†	44.5	19.9	8.7098 ug/L	8.7098 ppb	10:29:17
2	Se 196.026†	19.1	35.7	30.097 ug/L	30.097 ppb	10:29:17
2	Si 251.611†	3158.6	2600.8	98.606 ug/L	98.606 ppb	10:29:17
2	Sn 189.927†	61.3	52.8	12.017 ug/L	12.017 ppb	10:29:17
2	Ti 334.940†	1832.6	2913.4	5.0386 ug/L	5.0386 ppb	10:28:57
2	Tl 190.801†	27.5	56.0	21.724 ug/L	21.724 ppb	10:29:17
2	U 409.014†	-357.4	1854.6	56.243 ug/L	56.243 ppb	10:28:57
2	V 292.402†	-677.4	654.9	5.4708 ug/L	5.4708 ppb	10:28:57
2	Zn 213.857†	1716.0	1108.1	13.363 ug/L	13.363 ppb	10:29:17
2	SiO2†	3289.2	2717.4	221.49 ug/L	221.49 ppb	10:29:53
3	Sc Radial	4483.3	4483.3	102 %		10:28:05
3	Y RADIAL	4841.5	4841.5	101.7 %		10:28:05
3	Al 396.153Radial†	141.9	217.2	212.85 ug/L	212.85 ppb	10:28:25
3	Ca 317.933Radial†	130.9	112.7	213.20 ug/L	213.20 ppb	10:28:25
3	Fe 238.204 Radial†	17.3	8.5	98.662 ug/L	98.662 ppb	10:28:25
3	K 766.490 Radial†	3517.4	849.4	161.64 ug/L	161.64 ppb	10:28:05
3	Mg 279.077 IEC†	11.7	10.0	411.68 ug/L	411.68 ppb	10:28:25
3	Na 589.592 Radial†	-82.3	794.4	280.04 ug/L	280.04 ppb	10:28:05
3	Sr 421.552†	670.9	636.9	5.1036 ug/L	5.1036 ppb	10:28:05
3	Sc 361.383	836240.4	836240.4	102.13 %		10:29:23
3	Y 371.029	705188.3	705188.3	101.96 %		10:29:23
3	Ag 328.068†	1229.5	1018.7	5.2884 ug/L	5.2884 ppb	10:29:23
3	As 188.979†	36.9	62.9	34.584 ug/L	34.584 ppb	10:29:43
3	B 249.677†	1533.7	2039.1	57.173 ug/L	57.173 ppb	10:29:23
3	Ba 233.527†	569.0	557.9	5.2383 ug/L	5.2383 ppb	10:29:43
3	Be 313.107†	8522.5	12076.1	5.1539 ug/L	5.1539 ppb	10:29:23
3	Cd 226.502†	187.5	354.2	5.1435 ug/L	5.1435 ppb	10:29:43
3	Co 228.616†	163.0	205.8	5.3306 ug/L	5.3306 ppb	10:29:43
3	Cr 267.716†	463.5	382.4	5.1218 ug/L	5.1218 ppb	10:29:43
3	Cu 324.752†	8786.4	3051.5	10.048 ug/L	10.048 ppb	10:29:23
3	Mn 257.610†	8625.6	8056.9	10.586 ug/L	10.586 ppb	10:29:23
3	Mo 202.031†	124.3	113.2	10.075 ug/L	10.075 ppb	10:29:43
3	Ni 231.604†	259.0	169.5	5.3803 ug/L	5.3803 ppb	10:29:43
3	P 214.914†	398.5	202.9	149.24 ug/L	149.24 ppb	10:29:43
3	Pb 220.353†	12.0	70.1	10.819 ug/L	10.819 ppb	10:29:43
3	S 181.975 Axial†	85.1	53.1	95.060 ug/L	95.060 ppb	10:29:43
3	Sb 206.836†	57.7	32.9	14.105 ug/L	14.105 ppb	10:29:43
3	Se 196.026†	20.8	37.3	31.498 ug/L	31.498 ppb	10:29:43
3	Si 251.611†	3182.8	2628.4	99.656 ug/L	99.656 ppb	10:29:43
3	Sn 189.927†	53.7	45.4	10.337 ug/L	10.337 ppb	10:29:43
3	Ti 334.940†	1907.5	2989.0	5.1660 ug/L	5.1660 ppb	10:29:23
3	Tl 190.801†	25.8	54.4	21.092 ug/L	21.092 ppb	10:29:43
3	U 409.014†	-327.0	1884.0	57.134 ug/L	57.134 ppb	10:29:23
3	V 292.402†	-763.5	569.9	4.7882 ug/L	4.7882 ppb	10:29:23
3	Zn 213.857†	1721.2	1115.3	13.451 ug/L	13.451 ppb	10:29:43
3	SiO2†	3260.7	2693.5	219.55 ug/L	219.55 ppb	10:29:58

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	831931.9	101.60 %	1.022			1.01%
Sc Radial	4443.7	101 %	0.9			0.92%
Y 371.029	702492.0	101.57 %	0.871			0.86%
Y RADIAL	4808.0	101.0 %	0.61			0.61%
Ag 328.068†	978.5	5.0828 ug/L	0.17895	5.0828 ppb	0.17895	3.52%
QC value within limits for Ag 328.068 Recovery = 101.66%						
Al 396.153Radial†	215.5	211.17 ug/L	9.660	211.17 ppb	9.660	4.57%
QC value within limits for Al 396.153Radial Recovery = 105.58%						
As 188.979†	59.5	32.697 ug/L	3.3670	32.697 ppb	3.3670	10.30%
QC value within limits for As 188.979 Recovery = 108.99%						
B 249.677†	2041.9	57.252 ug/L	0.5232	57.252 ppb	0.5232	0.91%
QC value within limits for B 249.677 Recovery = 114.50%						
Ba 233.527†	567.3	5.3275 ug/L	0.11484	5.3275 ppb	0.11484	2.16%
QC value within limits for Ba 233.527 Recovery = 106.55%						
Be 313.107†	12066.9	5.1497 ug/L	0.01781	5.1497 ppb	0.01781	0.35%
QC value within limits for Be 313.107 Recovery = 102.99%						
Ca 317.933Radial†	116.8	221.08 ug/L	7.270	221.08 ppb	7.270	3.29%

QC value within limits for Ca 317.933 Radial Recovery = 110.54%							
Cd 226.502†	362.6	5.2642 ug/L	0.15594	5.2642 ppb	0.15594	2.96%	
QC value within limits for Cd 226.502 Recovery = 105.28%							
Co 228.616†	208.5	5.4024 ug/L	0.19132	5.4024 ppb	0.19132	3.54%	
QC value within limits for Co 228.616 Recovery = 108.05%							
Cr 267.716†	381.9	5.1161 ug/L	0.17357	5.1161 ppb	0.17357	3.39%	
QC value within limits for Cr 267.716 Recovery = 102.32%							
Cu 324.752†	3071.9	10.116 ug/L	0.1468	10.116 ppb	0.1468	1.45%	
QC value within limits for Cu 324.752 Recovery = 101.16%							
Fe 238.204 Radial†	9.3	107.47 ug/L	14.830	107.47 ppb	14.830	13.80%	
QC value within limits for Fe 238.204 Radial Recovery = 107.47%							
K 766.490 Radial†	896.1	170.53 ug/L	8.011	170.53 ppb	8.011	4.70%	
QC value within limits for K 766.490 Radial Recovery = 113.69%							
Mg 279.077 IEC†	9.3	383.89 ug/L	26.941	383.89 ppb	26.941	7.02%	
QC value within limits for Mg 279.077 IEC Recovery = 127.96%							
Mn 257.610†	8098.6	10.643 ug/L	0.0547	10.643 ppb	0.0547	0.51%	
QC value within limits for Mn 257.610 Recovery = 106.43%							
Mo 202.031†	115.2	10.254 ug/L	0.2030	10.254 ppb	0.2030	1.98%	
QC value within limits for Mo 202.031 Recovery = 102.54%							
Na 589.592 Radial†	813.8	286.88 ug/L	6.307	286.88 ppb	6.307	2.20%	
QC value within limits for Na 589.592 Radial Recovery = 95.63%							
Ni 231.604†	173.8	5.5175 ug/L	0.13352	5.5175 ppb	0.13352	2.42%	
QC value within limits for Ni 231.604 Recovery = 110.35%							
P 214.914†	203.8	149.90 ug/L	3.755	149.90 ppb	3.755	2.50%	
QC value within limits for P 214.914 Recovery = 99.93%							
Pb 220.353†	78.6	12.131 ug/L	1.1974	12.131 ppb	1.1974	9.87%	
QC value within limits for Pb 220.353 Recovery = 121.31%							
S 181.975 Axial†	55.5	99.309 ug/L	7.8229	99.309 ppb	7.8229	7.88%	
QC value within limits for S 181.975 Axial Recovery = 99.31%							
Sb 206.836†	27.2	11.761 ug/L	2.7662	11.761 ppb	2.7662	23.52%	
QC value within limits for Sb 206.836 Recovery = 117.61%							
Se 196.026†	36.8	31.024 ug/L	0.8032	31.024 ppb	0.8032	2.59%	
QC value within limits for Se 196.026 Recovery = 103.41%							
Si 251.611†	2637.7	100.01 ug/L	1.605	100.01 ppb	1.605	1.60%	
QC value within limits for Si 251.611 Recovery = 100.01%							
Sn 189.927†	47.6	10.843 ug/L	1.0204	10.843 ppb	1.0204	9.41%	
QC value within limits for Sn 189.927 Recovery = 108.43%							
Sr 421.552†	626.6	5.0212 ug/L	0.07790	5.0212 ppb	0.07790	1.55%	
QC value within limits for Sr 421.552 Recovery = 100.42%							
Ti 334.940†	2923.2	5.0548 ug/L	0.10406	5.0548 ppb	0.10406	2.06%	
QC value within limits for Ti 334.940 Recovery = 101.10%							
Tl 190.801†	51.2	19.855 ug/L	2.7075	19.855 ppb	2.7075	13.64%	
QC value within limits for Tl 190.801 Recovery = 99.28%							
U 409.014†	1899.0	57.588 ug/L	1.6212	57.588 ppb	1.6212	2.82%	
QC value within limits for U 409.014 Recovery = 115.18%							
V 292.402†	597.7	5.0125 ug/L	0.39690	5.0125 ppb	0.39690	7.92%	
QC value within limits for V 292.402 Recovery = 100.25%							
Zn 213.857†	1124.9	13.565 ug/L	0.2770	13.565 ppb	0.2770	2.04%	
QC value greater than the upper limit for Zn 213.857 Recovery = 135.65%							
SiO2†	2728.7	222.41 ug/L	3.427	222.41 ppb	3.427	1.54%	
QC value within limits for SiO2 Recovery = 104.42%							
QC Failed. Continue with analysis.							

Sequence No.: 10

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 10:32:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4467.1	4467.1	102 %		10:34:02
1	Y RADIAL	4880.5	4880.5	102.5 %		10:34:02
1	Al 396.153Radial†	-80.8	-1.4	-1.4230 ug/L	-1.4230 ppb	10:34:22
1	Ca 317.933Radial†	21.9	5.8	11.020 ug/L	11.020 ppb	10:34:22
1	Fe 238.204 Radial†	9.9	1.3	14.506 ug/L	14.506 ppb	10:34:22
1	K 766.490 Radial†	2657.3	15.7	2.9980 ug/L	2.9980 ppb	10:34:02
1	Mg 279.077 IEC†	0.7	-0.8	-34.124 ug/L	-34.124 ppb	10:34:22
1	Na 589.592 Radial†	-924.0	-34.0	-11.981 ug/L	-11.981 ppb	10:34:02
1	Sr 421.552†	21.1	-0.1	-0.0006 ug/L	-0.0006 ppb	10:34:02
1	Sc 361.383	815849.0	815849.0	99.637 %		10:35:19
1	Y 371.029	689649.4	689649.4	99.711 %		10:35:19
1	Ag 328.068†	248.9	64.7	0.3382 ug/L	0.3382 ppb	10:35:19
1	As 188.979†	-18.2	8.5	4.6577 ug/L	4.6577 ppb	10:35:39
1	B 249.677†	-318.6	217.6	6.1019 ug/L	6.1019 ppb	10:35:39
1	Ba 233.527†	7.9	8.6	0.0808 ug/L	0.0808 ppb	10:35:39
1	Be 313.107†	-3623.2	94.6	0.0402 ug/L	0.0402 ppb	10:35:19
1	Cd 226.502†	-173.7	-3.7	-0.0547 ug/L	-0.0547 ppb	10:35:39
1	Co 228.616†	-45.6	0.5	0.0135 ug/L	0.0135 ppb	10:35:39
1	Cr 267.716†	76.1	4.9	0.0662 ug/L	0.0662 ppb	10:35:39
1	Cu 324.752†	5630.0	98.6	0.3251 ug/L	0.3251 ppb	10:35:19
1	Mn 257.610†	436.1	48.7	0.0668 ug/L	0.0668 ppb	10:35:39
1	Mo 202.031†	13.8	5.3	0.4709 ug/L	0.4709 ppb	10:35:39
1	Ni 231.604†	78.0	-5.8	-0.1828 ug/L	-0.1828 ppb	10:35:39
1	P 214.914†	190.4	3.8	2.7615 ug/L	2.7615 ppb	10:35:39
1	Pb 220.353†	-44.4	13.7	2.1042 ug/L	2.1042 ppb	10:35:39
1	S 181.975 Axial†	28.0	-2.1	-3.6725 ug/L	-3.6725 ppb	10:35:39
1	Sb 206.836†	44.0	20.5	8.5973 ug/L	8.5973 ppb	10:35:39
1	Se 196.026†	-15.0	1.9	1.6296 ug/L	1.6296 ppb	10:35:39
1	Si 251.611†	543.0	56.8	2.1517 ug/L	2.1517 ppb	10:35:39
1	Sn 189.927†	11.5	4.4	0.9946 ug/L	0.9946 ppb	10:35:39
1	Ti 334.940†	-1142.7	-25.7	-0.0413 ug/L	-0.0413 ppb	10:35:19
1	Tl 190.801†	-30.9	-1.9	-0.7441 ug/L	-0.7441 ppb	10:35:39
1	U 409.014†	-2131.9	64.5	1.9553 ug/L	1.9553 ppb	10:35:19
1	V 292.402†	-1328.1	-15.5	-0.1162 ug/L	-0.1162 ppb	10:35:19
1	Zn 213.857†	714.3	146.8	1.7773 ug/L	1.7773 ppb	10:35:39
1	SiO2†	550.1	52.8	4.2972 ug/L	4.2972 ppb	10:36:35
2	Sc Radial	4480.4	4480.4	102 %		10:34:27
2	Y RADIAL	4876.8	4876.8	102.4 %		10:34:27
2	Al 396.153Radial†	-82.1	-2.5	-2.4574 ug/L	-2.4574 ppb	10:34:47
2	Ca 317.933Radial†	28.0	11.8	22.307 ug/L	22.307 ppb	10:34:47
2	Fe 238.204 Radial†	8.1	-0.5	-5.7454 ug/L	-5.7454 ppb	10:34:47
2	K 766.490 Radial†	2699.4	49.2	9.3714 ug/L	9.3714 ppb	10:34:27
2	Mg 279.077 IEC†	0.5	-1.0	-40.966 ug/L	-40.966 ppb	10:34:47
2	Na 589.592 Radial†	-910.7	-18.3	-6.4367 ug/L	-6.4367 ppb	10:34:27
2	Sr 421.552†	-14.0	-34.6	-0.2774 ug/L	-0.2774 ppb	10:34:27
2	Sc 361.383	818594.5	818594.5	99.972 %		10:35:44
2	Y 371.029	691573.4	691573.4	99.989 %		10:35:44
2	Ag 328.068†	183.2	-1.9	-0.0151 ug/L	-0.0151 ppb	10:35:44
2	As 188.979†	-18.7	8.1	4.4279 ug/L	4.4279 ppb	10:36:04
2	B 249.677†	-356.2	181.1	5.0804 ug/L	5.0804 ppb	10:36:04
2	Ba 233.527†	12.6	13.3	0.1235 ug/L	0.1235 ppb	10:36:04
2	Be 313.107†	-3656.6	73.3	0.0312 ug/L	0.0312 ppb	10:35:44
2	Cd 226.502†	-161.3	9.3	0.1357 ug/L	0.1357 ppb	10:36:04
2	Co 228.616†	-43.0	3.2	0.0842 ug/L	0.0842 ppb	10:36:04
2	Cr 267.716†	47.3	-24.2	-0.3265 ug/L	-0.3265 ppb	10:36:04
2	Cu 324.752†	5641.1	90.7	0.2980 ug/L	0.2980 ppb	10:35:44
2	Mn 257.610†	423.6	34.6	0.0466 ug/L	0.0466 ppb	10:36:04
2	Mo 202.031†	11.0	2.5	0.2183 ug/L	0.2183 ppb	10:36:04
2	Ni 231.604†	94.5	10.4	0.3309 ug/L	0.3309 ppb	10:36:04

2	P 214.914†	171.8	-15.5	-11.576 ug/L	-11.576 ppb	10:36:04
2	Pb 220.353†	-62.1	-3.8	-0.5818 ug/L	-0.5818 ppb	10:36:04
2	S 181.975 Axial†	28.6	-1.6	-2.8708 ug/L	-2.8708 ppb	10:36:04
2	Sb 206.836†	32.1	8.4	3.5319 ug/L	3.5319 ppb	10:36:04
2	Se 196.026†	-19.4	-2.4	-2.0415 ug/L	-2.0415 ppb	10:36:04
2	Si 251.611†	545.7	57.7	2.1873 ug/L	2.1873 ppb	10:36:04
2	Sn 189.927†	7.4	0.3	0.0664 ug/L	0.0664 ppb	10:36:04
2	Ti 334.940†	-1137.7	-16.8	-0.0238 ug/L	-0.0238 ppb	10:35:44
2	Tl 190.801†	-27.1	1.9	0.7540 ug/L	0.7540 ppb	10:36:04
2	U 409.014†	-2129.2	74.5	2.2602 ug/L	2.2602 ppb	10:35:44
2	V 292.402†	-1364.3	-47.2	-0.3696 ug/L	-0.3696 ppb	10:35:44
2	Zn 213.857†	727.3	157.4	1.9055 ug/L	1.9055 ppb	10:36:04
2	SiO2†	549.9	50.7	4.1340 ug/L	4.1340 ppb	10:36:40
3	Sc Radial	4415.9	4415.9	100 %		10:34:52
3	Y RADIAL	4804.7	4804.7	100.9 %		10:34:52
3	Al 396.153Radial†	-69.6	8.8	8.6302 ug/L	8.6302 ppb	10:35:12
3	Ca 317.933Radial†	26.4	10.6	19.996 ug/L	19.996 ppb	10:35:12
3	Fe 238.204 Radial†	7.2	-1.3	-14.518 ug/L	-14.518 ppb	10:35:12
3	K 766.490 Radial†	2636.1	25.0	4.7603 ug/L	4.7603 ppb	10:34:52
3	Mg 279.077 IEC†	1.4	-0.2	-6.9036 ug/L	-6.9036 ppb	10:35:12
3	Na 589.592 Radial†	-934.4	-54.9	-19.340 ug/L	-19.340 ppb	10:34:52
3	Sr 421.552†	23.2	2.2	0.0179 ug/L	0.0179 ppb	10:34:52
3	Sc 361.383	837815.6	837815.6	102.32 %		10:36:09
3	Y 371.029	707201.2	707201.2	102.25 %		10:36:09
3	Ag 328.068†	256.6	65.6	0.3313 ug/L	0.3313 ppb	10:36:09
3	As 188.979†	-21.0	6.2	3.4192 ug/L	3.4192 ppb	10:36:29
3	B 249.677†	-354.2	191.2	5.3659 ug/L	5.3659 ppb	10:36:29
3	Ba 233.527†	13.5	13.9	0.1289 ug/L	0.1289 ppb	10:36:29
3	Be 313.107†	-3751.0	65.0	0.0280 ug/L	0.0280 ppb	10:36:09
3	Cd 226.502†	-171.4	3.1	0.0472 ug/L	0.0472 ppb	10:36:29
3	Co 228.616†	-49.6	-2.3	-0.0579 ug/L	-0.0579 ppb	10:36:29
3	Cr 267.716†	79.9	6.6	0.0846 ug/L	0.0846 ppb	10:36:29
3	Cu 324.752†	5709.2	27.8	0.0887 ug/L	0.0887 ppb	10:36:09
3	Mn 257.610†	417.8	19.2	0.0241 ug/L	0.0241 ppb	10:36:29
3	Mo 202.031†	15.3	6.4	0.5693 ug/L	0.5693 ppb	10:36:29
3	Ni 231.604†	91.9	5.8	0.1838 ug/L	0.1838 ppb	10:36:29
3	P 214.914†	172.1	-19.0	-14.192 ug/L	-14.192 ppb	10:36:29
3	Pb 220.353†	-53.9	5.6	0.8719 ug/L	0.8719 ppb	10:36:29
3	S 181.975 Axial†	27.2	-3.6	-6.5009 ug/L	-6.5009 ppb	10:36:29
3	Sb 206.836†	31.6	7.2	3.0043 ug/L	3.0043 ppb	10:36:29
3	Se 196.026†	-18.2	-0.8	-0.7030 ug/L	-0.7030 ppb	10:36:29
3	Si 251.611†	521.0	21.0	0.7911 ug/L	0.7911 ppb	10:36:29
3	Sn 189.927†	4.8	-2.5	-0.5546 ug/L	-0.5546 ppb	10:36:29
3	Ti 334.940†	-1064.9	80.4	0.1412 ug/L	0.1412 ppb	10:36:09
3	Tl 190.801†	-27.7	2.1	0.7968 ug/L	0.7968 ppb	10:36:29
3	U 409.014†	-2109.5	142.5	4.3242 ug/L	4.3242 ppb	10:36:09
3	V 292.402†	-1381.1	-32.4	-0.2403 ug/L	-0.2403 ppb	10:36:09
3	Zn 213.857†	738.5	151.7	1.8389 ug/L	1.8389 ppb	10:36:29
3	SiO2†	535.3	23.8	1.9278 ug/L	1.9278 ppb	10:36:45

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	824086.4	100.64 %	1.462			1.45%
Sc Radial	4454.5	101 %	0.8			0.77%
Y 371.029	696141.3	100.65 %	1.392			1.38%
Y RADIAL	4854.0	102.0 %	0.90			0.88%
Ag 328.068†	42.8	0.2181 ug/L	0.20203	0.2181 ppb	0.20203	92.62%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	1.6	1.5833 ug/L	6.12472	1.5833 ppb	6.12472	386.84%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	7.6	4.1683 ug/L	0.65881	4.1683 ppb	0.65881	15.81%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	196.6	5.5161 ug/L	0.52706	5.5161 ppb	0.52706	9.56%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	11.9	0.1111 ug/L	0.02632	0.1111 ppb	0.02632	23.70%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	77.6	0.0331 ug/L	0.00631	0.0331 ppb	0.00631	19.05%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	9.4	17.774 ug/L	5.9625	17.774 ppb	5.9625	33.55%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	2.9	0.0427 ug/L	0.09529	0.0427 ppb	0.09529 222.93%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	0.5	0.0133 ug/L	0.07108	0.0133 ppb	0.07108 535.29%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	-4.2	-0.0586 ug/L	0.23221	-0.0586 ppb	0.23221 396.54%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	72.4	0.2373 ug/L	0.12938	0.2373 ppb	0.12938 54.53%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	-0.2	-1.9190 ug/L	14.88554	-1.9190 ppb	14.88554 775.71%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	30.0	5.7099 ug/L	3.29108	5.7099 ppb	3.29108 57.64%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	-0.7	-27.331 ug/L	18.0188	-27.331 ppb	18.0188 65.93%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	34.2	0.0459 ug/L	0.02135	0.0459 ppb	0.02135 46.54%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	4.7	0.4195 ug/L	0.18103	0.4195 ppb	0.18103 43.15%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-35.7	-12.586 ug/L	6.4730	-12.586 ppb	6.4730 51.43%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	3.5	0.1106 ug/L	0.26452	0.1106 ppb	0.26452 239.14%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	-10.2	-7.6690 ug/L	9.12731	-7.6690 ppb	9.12731 119.02%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	5.2	0.7981 ug/L	1.34456	0.7981 ppb	1.34456 168.47%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	-2.4	-4.3480 ug/L	1.90700	-4.3480 ppb	1.90700 43.86%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	12.0	5.0445 ug/L	3.08810	5.0445 ppb	3.08810 61.22%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-0.4	-0.3716 ug/L	1.85785	-0.3716 ppb	1.85785 499.98%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	45.2	1.7101 ug/L	0.79602	1.7101 ppb	0.79602 46.55%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	0.7	0.1688 ug/L	0.77966	0.1688 ppb	0.77966 461.89%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	-10.8	-0.0867 ug/L	0.16540	-0.0867 ppb	0.16540 190.77%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	12.7	0.0254 ug/L	0.10069	0.0254 ppb	0.10069 396.59%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	0.7	0.2689 ug/L	0.87754	0.2689 ppb	0.87754 326.36%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	93.8	2.8466 ug/L	1.28871	2.8466 ppb	1.28871 45.27%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-31.7	-0.2420 ug/L	0.12674	-0.2420 ppb	0.12674 52.37%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	152.0	1.8406 ug/L	0.06408	1.8406 ppb	0.06408 3.48%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	42.4	3.4530 ug/L	1.32338	3.4530 ppb	1.32338 38.33%
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: 3/19/2010 11:38:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4231.5	4231.5	96.3 %		11:40:31
1	Y RADIAL	4688.3	4688.3	98.48 %		11:40:11
1	Al 396.153Radial†	5078.5	5352.8	5233.5 ug/L	5233.5 ppb	11:40:11
1	Ca 317.933Radial†	2683.8	2771.8	5244.9 ug/L	5244.9 ppb	11:40:31
1	Fe 238.204 Radial†	447.0	455.9	5297.3 ug/L	5297.3 ppb	11:40:31
1	K 766.490 Radial†	29712.9	28262.5	5378.2 ug/L	5378.2 ppb	11:40:11
1	Mg 279.077 IEC†	125.8	129.1	5327.4 ug/L	5327.4 ppb	11:40:31
1	Na 589.592 Radial†	27281.4	29210.9	10297 ug/L	10297 ppb	11:40:11
1	Sr 421.552†	63681.7	66122.0	529.98 ug/L	529.98 ppb	11:40:11
1	Sc 361.383	836694.1	836694.1	102.18 %		11:41:28
1	Y 371.029	695496.4	695496.4	100.56 %		11:41:28
1	Ag 328.068†	99816.9	97499.9	509.39 ug/L	509.39 ppb	11:41:34
1	As 188.979†	930.2	937.1	518.83 ug/L	518.83 ppb	11:41:54
1	B 249.677†	17942.6	18096.7	505.35 ug/L	505.35 ppb	11:41:34
1	Ba 233.527†	55244.6	54065.5	507.67 ug/L	507.67 ppb	11:41:34
1	Be 313.107†	1219044.5	1196740.3	510.71 ug/L	510.71 ppb	11:41:28
1	Cd 226.502†	35788.8	35195.1	510.55 ug/L	510.55 ppb	11:41:34
1	Co 228.616†	20347.1	19958.7	515.95 ug/L	515.95 ppb	11:41:34
1	Cr 267.716†	38697.3	37799.4	507.96 ug/L	507.96 ppb	11:41:34
1	Cu 324.752†	160727.0	151742.3	500.97 ug/L	500.97 ppb	11:41:34
1	Mn 257.610†	387247.8	378588.3	498.08 ug/L	498.08 ppb	11:41:34
1	Mo 202.031†	5787.3	5655.2	503.17 ug/L	503.17 ppb	11:41:54
1	Ni 231.604†	16666.6	16226.6	515.00 ug/L	515.00 ppb	11:41:34
1	P 214.914†	3658.7	3393.2	2429.9 ug/L	2429.9 ppb	11:41:54
1	Pb 220.353†	3286.4	3274.5	504.53 ug/L	504.53 ppb	11:41:54
1	S 181.975 Axial†	609.8	566.5	1013.3 ug/L	1013.3 ppb	11:41:54
1	Sb 206.836†	1273.0	1222.2	529.40 ug/L	529.40 ppb	11:41:54
1	Se 196.026†	607.6	611.6	527.92 ug/L	527.92 ppb	11:41:54
1	Si 251.611†	69000.0	67038.2	2538.8 ug/L	2538.8 ppb	11:41:34
1	Sn 189.927†	2266.5	2210.9	502.34 ug/L	502.34 ppb	11:41:54
1	Ti 334.940†	290738.2	285650.1	496.62 ug/L	496.62 ppb	11:41:34
1	Tl 190.801†	1309.7	1310.8	510.40 ug/L	510.40 ppb	11:41:54
1	U 409.014†	15042.5	16925.4	511.75 ug/L	511.75 ppb	11:41:34
1	V 292.402†	63168.1	63136.4	510.86 ug/L	510.86 ppb	11:41:34
1	Zn 213.857†	43730.0	42225.9	506.89 ug/L	506.89 ppb	11:41:34
1	SiO2†	68926.3	66954.9	5450.6 ug/L	5450.6 ppb	11:43:01
2	Sc Radial	4265.7	4265.7	97.1 %		11:40:56
2	Y RADIAL	4839.5	4839.5	101.7 %		11:40:36
2	Al 396.153Radial†	5150.2	5384.5	5265.0 ug/L	5265.0 ppb	11:40:36
2	Ca 317.933Radial†	2698.8	2764.9	5231.8 ug/L	5231.8 ppb	11:40:56
2	Fe 238.204 Radial†	449.8	455.0	5286.7 ug/L	5286.7 ppb	11:40:56
2	K 766.490 Radial†	29893.9	28201.7	5366.7 ug/L	5366.7 ppb	11:40:36
2	Mg 279.077 IEC†	131.2	133.7	5513.6 ug/L	5513.6 ppb	11:40:56
2	Na 589.592 Radial†	27374.6	29079.9	10251 ug/L	10251 ppb	11:40:36
2	Sr 421.552†	64071.5	65993.7	528.95 ug/L	528.95 ppb	11:40:36
2	Sc 361.383	848819.8	848819.8	103.66 %		11:41:59
2	Y 371.029	706333.9	706333.9	102.12 %		11:41:59
2	Ag 328.068†	99812.0	96099.8	502.10 ug/L	502.10 ppb	11:42:04
2	As 188.979†	913.1	907.6	502.60 ug/L	502.60 ppb	11:42:25
2	B 249.677†	17949.1	17852.2	498.51 ug/L	498.51 ppb	11:42:04
2	Ba 233.527†	55297.9	53344.6	500.90 ug/L	500.90 ppb	11:42:04
2	Be 313.107†	1237185.8	1197198.0	510.89 ug/L	510.89 ppb	11:41:59
2	Cd 226.502†	35790.9	34696.8	503.31 ug/L	503.31 ppb	11:42:04
2	Co 228.616†	20379.5	19705.5	509.40 ug/L	509.40 ppb	11:42:04
2	Cr 267.716†	38754.5	37313.5	501.44 ug/L	501.44 ppb	11:42:04
2	Cu 324.752†	160790.4	149556.5	493.76 ug/L	493.76 ppb	11:42:04
2	Mn 257.610†	386901.3	372840.2	490.51 ug/L	490.51 ppb	11:42:04
2	Mo 202.031†	5780.9	5568.1	495.43 ug/L	495.43 ppb	11:42:25
2	Ni 231.604†	16669.3	15996.2	507.69 ug/L	507.69 ppb	11:42:04

2	P 214.914†	3643.5	3327.5	2382.3 ug/L	2382.3 ppb	11:42:25
2	Pb 220.353†	3274.7	3217.3	495.73 ug/L	495.73 ppb	11:42:25
2	S 181.975 Axial†	602.1	550.6	984.78 ug/L	984.78 ppb	11:42:25
2	Sb 206.836†	1250.5	1182.6	512.53 ug/L	512.53 ppb	11:42:25
2	Se 196.026†	602.0	597.7	516.28 ug/L	516.28 ppb	11:42:25
2	Si 251.611†	69005.4	66078.7	2502.5 ug/L	2502.5 ppb	11:42:04
2	Sn 189.927†	2253.2	2166.4	492.23 ug/L	492.23 ppb	11:42:25
2	Ti 334.940†	291171.1	282003.1	490.27 ug/L	490.27 ppb	11:42:04
2	Tl 190.801†	1306.3	1289.2	502.00 ug/L	502.00 ppb	11:42:25
2	U 409.014†	15074.6	16746.1	506.33 ug/L	506.33 ppb	11:42:04
2	V 292.402†	63254.1	62336.3	504.37 ug/L	504.37 ppb	11:42:04
2	Zn 213.857†	43730.3	41614.9	499.54 ug/L	499.54 ppb	11:42:04
2	SiO2†	68517.6	65597.0	5340.0 ug/L	5340.0 ppb	11:43:06
3	Sc Radial	4269.7	4269.7	97.1 %		11:41:22
3	Y RADIAL	4809.0	4809.0	101.0 %		11:41:01
3	Al 396.153Radial†	5136.6	5365.6	5246.2 ug/L	5246.2 ppb	11:41:01
3	Ca 317.933Radial†	2697.3	2760.8	5224.0 ug/L	5224.0 ppb	11:41:22
3	Fe 238.204 Radial†	445.9	450.6	5236.1 ug/L	5236.1 ppb	11:41:22
3	K 766.490 Radial†	29946.0	28226.7	5371.5 ug/L	5371.5 ppb	11:41:01
3	Mg 279.077 IEC†	122.8	124.9	5152.6 ug/L	5152.6 ppb	11:41:22
3	Na 589.592 Radial†	27228.5	28903.2	10189 ug/L	10189 ppb	11:41:01
3	Sr 421.552†	63894.3	65749.9	527.00 ug/L	527.00 ppb	11:41:01
3	Sc 361.383	838817.3	838817.3	102.44 %		11:42:30
3	Y 371.029	698716.9	698716.9	101.02 %		11:42:30
3	Ag 328.068†	99235.4	96685.1	505.14 ug/L	505.14 ppb	11:42:35
3	As 188.979†	918.9	923.8	511.49 ug/L	511.49 ppb	11:42:55
3	B 249.677†	17901.0	18011.7	502.99 ug/L	502.99 ppb	11:42:35
3	Ba 233.527†	55002.2	53691.9	504.16 ug/L	504.16 ppb	11:42:35
3	Be 313.107†	1222413.8	1197009.5	510.81 ug/L	510.81 ppb	11:42:30
3	Cd 226.502†	35634.8	34956.1	507.08 ug/L	507.08 ppb	11:42:35
3	Co 228.616†	20235.0	19798.9	511.82 ug/L	511.82 ppb	11:42:35
3	Cr 267.716†	38586.2	37595.0	505.22 ug/L	505.22 ppb	11:42:35
3	Cu 324.752†	160008.7	150643.0	497.34 ug/L	497.34 ppb	11:42:35
3	Mn 257.610†	385207.0	375636.8	494.20 ug/L	494.20 ppb	11:42:35
3	Mo 202.031†	5767.3	5621.3	500.15 ug/L	500.15 ppb	11:42:55
3	Ni 231.604†	16538.7	16060.4	509.73 ug/L	509.73 ppb	11:42:35
3	P 214.914†	3658.9	3384.4	2424.1 ug/L	2424.1 ppb	11:42:55
3	Pb 220.353†	3276.9	3257.1	501.86 ug/L	501.86 ppb	11:42:55
3	S 181.975 Axial†	611.1	566.4	1013.0 ug/L	1013.0 ppb	11:42:55
3	Sb 206.836†	1263.9	1210.1	524.31 ug/L	524.31 ppb	11:42:55
3	Se 196.026†	606.1	608.6	525.28 ug/L	525.28 ppb	11:42:55
3	Si 251.611†	68566.9	66444.5	2516.3 ug/L	2516.3 ppb	11:42:35
3	Sn 189.927†	2275.7	2214.3	503.11 ug/L	503.11 ppb	11:42:55
3	Ti 334.940†	289344.8	283569.7	493.02 ug/L	493.02 ppb	11:42:35
3	Tl 190.801†	1294.0	1292.3	503.22 ug/L	503.22 ppb	11:42:55
3	U 409.014†	14750.9	16603.5	502.00 ug/L	502.00 ppb	11:42:35
3	V 292.402†	62942.9	62760.1	507.80 ug/L	507.80 ppb	11:42:35
3	Zn 213.857†	43510.6	41903.4	503.03 ug/L	503.03 ppb	11:42:35
3	SiO2†	67364.1	65259.2	5312.3 ug/L	5312.3 ppb	11:43:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	841443.7	102.76 %	0.791			0.77%
Sc Radial	4255.6	96.8 %	0.48			0.49%
Y 371.029	700182.4	101.23 %	0.805			0.79%
Y RADIAL	4778.9	100.4 %	1.68			1.67%
Ag 328.068†	96761.6	505.54 ug/L	3.664	505.54 ppb	3.664	0.72%
QC value within limits for Ag 328.068 Recovery = 101.11%						
Al 396.153Radial†	5367.6	5248.3 ug/L	15.85	5248.3 ppb	15.85	0.30%
QC value within limits for Al 396.153Radial Recovery = 104.97%						
As 188.979†	922.8	510.97 ug/L	8.127	510.97 ppb	8.127	1.59%
QC value within limits for As 188.979 Recovery = 102.19%						
B 249.677†	17986.9	502.29 ug/L	3.474	502.29 ppb	3.474	0.69%
QC value within limits for B 249.677 Recovery = 100.46%						
Ba 233.527†	53700.7	504.25 ug/L	3.384	504.25 ppb	3.384	0.67%
QC value within limits for Ba 233.527 Recovery = 100.85%						
Be 313.107†	1196982.6	510.80 ug/L	0.091	510.80 ppb	0.091	0.02%
QC value within limits for Be 313.107 Recovery = 102.16%						
Ca 317.933Radial†	2765.8	5233.6 ug/L	10.57	5233.6 ppb	10.57	0.20%

QC value within limits for Ca 317.933 Radial Recovery = 104.67%							
Cd 226.502†	34949.3	506.98 ug/L	3.619	506.98 ppb	3.619	0.71%	
QC value within limits for Cd 226.502 Recovery = 101.40%							
Co 228.616†	19821.0	512.39 ug/L	3.312	512.39 ppb	3.312	0.65%	
QC value within limits for Co 228.616 Recovery = 102.48%							
Cr 267.716†	37569.3	504.87 ug/L	3.275	504.87 ppb	3.275	0.65%	
QC value within limits for Cr 267.716 Recovery = 100.97%							
Cu 324.752†	150647.3	497.36 ug/L	3.607	497.36 ppb	3.607	0.73%	
QC value within limits for Cu 324.752 Recovery = 99.47%							
Fe 238.204 Radial†	453.8	5273.4 ug/L	32.71	5273.4 ppb	32.71	0.62%	
QC value within limits for Fe 238.204 Radial Recovery = 105.47%							
K 766.490 Radial†	28230.3	5372.1 ug/L	5.80	5372.1 ppb	5.80	0.11%	
QC value within limits for K 766.490 Radial Recovery = 107.44%							
Mg 279.077 IEC†	129.2	5331.2 ug/L	180.50	5331.2 ppb	180.50	3.39%	
QC value within limits for Mg 279.077 IEC Recovery = 106.62%							
Mn 257.610†	375688.4	494.26 ug/L	3.784	494.26 ppb	3.784	0.77%	
QC value within limits for Mn 257.610 Recovery = 98.85%							
Mo 202.031†	5614.9	499.58 ug/L	3.902	499.58 ppb	3.902	0.78%	
QC value within limits for Mo 202.031 Recovery = 99.92%							
Na 589.592 Radial†	29064.7	10246 ug/L	54.4	10246 ppb	54.4	0.53%	
QC value within limits for Na 589.592 Radial Recovery = 102.46%							
Ni 231.604†	16094.4	510.81 ug/L	3.773	510.81 ppb	3.773	0.74%	
QC value within limits for Ni 231.604 Recovery = 102.16%							
P 214.914†	3368.4	2412.1 ug/L	25.99	2412.1 ppb	25.99	1.08%	
QC value within limits for P 214.914 Recovery = 96.48%							
Pb 220.353†	3249.7	500.70 ug/L	4.513	500.70 ppb	4.513	0.90%	
QC value within limits for Pb 220.353 Recovery = 100.14%							
S 181.975 Axial†	561.2	1003.7 ug/L	16.36	1003.7 ppb	16.36	1.63%	
QC value within limits for S 181.975 Axial Recovery = 100.37%							
Sb 206.836†	1205.0	522.08 ug/L	8.656	522.08 ppb	8.656	1.66%	
QC value within limits for Sb 206.836 Recovery = 104.42%							
Se 196.026†	606.0	523.16 ug/L	6.101	523.16 ppb	6.101	1.17%	
QC value within limits for Se 196.026 Recovery = 104.63%							
Si 251.611†	66520.5	2519.2 ug/L	18.34	2519.2 ppb	18.34	0.73%	
QC value within limits for Si 251.611 Recovery = 100.77%							
Sn 189.927†	2197.2	499.23 ug/L	6.070	499.23 ppb	6.070	1.22%	
QC value within limits for Sn 189.927 Recovery = 99.85%							
Sr 421.552†	65955.2	528.64 ug/L	1.515	528.64 ppb	1.515	0.29%	
QC value within limits for Sr 421.552 Recovery = 105.73%							
Ti 334.940†	283741.0	493.30 ug/L	3.187	493.30 ppb	3.187	0.65%	
QC value within limits for Ti 334.940 Recovery = 98.66%							
Tl 190.801†	1297.4	505.20 ug/L	4.539	505.20 ppb	4.539	0.90%	
QC value within limits for Tl 190.801 Recovery = 101.04%							
U 409.014†	16758.3	506.69 ug/L	4.887	506.69 ppb	4.887	0.96%	
QC value within limits for U 409.014 Recovery = 101.34%							
V 292.402†	62744.3	507.68 ug/L	3.249	507.68 ppb	3.249	0.64%	
QC value within limits for V 292.402 Recovery = 101.54%							
Zn 213.857†	41914.8	503.15 ug/L	3.675	503.15 ppb	3.675	0.73%	
QC value within limits for Zn 213.857 Recovery = 100.63%							
SiO2†	65937.0	5367.6 ug/L	73.18	5367.6 ppb	73.18	1.36%	
QC value within limits for SiO2 Recovery = 100.38%							
All analyte(s) passed QC.							

Sequence No.: 10

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 11:45:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4343.7	4343.7	98.8 %		11:47:14
1	Y RADIAL	4752.6	4752.6	99.83 %		11:47:14
1	Al 396.153Radial†	-72.3	4.9	4.8133 ug/L	4.8133 ppb	11:47:34
1	Ca 317.933Radial†	26.1	10.7	20.319 ug/L	20.319 ppb	11:47:34
1	Fe 238.204 Radial†	7.8	-0.6	-6.4728 ug/L	-6.4728 ppb	11:47:34
1	K 766.490 Radial†	2857.2	292.2	55.678 ug/L	55.678 ppb	11:47:14
1	Mg 279.077 IEC†	3.4	1.9	79.741 ug/L	79.741 ppb	11:47:34
1	Na 589.592 Radial†	-927.8	-63.7	-22.449 ug/L	-22.449 ppb	11:47:14
1	Sr 421.552†	28.1	7.6	0.0605 ug/L	0.0605 ppb	11:47:14
1	Sc 361.383	828290.0	828290.0	101.16 %		11:48:31
1	Y 371.029	698408.7	698408.7	100.98 %		11:48:31
1	Ag 328.068†	104.7	-81.6	-0.4271 ug/L	-0.4271 ppb	11:48:31
1	As 188.979†	-31.6	-4.5	-2.4585 ug/L	-2.4585 ppb	11:48:51
1	B 249.677†	-193.4	346.2	9.7120 ug/L	9.7120 ppb	11:48:51
1	Ba 233.527†	14.1	14.7	0.1368 ug/L	0.1368 ppb	11:48:51
1	Be 313.107†	-3650.4	122.4	0.0523 ug/L	0.0523 ppb	11:48:31
1	Cd 226.502†	-158.0	14.5	0.2110 ug/L	0.2110 ppb	11:48:51
1	Co 228.616†	-45.0	1.8	0.0456 ug/L	0.0456 ppb	11:48:51
1	Cr 267.716†	83.6	11.2	0.1488 ug/L	0.1488 ppb	11:48:51
1	Cu 324.752†	5611.4	-4.7	-0.0160 ug/L	-0.0160 ppb	11:48:31
1	Mn 257.610†	476.0	81.5	0.1032 ug/L	0.1032 ppb	11:48:51
1	Mo 202.031†	9.0	0.3	0.0289 ug/L	0.0289 ppb	11:48:51
1	Ni 231.604†	93.0	7.8	0.2484 ug/L	0.2484 ppb	11:48:51
1	P 214.914†	189.1	-0.4	-0.2430 ug/L	-0.2430 ppb	11:48:51
1	Pb 220.353†	-55.8	3.1	0.4814 ug/L	0.4814 ppb	11:48:51
1	S 181.975 Axial†	32.8	2.2	3.9603 ug/L	3.9603 ppb	11:48:51
1	Sb 206.836†	25.8	1.8	0.7907 ug/L	0.7907 ppb	11:48:51
1	Se 196.026†	-13.3	3.9	3.1912 ug/L	3.1912 ppb	11:48:51
1	Si 251.611†	646.0	150.5	5.7129 ug/L	5.7129 ppb	11:48:51
1	Sn 189.927†	15.0	7.7	1.7470 ug/L	1.7470 ppb	11:48:51
1	Ti 334.940†	-1081.0	52.5	0.0874 ug/L	0.0874 ppb	11:48:31
1	Tl 190.801†	-17.1	12.2	4.7325 ug/L	4.7325 ppb	11:48:51
1	U 409.014†	-2223.2	6.4	0.1952 ug/L	0.1952 ppb	11:48:31
1	V 292.402†	-1356.9	-23.9	-0.1879 ug/L	-0.1879 ppb	11:48:31
1	Zn 213.857†	920.4	339.8	4.1165 ug/L	4.1165 ppb	11:48:51
1	SiO2†	681.4	174.2	14.218 ug/L	14.218 ppb	11:50:02
2	Sc Radial	4441.9	4441.9	101 %		11:47:39
2	Y RADIAL	4833.4	4833.4	101.5 %		11:47:39
2	Al 396.153Radial†	-89.0	-10.0	-9.8127 ug/L	-9.8127 ppb	11:47:59
2	Ca 317.933Radial†	25.8	9.9	18.681 ug/L	18.681 ppb	11:47:59
2	Fe 238.204 Radial†	8.3	-0.3	-3.2666 ug/L	-3.2666 ppb	11:47:59
2	K 766.490 Radial†	2698.1	70.9	13.499 ug/L	13.499 ppb	11:47:39
2	Mg 279.077 IEC†	4.0	2.4	99.388 ug/L	99.388 ppb	11:47:59
2	Na 589.592 Radial†	-871.7	12.7	4.4605 ug/L	4.4605 ppb	11:47:39
2	Sr 421.552†	31.8	10.7	0.0855 ug/L	0.0855 ppb	11:47:39
2	Sc 361.383	822220.7	822220.7	100.41 %		11:48:56
2	Y 371.029	694053.4	694053.4	100.35 %		11:48:56
2	Ag 328.068†	97.9	-87.6	-0.4532 ug/L	-0.4532 ppb	11:48:56
2	As 188.979†	-18.2	8.7	4.7808 ug/L	4.7808 ppb	11:49:16
2	B 249.677†	-207.3	330.9	9.2829 ug/L	9.2829 ppb	11:49:16
2	Ba 233.527†	8.6	9.2	0.0863 ug/L	0.0863 ppb	11:49:16
2	Be 313.107†	-3738.2	8.3	0.0032 ug/L	0.0032 ppb	11:48:56
2	Cd 226.502†	-172.2	-0.9	-0.0129 ug/L	-0.0129 ppb	11:49:16
2	Co 228.616†	-48.8	-2.4	-0.0611 ug/L	-0.0611 ppb	11:49:16
2	Cr 267.716†	62.0	-9.8	-0.1300 ug/L	-0.1300 ppb	11:49:16
2	Cu 324.752†	5614.1	38.9	0.1304 ug/L	0.1304 ppb	11:48:56
2	Mn 257.610†	501.3	110.2	0.1405 ug/L	0.1405 ppb	11:49:16
2	Mo 202.031†	10.8	2.2	0.1973 ug/L	0.1973 ppb	11:49:16
2	Ni 231.604†	90.3	5.9	0.1874 ug/L	0.1874 ppb	11:49:16

2	P 214.914†	180.7	-7.3	-5.4650 ug/L	-5.4650 ppb	11:49:16
2	Pb 220.353†	-39.7	18.7	2.8759 ug/L	2.8759 ppb	11:49:16
2	S 181.975 Axial†	29.8	-0.5	-0.8807 ug/L	-0.8807 ppb	11:49:16
2	Sb 206.836†	23.8	0.1	0.0562 ug/L	0.0562 ppb	11:49:16
2	Se 196.026†	-17.5	-0.5	-0.3920 ug/L	-0.3920 ppb	11:49:16
2	Si 251.611†	640.6	149.7	5.6822 ug/L	5.6822 ppb	11:49:16
2	Sn 189.927†	13.4	6.2	1.4045 ug/L	1.4045 ppb	11:49:16
2	Ti 334.940†	-1200.9	-74.7	-0.1338 ug/L	-0.1338 ppb	11:48:56
2	Tl 190.801†	-29.2	0.0	0.0028 ug/L	0.0028 ppb	11:49:16
2	U 409.014†	-2336.4	-122.6	-3.7174 ug/L	-3.7174 ppb	11:48:56
2	V 292.402†	-1326.4	-3.5	-0.0295 ug/L	-0.0295 ppb	11:48:56
2	Zn 213.857†	929.9	356.0	4.3122 ug/L	4.3122 ppb	11:49:16
2	SiO2†	659.8	157.7	12.866 ug/L	12.866 ppb	11:50:22
3	Sc Radial	4304.4	4304.4	97.9 %		11:48:04
3	Y RADIAL	4703.3	4703.3	98.80 %		11:48:04
3	Al 396.153Radial†	-76.9	-0.5	-0.4680 ug/L	-0.4680 ppb	11:48:24
3	Ca 317.933Radial†	24.4	9.2	17.441 ug/L	17.441 ppb	11:48:24
3	Fe 238.204 Radial†	8.1	-0.2	-2.3264 ug/L	-2.3264 ppb	11:48:24
3	K 766.490 Radial†	2757.5	216.8	41.316 ug/L	41.316 ppb	11:48:04
3	Mg 279.077 IEC†	-1.8	-3.4	-138.98 ug/L	-138.98 ppb	11:48:24
3	Na 589.592 Radial†	-956.3	-101.3	-35.712 ug/L	-35.712 ppb	11:48:04
3	Sr 421.552†	17.2	-3.2	-0.0261 ug/L	-0.0261 ppb	11:48:04
3	Sc 361.383	833215.2	833215.2	101.76 %		11:49:21
3	Y 371.029	704277.1	704277.1	101.83 %		11:49:21
3	Ag 328.068†	241.3	52.0	0.2686 ug/L	0.2686 ppb	11:49:21
3	As 188.979†	-21.5	5.7	3.1078 ug/L	3.1078 ppb	11:49:41
3	B 249.677†	-197.2	343.6	9.6384 ug/L	9.6384 ppb	11:49:41
3	Ba 233.527†	18.2	18.6	0.1741 ug/L	0.1741 ppb	11:49:41
3	Be 313.107†	-3699.6	95.4	0.0407 ug/L	0.0407 ppb	11:49:21
3	Cd 226.502†	-179.9	-6.1	-0.0885 ug/L	-0.0885 ppb	11:49:41
3	Co 228.616†	-44.9	2.1	0.0532 ug/L	0.0532 ppb	11:49:41
3	Cr 267.716†	100.4	27.1	0.3634 ug/L	0.3634 ppb	11:49:41
3	Cu 324.752†	5718.7	67.9	0.2234 ug/L	0.2234 ppb	11:49:21
3	Mn 257.610†	479.2	81.9	0.1131 ug/L	0.1131 ppb	11:49:41
3	Mo 202.031†	10.6	1.9	0.1659 ug/L	0.1659 ppb	11:49:41
3	Ni 231.604†	99.0	13.2	0.4195 ug/L	0.4195 ppb	11:49:41
3	P 214.914†	193.1	2.5	1.8356 ug/L	1.8356 ppb	11:49:41
3	Pb 220.353†	-58.2	1.1	0.1647 ug/L	0.1647 ppb	11:49:41
3	S 181.975 Axial†	28.0	-2.6	-4.7374 ug/L	-4.7374 ppb	11:49:41
3	Sb 206.836†	29.2	5.0	2.1114 ug/L	2.1114 ppb	11:49:41
3	Se 196.026†	-18.5	-1.2	-1.0177 ug/L	-1.0177 ppb	11:49:41
3	Si 251.611†	635.3	136.2	5.1683 ug/L	5.1683 ppb	11:49:41
3	Sn 189.927†	11.5	4.1	0.9329 ug/L	0.9329 ppb	11:49:41
3	Ti 334.940†	-1105.7	34.6	0.0732 ug/L	0.0732 ppb	11:49:21
3	Tl 190.801†	-32.3	-2.6	-1.0229 ug/L	-1.0229 ppb	11:49:41
3	U 409.014†	-2206.7	35.6	1.0801 ug/L	1.0801 ppb	11:49:21
3	V 292.402†	-1323.5	16.7	0.1356 ug/L	0.1356 ppb	11:49:21
3	Zn 213.857†	913.1	327.3	3.9630 ug/L	3.9630 ppb	11:49:41
3	SiO2†	667.1	156.3	12.748 ug/L	12.748 ppb	11:50:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	827908.6	101.11 %		0.673			0.67%
Sc Radial	4363.4	99.3 %		1.61			1.62%
Y 371.029	698913.0	101.05 %		0.742			0.73%
Y RADIAL	4763.1	100.1 %		1.38			1.38%
Ag 328.068†	-39.1	-0.2039 ug/L		0.40937	-0.2039 ppb	0.40937	200.79%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-1.8	-1.8225 ug/L		7.40648	-1.8225 ppb	7.40648	406.40%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	3.3	1.8100 ug/L		3.79014	1.8100 ppb	3.79014	209.40%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	340.2	9.5444 ug/L		0.22946	9.5444 ppb	0.22946	2.40%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	14.2	0.1324 ug/L		0.04406	0.1324 ppb	0.04406	33.28%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	75.3	0.0321 ug/L		0.02566	0.0321 ppb	0.02566	79.97%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	9.9	18.814 ug/L		1.4439	18.814 ppb	1.4439	7.67%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	2.5	0.0365 ug/L	0.15575	0.0365 ppb	0.15575 426.34%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	0.5	0.0126 ug/L	0.06393	0.0126 ppb	0.06393 508.85%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	9.5	0.1274 ug/L	0.24741	0.1274 ppb	0.24741 194.22%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	34.0	0.1126 ug/L	0.12073	0.1126 ppb	0.12073 107.22%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	-0.3	-4.0220 ug/L	2.17392	-4.0220 ppb	2.17392 54.05%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	193.3	36.831 ug/L	21.4438	36.831 ppb	21.4438 58.22%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	0.3	13.382 ug/L	132.3172	13.382 ppb	132.3172 988.75%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	91.2	0.1189 ug/L	0.01931	0.1189 ppb	0.01931 16.23%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	1.5	0.1307 ug/L	0.08959	0.1307 ppb	0.08959 68.54%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-50.8	-17.900 ug/L	20.4690	-17.900 ppb	20.4690 114.35%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	9.0	0.2851 ug/L	0.12032	0.2851 ppb	0.12032 42.20%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	-1.7	-1.2908 ug/L	3.76140	-1.2908 ppb	3.76140 291.40%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	7.6	1.1740 ug/L	1.48236	1.1740 ppb	1.48236 126.27%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	-0.3	-0.5526 ug/L	4.35816	-0.5526 ppb	4.35816 788.67%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	2.3	0.9861 ug/L	1.04143	0.9861 ppb	1.04143 105.61%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	0.7	0.5938 ug/L	2.27102	0.5938 ppb	2.27102 382.45%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	145.5	5.5211 ug/L	0.30596	5.5211 ppb	0.30596 5.54%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	6.0	1.3615 ug/L	0.40877	1.3615 ppb	0.40877 30.02%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	5.0	0.0400 ug/L	0.05856	0.0400 ppb	0.05856 146.55%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	4.1	0.0089 ug/L	0.12382	0.0089 ppb	0.12382 >999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	3.2	1.2375 ug/L	3.06995	1.2375 ppb	3.06995 248.08%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	-26.8	-0.8140 ug/L	2.55300	-0.8140 ppb	2.55300 313.63%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-3.5	-0.0273 ug/L	0.16176	-0.0273 ppb	0.16176 593.25%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	341.0	4.1306 ug/L	0.17503	4.1306 ppb	0.17503 4.24%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	162.7	13.278 ug/L	0.8169	13.278 ppb	0.8169 6.15%
QC value within limits for SiO2 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 12:49:40

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4261.9	4261.9	97.0 %		12:51:52
1	Y RADIAL	4786.4	4786.4	100.5 %		12:51:32
1	Al 396.153Radial†	5093.9	5331.2	5212.3 ug/L	5212.3 ppb	12:51:32
1	Ca 317.933Radial†	2683.5	2751.7	5206.8 ug/L	5206.8 ppb	12:51:52
1	Fe 238.204 Radial†	446.8	452.3	5256.6 ug/L	5256.6 ppb	12:51:52
1	K 766.490 Radial†	29720.1	28050.1	5337.7 ug/L	5337.7 ppb	12:51:32
1	Mg 279.077 IEC†	127.0	129.4	5338.2 ug/L	5338.2 ppb	12:51:52
1	Na 589.592 Radial†	28222.6	29979.7	10568 ug/L	10568 ppb	12:51:32
1	Sr 421.552†	64501.3	66496.3	532.98 ug/L	532.98 ppb	12:51:32
1	Sc 361.383	828749.8	828749.8	101.21 %		12:52:49
1	Y 371.029	689872.4	689872.4	99.743 %		12:52:49
1	Ag 328.068†	99303.8	97929.4	511.61 ug/L	511.61 ppb	12:52:54
1	As 188.979†	907.6	923.5	511.35 ug/L	511.35 ppb	12:53:14
1	B 249.677†	17583.9	17910.7	500.15 ug/L	500.15 ppb	12:52:54
1	Ba 233.527†	54830.6	54174.7	508.70 ug/L	508.70 ppb	12:52:54
1	Be 313.107†	1202781.6	1192108.2	508.74 ug/L	508.74 ppb	12:52:49
1	Cd 226.502†	35321.1	35068.8	508.72 ug/L	508.72 ppb	12:52:54
1	Co 228.616†	20083.2	19888.9	514.15 ug/L	514.15 ppb	12:52:54
1	Cr 267.716†	38399.6	37868.2	508.88 ug/L	508.88 ppb	12:52:54
1	Cu 324.752†	159658.3	152194.2	502.46 ug/L	502.46 ppb	12:52:54
1	Mn 257.610†	384664.4	379668.6	499.50 ug/L	499.50 ppb	12:52:54
1	Mo 202.031†	5739.0	5661.7	503.75 ug/L	503.75 ppb	12:53:14
1	Ni 231.604†	16468.1	16186.9	513.74 ug/L	513.74 ppb	12:52:54
1	P 214.914†	3605.0	3374.5	2415.7 ug/L	2415.7 ppb	12:53:14
1	Pb 220.353†	3261.4	3280.6	505.46 ug/L	505.46 ppb	12:53:14
1	S 181.975 Axial†	600.7	563.3	1007.5 ug/L	1007.5 ppb	12:53:14
1	Sb 206.836†	1234.1	1195.7	518.37 ug/L	518.37 ppb	12:53:14
1	Se 196.026†	590.6	600.5	518.57 ug/L	518.57 ppb	12:53:14
1	Si 251.611†	68245.0	66939.6	2535.0 ug/L	2535.0 ppb	12:52:54
1	Sn 189.927†	2253.1	2219.0	504.17 ug/L	504.17 ppb	12:53:14
1	Ti 334.940†	288608.1	286273.0	497.70 ug/L	497.70 ppb	12:52:54
1	Tl 190.801†	1286.6	1300.3	506.37 ug/L	506.37 ppb	12:53:14
1	U 409.014†	14990.3	17015.0	514.47 ug/L	514.47 ppb	12:52:54
1	V 292.402†	62830.4	63395.4	512.95 ug/L	512.95 ppb	12:52:54
1	Zn 213.857†	43245.4	42157.4	506.07 ug/L	506.07 ppb	12:52:54
1	SiO2†	68507.2	67187.4	5469.6 ug/L	5469.6 ppb	12:54:21
2	Sc Radial	4304.5	4304.5	97.9 %		12:52:17
2	Y RADIAL	4714.5	4714.5	99.03 %		12:51:57
2	Al 396.153Radial†	4972.9	5155.6	5039.8 ug/L	5039.8 ppb	12:51:57
2	Ca 317.933Radial†	2695.0	2736.0	5177.2 ug/L	5177.2 ppb	12:52:17
2	Fe 238.204 Radial†	451.1	452.1	5254.2 ug/L	5254.2 ppb	12:52:17
2	K 766.490 Radial†	29193.9	27209.2	5177.6 ug/L	5177.6 ppb	12:51:57
2	Mg 279.077 IEC†	128.3	129.4	5339.6 ug/L	5339.6 ppb	12:52:17
2	Na 589.592 Radial†	27372.0	28822.9	10161 ug/L	10161 ppb	12:51:57
2	Sr 421.552†	62671.0	63968.4	512.72 ug/L	512.72 ppb	12:51:57
2	Sc 361.383	832371.4	832371.4	101.65 %		12:53:20
2	Y 371.029	695164.8	695164.8	100.51 %		12:53:20
2	Ag 328.068†	99890.0	98079.2	512.40 ug/L	512.40 ppb	12:53:25
2	As 188.979†	910.5	922.5	510.80 ug/L	510.80 ppb	12:53:45
2	B 249.677†	17865.0	18111.6	505.77 ug/L	505.77 ppb	12:53:25
2	Ba 233.527†	55189.0	54291.6	509.80 ug/L	509.80 ppb	12:53:25
2	Be 313.107†	1218747.3	1202643.5	513.23 ug/L	513.23 ppb	12:53:20
2	Cd 226.502†	35688.8	35278.6	511.76 ug/L	511.76 ppb	12:53:25
2	Co 228.616†	20324.8	20040.3	518.06 ug/L	518.06 ppb	12:53:25
2	Cr 267.716†	38700.7	37999.3	510.64 ug/L	510.64 ppb	12:53:25
2	Cu 324.752†	160866.7	152696.7	504.12 ug/L	504.12 ppb	12:53:25
2	Mn 257.610†	387332.0	380639.2	500.77 ug/L	500.77 ppb	12:53:25
2	Mo 202.031†	5751.8	5649.6	502.67 ug/L	502.67 ppb	12:53:45
2	Ni 231.604†	16569.9	16216.2	514.67 ug/L	514.67 ppb	12:53:25

2	P 214.914†	3628.3	3381.9	2420.9 ug/L	2420.9 ppb	12:53:45
2	Pb 220.353†	3281.8	3286.7	506.36 ug/L	506.36 ppb	12:53:45
2	S 181.975 Axial†	602.5	562.5	1006.1 ug/L	1006.1 ppb	12:53:45
2	Sb 206.836†	1262.4	1218.2	527.79 ug/L	527.79 ppb	12:53:45
2	Se 196.026†	608.2	615.3	530.79 ug/L	530.79 ppb	12:53:45
2	Si 251.611†	68655.1	67049.6	2539.2 ug/L	2539.2 ppb	12:53:25
2	Sn 189.927†	2273.0	2228.8	506.39 ug/L	506.39 ppb	12:53:45
2	Ti 334.940†	290598.2	286990.0	498.94 ug/L	498.94 ppb	12:53:25
2	Tl 190.801†	1294.9	1302.9	507.38 ug/L	507.38 ppb	12:53:45
2	U 409.014†	15118.1	17076.2	516.32 ug/L	516.32 ppb	12:53:25
2	V 292.402†	63417.0	63702.4	515.38 ug/L	515.38 ppb	12:53:25
2	Zn 213.857†	43539.1	42260.5	507.31 ug/L	507.31 ppb	12:53:25
2	SiO2†	68156.5	66548.0	5417.4 ug/L	5417.4 ppb	12:54:27
3	Sc Radial	4246.7	4246.7	96.6 %		12:52:42
3	Y RADIAL	4814.1	4814.1	101.1 %		12:52:22
3	Al 396.153Radial†	5061.9	5316.9	5198.5 ug/L	5198.5 ppb	12:52:22
3	Ca 317.933Radial†	2688.3	2766.6	5234.9 ug/L	5234.9 ppb	12:52:42
3	Fe 238.204 Radial†	454.8	462.2	5370.5 ug/L	5370.5 ppb	12:52:42
3	K 766.490 Radial†	29670.6	28108.9	5348.9 ug/L	5348.9 ppb	12:52:22
3	Mg 279.077 IEC†	125.5	128.4	5294.8 ug/L	5294.8 ppb	12:52:42
3	Na 589.592 Radial†	28072.0	29928.3	10550 ug/L	10550 ppb	12:52:22
3	Sr 421.552†	64332.8	66560.5	533.49 ug/L	533.49 ppb	12:52:22
3	Sc 361.383	837178.6	837178.6	102.24 %		12:53:51
3	Y 371.029	698029.1	698029.1	100.92 %		12:53:51
3	Ag 328.068†	98356.8	96015.3	501.68 ug/L	501.68 ppb	12:53:56
3	As 188.979†	909.8	916.6	507.54 ug/L	507.54 ppb	12:54:16
3	B 249.677†	17499.0	17652.8	492.92 ug/L	492.92 ppb	12:53:56
3	Ba 233.527†	54300.7	53110.9	498.72 ug/L	498.72 ppb	12:53:56
3	Be 313.107†	1209735.4	1186944.8	506.52 ug/L	506.52 ppb	12:53:51
3	Cd 226.502†	35124.3	34524.9	500.81 ug/L	500.81 ppb	12:53:56
3	Co 228.616†	19951.5	19560.3	505.66 ug/L	505.66 ppb	12:53:56
3	Cr 267.716†	38093.5	37186.8	499.75 ug/L	499.75 ppb	12:53:56
3	Cu 324.752†	157873.2	148860.1	491.46 ug/L	491.46 ppb	12:53:56
3	Mn 257.610†	381533.0	372779.4	490.45 ug/L	490.45 ppb	12:53:56
3	Mo 202.031†	5739.4	5605.0	498.72 ug/L	498.72 ppb	12:54:16
3	Ni 231.604†	16305.4	15863.9	503.49 ug/L	503.49 ppb	12:53:56
3	P 214.914†	3597.0	3330.9	2385.2 ug/L	2385.2 ppb	12:54:16
3	Pb 220.353†	3275.3	3261.8	502.55 ug/L	502.55 ppb	12:54:16
3	S 181.975 Axial†	599.8	556.4	995.14 ug/L	995.14 ppb	12:54:16
3	Sb 206.836†	1256.7	1205.4	522.26 ug/L	522.26 ppb	12:54:16
3	Se 196.026†	602.6	606.3	523.72 ug/L	523.72 ppb	12:54:16
3	Si 251.611†	67639.5	65668.4	2486.8 ug/L	2486.8 ppb	12:53:56
3	Sn 189.927†	2253.0	2196.4	499.04 ug/L	499.04 ppb	12:54:16
3	Ti 334.940†	285965.2	280817.1	488.22 ug/L	488.22 ppb	12:53:56
3	Tl 190.801†	1292.6	1293.3	503.60 ug/L	503.60 ppb	12:54:16
3	U 409.014†	14765.8	16646.3	503.29 ug/L	503.29 ppb	12:53:56
3	V 292.402†	62348.1	62298.6	504.09 ug/L	504.09 ppb	12:53:56
3	Zn 213.857†	42944.7	41433.1	497.36 ug/L	497.36 ppb	12:53:56
3	SiO2†	68149.5	66156.1	5385.5 ug/L	5385.5 ppb	12:54:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	832766.6	101.70 %	0.516			0.51%
Sc Radial	4271.0	97.2 %	0.68			0.70%
Y 371.029	694355.4	100.39 %	0.598			0.60%
Y RADIAL	4771.7	100.2 %	1.08			1.08%
Ag 328.068†	97341.3	508.57 ug/L	5.972	508.57 ppb	5.972	1.17%
QC value within limits for Ag 328.068 Recovery = 101.71%						
Al 396.153Radial†	5267.9	5150.2 ug/L	95.84	5150.2 ppb	95.84	1.86%
QC value within limits for Al 396.153Radial Recovery = 103.00%						
As 188.979†	920.9	509.90 ug/L	2.058	509.90 ppb	2.058	0.40%
QC value within limits for As 188.979 Recovery = 101.98%						
B 249.677†	17891.7	499.61 ug/L	6.445	499.61 ppb	6.445	1.29%
QC value within limits for B 249.677 Recovery = 99.92%						
Ba 233.527†	53859.0	505.74 ug/L	6.104	505.74 ppb	6.104	1.21%
QC value within limits for Ba 233.527 Recovery = 101.15%						
Be 313.107†	1193898.8	509.49 ug/L	3.418	509.49 ppb	3.418	0.67%
QC value within limits for Be 313.107 Recovery = 101.90%						
Ca 317.933Radial†	2751.4	5206.3 ug/L	28.88	5206.3 ppb	28.88	0.55%

QC value within limits for Ca 317.933 Radial Recovery = 104.13%							
Cd 226.502†	34957.4	507.10 ug/L	5.656	507.10 ppb	5.656	1.12%	
QC value within limits for Cd 226.502 Recovery = 101.42%							
Co 228.616†	19829.8	512.62 ug/L	6.337	512.62 ppb	6.337	1.24%	
QC value within limits for Co 228.616 Recovery = 102.52%							
Cr 267.716†	37684.8	506.43 ug/L	5.848	506.43 ppb	5.848	1.15%	
QC value within limits for Cr 267.716 Recovery = 101.29%							
Cu 324.752†	151250.3	499.35 ug/L	6.877	499.35 ppb	6.877	1.38%	
QC value within limits for Cu 324.752 Recovery = 99.87%							
Fe 238.204 Radial†	455.6	5293.8 ug/L	66.47	5293.8 ppb	66.47	1.26%	
QC value within limits for Fe 238.204 Radial Recovery = 105.88%							
K 766.490 Radial†	27789.4	5288.1 ug/L	95.80	5288.1 ppb	95.80	1.81%	
QC value within limits for K 766.490 Radial Recovery = 105.76%							
Mg 279.077 IEC†	129.1	5324.2 ug/L	25.49	5324.2 ppb	25.49	0.48%	
QC value within limits for Mg 279.077 IEC Recovery = 106.48%							
Mn 257.610†	377695.8	496.91 ug/L	5.627	496.91 ppb	5.627	1.13%	
QC value within limits for Mn 257.610 Recovery = 99.38%							
Mo 202.031†	5638.8	501.71 ug/L	2.649	501.71 ppb	2.649	0.53%	
QC value within limits for Mo 202.031 Recovery = 100.34%							
Na 589.592 Radial†	29576.9	10427 ug/L	230.4	10427 ppb	230.4	2.21%	
QC value within limits for Na 589.592 Radial Recovery = 104.27%							
Ni 231.604†	16089.0	510.63 ug/L	6.204	510.63 ppb	6.204	1.21%	
QC value within limits for Ni 231.604 Recovery = 102.13%							
P 214.914†	3362.4	2407.3 ug/L	19.27	2407.3 ppb	19.27	0.80%	
QC value within limits for P 214.914 Recovery = 96.29%							
Pb 220.353†	3276.4	504.79 ug/L	1.993	504.79 ppb	1.993	0.39%	
QC value within limits for Pb 220.353 Recovery = 100.96%							
S 181.975 Axial†	560.8	1002.9 ug/L	6.76	1002.9 ppb	6.76	0.67%	
QC value within limits for S 181.975 Axial Recovery = 100.29%							
Sb 206.836†	1206.4	522.80 ug/L	4.735	522.80 ppb	4.735	0.91%	
QC value within limits for Sb 206.836 Recovery = 104.56%							
Se 196.026†	607.4	524.36 ug/L	6.133	524.36 ppb	6.133	1.17%	
QC value within limits for Se 196.026 Recovery = 104.87%							
Si 251.611†	66552.5	2520.4 ug/L	29.11	2520.4 ppb	29.11	1.15%	
QC value within limits for Si 251.611 Recovery = 100.81%							
Sn 189.927†	2214.7	503.20 ug/L	3.770	503.20 ppb	3.770	0.75%	
QC value within limits for Sn 189.927 Recovery = 100.64%							
Sr 421.552†	65675.1	526.40 ug/L	11.850	526.40 ppb	11.850	2.25%	
QC value within limits for Sr 421.552 Recovery = 105.28%							
Ti 334.940†	284693.4	494.95 ug/L	5.860	494.95 ppb	5.860	1.18%	
QC value within limits for Ti 334.940 Recovery = 98.99%							
Tl 190.801†	1298.9	505.78 ug/L	1.953	505.78 ppb	1.953	0.39%	
QC value within limits for Tl 190.801 Recovery = 101.16%							
U 409.014†	16912.5	511.36 ug/L	7.050	511.36 ppb	7.050	1.38%	
QC value within limits for U 409.014 Recovery = 102.27%							
V 292.402†	63132.1	510.81 ug/L	5.942	510.81 ppb	5.942	1.16%	
QC value within limits for V 292.402 Recovery = 102.16%							
Zn 213.857†	41950.3	503.58 ug/L	5.424	503.58 ppb	5.424	1.08%	
QC value within limits for Zn 213.857 Recovery = 100.72%							
SiO2†	66630.5	5424.2 ug/L	42.42	5424.2 ppb	42.42	0.78%	
QC value within limits for SiO2 Recovery = 101.43%							
All analyte(s) passed QC.							

Sequence No.: 20

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 12:56:41

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	4122.8	4122.8	93.8 %		12:58:54
1	Y RADIAL	4237.6	4237.6	89.01 %		12:58:34
1	Al 396.153Radial†	-72.2	1.1	1.0140 ug/L	1.0140 ppb	12:58:54
1	Ca 317.933Radial†	19.5	5.1	9.5949 ug/L	9.5949 ppb	12:58:54
1	Fe 238.204 Radial†	6.3	-1.8	-20.749 ug/L	-20.749 ppb	12:58:54
1	K 766.490 Radial†	2742.0	324.3	61.784 ug/L	61.784 ppb	12:58:34
1	Mg 279.077 IEC†	1.8	0.4	16.217 ug/L	16.217 ppb	12:58:54
1	Na 589.592 Radial†	-841.8	-22.3	-7.8636 ug/L	-7.8636 ppb	12:58:34
1	Sr 421.552†	22.9	3.5	0.0283 ug/L	0.0283 ppb	12:58:34
1	Sc 361.383	820286.5	820286.5	100.18 %		12:59:51
1	Y 371.029	693929.7	693929.7	100.33 %		12:59:51
1	Ag 328.068†	165.9	-19.6	-0.1098 ug/L	-0.1098 ppb	12:59:51
1	As 188.979†	-22.3	4.5	2.4690 ug/L	2.4690 ppb	13:00:11
1	B 249.677†	-310.7	227.2	6.3770 ug/L	6.3770 ppb	13:00:11
1	Ba 233.527†	3.2	3.9	0.0347 ug/L	0.0347 ppb	13:00:11
1	Be 313.107†	-3607.0	130.5	0.0559 ug/L	0.0559 ppb	12:59:51
1	Cd 226.502†	-163.0	7.9	0.1166 ug/L	0.1166 ppb	13:00:11
1	Co 228.616†	-31.6	14.7	0.3824 ug/L	0.3824 ppb	13:00:11
1	Cr 267.716†	71.5	-0.2	-0.0048 ug/L	-0.0048 ppb	13:00:11
1	Cu 324.752†	5624.1	62.1	0.2040 ug/L	0.2040 ppb	12:59:51
1	Mn 257.610†	486.4	96.5	0.1241 ug/L	0.1241 ppb	13:00:11
1	Mo 202.031†	19.0	10.5	0.9285 ug/L	0.9285 ppb	13:00:11
1	Ni 231.604†	92.7	8.4	0.2679 ug/L	0.2679 ppb	13:00:11
1	P 214.914†	184.0	-3.6	-2.7086 ug/L	-2.7086 ppb	13:00:11
1	Pb 220.353†	-51.3	7.1	1.0952 ug/L	1.0952 ppb	13:00:11
1	S 181.975 Axial†	27.2	-3.0	-5.4258 ug/L	-5.4258 ppb	13:00:11
1	Sb 206.836†	23.9	0.2	0.0873 ug/L	0.0873 ppb	13:00:11
1	Se 196.026†	-13.7	3.3	2.6542 ug/L	2.6542 ppb	13:00:11
1	Si 251.611†	636.7	147.4	5.5832 ug/L	5.5832 ppb	13:00:11
1	Sn 189.927†	6.6	-0.6	-0.1354 ug/L	-0.1354 ppb	13:00:11
1	Ti 334.940†	-1033.3	89.8	0.1561 ug/L	0.1561 ppb	12:59:51
1	Tl 190.801†	-27.9	1.2	0.4639 ug/L	0.4639 ppb	13:00:11
1	U 409.014†	-2215.6	-7.5	-0.2238 ug/L	-0.2238 ppb	12:59:51
1	V 292.402†	-1375.0	-55.2	-0.4246 ug/L	-0.4246 ppb	12:59:51
1	Zn 213.857†	851.6	280.0	3.3939 ug/L	3.3939 ppb	13:00:11
1	SiO2†	638.6	138.1	11.247 ug/L	11.247 ppb	13:01:22
2	Sc Radial	4186.6	4186.6	95.3 %		12:59:19
2	Y RADIAL	4679.1	4679.1	98.29 %		12:58:59
2	Al 396.153Radial†	-87.4	-13.7	-13.461 ug/L	-13.461 ppb	12:59:19
2	Ca 317.933Radial†	22.7	8.1	15.366 ug/L	15.366 ppb	12:59:19
2	Fe 238.204 Radial†	7.5	-0.6	-6.4238 ug/L	-6.4238 ppb	12:59:19
2	K 766.490 Radial†	2754.6	293.0	55.823 ug/L	55.823 ppb	12:58:59
2	Mg 279.077 IEC†	0.8	-0.7	-27.119 ug/L	-27.119 ppb	12:59:19
2	Na 589.592 Radial†	-886.4	-55.5	-19.549 ug/L	-19.549 ppb	12:58:59
2	Sr 421.552†	21.0	1.2	0.0097 ug/L	0.0097 ppb	12:58:59
2	Sc 361.383	820591.8	820591.8	100.22 %		13:00:16
2	Y 371.029	693619.7	693619.7	100.29 %		13:00:16
2	Ag 328.068†	137.4	-48.0	-0.2526 ug/L	-0.2526 ppb	13:00:16
2	As 188.979†	-25.6	1.3	0.6986 ug/L	0.6986 ppb	13:00:36
2	B 249.677†	-293.6	244.4	6.8564 ug/L	6.8564 ppb	13:00:36
2	Ba 233.527†	9.0	9.7	0.0893 ug/L	0.0893 ppb	13:00:36
2	Be 313.107†	-3652.3	86.6	0.0372 ug/L	0.0372 ppb	13:00:16
2	Cd 226.502†	-166.4	4.6	0.0669 ug/L	0.0669 ppb	13:00:36
2	Co 228.616†	-41.3	5.0	0.1287 ug/L	0.1287 ppb	13:00:36
2	Cr 267.716†	79.9	8.2	0.1090 ug/L	0.1090 ppb	13:00:36
2	Cu 324.752†	5675.4	111.2	0.3674 ug/L	0.3674 ppb	13:00:16
2	Mn 257.610†	483.2	93.1	0.1229 ug/L	0.1229 ppb	13:00:36
2	Mo 202.031†	10.6	2.1	0.1845 ug/L	0.1845 ppb	13:00:36
2	Ni 231.604†	97.8	13.5	0.4294 ug/L	0.4294 ppb	13:00:36

2	P 214.914†	186.5	-1.2	-0.9377 ug/L	-0.9377 ppb	13:00:36
2	Pb 220.353†	-61.1	-2.6	-0.4083 ug/L	-0.4083 ppb	13:00:36
2	S 181.975 Axial†	29.3	-0.9	-1.6210 ug/L	-1.6210 ppb	13:00:36
2	Sb 206.836†	26.0	2.3	0.9839 ug/L	0.9839 ppb	13:00:36
2	Se 196.026†	-13.8	3.2	2.6731 ug/L	2.6731 ppb	13:00:36
2	Si 251.611†	652.9	163.3	6.1968 ug/L	6.1968 ppb	13:00:36
2	Sn 189.927†	12.5	5.3	1.2124 ug/L	1.2124 ppb	13:00:36
2	Ti 334.940†	-1036.2	87.3	0.1565 ug/L	0.1565 ppb	13:00:16
2	Tl 190.801†	-29.8	-0.7	-0.2529 ug/L	-0.2529 ppb	13:00:36
2	U 409.014†	-2247.7	-38.6	-1.1711 ug/L	-1.1711 ppb	13:00:16
2	V 292.402†	-1381.9	-61.5	-0.4908 ug/L	-0.4908 ppb	13:00:16
2	Zn 213.857†	850.6	278.7	3.3742 ug/L	3.3742 ppb	13:00:36
2	SiO2†	638.7	138.0	11.256 ug/L	11.256 ppb	13:01:42
3	Sc Radial	4228.2	4228.2	96.2 %		12:59:44
3	Y RADIAL	4655.5	4655.5	97.79 %		12:59:24
3	Al 396.153Radial†	-73.3	1.9	1.8952 ug/L	1.8952 ppb	12:59:44
3	Ca 317.933Radial†	27.0	12.4	23.461 ug/L	23.461 ppb	12:59:44
3	Fe 238.204 Radial†	6.2	-2.0	-23.574 ug/L	-23.574 ppb	12:59:44
3	K 766.490 Radial†	2678.8	185.7	35.373 ug/L	35.373 ppb	12:59:24
3	Mg 279.077 IEC†	3.6	2.2	90.892 ug/L	90.892 ppb	12:59:44
3	Na 589.592 Radial†	-859.2	-18.0	-6.3412 ug/L	-6.3412 ppb	12:59:24
3	Sr 421.552†	27.4	7.6	0.0609 ug/L	0.0609 ppb	12:59:24
3	Sc 361.383	819441.0	819441.0	100.08 %		13:00:41
3	Y 371.029	693279.0	693279.0	100.24 %		13:00:41
3	Ag 328.068†	227.2	41.9	0.2062 ug/L	0.2062 ppb	13:00:41
3	As 188.979†	-19.4	7.4	4.0824 ug/L	4.0824 ppb	13:01:01
3	B 249.677†	-335.2	202.4	5.6818 ug/L	5.6818 ppb	13:01:01
3	Ba 233.527†	13.3	14.0	0.1308 ug/L	0.1308 ppb	13:01:01
3	Be 313.107†	-3646.0	87.7	0.0377 ug/L	0.0377 ppb	13:00:41
3	Cd 226.502†	-169.5	1.3	0.0222 ug/L	0.0222 ppb	13:01:01
3	Co 228.616†	-41.7	4.6	0.1177 ug/L	0.1177 ppb	13:01:01
3	Cr 267.716†	71.9	0.3	0.0001 ug/L	0.0001 ppb	13:01:01
3	Cu 324.752†	5660.5	104.2	0.3398 ug/L	0.3398 ppb	13:00:41
3	Mn 257.610†	483.4	94.0	0.1175 ug/L	0.1175 ppb	13:01:01
3	Mo 202.031†	5.8	-2.7	-0.2418 ug/L	-0.2418 ppb	13:01:01
3	Ni 231.604†	81.9	-2.2	-0.0710 ug/L	-0.0710 ppb	13:01:01
3	P 214.914†	187.3	-0.1	-0.1132 ug/L	-0.1132 ppb	13:01:01
3	Pb 220.353†	-50.0	8.3	1.2784 ug/L	1.2784 ppb	13:01:01
3	S 181.975 Axial†	34.3	4.0	7.2446 ug/L	7.2446 ppb	13:01:01
3	Sb 206.836†	28.6	4.9	2.0605 ug/L	2.0605 ppb	13:01:01
3	Se 196.026†	-21.1	-4.1	-3.4948 ug/L	-3.4948 ppb	13:01:01
3	Si 251.611†	646.5	157.9	5.9962 ug/L	5.9962 ppb	13:01:01
3	Sn 189.927†	12.3	5.1	1.1633 ug/L	1.1633 ppb	13:01:01
3	Ti 334.940†	-1046.5	75.5	0.1245 ug/L	0.1245 ppb	13:00:41
3	Tl 190.801†	-30.8	-1.7	-0.6569 ug/L	-0.6569 ppb	13:01:01
3	U 409.014†	-2022.8	183.0	5.5531 ug/L	5.5531 ppb	13:00:41
3	V 292.402†	-1297.7	20.7	0.1779 ug/L	0.1779 ppb	13:00:41
3	Zn 213.857†	843.6	272.9	3.3102 ug/L	3.3102 ppb	13:01:01
3	SiO2†	641.2	141.4	11.549 ug/L	11.549 ppb	13:02:02

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	820106.4	100.16 %		0.073			0.07%
Sc Radial	4179.2	95.1 %		1.21			1.27%
Y 371.029	693609.5	100.28 %		0.047			0.05%
Y RADIAL	4524.1	95.03 %		5.217			5.49%
Ag 328.068†	-8.6	-0.0521 ug/L		0.23480	-0.0521 ppb	0.23480	450.92%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-3.6	-3.5172 ug/L		8.62256	-3.5172 ppb	8.62256	245.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	4.4	2.4167 ug/L		1.69248	2.4167 ppb	1.69248	70.03%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	224.7	6.3051 ug/L		0.59056	6.3051 ppb	0.59056	9.37%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	9.2	0.0849 ug/L		0.04816	0.0849 ppb	0.04816	56.71%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	101.6	0.0436 ug/L		0.01067	0.0436 ppb	0.01067	24.49%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	8.5	16.141 ug/L		6.9654	16.141 ppb	6.9654	43.15%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	4.6	0.0686 ug/L	0.04722	0.0686 ppb	0.04722	68.89%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	8.1	0.2096 ug/L	0.14974	0.2096 ppb	0.14974	71.44%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	2.8	0.0347 ug/L	0.06433	0.0347 ppb	0.06433	185.23%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	92.5	0.3037 ug/L	0.08749	0.3037 ppb	0.08749	28.81%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-1.5	-16.916 ug/L	9.1955	-16.916 ppb	9.1955	54.36%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	267.6	50.993 ug/L	13.8523	50.993 ppb	13.8523	27.17%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.6	26.663 ug/L	59.6950	26.663 ppb	59.6950	223.88%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	94.5	0.1215 ug/L	0.00352	0.1215 ppb	0.00352	2.90%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.3	0.2904 ug/L	0.59228	0.2904 ppb	0.59228	203.93%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-31.9	-11.251 ug/L	7.2261	-11.251 ppb	7.2261	64.23%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	6.6	0.2088 ug/L	0.25541	0.2088 ppb	0.25541	122.34%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-1.6	-1.2532 ug/L	1.32612	-1.2532 ppb	1.32612	105.82%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	4.2	0.6551 ug/L	0.92549	0.6551 ppb	0.92549	141.28%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	0.0	0.0660 ug/L	6.50146	0.0660 ppb	6.50146	>999.9%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	2.5	1.0439 ug/L	0.98794	1.0439 ppb	0.98794	94.64%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	0.8	0.6108 ug/L	3.55557	0.6108 ppb	3.55557	582.11%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	156.2	5.9254 ug/L	0.31285	5.9254 ppb	0.31285	5.28%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	3.3	0.7467 ug/L	0.76437	0.7467 ppb	0.76437	102.36%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	4.1	0.0330 ug/L	0.02594	0.0330 ppb	0.02594	78.72%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	84.2	0.1457 ug/L	0.01835	0.1457 ppb	0.01835	12.59%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-0.4	-0.1486 ug/L	0.56763	-0.1486 ppb	0.56763	381.86%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	45.6	1.3860 ug/L	3.63969	1.3860 ppb	3.63969	262.60%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-32.0	-0.2458 ug/L	0.36848	-0.2458 ppb	0.36848	149.89%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	277.2	3.3594 ug/L	0.04376	3.3594 ppb	0.04376	1.30%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	139.2	11.351 ug/L	0.1715	11.351 ppb	0.1715	1.51%	
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

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Analysis Begun

Start Time: 3/19/2010 13:15:22

Plasma On Time: 3/15/2010 06:51:19

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\031910.sif

Batch ID:

Results Data Set: 031910

Results Library: C:\pe\Optima3\Results\Results.mdb
=====

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/19/2010 13:15:23

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:
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Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4422.0	4422.0	101 %		13:17:15
1	Y RADIAL	4780.1	4780.1	100.4 %		13:17:15
1	Al 396.153Radial†	4976.3	5024.0	4910.8 ug/L	4910.8 ppb	13:17:15
1	Ca 317.933Radial†	2700.5	2668.4	5049.1 ug/L	5049.1 ppb	13:17:35
1	Fe 238.204 Radial†	452.2	441.0	5124.8 ug/L	5124.8 ppb	13:17:35
1	K 766.490 Radial†	28954.1	26178.8	4981.5 ug/L	4981.5 ppb	13:17:15
1	Mg 279.077 IEC†	127.2	124.9	5152.1 ug/L	5152.1 ppb	13:17:35
1	Na 589.592 Radial†	27030.2	27740.5	9779.1 ug/L	9779.1 ppb	13:17:15
1	Sr 421.552†	62430.7	62029.2	497.17 ug/L	497.17 ppb	13:17:15
1	Sc 361.383	836041.4	836041.4	102.10 %		13:18:32
1	Y 371.029	695666.9	695666.9	100.58 %		13:18:32
1	Ag 328.068†	99741.5	97502.4	509.35 ug/L	509.35 ppb	13:18:37
1	As 188.979†	902.8	911.0	504.45 ug/L	504.45 ppb	13:18:57
1	B 249.677†	17798.3	17969.1	501.80 ug/L	501.80 ppb	13:18:37
1	Ba 233.527†	55289.1	54151.2	508.47 ug/L	508.47 ppb	13:18:37
1	Be 313.107†	1212462.2	1191224.9	508.36 ug/L	508.36 ppb	13:18:32
1	Cd 226.502†	35617.7	35054.9	508.53 ug/L	508.53 ppb	13:18:37
1	Co 228.616†	20302.2	19930.3	515.21 ug/L	515.21 ppb	13:18:37
1	Cr 267.716†	38592.6	37726.3	506.96 ug/L	506.96 ppb	13:18:37
1	Cu 324.752†	160977.9	152110.9	502.18 ug/L	502.18 ppb	13:18:37
1	Mn 257.610†	392889.1	384409.3	505.72 ug/L	505.72 ppb	13:18:32
1	Mo 202.031†	5733.6	5606.9	498.87 ug/L	498.87 ppb	13:18:57
1	Ni 231.604†	16562.6	16137.5	512.17 ug/L	512.17 ppb	13:18:37
1	P 214.914†	3592.6	3331.3	2383.6 ug/L	2383.6 ppb	13:18:57
1	Pb 220.353†	3245.5	3237.0	498.70 ug/L	498.70 ppb	13:18:57
1	S 181.975 Axial†	595.4	552.9	988.90 ug/L	988.90 ppb	13:18:57
1	Sb 206.836†	1246.1	1196.8	518.64 ug/L	518.64 ppb	13:18:57
1	Se 196.026†	605.1	609.6	525.69 ug/L	525.69 ppb	13:18:57
1	Si 251.611†	68974.5	67066.0	2539.9 ug/L	2539.9 ppb	13:18:37
1	Sn 189.927†	2249.7	2196.2	498.98 ug/L	498.98 ppb	13:18:57
1	Ti 334.940†	291047.8	286175.5	497.52 ug/L	497.52 ppb	13:18:37
1	Tl 190.801†	1279.6	1282.3	499.44 ug/L	499.44 ppb	13:18:57
1	U 409.014†	15153.6	17045.7	515.42 ug/L	515.42 ppb	13:18:37
1	V 292.402†	63088.1	63106.3	510.59 ug/L	510.59 ppb	13:18:37
1	Zn 213.857†	43547.5	42080.7	505.17 ug/L	505.17 ppb	13:18:37
1	SiO2†	69192.6	67268.3	5476.3 ug/L	5476.3 ppb	13:20:05
2	Sc Radial	4371.3	4371.3	99.5 %		13:17:40
2	Y RADIAL	4764.2	4764.2	100.1 %		13:17:40
2	Al 396.153Radial†	5013.3	5118.7	5001.8 ug/L	5001.8 ppb	13:17:40
2	Ca 317.933Radial†	2726.3	2725.5	5157.2 ug/L	5157.2 ppb	13:18:00
2	Fe 238.204 Radial†	455.1	449.1	5219.7 ug/L	5219.7 ppb	13:18:00
2	K 766.490 Radial†	29490.7	27052.7	5147.8 ug/L	5147.8 ppb	13:17:40
2	Mg 279.077 IEC†	130.5	129.7	5350.0 ug/L	5350.0 ppb	13:18:00
2	Na 589.592 Radial†	27159.9	28183.1	9935.1 ug/L	9935.1 ppb	13:17:40
2	Sr 421.552†	63189.5	63513.1	509.07 ug/L	509.07 ppb	13:17:40
2	Sc 361.383	780265.1	780265.1	95.291 %		13:19:03
2	Y 371.029	650259.2	650259.2	94.016 %		13:19:03

2	Ag 328.068†	98573.2	103259.4	539.38 ug/L	539.38 ppb	13:19:08
2	As 188.979†	919.2	991.5	548.84 ug/L	548.84 ppb	13:19:28
2	B 249.677†	17450.0	18849.7	526.40 ug/L	526.40 ppb	13:19:08
2	Ba 233.527†	54777.2	57485.0	539.77 ug/L	539.77 ppb	13:19:08
2	Be 313.107†	1214795.0	1278559.6	545.62 ug/L	545.62 ppb	13:19:03
2	Cd 226.502†	35129.2	37035.9	537.29 ug/L	537.29 ppb	13:19:08
2	Co 228.616†	20097.6	21137.0	546.43 ug/L	546.43 ppb	13:19:08
2	Cr 267.716†	38463.9	40293.3	541.43 ug/L	541.43 ppb	13:19:08
2	Cu 324.752†	159071.0	161380.1	532.77 ug/L	532.77 ppb	13:19:08
2	Mn 257.610†	393681.2	412747.3	542.98 ug/L	542.98 ppb	13:19:03
2	Mo 202.031†	5788.9	6066.5	539.72 ug/L	539.72 ppb	13:19:28
2	Ni 231.604†	16444.8	17173.4	545.05 ug/L	545.05 ppb	13:19:08
2	P 214.914†	3636.2	3628.6	2599.3 ug/L	2599.3 ppb	13:19:28
2	Pb 220.353†	3292.1	3513.1	541.22 ug/L	541.22 ppb	13:19:28
2	S 181.975 Axial†	596.4	595.7	1065.5 ug/L	1065.5 ppb	13:19:28
2	Sb 206.836†	1259.5	1298.0	562.53 ug/L	562.53 ppb	13:19:28
2	Se 196.026†	593.8	640.1	551.52 ug/L	551.52 ppb	13:19:28
2	Si 251.611†	67834.1	70698.2	2677.3 ug/L	2677.3 ppb	13:19:08
2	Sn 189.927†	2279.1	2384.6	541.74 ug/L	541.74 ppb	13:19:28
2	Ti 334.940†	288492.3	303870.4	528.27 ug/L	528.27 ppb	13:19:08
2	Tl 190.801†	1298.1	1391.4	541.85 ug/L	541.85 ppb	13:19:28
2	U 409.014†	15019.8	17966.3	543.26 ug/L	543.26 ppb	13:19:08
2	V 292.402†	62992.3	67422.8	545.63 ug/L	545.63 ppb	13:19:08
2	Zn 213.857†	42669.0	44207.5	530.68 ug/L	530.68 ppb	13:19:08
2	SiO2†	67938.2	70796.3	5763.1 ug/L	5763.1 ppb	13:20:10
3	Sc Radial	4235.6	4235.6	96.4 %		13:18:05
3	Y RADIAL	4578.7	4578.7	96.18 %		13:18:05
3	Al 396.153Radial†	5061.7	5330.3	5211.5 ug/L	5211.5 ppb	13:18:05
3	Ca 317.933Radial†	2685.3	2770.7	5242.7 ug/L	5242.7 ppb	13:18:25
3	Fe 238.204 Radial†	451.0	459.5	5339.8 ug/L	5339.8 ppb	13:18:25
3	K 766.490 Radial†	29654.4	28171.8	5360.9 ug/L	5360.9 ppb	13:18:05
3	Mg 279.077 IEC†	126.6	129.9	5356.3 ug/L	5356.3 ppb	13:18:25
3	Na 589.592 Radial†	27458.7	29367.4	10353 ug/L	10353 ppb	13:18:05
3	Sr 421.552†	63431.8	65798.5	527.38 ug/L	527.38 ppb	13:18:05
3	Sc 361.383	836309.7	836309.7	102.14 %		13:19:34
3	Y 371.029	697379.0	697379.0	100.83 %		13:19:34
3	Ag 328.068†	98803.2	96552.4	504.47 ug/L	504.47 ppb	13:19:39
3	As 188.979†	902.8	910.7	504.29 ug/L	504.29 ppb	13:19:59
3	B 249.677†	17576.7	17746.6	495.54 ug/L	495.54 ppb	13:19:39
3	Ba 233.527†	54612.1	53471.0	502.09 ug/L	502.09 ppb	13:19:39
3	Be 313.107†	1217346.2	1195625.9	510.22 ug/L	510.22 ppb	13:19:34
3	Cd 226.502†	35283.2	34716.1	503.59 ug/L	503.59 ppb	13:19:39
3	Co 228.616†	20062.5	19689.2	508.99 ug/L	508.99 ppb	13:19:39
3	Cr 267.716†	38307.3	37434.9	503.08 ug/L	503.08 ppb	13:19:39
3	Cu 324.752†	158684.0	149814.3	494.61 ug/L	494.61 ppb	13:19:39
3	Mn 257.610†	392833.1	384231.0	505.50 ug/L	505.50 ppb	13:19:34
3	Mo 202.031†	5772.3	5643.1	502.10 ug/L	502.10 ppb	13:19:59
3	Ni 231.604†	16433.1	16005.4	507.98 ug/L	507.98 ppb	13:19:39
3	P 214.914†	3637.4	3374.1	2416.9 ug/L	2416.9 ppb	13:19:59
3	Pb 220.353†	3275.8	3265.6	503.14 ug/L	503.14 ppb	13:19:59
3	S 181.975 Axial†	595.7	553.1	989.20 ug/L	989.20 ppb	13:19:59
3	Sb 206.836†	1259.7	1209.7	524.15 ug/L	524.15 ppb	13:19:59
3	Se 196.026†	604.4	608.7	525.65 ug/L	525.65 ppb	13:19:59
3	Si 251.611†	67839.7	65933.2	2496.8 ug/L	2496.8 ppb	13:19:39
3	Sn 189.927†	2259.5	2205.1	501.02 ug/L	501.02 ppb	13:19:59
3	Ti 334.940†	287629.2	282736.9	491.56 ug/L	491.56 ppb	13:19:39
3	Tl 190.801†	1293.5	1295.6	504.55 ug/L	504.55 ppb	13:19:59
3	U 409.014†	14827.1	16721.4	505.57 ug/L	505.57 ppb	13:19:39
3	V 292.402†	62590.7	62599.5	506.55 ug/L	506.55 ppb	13:19:39
3	Zn 213.857†	43091.5	41620.4	499.60 ug/L	499.60 ppb	13:19:39
3	SiO2†	68658.1	66723.3	5431.7 ug/L	5431.7 ppb	13:20:15

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	817538.8	99.843 %	3.9423			3.95%
Sc Radial	4343.0	98.8 %	2.19			2.22%
Y 371.029	681101.7	98.475 %	3.8638			3.92%
Y RADIAL	4707.7	98.89 %	2.352			2.38%
Ag 328.068†	99104.7	517.73 ug/L	18.906	517.73 ppb	18.906	3.65%

QC value within limits for Ag 328.068 Recovery = 103.55%							
Al 396.153Radial†	5157.7	5041.4 ug/L	154.20	5041.4 ppb	154.20	3.06%	
QC value within limits for Al 396.153Radial Recovery = 100.83%							
As 188.979†	937.7	519.19 ug/L	25.673	519.19 ppb	25.673	4.94%	
QC value within limits for As 188.979 Recovery = 103.84%							
B 249.677†	18188.5	507.92 ug/L	16.313	507.92 ppb	16.313	3.21%	
QC value within limits for B 249.677 Recovery = 101.58%							
Ba 233.527†	55035.7	516.78 ug/L	20.167	516.78 ppb	20.167	3.90%	
QC value within limits for Ba 233.527 Recovery = 103.36%							
Be 313.107†	1221803.4	521.40 ug/L	20.994	521.40 ppb	20.994	4.03%	
QC value within limits for Be 313.107 Recovery = 104.28%							
Ca 317.933Radial†	2721.5	5149.7 ug/L	97.02	5149.7 ppb	97.02	1.88%	
QC value within limits for Ca 317.933Radial Recovery = 102.99%							
Cd 226.502†	35602.3	516.47 ug/L	18.200	516.47 ppb	18.200	3.52%	
QC value within limits for Cd 226.502 Recovery = 103.29%							
Co 228.616†	20252.2	523.54 ug/L	20.061	523.54 ppb	20.061	3.83%	
QC value within limits for Co 228.616 Recovery = 104.71%							
Cr 267.716†	38484.8	517.16 ug/L	21.113	517.16 ppb	21.113	4.08%	
QC value within limits for Cr 267.716 Recovery = 103.43%							
Cu 324.752†	154435.1	509.85 ug/L	20.203	509.85 ppb	20.203	3.96%	
QC value within limits for Cu 324.752 Recovery = 101.97%							
Fe 238.204 Radial†	449.9	5228.1 ug/L	107.73	5228.1 ppb	107.73	2.06%	
QC value within limits for Fe 238.204 Radial Recovery = 104.56%							
K 766.490 Radial†	27134.5	5163.4 ug/L	190.20	5163.4 ppb	190.20	3.68%	
QC value within limits for K 766.490 Radial Recovery = 103.27%							
Mg 279.077 IEC†	128.1	5286.1 ug/L	116.14	5286.1 ppb	116.14	2.20%	
QC value within limits for Mg 279.077 IEC Recovery = 105.72%							
Mn 257.610†	393795.9	518.07 ug/L	21.577	518.07 ppb	21.577	4.16%	
QC value within limits for Mn 257.610 Recovery = 103.61%							
Mo 202.031†	5772.2	513.56 ug/L	22.713	513.56 ppb	22.713	4.42%	
QC value within limits for Mo 202.031 Recovery = 102.71%							
Na 589.592 Radial†	28430.3	10022 ug/L	296.5	10022 ppb	296.5	2.96%	
QC value within limits for Na 589.592 Radial Recovery = 100.22%							
Ni 231.604†	16438.8	521.74 ug/L	20.300	521.74 ppb	20.300	3.89%	
QC value within limits for Ni 231.604 Recovery = 104.35%							
P 214.914†	3444.7	2466.6 ug/L	116.16	2466.6 ppb	116.16	4.71%	
QC value within limits for P 214.914 Recovery = 98.66%							
Pb 220.353†	3338.6	514.35 ug/L	23.371	514.35 ppb	23.371	4.54%	
QC value within limits for Pb 220.353 Recovery = 102.87%							
S 181.975 Axial†	567.2	1014.5 ug/L	44.16	1014.5 ppb	44.16	4.35%	
QC value within limits for S 181.975 Axial Recovery = 101.45%							
Sb 206.836†	1234.8	535.11 ug/L	23.909	535.11 ppb	23.909	4.47%	
QC value within limits for Sb 206.836 Recovery = 107.02%							
Se 196.026†	619.5	534.29 ug/L	14.922	534.29 ppb	14.922	2.79%	
QC value within limits for Se 196.026 Recovery = 106.86%							
Si 251.611†	67899.1	2571.3 ug/L	94.24	2571.3 ppb	94.24	3.66%	
QC value within limits for Si 251.611 Recovery = 102.85%							
Sn 189.927†	2262.0	513.91 ug/L	24.123	513.91 ppb	24.123	4.69%	
QC value within limits for Sn 189.927 Recovery = 102.78%							
Sr 421.552†	63780.3	511.21 ug/L	15.220	511.21 ppb	15.220	2.98%	
QC value within limits for Sr 421.552 Recovery = 102.24%							
Ti 334.940†	290927.6	505.78 ug/L	19.700	505.78 ppb	19.700	3.90%	
QC value within limits for Ti 334.940 Recovery = 101.16%							
Tl 190.801†	1323.1	515.28 ug/L	23.152	515.28 ppb	23.152	4.49%	
QC value within limits for Tl 190.801 Recovery = 103.06%							
U 409.014†	17244.4	521.42 ug/L	19.550	521.42 ppb	19.550	3.75%	
QC value within limits for U 409.014 Recovery = 104.28%							
V 292.402†	64376.2	520.92 ug/L	21.493	520.92 ppb	21.493	4.13%	
QC value within limits for V 292.402 Recovery = 104.18%							
Zn 213.857†	42636.2	511.81 ug/L	16.570	511.81 ppb	16.570	3.24%	
QC value within limits for Zn 213.857 Recovery = 102.36%							
SiO2†	68262.6	5557.1 ug/L	179.84	5557.1 ppb	179.84	3.24%	
QC value within limits for SiO2 Recovery = 103.92%							
All analyte(s) passed QC.							

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 13:22:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4214.0	4214.0	95.9 %		13:24:38
1	Y RADIAL	4617.8	4617.8	97.00 %		13:24:18
1	Al 396.153Radial†	-78.0	-3.3	-3.2278 ug/L	-3.2278 ppb	13:24:38
1	Ca 317.933Radial†	25.8	11.2	21.266 ug/L	21.266 ppb	13:24:38
1	Fe 238.204 Radial†	6.9	-1.3	-14.901 ug/L	-14.901 ppb	13:24:38
1	K 766.490 Radial†	2560.2	71.4	13.599 ug/L	13.599 ppb	13:24:18
1	Mg 279.077 IEC†	2.3	0.9	37.080 ug/L	37.080 ppb	13:24:38
1	Na 589.592 Radial†	-866.0	-28.1	-9.9122 ug/L	-9.9122 ppb	13:24:18
1	Sr 421.552†	25.6	5.9	0.0470 ug/L	0.0470 ppb	13:24:18
1	Sc 361.383	828827.6	828827.6	101.22 %		13:25:35
1	Y 371.029	700055.9	700055.9	101.22 %		13:25:35
1	Ag 328.068†	206.7	19.1	0.0888 ug/L	0.0888 ppb	13:25:35
1	As 188.979†	-29.4	-2.3	-1.2633 ug/L	-1.2633 ppb	13:25:55
1	B 249.677†	-290.5	250.3	7.0258 ug/L	7.0258 ppb	13:25:55
1	Ba 233.527†	1.9	2.6	0.0237 ug/L	0.0237 ppb	13:25:55
1	Be 313.107†	-3640.9	134.1	0.0571 ug/L	0.0571 ppb	13:25:35
1	Cd 226.502†	-168.1	4.6	0.0690 ug/L	0.0690 ppb	13:25:55
1	Co 228.616†	-49.5	-2.7	-0.0682 ug/L	-0.0682 ppb	13:25:55
1	Cr 267.716†	72.4	0.0	-0.0036 ug/L	-0.0036 ppb	13:25:55
1	Cu 324.752†	5691.7	71.0	0.2304 ug/L	0.2304 ppb	13:25:35
1	Mn 257.610†	475.1	80.3	0.1026 ug/L	0.1026 ppb	13:25:55
1	Mo 202.031†	16.0	7.2	0.6416 ug/L	0.6416 ppb	13:25:55
1	Ni 231.604†	93.4	8.3	0.2620 ug/L	0.2620 ppb	13:25:55
1	P 214.914†	183.1	-6.4	-4.8145 ug/L	-4.8145 ppb	13:25:55
1	Pb 220.353†	-56.0	3.0	0.4595 ug/L	0.4595 ppb	13:25:55
1	S 181.975 Axial†	32.6	2.0	3.5771 ug/L	3.5771 ppb	13:25:55
1	Sb 206.836†	30.2	6.2	2.6171 ug/L	2.6171 ppb	13:25:55
1	Se 196.026†	-6.0	11.1	9.1807 ug/L	9.1807 ppb	13:25:55
1	Si 251.611†	640.7	144.8	5.4888 ug/L	5.4888 ppb	13:25:55
1	Sn 189.927†	10.5	3.2	0.7280 ug/L	0.7280 ppb	13:25:55
1	Ti 334.940†	-1118.9	15.8	0.0248 ug/L	0.0248 ppb	13:25:35
1	Tl 190.801†	-30.5	-1.0	-0.3917 ug/L	-0.3917 ppb	13:25:55
1	U 409.014†	-2040.5	188.3	5.7146 ug/L	5.7146 ppb	13:25:35
1	V 292.402†	-1357.2	-23.4	-0.1643 ug/L	-0.1643 ppb	13:25:35
1	Zn 213.857†	824.2	244.1	2.9585 ug/L	2.9585 ppb	13:25:55
1	SiO2†	614.0	107.2	8.7346 ug/L	8.7346 ppb	13:26:51
2	Sc Radial	4287.6	4287.6	97.6 %		13:25:03
2	Y RADIAL	4853.5	4853.5	102.0 %		13:24:43
2	Al 396.153Radial†	-79.3	-3.2	-3.2285 ug/L	-3.2285 ppb	13:25:03
2	Ca 317.933Radial†	28.5	13.5	25.522 ug/L	25.522 ppb	13:25:03
2	Fe 238.204 Radial†	7.8	-0.5	-5.6203 ug/L	-5.6203 ppb	13:25:03
2	K 766.490 Radial†	2708.7	177.8	33.882 ug/L	33.882 ppb	13:24:43
2	Mg 279.077 IEC†	1.9	0.4	15.487 ug/L	15.487 ppb	13:25:03
2	Na 589.592 Radial†	-956.7	-105.6	-37.211 ug/L	-37.211 ppb	13:24:43
2	Sr 421.552†	37.2	17.3	0.1382 ug/L	0.1382 ppb	13:24:43
2	Sc 361.383	836907.6	836907.6	102.21 %		13:26:00
2	Y 371.029	707095.7	707095.7	102.23 %		13:26:00
2	Ag 328.068†	124.8	-63.0	-0.3304 ug/L	-0.3304 ppb	13:26:00
2	As 188.979†	-22.0	5.3	2.8864 ug/L	2.8864 ppb	13:26:20
2	B 249.677†	-270.3	272.9	7.6575 ug/L	7.6575 ppb	13:26:20
2	Ba 233.527†	16.9	17.3	0.1616 ug/L	0.1616 ppb	13:26:20
2	Be 313.107†	-3628.8	180.7	0.0773 ug/L	0.0773 ppb	13:26:00
2	Cd 226.502†	-169.9	4.4	0.0656 ug/L	0.0656 ppb	13:26:20
2	Co 228.616†	-50.5	-3.2	-0.0794 ug/L	-0.0794 ppb	13:26:20
2	Cr 267.716†	64.1	-8.8	-0.1196 ug/L	-0.1196 ppb	13:26:20
2	Cu 324.752†	5653.3	-20.8	-0.0701 ug/L	-0.0701 ppb	13:26:00
2	Mn 257.610†	476.1	76.8	0.0998 ug/L	0.0998 ppb	13:26:20
2	Mo 202.031†	21.7	12.7	1.1268 ug/L	1.1268 ppb	13:26:20
2	Ni 231.604†	91.6	5.5	0.1758 ug/L	0.1758 ppb	13:26:20

2	P 214.914†	183.5	-7.7	-5.7343 ug/L	-5.7343 ppb	13:26:20
2	Pb 220.353†	-52.7	6.8	1.0466 ug/L	1.0466 ppb	13:26:20
2	S 181.975 Axial†	36.4	5.4	9.6328 ug/L	9.6328 ppb	13:26:20
2	Sb 206.836†	20.4	-3.7	-1.5352 ug/L	-1.5352 ppb	13:26:20
2	Se 196.026†	-17.9	-0.6	-0.4926 ug/L	-0.4926 ppb	13:26:20
2	Si 251.611†	636.7	134.8	5.1028 ug/L	5.1028 ppb	13:26:20
2	Sn 189.927†	9.4	2.0	0.4691 ug/L	0.4691 ppb	13:26:20
2	Ti 334.940†	-1040.5	103.2	0.1808 ug/L	0.1808 ppb	13:26:00
2	Tl 190.801†	-17.0	12.4	4.8149 ug/L	4.8149 ppb	13:26:20
2	U 409.014†	-2187.0	64.5	1.9568 ug/L	1.9568 ppb	13:26:00
2	V 292.402†	-1336.3	10.0	0.1004 ug/L	0.1004 ppb	13:26:00
2	Zn 213.857†	847.0	258.7	3.1339 ug/L	3.1339 ppb	13:26:20
2	SiO2†	672.8	159.0	12.943 ug/L	12.943 ppb	13:26:56
3	Sc Radial	4223.8	4223.8	96.1 %		13:25:29
3	Y RADIAL	4787.5	4787.5	100.6 %		13:25:08
3	Al 396.153Radial†	-68.0	7.3	7.1801 ug/L	7.1801 ppb	13:25:29
3	Ca 317.933Radial†	26.0	11.4	21.587 ug/L	21.587 ppb	13:25:29
3	Fe 238.204 Radial†	10.4	2.3	27.019 ug/L	27.019 ppb	13:25:29
3	K 766.490 Radial†	2761.7	274.9	52.379 ug/L	52.379 ppb	13:25:08
3	Mg 279.077 IEC†	3.9	2.5	103.77 ug/L	103.77 ppb	13:25:29
3	Na 589.592 Radial†	-913.7	-75.6	-26.662 ug/L	-26.662 ppb	13:25:08
3	Sr 421.552†	26.1	6.3	0.0504 ug/L	0.0504 ppb	13:25:08
3	Sc 361.383	826019.3	826019.3	100.88 %		13:26:26
3	Y 371.029	699154.6	699154.6	101.09 %		13:26:26
3	Ag 328.068†	254.0	66.6	0.3502 ug/L	0.3502 ppb	13:26:26
3	As 188.979†	-18.3	8.7	4.7742 ug/L	4.7742 ppb	13:26:46
3	B 249.677†	-276.0	263.7	7.3939 ug/L	7.3939 ppb	13:26:46
3	Ba 233.527†	2.5	3.1	0.0295 ug/L	0.0295 ppb	13:26:46
3	Be 313.107†	-3722.1	41.4	0.0180 ug/L	0.0180 ppb	13:26:26
3	Cd 226.502†	-167.3	4.8	0.0667 ug/L	0.0667 ppb	13:26:46
3	Co 228.616†	-48.2	-1.5	-0.0409 ug/L	-0.0409 ppb	13:26:46
3	Cr 267.716†	91.7	19.4	0.2616 ug/L	0.2616 ppb	13:26:46
3	Cu 324.752†	5709.6	107.9	0.3559 ug/L	0.3559 ppb	13:26:26
3	Mn 257.610†	484.6	91.3	0.1185 ug/L	0.1185 ppb	13:26:46
3	Mo 202.031†	5.8	-2.7	-0.2411 ug/L	-0.2411 ppb	13:26:46
3	Ni 231.604†	81.5	-3.3	-0.1050 ug/L	-0.1050 ppb	13:26:46
3	P 214.914†	185.3	-3.6	-2.7581 ug/L	-2.7581 ppb	13:26:46
3	Pb 220.353†	-51.2	7.5	1.1535 ug/L	1.1535 ppb	13:26:46
3	S 181.975 Axial†	29.6	-0.8	-1.4364 ug/L	-1.4364 ppb	13:26:46
3	Sb 206.836†	21.4	-2.5	-0.9971 ug/L	-0.9971 ppb	13:26:46
3	Se 196.026†	-25.5	-8.3	-6.8747 ug/L	-6.8747 ppb	13:26:46
3	Si 251.611†	640.1	146.4	5.5592 ug/L	5.5592 ppb	13:26:46
3	Sn 189.927†	19.1	11.8	2.6769 ug/L	2.6769 ppb	13:26:46
3	Ti 334.940†	-1044.7	85.7	0.1419 ug/L	0.1419 ppb	13:26:26
3	Tl 190.801†	-23.1	6.2	2.3838 ug/L	2.3838 ppb	13:26:46
3	U 409.014†	-2122.7	99.9	3.0285 ug/L	3.0285 ppb	13:26:26
3	V 292.402†	-1369.3	-39.9	-0.3187 ug/L	-0.3187 ppb	13:26:26
3	Zn 213.857†	853.0	275.4	3.3336 ug/L	3.3336 ppb	13:26:46
3	SiO2†	645.5	140.5	11.476 ug/L	11.476 ppb	13:27:01

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	830584.8	101.44 %		0.690			0.68%
Sc Radial	4241.8	96.5 %		0.91			0.94%
Y 371.029	702102.1	101.51 %		0.629			0.62%
Y RADIAL	4753.0	99.84 %		2.554			2.56%
Ag 328.068†	7.6	0.0362 ug/L		0.34331	0.0362 ppb	0.34331	948.38%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	0.3	0.2413 ug/L		6.00919	0.2413 ppb	6.00919	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	3.9	2.1324 ug/L		3.08859	2.1324 ppb	3.08859	144.84%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	262.3	7.3591 ug/L		0.31728	7.3591 ppb	0.31728	4.31%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	7.7	0.0716 ug/L		0.07804	0.0716 ppb	0.07804	108.99%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	118.7	0.0508 ug/L		0.03019	0.0508 ppb	0.03019	59.42%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	12.0	22.792 ug/L		2.3703	22.792 ppb	2.3703	10.40%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	4.6	0.0671 ug/L	0.00174	0.0671 ppb	0.00174	2.59%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-2.5	-0.0628 ug/L	0.01978	-0.0628 ppb	0.01978	31.48%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	3.5	0.0461 ug/L	0.19542	0.0461 ppb	0.19542	423.60%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	52.7	0.1720 ug/L	0.21892	0.1720 ppb	0.21892	127.26%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.2	2.1660 ug/L	22.01818	2.1660 ppb	22.01818	>999.9%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	174.7	33.287 ug/L	19.3971	33.287 ppb	19.3971	58.27%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.3	52.114 ug/L	46.0235	52.114 ppb	46.0235	88.31%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	82.8	0.1069 ug/L	0.01008	0.1069 ppb	0.01008	9.43%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	5.7	0.5091 ug/L	0.69348	0.5091 ppb	0.69348	136.22%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-69.8	-24.595 ug/L	13.7661	-24.595 ppb	13.7661	55.97%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	3.5	0.1110 ug/L	0.19193	0.1110 ppb	0.19193	172.99%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-5.9	-4.4357 ug/L	1.52384	-4.4357 ppb	1.52384	34.35%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	5.8	0.8865 ug/L	0.37365	0.8865 ppb	0.37365	42.15%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	2.2	3.9245 ug/L	5.54276	3.9245 ppb	5.54276	141.24%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-0.0	0.0283 ug/L	2.25812	0.0283 ppb	2.25812	>999.9%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	0.7	0.6045 ug/L	8.08370	0.6045 ppb	8.08370	>999.9%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	142.0	5.3836 ug/L	0.24572	5.3836 ppb	0.24572	4.56%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	5.7	1.2913 ug/L	1.20690	1.2913 ppb	1.20690	93.46%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	9.8	0.0785 ug/L	0.05168	0.0785 ppb	0.05168	65.82%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	68.2	0.1159 ug/L	0.08122	0.1159 ppb	0.08122	70.10%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	5.9	2.2690 ug/L	2.60522	2.2690 ppb	2.60522	114.82%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	117.6	3.5666 ug/L	1.93587	3.5666 ppb	1.93587	54.28%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-17.8	-0.1275 ug/L	0.21193	-0.1275 ppb	0.21193	166.18%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	259.4	3.1420 ug/L	0.18772	3.1420 ppb	0.18772	5.97%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	135.6	11.051 ug/L	2.1364	11.051 ppb	2.1364	19.33%	
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 14:17:09

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	4286.6	4286.6	97.5 %		14:19:21
1	Y RADIAL	4712.3	4712.3	98.99 %		14:19:01
1	Al 396.153Radial†	4948.0	5151.3	5035.7 ug/L	5035.7 ppb	14:19:01
1	Ca 317.933Radial†	2681.9	2734.1	5173.4 ug/L	5173.4 ppb	14:19:21
1	Fe 238.204 Radial†	445.8	448.7	5213.7 ug/L	5213.7 ppb	14:19:21
1	K 766.490 Radial†	29143.9	27282.4	5191.6 ug/L	5191.6 ppb	14:19:01
1	Mg 279.077 IEC†	128.4	130.2	5369.0 ug/L	5369.0 ppb	14:19:21
1	Na 589.592 Radial†	27278.3	28843.5	10168 ug/L	10168 ppb	14:19:01
1	Sr 421.552†	62479.4	64039.2	513.28 ug/L	513.28 ppb	14:19:01
1	Sc 361.383	831477.9	831477.9	101.55 %		14:20:18
1	Y 371.029	692747.3	692747.3	100.16 %		14:20:18
1	Ag 328.068†	98324.6	96643.2	504.90 ug/L	504.90 ppb	14:20:24
1	As 188.979†	905.4	918.4	508.54 ug/L	508.54 ppb	14:20:44
1	B 249.677†	17422.4	17694.6	494.10 ug/L	494.10 ppb	14:20:24
1	Ba 233.527†	54391.7	53564.7	502.96 ug/L	502.96 ppb	14:20:24
1	Be 313.107†	1194858.5	1180406.6	503.74 ug/L	503.74 ppb	14:20:18
1	Cd 226.502†	35200.5	34835.4	505.33 ug/L	505.33 ppb	14:20:24
1	Co 228.616†	20048.9	19790.0	511.60 ug/L	511.60 ppb	14:20:24
1	Cr 267.716†	37955.7	37306.6	501.34 ug/L	501.34 ppb	14:20:24
1	Cu 324.752†	157713.0	149761.0	494.43 ug/L	494.43 ppb	14:20:24
1	Mn 257.610†	381470.8	375276.7	493.72 ug/L	493.72 ppb	14:20:24
1	Mo 202.031†	5726.4	5630.7	500.99 ug/L	500.99 ppb	14:20:44
1	Ni 231.604†	16346.0	16013.1	508.23 ug/L	508.23 ppb	14:20:24
1	P 214.914†	3603.1	3360.9	2407.2 ug/L	2407.2 ppb	14:20:44
1	Pb 220.353†	3243.2	3252.2	501.06 ug/L	501.06 ppb	14:20:44
1	S 181.975 Axial†	604.1	564.7	1010.0 ug/L	1010.0 ppb	14:20:44
1	Sb 206.836†	1248.8	1206.2	522.61 ug/L	522.61 ppb	14:20:44
1	Se 196.026†	598.5	606.4	523.26 ug/L	523.26 ppb	14:20:44
1	Si 251.611†	68567.2	67035.6	2538.7 ug/L	2538.7 ppb	14:20:24
1	Sn 189.927†	2241.0	2199.7	499.80 ug/L	499.80 ppb	14:20:44
1	Ti 334.940†	287050.0	283803.0	493.40 ug/L	493.40 ppb	14:20:24
1	Tl 190.801†	1277.2	1286.9	501.13 ug/L	501.13 ppb	14:20:44
1	U 409.014†	14715.7	16695.9	504.81 ug/L	504.81 ppb	14:20:24
1	V 292.402†	61985.5	62359.7	504.63 ug/L	504.63 ppb	14:20:24
1	Zn 213.857†	42736.7	41516.3	498.35 ug/L	498.35 ppb	14:20:24
1	Sio2†	68779.3	67233.3	5473.4 ug/L	5473.4 ppb	14:21:51
2	Sc Radial	4298.9	4298.9	97.8 %		14:19:46
2	Y RADIAL	4801.9	4801.9	100.9 %		14:19:26
2	Al 396.153Radial†	5052.3	5243.4	5126.5 ug/L	5126.5 ppb	14:19:26
2	Ca 317.933Radial†	2690.8	2735.3	5175.8 ug/L	5175.8 ppb	14:19:46
2	Fe 238.204 Radial†	448.2	449.8	5226.7 ug/L	5226.7 ppb	14:19:46
2	K 766.490 Radial†	29575.8	27638.4	5259.4 ug/L	5259.4 ppb	14:19:26
2	Mg 279.077 IEC†	124.6	125.8	5189.8 ug/L	5189.8 ppb	14:19:46
2	Na 589.592 Radial†	27711.8	29206.6	10296 ug/L	10296 ppb	14:19:26
2	Sr 421.552†	63721.4	65125.5	521.99 ug/L	521.99 ppb	14:19:26
2	Sc 361.383	838934.0	838934.0	102.46 %		14:20:49
2	Y 371.029	696901.9	696901.9	100.76 %		14:20:49
2	Ag 328.068†	98089.8	95553.4	499.22 ug/L	499.22 ppb	14:20:54
2	As 188.979†	897.0	902.3	499.63 ug/L	499.63 ppb	14:21:15
2	B 249.677†	17432.6	17552.1	490.12 ug/L	490.12 ppb	14:20:54
2	Ba 233.527†	54141.6	52844.5	496.20 ug/L	496.20 ppb	14:20:54
2	Be 313.107†	1207828.3	1182607.7	504.67 ug/L	504.67 ppb	14:20:49
2	Cd 226.502†	34973.2	34305.6	497.64 ug/L	497.64 ppb	14:20:54
2	Co 228.616†	19965.7	19533.3	504.96 ug/L	504.96 ppb	14:20:54
2	Cr 267.716†	37713.6	36738.1	493.71 ug/L	493.71 ppb	14:20:54
2	Cu 324.752†	157185.6	147865.8	488.18 ug/L	488.18 ppb	14:20:54
2	Mn 257.610†	379619.5	370131.0	486.96 ug/L	486.96 ppb	14:20:54
2	Mo 202.031†	5693.9	5548.9	493.72 ug/L	493.72 ppb	14:21:15
2	Ni 231.604†	16251.4	15777.8	500.76 ug/L	500.76 ppb	14:20:54

2	P 214.914†	3594.4	3321.0	2378.6 ug/L	2378.6 ppb	14:21:15
2	Pb 220.353†	3259.7	3239.8	499.16 ug/L	499.16 ppb	14:21:15
2	S 181.975 Axial†	605.2	560.5	1002.5 ug/L	1002.5 ppb	14:21:15
2	Sb 206.836†	1248.3	1194.7	517.64 ug/L	517.64 ppb	14:21:15
2	Se 196.026†	589.8	592.6	511.83 ug/L	511.83 ppb	14:21:15
2	Si 251.611†	68173.9	66051.6	2501.4 ug/L	2501.4 ppb	14:20:54
2	Sn 189.927†	2257.8	2196.6	499.08 ug/L	499.08 ppb	14:21:15
2	Ti 334.940†	285541.1	279817.9	486.49 ug/L	486.49 ppb	14:20:54
2	Tl 190.801†	1275.8	1274.3	496.22 ug/L	496.22 ppb	14:21:15
2	U 409.014†	14699.2	16551.0	500.43 ug/L	500.43 ppb	14:20:54
2	V 292.402†	61693.6	61532.2	497.92 ug/L	497.92 ppb	14:20:54
2	Zn 213.857†	42687.0	41093.7	493.29 ug/L	493.29 ppb	14:20:54
2	SiO2†	69054.8	66900.2	5446.4 ug/L	5446.4 ppb	14:21:56
3	Sc Radial	4285.5	4285.5	97.5 %		14:20:11
3	Y RADIAL	4880.2	4880.2	102.5 %		14:19:51
3	Al 396.153Radial†	5069.9	5277.6	5159.6 ug/L	5159.6 ppb	14:19:51
3	Ca 317.933Radial†	2697.6	2750.8	5205.1 ug/L	5205.1 ppb	14:20:11
3	Fe 238.204 Radial†	454.8	458.0	5322.0 ug/L	5322.0 ppb	14:20:11
3	K 766.490 Radial†	29958.4	28125.4	5352.1 ug/L	5352.1 ppb	14:19:51
3	Mg 279.077 IEC†	131.4	133.2	5495.5 ug/L	5495.5 ppb	14:20:11
3	Na 589.592 Radial†	27959.3	29549.0	10417 ug/L	10417 ppb	14:19:51
3	Sr 421.552†	64362.6	65986.8	528.89 ug/L	528.89 ppb	14:19:51
3	Sc 361.383	825187.1	825187.1	100.78 %		14:21:20
3	Y 371.029	686685.7	686685.7	99.283 %		14:21:20
3	Ag 328.068†	97337.1	96401.4	503.67 ug/L	503.67 ppb	14:21:25
3	As 188.979†	913.9	933.6	516.86 ug/L	516.86 ppb	14:21:45
3	B 249.677†	17209.9	17614.5	491.84 ug/L	491.84 ppb	14:21:25
3	Ba 233.527†	53489.1	53077.4	498.40 ug/L	498.40 ppb	14:21:25
3	Be 313.107†	1185936.7	1180523.9	503.79 ug/L	503.79 ppb	14:21:20
3	Cd 226.502†	34609.4	34513.2	500.64 ug/L	500.64 ppb	14:21:25
3	Co 228.616†	19749.9	19643.9	507.83 ug/L	507.83 ppb	14:21:25
3	Cr 267.716†	37555.4	37194.3	499.84 ug/L	499.84 ppb	14:21:25
3	Cu 324.752†	155986.3	149231.7	492.69 ug/L	492.69 ppb	14:21:25
3	Mn 257.610†	376330.0	373039.4	490.78 ug/L	490.78 ppb	14:21:25
3	Mo 202.031†	5723.8	5671.2	504.59 ug/L	504.59 ppb	14:21:45
3	Ni 231.604†	16186.7	15977.8	507.11 ug/L	507.11 ppb	14:21:25
3	P 214.914†	3581.7	3366.8	2411.9 ug/L	2411.9 ppb	14:21:45
3	Pb 220.353†	3250.7	3283.9	505.96 ug/L	505.96 ppb	14:21:45
3	S 181.975 Axial†	603.6	568.8	1017.3 ug/L	1017.3 ppb	14:21:45
3	Sb 206.836†	1251.1	1217.8	527.67 ug/L	527.67 ppb	14:21:45
3	Se 196.026†	597.0	609.3	526.11 ug/L	526.11 ppb	14:21:45
3	Si 251.611†	67487.4	66478.9	2517.5 ug/L	2517.5 ppb	14:21:25
3	Sn 189.927†	2258.7	2234.1	507.59 ug/L	507.59 ppb	14:21:45
3	Ti 334.940†	283433.1	282369.0	490.90 ug/L	490.90 ppb	14:21:25
3	Tl 190.801†	1286.7	1305.8	508.45 ug/L	508.45 ppb	14:21:45
3	U 409.014†	14522.6	16614.8	502.34 ug/L	502.34 ppb	14:21:25
3	V 292.402†	61245.5	62090.7	502.52 ug/L	502.52 ppb	14:21:25
3	Zn 213.857†	42292.7	41396.5	496.90 ug/L	496.90 ppb	14:21:25
3	SiO2†	68089.2	67064.8	5459.5 ug/L	5459.5 ppb	14:22:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	831866.4	101.59 %	0.840			0.83%
Sc Radial	4290.4	97.6 %	0.17			0.17%
Y 371.029	692111.7	100.07 %	0.743			0.74%
Y RADIAL	4798.1	100.8 %	1.76			1.75%
Ag 328.068†	96199.3	502.60 ug/L	2.987	502.60 ppb	2.987	0.59%
QC value within limits for Ag 328.068 Recovery = 100.52%						
Al 396.153Radial†	5224.1	5107.2 ug/L	64.17	5107.2 ppb	64.17	1.26%
QC value within limits for Al 396.153Radial Recovery = 102.14%						
As 188.979†	918.1	508.34 ug/L	8.615	508.34 ppb	8.615	1.69%
QC value within limits for As 188.979 Recovery = 101.67%						
B 249.677†	17620.4	492.02 ug/L	1.996	492.02 ppb	1.996	0.41%
QC value within limits for B 249.677 Recovery = 98.40%						
Ba 233.527†	53162.2	499.19 ug/L	3.449	499.19 ppb	3.449	0.69%
QC value within limits for Ba 233.527 Recovery = 99.84%						
Be 313.107†	1181179.4	504.07 ug/L	0.520	504.07 ppb	0.520	0.10%
QC value within limits for Be 313.107 Recovery = 100.81%						
Ca 317.933Radial†	2740.1	5184.8 ug/L	17.64	5184.8 ppb	17.64	0.34%

QC value within limits for Ca 317.933 Radial Recovery = 103.70%						
Cd 226.502†	34551.4	501.20 ug/L	3.878	501.20 ppb	3.878	0.77%
QC value within limits for Cd 226.502 Recovery = 100.24%						
Co 228.616†	19655.7	508.13 ug/L	3.329	508.13 ppb	3.329	0.66%
QC value within limits for Co 228.616 Recovery = 101.63%						
Cr 267.716†	37079.7	498.30 ug/L	4.043	498.30 ppb	4.043	0.81%
QC value within limits for Cr 267.716 Recovery = 99.66%						
Cu 324.752†	148952.8	491.77 ug/L	3.228	491.77 ppb	3.228	0.66%
QC value within limits for Cu 324.752 Recovery = 98.35%						
Fe 238.204 Radial†	452.2	5254.2 ug/L	59.13	5254.2 ppb	59.13	1.13%
QC value within limits for Fe 238.204 Radial Recovery = 105.08%						
K 766.490 Radial†	27682.1	5267.7 ug/L	80.57	5267.7 ppb	80.57	1.53%
QC value within limits for K 766.490 Radial Recovery = 105.35%						
Mg 279.077 IEC†	129.7	5351.4 ug/L	153.62	5351.4 ppb	153.62	2.87%
QC value within limits for Mg 279.077 IEC Recovery = 107.03%						
Mn 257.610†	372815.7	490.48 ug/L	3.388	490.48 ppb	3.388	0.69%
QC value within limits for Mn 257.610 Recovery = 98.10%						
Mo 202.031†	5616.9	499.77 ug/L	5.539	499.77 ppb	5.539	1.11%
QC value within limits for Mo 202.031 Recovery = 99.95%						
Na 589.592 Radial†	29199.7	10294 ug/L	124.4	10294 ppb	124.4	1.21%
QC value within limits for Na 589.592 Radial Recovery = 102.94%						
Ni 231.604†	15922.9	505.36 ug/L	4.029	505.36 ppb	4.029	0.80%
QC value within limits for Ni 231.604 Recovery = 101.07%						
P 214.914†	3349.6	2399.2 ug/L	17.98	2399.2 ppb	17.98	0.75%
QC value within limits for P 214.914 Recovery = 95.97%						
Pb 220.353†	3258.6	502.06 ug/L	3.508	502.06 ppb	3.508	0.70%
QC value within limits for Pb 220.353 Recovery = 100.41%						
S 181.975 Axial†	564.7	1009.9 ug/L	7.41	1009.9 ppb	7.41	0.73%
QC value within limits for S 181.975 Axial Recovery = 100.99%						
Sb 206.836†	1206.2	522.64 ug/L	5.013	522.64 ppb	5.013	0.96%
QC value within limits for Sb 206.836 Recovery = 104.53%						
Se 196.026†	602.8	520.40 ug/L	7.558	520.40 ppb	7.558	1.45%
QC value within limits for Se 196.026 Recovery = 104.08%						
Si 251.611†	66522.0	2519.2 ug/L	18.69	2519.2 ppb	18.69	0.74%
QC value within limits for Si 251.611 Recovery = 100.77%						
Sn 189.927†	2210.1	502.15 ug/L	4.722	502.15 ppb	4.722	0.94%
QC value within limits for Sn 189.927 Recovery = 100.43%						
Sr 421.552†	65050.5	521.39 ug/L	7.823	521.39 ppb	7.823	1.50%
QC value within limits for Sr 421.552 Recovery = 104.28%						
Ti 334.940†	281996.6	490.26 ug/L	3.499	490.26 ppb	3.499	0.71%
QC value within limits for Ti 334.940 Recovery = 98.05%						
Tl 190.801†	1289.0	501.94 ug/L	6.156	501.94 ppb	6.156	1.23%
QC value within limits for Tl 190.801 Recovery = 100.39%						
U 409.014†	16620.6	502.53 ug/L	2.197	502.53 ppb	2.197	0.44%
QC value within limits for U 409.014 Recovery = 100.51%						
V 292.402†	61994.2	501.69 ug/L	3.433	501.69 ppb	3.433	0.68%
QC value within limits for V 292.402 Recovery = 100.34%						
Zn 213.857†	41335.5	496.18 ug/L	2.608	496.18 ppb	2.608	0.53%
QC value within limits for Zn 213.857 Recovery = 99.24%						
SiO2†	67066.1	5459.8 ug/L	13.50	5459.8 ppb	13.50	0.25%
QC value within limits for SiO2 Recovery = 102.10%						
All analyte(s) passed QC.						

Sequence No.: 11

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 14:24:11

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4205.6	4205.6	95.7 %		14:26:24
1	Y RADIAL	4674.8	4674.8	98.20 %		14:26:04
1	Al 396.153Radial†	-79.0	-4.5	-4.4237 ug/L	-4.4237 ppb	14:26:24
1	Ca 317.933Radial†	19.5	4.7	8.8716 ug/L	8.8716 ppb	14:26:24
1	Fe 238.204 Radial†	6.8	-1.3	-15.152 ug/L	-15.152 ppb	14:26:24
1	K 766.490 Radial†	2657.1	178.0	33.925 ug/L	33.925 ppb	14:26:04
1	Mg 279.077 IEC†	2.1	0.7	28.443 ug/L	28.443 ppb	14:26:24
1	Na 589.592 Radial†	-889.3	-54.3	-19.138 ug/L	-19.138 ppb	14:26:04
1	Sr 421.552†	24.1	4.3	0.0345 ug/L	0.0345 ppb	14:26:04
1	Sc 361.383	823769.2	823769.2	100.60 %		14:27:21
1	Y 371.029	695270.5	695270.5	100.52 %		14:27:21
1	Ag 328.068†	239.9	53.4	0.2721 ug/L	0.2721 ppb	14:27:21
1	As 188.979†	-22.7	4.3	2.3396 ug/L	2.3396 ppb	14:27:41
1	B 249.677†	-326.0	213.3	5.9855 ug/L	5.9855 ppb	14:27:41
1	Ba 233.527†	2.4	3.1	0.0279 ug/L	0.0279 ppb	14:27:41
1	Be 313.107†	-3704.2	49.1	0.0210 ug/L	0.0210 ppb	14:27:21
1	Cd 226.502†	-181.7	-10.0	-0.1442 ug/L	-0.1442 ppb	14:27:41
1	Co 228.616†	-39.1	7.3	0.1900 ug/L	0.1900 ppb	14:27:41
1	Cr 267.716†	76.1	4.1	0.0536 ug/L	0.0536 ppb	14:27:41
1	Cu 324.752†	5545.9	-39.4	-0.1306 ug/L	-0.1306 ppb	14:27:21
1	Mn 257.610†	381.1	-10.3	-0.0162 ug/L	-0.0162 ppb	14:27:41
1	Mo 202.031†	14.0	5.4	0.4818 ug/L	0.4818 ppb	14:27:41
1	Ni 231.604†	72.9	-11.6	-0.3696 ug/L	-0.3696 ppb	14:27:41
1	P 214.914†	183.4	-5.0	-3.6798 ug/L	-3.6798 ppb	14:27:41
1	Pb 220.353†	-46.8	11.8	1.8119 ug/L	1.8119 ppb	14:27:41
1	S 181.975 Axial†	32.0	1.6	2.8912 ug/L	2.8912 ppb	14:27:41
1	Sb 206.836†	43.9	20.0	8.3742 ug/L	8.3742 ppb	14:27:41
1	Se 196.026†	-22.6	-5.5	-4.6659 ug/L	-4.6659 ppb	14:27:41
1	Si 251.611†	500.4	9.2	0.3440 ug/L	0.3440 ppb	14:27:41
1	Sn 189.927†	7.2	0.0	0.0045 ug/L	0.0045 ppb	14:27:41
1	Ti 334.940†	-1115.0	12.9	0.0215 ug/L	0.0215 ppb	14:27:21
1	Tl 190.801†	-27.7	1.5	0.5959 ug/L	0.5959 ppb	14:27:41
1	U 409.014†	-2231.3	-13.8	-0.4157 ug/L	-0.4157 ppb	14:27:21
1	V 292.402†	-1342.4	-17.0	-0.1266 ug/L	-0.1266 ppb	14:27:21
1	Zn 213.857†	544.5	-28.8	-0.3443 ug/L	-0.3443 ppb	14:27:41
1	SiO2†	528.6	26.1	2.1191 ug/L	2.1191 ppb	14:28:52
2	Sc Radial	4264.1	4264.1	97.0 %		14:26:49
2	Y RADIAL	4759.1	4759.1	99.97 %		14:26:29
2	Al 396.153Radial†	-70.3	5.6	5.5009 ug/L	5.5009 ppb	14:26:49
2	Ca 317.933Radial†	18.4	3.2	6.0968 ug/L	6.0968 ppb	14:26:49
2	Fe 238.204 Radial†	5.2	-3.1	-35.431 ug/L	-35.431 ppb	14:26:49
2	K 766.490 Radial†	2765.0	251.1	47.845 ug/L	47.845 ppb	14:26:29
2	Mg 279.077 IEC†	0.2	-1.3	-52.606 ug/L	-52.606 ppb	14:26:49
2	Na 589.592 Radial†	-846.1	3.0	1.0656 ug/L	1.0656 ppb	14:26:29
2	Sr 421.552†	8.3	-12.3	-0.0986 ug/L	-0.0986 ppb	14:26:29
2	Sc 361.383	820046.7	820046.7	100.15 %		14:27:46
2	Y 371.029	692570.4	692570.4	100.13 %		14:27:46
2	Ag 328.068†	155.7	-29.7	-0.1663 ug/L	-0.1663 ppb	14:27:46
2	As 188.979†	-21.4	5.4	2.9797 ug/L	2.9797 ppb	14:28:06
2	B 249.677†	-341.2	196.7	5.5226 ug/L	5.5226 ppb	14:28:06
2	Ba 233.527†	10.9	11.6	0.1074 ug/L	0.1074 ppb	14:28:06
2	Be 313.107†	-3692.5	44.0	0.0186 ug/L	0.0186 ppb	14:27:46
2	Cd 226.502†	-177.9	-7.0	-0.0978 ug/L	-0.0978 ppb	14:28:06
2	Co 228.616†	-34.2	12.0	0.3131 ug/L	0.3131 ppb	14:28:06
2	Cr 267.716†	63.7	-7.9	-0.1096 ug/L	-0.1096 ppb	14:28:06
2	Cu 324.752†	5570.5	10.2	0.0316 ug/L	0.0316 ppb	14:27:46
2	Mn 257.610†	410.2	20.5	0.0256 ug/L	0.0256 ppb	14:28:06
2	Mo 202.031†	16.5	7.9	0.7010 ug/L	0.7010 ppb	14:28:06
2	Ni 231.604†	72.9	-11.2	-0.3570 ug/L	-0.3570 ppb	14:28:06

2	P 214.914†	186.8	-0.8	-0.5492 ug/L	-0.5492 ppb	14:28:06
2	Pb 220.353†	-58.2	0.2	0.0395 ug/L	0.0395 ppb	14:28:06
2	S 181.975 Axial†	27.1	-3.1	-5.5952 ug/L	-5.5952 ppb	14:28:06
2	Sb 206.836†	28.8	5.1	2.1640 ug/L	2.1640 ppb	14:28:06
2	Se 196.026†	-18.2	-1.2	-1.1286 ug/L	-1.1286 ppb	14:28:06
2	Si 251.611†	504.7	15.7	0.5887 ug/L	0.5887 ppb	14:28:06
2	Sn 189.927†	9.4	2.2	0.4997 ug/L	0.4997 ppb	14:28:06
2	Ti 334.940†	-1163.2	-40.2	-0.0649 ug/L	-0.0649 ppb	14:27:46
2	Tl 190.801†	-24.2	5.0	1.9222 ug/L	1.9222 ppb	14:28:06
2	U 409.014†	-2198.7	8.8	0.2707 ug/L	0.2707 ppb	14:27:46
2	V 292.402†	-1351.3	-31.9	-0.2400 ug/L	-0.2400 ppb	14:27:46
2	Zn 213.857†	568.5	-2.4	-0.0213 ug/L	-0.0213 ppb	14:28:06
2	SiO2†	525.9	25.8	2.0856 ug/L	2.0856 ppb	14:29:12
3	Sc Radial	4260.5	4260.5	96.9 %		14:27:14
3	Y RADIAL	4745.0	4745.0	99.67 %		14:26:54
3	Al 396.153Radial†	-75.0	0.8	0.7173 ug/L	0.7173 ppb	14:27:14
3	Ca 317.933Radial†	17.2	2.0	3.8392 ug/L	3.8392 ppb	14:27:14
3	Fe 238.204 Radial†	9.8	1.6	18.570 ug/L	18.570 ppb	14:27:14
3	K 766.490 Radial†	2583.2	66.1	12.593 ug/L	12.593 ppb	14:26:54
3	Mg 279.077 IEC†	4.2	2.8	116.12 ug/L	116.12 ppb	14:27:14
3	Na 589.592 Radial†	-905.2	-58.7	-20.689 ug/L	-20.689 ppb	14:26:54
3	Sr 421.552†	51.1	31.9	0.2554 ug/L	0.2554 ppb	14:26:54
3	Sc 361.383	830623.4	830623.4	101.44 %		14:28:11
3	Y 371.029	700309.7	700309.7	101.25 %		14:28:11
3	Ag 328.068†	154.3	-33.0	-0.1667 ug/L	-0.1667 ppb	14:28:11
3	As 188.979†	-19.3	7.8	4.2894 ug/L	4.2894 ppb	14:28:31
3	B 249.677†	-338.5	203.7	5.7097 ug/L	5.7097 ppb	14:28:31
3	Ba 233.527†	3.3	4.0	0.0384 ug/L	0.0384 ppb	14:28:31
3	Be 313.107†	-3793.1	-8.2	-0.0031 ug/L	-0.0031 ppb	14:28:11
3	Cd 226.502†	-163.4	9.5	0.1367 ug/L	0.1367 ppb	14:28:31
3	Co 228.616†	-38.1	8.6	0.2236 ug/L	0.2236 ppb	14:28:31
3	Cr 267.716†	71.6	-1.0	-0.0114 ug/L	-0.0114 ppb	14:28:31
3	Cu 324.752†	5605.6	-26.0	-0.0864 ug/L	-0.0864 ppb	14:28:11
3	Mn 257.610†	397.9	3.2	0.0012 ug/L	0.0012 ppb	14:28:31
3	Mo 202.031†	14.3	5.6	0.4998 ug/L	0.4998 ppb	14:28:31
3	Ni 231.604†	66.4	-18.6	-0.5896 ug/L	-0.5896 ppb	14:28:31
3	P 214.914†	183.4	-6.5	-4.8409 ug/L	-4.8409 ppb	14:28:31
3	Pb 220.353†	-56.2	2.9	0.4381 ug/L	0.4381 ppb	14:28:31
3	S 181.975 Axial†	30.1	-0.5	-0.8845 ug/L	-0.8845 ppb	14:28:31
3	Sb 206.836†	25.6	1.6	0.6614 ug/L	0.6614 ppb	14:28:31
3	Se 196.026†	-20.1	-2.8	-2.3008 ug/L	-2.3008 ppb	14:28:31
3	Si 251.611†	507.2	11.8	0.4437 ug/L	0.4437 ppb	14:28:31
3	Sn 189.927†	3.8	-3.4	-0.7653 ug/L	-0.7653 ppb	14:28:31
3	Ti 334.940†	-1039.1	96.9	0.1583 ug/L	0.1583 ppb	14:28:11
3	Tl 190.801†	-26.5	2.9	1.1346 ug/L	1.1346 ppb	14:28:31
3	U 409.014†	-2141.1	93.5	2.8347 ug/L	2.8347 ppb	14:28:11
3	V 292.402†	-1290.2	45.6	0.3759 ug/L	0.3759 ppb	14:28:11
3	Zn 213.857†	545.0	-32.8	-0.3965 ug/L	-0.3965 ppb	14:28:31
3	SiO2†	528.5	21.6	1.7513 ug/L	1.7513 ppb	14:29:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	824813.1	100.73 %	0.655			0.65%
Sc Radial	4243.4	96.5 %	0.75			0.77%
Y 371.029	696050.2	100.64 %	0.568			0.56%
Y RADIAL	4726.3	99.28 %	0.949			0.96%
Ag 328.068†	-3.1	-0.0203 ug/L	0.25322	-0.0203 ppb	0.25322	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	0.6	0.5982 ug/L	4.96338	0.5982 ppb	4.96338	829.76%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	5.8	3.2029 ug/L	0.99385	3.2029 ppb	0.99385	31.03%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	204.5	5.7393 ug/L	0.23288	5.7393 ppb	0.23288	4.06%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	6.2	0.0579 ug/L	0.04318	0.0579 ppb	0.04318	74.57%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	28.3	0.0121 ug/L	0.01325	0.0121 ppb	0.01325	109.09%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	3.3	6.2692 ug/L	2.52066	6.2692 ppb	2.52066	40.21%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-2.5	-0.0351 ug/L	0.15058	-0.0351 ppb	0.15058	429.43%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	9.3	0.2423 ug/L	0.06365	0.2423 ppb	0.06365	26.27%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-1.6	-0.0225 ug/L	0.08221	-0.0225 ppb	0.08221	365.69%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-18.4	-0.0618 ug/L	0.08382	-0.0618 ppb	0.08382	135.61%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.9	-10.671 ug/L	27.2781	-10.671 ppb	27.2781	255.63%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	165.1	31.454 ug/L	17.7553	31.454 ppb	17.7553	56.45%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.7	30.653 ug/L	84.3857	30.653 ppb	84.3857	275.29%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	4.5	0.0036 ug/L	0.02100	0.0036 ppb	0.02100	589.65%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	6.3	0.5609 ug/L	0.12168	0.5609 ppb	0.12168	21.69%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-36.7	-12.921 ug/L	12.1373	-12.921 ppb	12.1373	93.94%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-13.8	-0.4387 ug/L	0.13079	-0.4387 ppb	0.13079	29.81%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-4.1	-3.0233 ug/L	2.21992	-3.0233 ppb	2.21992	73.43%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	4.9	0.7632 ug/L	0.92984	0.7632 ppb	0.92984	121.84%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-0.7	-1.1962 ug/L	4.25178	-1.1962 ppb	4.25178	355.45%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	8.9	3.7332 ug/L	4.08887	3.7332 ppb	4.08887	109.53%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-3.2	-2.6985 ug/L	1.80185	-2.6985 ppb	1.80185	66.77%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	12.3	0.4588 ug/L	0.12302	0.4588 ppb	0.12302	26.81%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-0.4	-0.0870 ug/L	0.63746	-0.0870 ppb	0.63746	732.63%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	8.0	0.0638 ug/L	0.17881	0.0638 ppb	0.17881	280.39%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	23.2	0.0383 ug/L	0.11258	0.0383 ppb	0.11258	294.02%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	3.1	1.2176 ug/L	0.66700	1.2176 ppb	0.66700	54.78%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	29.5	0.8966 ug/L	1.71320	0.8966 ppb	1.71320	191.08%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-1.1	0.0031 ug/L	0.32780	0.0031 ppb	0.32780	>999.9%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-21.3	-0.2541 ug/L	0.20321	-0.2541 ppb	0.20321	79.99%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	24.5	1.9853 ug/L	0.20340	1.9853 ppb	0.20340	10.25%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 18

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 15:12:45

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4404.0	4404.0	100 %		15:14:37
1	Y RADIAL	4730.6	4730.6	99.37 %		15:14:37
1	Al 396.153Radial†	5002.3	5070.3	4955.5 ug/L	4955.5 ppb	15:14:37
1	Ca 317.933Radial†	2665.0	2643.9	5002.8 ug/L	5002.8 ppb	15:14:57
1	Fe 238.204 Radial†	445.1	435.7	5064.4 ug/L	5064.4 ppb	15:14:57
1	K 766.490 Radial†	29328.0	26670.1	5075.1 ug/L	5075.1 ppb	15:14:37
1	Mg 279.077 IEC†	128.1	126.4	5212.2 ug/L	5212.2 ppb	15:14:57
1	Na 589.592 Radial†	26896.2	27717.1	9770.9 ug/L	9770.9 ppb	15:14:37
1	Sr 421.552†	62531.5	62384.5	500.02 ug/L	500.02 ppb	15:14:37
1	Sc 361.383	815981.5	815981.5	99.653 %		15:15:54
1	Y 371.029	678972.4	678972.4	98.168 %		15:15:54
1	Ag 328.068†	99323.4	99484.4	519.65 ug/L	519.65 ppb	15:15:59
1	As 188.979†	916.3	946.3	523.88 ug/L	523.88 ppb	15:16:19
1	B 249.677†	17665.7	18264.6	510.08 ug/L	510.08 ppb	15:15:59
1	Ba 233.527†	54677.6	54868.8	515.21 ug/L	515.21 ppb	15:15:59
1	Be 313.107†	1198712.4	1206620.3	514.94 ug/L	514.94 ppb	15:15:54
1	Cd 226.502†	35251.0	35544.4	515.65 ug/L	515.65 ppb	15:15:59
1	Co 228.616†	20174.1	20290.6	524.53 ug/L	524.53 ppb	15:15:59
1	Cr 267.716†	38269.8	38331.7	515.08 ug/L	515.08 ppb	15:15:59
1	Cu 324.752†	159857.8	154862.8	511.26 ug/L	511.26 ppb	15:15:59
1	Mn 257.610†	387826.8	388789.1	511.47 ug/L	511.47 ppb	15:15:54
1	Mo 202.031†	5749.0	5760.5	512.51 ug/L	512.51 ppb	15:16:19
1	Ni 231.604†	16400.6	16373.6	519.67 ug/L	519.67 ppb	15:15:59
1	P 214.914†	3631.4	3456.8	2475.4 ug/L	2475.4 ppb	15:16:19
1	Pb 220.353†	3246.5	3316.2	510.91 ug/L	510.91 ppb	15:16:19
1	S 181.975 Axial†	607.6	579.5	1036.6 ug/L	1036.6 ppb	15:16:19
1	Sb 206.836†	1250.0	1230.7	533.32 ug/L	533.32 ppb	15:16:19
1	Se 196.026†	594.8	613.8	529.04 ug/L	529.04 ppb	15:16:19
1	Si 251.611†	69143.7	68896.5	2609.2 ug/L	2609.2 ppb	15:15:59
1	Sn 189.927†	2261.0	2261.7	513.83 ug/L	513.83 ppb	15:16:19
1	Ti 334.940†	289769.3	291900.3	507.46 ug/L	507.46 ppb	15:15:59
1	Tl 190.801†	1279.6	1313.1	511.41 ug/L	511.41 ppb	15:16:19
1	U 409.014†	14956.9	17213.2	520.49 ug/L	520.49 ppb	15:15:59
1	V 292.402†	62622.7	64158.3	519.19 ug/L	519.19 ppb	15:15:59
1	Zn 213.857†	43109.4	42689.5	512.50 ug/L	512.50 ppb	15:15:59
1	SiO2†	68460.8	68200.0	5552.0 ug/L	5552.0 ppb	15:17:27
2	Sc Radial	4392.0	4392.0	99.9 %		15:15:02
2	Y RADIAL	4731.1	4731.1	99.38 %		15:15:02
2	Al 396.153Radial†	4974.3	5055.8	4942.1 ug/L	4942.1 ppb	15:15:02
2	Ca 317.933Radial†	2657.5	2643.6	5002.3 ug/L	5002.3 ppb	15:15:22
2	Fe 238.204 Radial†	442.7	434.5	5050.3 ug/L	5050.3 ppb	15:15:22
2	K 766.490 Radial†	29402.7	26824.3	5104.5 ug/L	5104.5 ppb	15:15:02
2	Mg 279.077 IEC†	126.8	125.3	5170.3 ug/L	5170.3 ppb	15:15:22
2	Na 589.592 Radial†	26914.6	27808.3	9803.0 ug/L	9803.0 ppb	15:15:02
2	Sr 421.552†	62368.6	62390.9	500.07 ug/L	500.07 ppb	15:15:02
2	Sc 361.383	834394.9	834394.9	101.90 %		15:16:25
2	Y 371.029	694397.6	694397.6	100.40 %		15:16:25
2	Ag 328.068†	99525.8	97483.5	509.22 ug/L	509.22 ppb	15:16:30
2	As 188.979†	888.4	898.6	497.66 ug/L	497.66 ppb	15:16:50
2	B 249.677†	17654.2	17862.1	498.82 ug/L	498.82 ppb	15:16:30
2	Ba 233.527†	54672.4	53652.9	503.79 ug/L	503.79 ppb	15:16:30
2	Be 313.107†	1208362.9	1189545.5	507.64 ug/L	507.64 ppb	15:16:25
2	Cd 226.502†	35289.2	34801.3	504.86 ug/L	504.86 ppb	15:16:30
2	Co 228.616†	20123.5	19794.2	511.69 ug/L	511.69 ppb	15:16:30
2	Cr 267.716†	38179.5	37395.5	502.52 ug/L	502.52 ppb	15:16:30
2	Cu 324.752†	159882.0	151346.5	499.65 ug/L	499.65 ppb	15:16:30
2	Mn 257.610†	391166.3	383477.9	504.49 ug/L	504.49 ppb	15:16:25
2	Mo 202.031†	5685.1	5570.5	495.62 ug/L	495.62 ppb	15:16:50
2	Ni 231.604†	16441.2	16050.3	509.41 ug/L	509.41 ppb	15:16:30

2	P 214.914†	3569.9	3316.0	2372.7 ug/L	2372.7 ppb	15:16:50
2	Pb 220.353†	3236.1	3234.0	498.25 ug/L	498.25 ppb	15:16:50
2	S 181.975 Axial†	595.9	554.6	991.99 ug/L	991.99 ppb	15:16:50
2	Sb 206.836†	1237.5	1190.8	516.03 ug/L	516.03 ppb	15:16:50
2	Se 196.026†	584.8	590.9	509.84 ug/L	509.84 ppb	15:16:50
2	Si 251.611†	69211.5	67431.8	2553.8 ug/L	2553.8 ppb	15:16:30
2	Sn 189.927†	2235.2	2186.3	496.74 ug/L	496.74 ppb	15:16:50
2	Ti 334.940†	289447.9	285167.9	495.76 ug/L	495.76 ppb	15:16:30
2	Tl 190.801†	1270.6	1276.0	496.99 ug/L	496.99 ppb	15:16:50
2	U 409.014†	15111.0	17033.2	515.06 ug/L	515.06 ppb	15:16:30
2	V 292.402†	62576.2	62725.9	507.52 ug/L	507.52 ppb	15:16:30
2	Zn 213.857†	43153.1	41777.8	501.53 ug/L	501.53 ppb	15:16:30
2	SiO2†	68493.7	66716.3	5431.3 ug/L	5431.3 ppb	15:17:32
3	Sc Radial	4459.3	4459.3	101 %		15:15:27
3	Y RADIAL	4814.6	4814.6	101.1 %		15:15:27
3	Al 396.153Radial†	4993.1	4999.3	4886.3 ug/L	4886.3 ppb	15:15:27
3	Ca 317.933Radial†	2664.6	2610.6	4939.8 ug/L	4939.8 ppb	15:15:47
3	Fe 238.204 Radial†	446.8	431.9	5019.7 ug/L	5019.7 ppb	15:15:47
3	K 766.490 Radial†	29415.5	26393.2	5022.4 ug/L	5022.4 ppb	15:15:27
3	Mg 279.077 IEC†	128.2	124.8	5148.6 ug/L	5148.6 ppb	15:15:47
3	Na 589.592 Radial†	27038.4	27524.2	9702.9 ug/L	9702.9 ppb	15:15:27
3	Sr 421.552†	62826.9	61901.4	496.15 ug/L	496.15 ppb	15:15:27
3	Sc 361.383	833630.7	833630.7	101.81 %		15:16:56
3	Y 371.029	692553.2	692553.2	100.13 %		15:16:56
3	Ag 328.068†	97710.7	95790.2	500.40 ug/L	500.40 ppb	15:17:01
3	As 188.979†	899.6	910.4	504.02 ug/L	504.02 ppb	15:17:21
3	B 249.677†	17246.9	17477.9	488.07 ug/L	488.07 ppb	15:17:01
3	Ba 233.527†	53738.1	52784.4	495.64 ug/L	495.64 ppb	15:17:01
3	Be 313.107†	1192189.2	1174746.1	501.32 ug/L	501.32 ppb	15:16:56
3	Cd 226.502†	34796.6	34349.3	498.29 ug/L	498.29 ppb	15:17:01
3	Co 228.616†	19805.2	19499.7	504.11 ug/L	504.11 ppb	15:17:01
3	Cr 267.716†	37606.7	36867.3	495.42 ug/L	495.42 ppb	15:17:01
3	Cu 324.752†	156722.8	148387.3	489.89 ug/L	489.89 ppb	15:17:01
3	Mn 257.610†	387453.6	380183.1	500.16 ug/L	500.16 ppb	15:16:56
3	Mo 202.031†	5766.5	5655.5	503.17 ug/L	503.17 ppb	15:17:21
3	Ni 231.604†	16153.9	15783.0	500.92 ug/L	500.92 ppb	15:17:01
3	P 214.914†	3634.3	3382.5	2424.3 ug/L	2424.3 ppb	15:17:21
3	Pb 220.353†	3285.2	3285.1	506.12 ug/L	506.12 ppb	15:17:21
3	S 181.975 Axial†	600.0	559.2	1000.1 ug/L	1000.1 ppb	15:17:21
3	Sb 206.836†	1263.4	1217.3	527.40 ug/L	527.40 ppb	15:17:21
3	Se 196.026†	606.3	612.5	527.75 ug/L	527.75 ppb	15:17:21
3	Si 251.611†	67911.9	66217.5	2507.6 ug/L	2507.6 ppb	15:17:01
3	Sn 189.927†	2271.2	2223.7	505.20 ug/L	505.20 ppb	15:17:21
3	Ti 334.940†	284631.4	280697.4	487.99 ug/L	487.99 ppb	15:17:01
3	Tl 190.801†	1292.7	1298.8	505.78 ug/L	505.78 ppb	15:17:21
3	U 409.014†	14495.0	16441.7	497.14 ug/L	497.14 ppb	15:17:01
3	V 292.402†	61439.3	61665.5	499.14 ug/L	499.14 ppb	15:17:01
3	Zn 213.857†	42394.5	41071.4	493.05 ug/L	493.05 ppb	15:17:01
3	SiO2†	69769.2	68030.7	5538.4 ug/L	5538.4 ppb	15:17:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	828002.3	101.12 %	1.272			1.26%
Sc Radial	4418.4	101 %	0.8			0.81%
Y 371.029	688641.1	99.565 %	1.2179			1.22%
Y RADIAL	4758.8	99.96 %	1.015			1.02%
Ag 328.068†	97586.0	509.75 ug/L	9.638	509.75 ppb	9.638	1.89%
QC value within limits for Ag 328.068 Recovery = 101.95%						
Al 396.153Radial†	5041.8	4928.0 ug/L	36.71	4928.0 ppb	36.71	0.74%
QC value within limits for Al 396.153Radial Recovery = 98.56%						
As 188.979†	918.4	508.52 ug/L	13.678	508.52 ppb	13.678	2.69%
QC value within limits for As 188.979 Recovery = 101.70%						
B 249.677†	17868.2	498.99 ug/L	11.003	498.99 ppb	11.003	2.21%
QC value within limits for B 249.677 Recovery = 99.80%						
Ba 233.527†	53768.7	504.88 ug/L	9.830	504.88 ppb	9.830	1.95%
QC value within limits for Ba 233.527 Recovery = 100.98%						
Be 313.107†	1190304.0	507.97 ug/L	6.814	507.97 ppb	6.814	1.34%
QC value within limits for Be 313.107 Recovery = 101.59%						
Ca 317.933Radial†	2632.7	4981.6 ug/L	36.27	4981.6 ppb	36.27	0.73%

QC value within limits for Ca 317.933 Radial Recovery = 99.63%						
Cd 226.502†	34898.3	506.26 ug/L	8.762	506.26 ppb	8.762	1.73%
QC value within limits for Cd 226.502 Recovery = 101.25%						
Co 228.616†	19861.5	513.44 ug/L	10.324	513.44 ppb	10.324	2.01%
QC value within limits for Co 228.616 Recovery = 102.69%						
Cr 267.716†	37531.5	504.34 ug/L	9.957	504.34 ppb	9.957	1.97%
QC value within limits for Cr 267.716 Recovery = 100.87%						
Cu 324.752†	151532.2	500.27 ug/L	10.697	500.27 ppb	10.697	2.14%
QC value within limits for Cu 324.752 Recovery = 100.05%						
Fe 238.204 Radial†	434.1	5044.8 ug/L	22.84	5044.8 ppb	22.84	0.45%
QC value within limits for Fe 238.204 Radial Recovery = 100.90%						
K 766.490 Radial†	26629.2	5067.3 ug/L	41.59	5067.3 ppb	41.59	0.82%
QC value within limits for K 766.490 Radial Recovery = 101.35%						
Mg 279.077 IEC†	125.5	5177.0 ug/L	32.36	5177.0 ppb	32.36	0.63%
QC value within limits for Mg 279.077 IEC Recovery = 103.54%						
Mn 257.610†	384150.0	505.37 ug/L	5.710	505.37 ppb	5.710	1.13%
QC value within limits for Mn 257.610 Recovery = 101.07%						
Mo 202.031†	5662.2	503.77 ug/L	8.461	503.77 ppb	8.461	1.68%
QC value within limits for Mo 202.031 Recovery = 100.75%						
Na 589.592 Radial†	27683.2	9758.9 ug/L	51.14	9758.9 ppb	51.14	0.52%
QC value within limits for Na 589.592 Radial Recovery = 97.59%						
Ni 231.604†	16069.0	510.00 ug/L	9.387	510.00 ppb	9.387	1.84%
QC value within limits for Ni 231.604 Recovery = 102.00%						
P 214.914†	3385.1	2424.1 ug/L	51.37	2424.1 ppb	51.37	2.12%
QC value within limits for P 214.914 Recovery = 96.96%						
Pb 220.353†	3278.4	505.09 ug/L	6.393	505.09 ppb	6.393	1.27%
QC value within limits for Pb 220.353 Recovery = 101.02%						
S 181.975 Axial†	564.4	1009.6 ug/L	23.75	1009.6 ppb	23.75	2.35%
QC value within limits for S 181.975 Axial Recovery = 100.96%						
Sb 206.836†	1212.9	525.58 ug/L	8.789	525.58 ppb	8.789	1.67%
QC value within limits for Sb 206.836 Recovery = 105.12%						
Se 196.026†	605.7	522.21 ug/L	10.735	522.21 ppb	10.735	2.06%
QC value within limits for Se 196.026 Recovery = 104.44%						
Si 251.611†	67515.3	2556.9 ug/L	50.86	2556.9 ppb	50.86	1.99%
QC value within limits for Si 251.611 Recovery = 102.28%						
Sn 189.927†	2223.9	505.26 ug/L	8.547	505.26 ppb	8.547	1.69%
QC value within limits for Sn 189.927 Recovery = 101.05%						
Sr 421.552†	62225.6	498.75 ug/L	2.251	498.75 ppb	2.251	0.45%
QC value within limits for Sr 421.552 Recovery = 99.75%						
Ti 334.940†	285921.8	497.07 ug/L	9.800	497.07 ppb	9.800	1.97%
QC value within limits for Ti 334.940 Recovery = 99.41%						
Tl 190.801†	1296.0	504.73 ug/L	7.266	504.73 ppb	7.266	1.44%
QC value within limits for Tl 190.801 Recovery = 100.95%						
U 409.014†	16896.0	510.90 ug/L	12.223	510.90 ppb	12.223	2.39%
QC value within limits for U 409.014 Recovery = 102.18%						
V 292.402†	62849.9	508.61 ug/L	10.069	508.61 ppb	10.069	1.98%
QC value within limits for V 292.402 Recovery = 101.72%						
Zn 213.857†	41846.3	502.36 ug/L	9.752	502.36 ppb	9.752	1.94%
QC value within limits for Zn 213.857 Recovery = 100.47%						
Sio2†	67649.0	5507.2 ug/L	66.08	5507.2 ppb	66.08	1.20%
QC value within limits for SiO2 Recovery = 102.99%						
All analyte(s) passed QC.						

Sequence No.: 19

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 15:19:47

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	4561.2	4561.2	104 %		15:21:39
1	Y RADIAL	4943.3	4943.3	103.8 %		15:21:39
1	Al 396.153Radial†	-82.3	-1.3	-1.2627 ug/L	-1.2627 ppb	15:21:59
1	Ca 317.933Radial†	20.9	4.4	8.3378 ug/L	8.3378 ppb	15:21:59
1	Fe 238.204 Radial†	7.8	-0.9	-10.521 ug/L	-10.521 ppb	15:21:59
1	K 766.490 Radial†	2758.8	59.5	11.332 ug/L	11.332 ppb	15:21:39
1	Mg 279.077 IEC†	2.6	1.0	39.950 ug/L	39.950 ppb	15:21:59
1	Na 589.592 Radial†	-843.2	62.6	22.070 ug/L	22.070 ppb	15:21:39
1	Sr 421.552†	26.0	4.2	0.0335 ug/L	0.0335 ppb	15:21:39
1	Sc 361.383	812531.2	812531.2	99.231 %		15:22:56
1	Y 371.029	687107.4	687107.4	99.344 %		15:22:56
1	Ag 328.068†	225.0	41.6	0.2104 ug/L	0.2104 ppb	15:22:56
1	As 188.979†	-22.2	4.5	2.4473 ug/L	2.4473 ppb	15:23:16
1	B 249.677†	-303.9	231.1	6.4852 ug/L	6.4852 ppb	15:23:16
1	Ba 233.527†	3.7	4.4	0.0400 ug/L	0.0400 ppb	15:23:16
1	Be 313.107†	-3705.1	-2.7	-0.0013 ug/L	-0.0013 ppb	15:22:56
1	Cd 226.502†	-168.8	0.5	0.0088 ug/L	0.0088 ppb	15:23:16
1	Co 228.616†	-45.5	0.4	0.0116 ug/L	0.0116 ppb	15:23:16
1	Cr 267.716†	74.3	3.4	0.0438 ug/L	0.0438 ppb	15:23:16
1	Cu 324.752†	5446.3	-63.5	-0.2108 ug/L	-0.2108 ppb	15:22:56
1	Mn 257.610†	438.5	52.9	0.0668 ug/L	0.0668 ppb	15:23:16
1	Mo 202.031†	15.7	7.3	0.6438 ug/L	0.6438 ppb	15:23:16
1	Ni 231.604†	66.2	-17.3	-0.5503 ug/L	-0.5503 ppb	15:23:16
1	P 214.914†	186.1	0.3	0.2556 ug/L	0.2556 ppb	15:23:16
1	Pb 220.353†	-59.8	-2.0	-0.3012 ug/L	-0.3012 ppb	15:23:16
1	S 181.975 Axial†	32.2	2.2	4.0167 ug/L	4.0167 ppb	15:23:16
1	Sb 206.836†	42.0	18.7	7.7890 ug/L	7.7890 ppb	15:23:16
1	Se 196.026†	-9.1	7.8	6.4898 ug/L	6.4898 ppb	15:23:16
1	Si 251.611†	517.9	33.8	1.2738 ug/L	1.2738 ppb	15:23:16
1	Sn 189.927†	-0.6	-7.7	-1.7537 ug/L	-1.7537 ppb	15:23:16
1	Ti 334.940†	-1144.0	-31.6	-0.0576 ug/L	-0.0576 ppb	15:22:56
1	Tl 190.801†	-20.8	8.1	3.1394 ug/L	3.1394 ppb	15:23:16
1	U 409.014†	-2158.3	29.2	0.8862 ug/L	0.8862 ppb	15:22:56
1	V 292.402†	-1354.7	-47.7	-0.3679 ug/L	-0.3679 ppb	15:22:56
1	Zn 213.857†	584.1	18.5	0.2295 ug/L	0.2295 ppb	15:23:16
1	SiO2†	515.7	20.4	1.6444 ug/L	1.6444 ppb	15:24:27
2	Sc Radial	4315.7	4315.7	98.2 %		15:22:05
2	Y RADIAL	4683.2	4683.2	98.37 %		15:22:05
2	Al 396.153Radial†	-77.4	-0.7	-0.6792 ug/L	-0.6792 ppb	15:22:25
2	Ca 317.933Radial†	16.9	1.6	2.9400 ug/L	2.9400 ppb	15:22:25
2	Fe 238.204 Radial†	12.0	3.8	43.926 ug/L	43.926 ppb	15:22:25
2	K 766.490 Radial†	2745.9	197.6	37.644 ug/L	37.644 ppb	15:22:05
2	Mg 279.077 IEC†	0.9	-0.6	-24.744 ug/L	-24.744 ppb	15:22:25
2	Na 589.592 Radial†	-812.0	48.1	16.974 ug/L	16.974 ppb	15:22:05
2	Sr 421.552†	39.4	19.4	0.1551 ug/L	0.1551 ppb	15:22:05
2	Sc 361.383	830170.6	830170.6	101.39 %		15:23:22
2	Y 371.029	701100.0	701100.0	101.37 %		15:23:22
2	Ag 328.068†	161.1	-26.3	-0.1273 ug/L	-0.1273 ppb	15:23:22
2	As 188.979†	-26.5	0.7	0.3885 ug/L	0.3885 ppb	15:23:42
2	B 249.677†	-305.1	236.5	6.6262 ug/L	6.6262 ppb	15:23:42
2	Ba 233.527†	0.3	1.0	0.0108 ug/L	0.0108 ppb	15:23:42
2	Be 313.107†	-3685.3	96.1	0.0413 ug/L	0.0413 ppb	15:23:22
2	Cd 226.502†	-165.1	7.8	0.1093 ug/L	0.1093 ppb	15:23:42
2	Co 228.616†	-36.9	9.8	0.2516 ug/L	0.2516 ppb	15:23:42
2	Cr 267.716†	87.9	15.2	0.2059 ug/L	0.2059 ppb	15:23:42
2	Cu 324.752†	5508.2	-119.1	-0.3942 ug/L	-0.3942 ppb	15:23:22
2	Mn 257.610†	409.3	14.6	0.0246 ug/L	0.0246 ppb	15:23:42
2	Mo 202.031†	7.6	-1.1	-0.0920 ug/L	-0.0920 ppb	15:23:42
2	Ni 231.604†	72.4	-12.6	-0.4018 ug/L	-0.4018 ppb	15:23:42

2	P 214.914†	194.2	4.3	3.2216 ug/L	3.2216 ppb	15:23:42
2	Pb 220.353†	-59.1	0.0	-0.0005 ug/L	-0.0005 ppb	15:23:42
2	S 181.975 Axial†	32.1	1.4	2.5716 ug/L	2.5716 ppb	15:23:42
2	Sb 206.836†	28.8	4.7	1.9615 ug/L	1.9615 ppb	15:23:42
2	Se 196.026†	-20.5	-3.3	-2.6269 ug/L	-2.6269 ppb	15:23:42
2	Si 251.611†	502.8	7.7	0.2951 ug/L	0.2951 ppb	15:23:42
2	Sn 189.927†	3.6	-3.6	-0.8238 ug/L	-0.8238 ppb	15:23:42
2	Ti 334.940†	-1041.5	93.9	0.1629 ug/L	0.1629 ppb	15:23:22
2	Tl 190.801†	-31.4	-1.9	-0.7308 ug/L	-0.7308 ppb	15:23:42
2	U 409.014†	-2028.3	203.6	6.1723 ug/L	6.1723 ppb	15:23:22
2	V 292.402†	-1316.9	18.5	0.1514 ug/L	0.1514 ppb	15:23:22
2	Zn 213.857†	587.0	8.9	0.1045 ug/L	0.1045 ppb	15:23:42
2	SiO2†	533.5	26.8	2.1935 ug/L	2.1935 ppb	15:24:47
3	Sc Radial	4508.6	4508.6	103 %		15:22:30
3	Y RADIAL	4909.7	4909.7	103.1 %		15:22:30
3	Al 396.153Radial†	-70.5	9.3	9.1260 ug/L	9.1260 ppb	15:22:50
3	Ca 317.933Radial†	15.7	-0.3	-0.6519 ug/L	-0.6519 ppb	15:22:50
3	Fe 238.204 Radial†	8.7	0.1	0.5782 ug/L	0.5782 ppb	15:22:50
3	K 766.490 Radial†	2587.6	-76.3	-14.548 ug/L	-14.548 ppb	15:22:30
3	Mg 279.077 IEC†	1.4	-0.2	-7.9990 ug/L	-7.9990 ppb	15:22:50
3	Na 589.592 Radial†	-873.2	23.9	8.4342 ug/L	8.4342 ppb	15:22:30
3	Sr 421.552†	25.7	4.2	0.0337 ug/L	0.0337 ppb	15:22:30
3	Sc 361.383	814827.9	814827.9	99.512 %		15:23:47
3	Y 371.029	686828.7	686828.7	99.303 %		15:23:47
3	Ag 328.068†	97.6	-87.1	-0.4563 ug/L	-0.4563 ppb	15:23:47
3	As 188.979†	-25.2	1.5	0.8026 ug/L	0.8026 ppb	15:24:07
3	B 249.677†	-327.7	208.0	5.8359 ug/L	5.8359 ppb	15:24:07
3	Ba 233.527†	-5.0	-4.3	-0.0411 ug/L	-0.0411 ppb	15:24:07
3	Be 313.107†	-3699.6	13.2	0.0055 ug/L	0.0055 ppb	15:23:47
3	Cd 226.502†	-177.6	-7.8	-0.1132 ug/L	-0.1132 ppb	15:24:07
3	Co 228.616†	-50.0	-4.0	-0.1022 ug/L	-0.1022 ppb	15:24:07
3	Cr 267.716†	68.5	-2.6	-0.0370 ug/L	-0.0370 ppb	15:24:07
3	Cu 324.752†	5513.3	-11.7	-0.0402 ug/L	-0.0402 ppb	15:23:47
3	Mn 257.610†	419.8	32.8	0.0435 ug/L	0.0435 ppb	15:24:07
3	Mo 202.031†	17.2	8.8	0.7797 ug/L	0.7797 ppb	15:24:07
3	Ni 231.604†	63.2	-20.6	-0.6526 ug/L	-0.6526 ppb	15:24:07
3	P 214.914†	191.3	4.9	3.6842 ug/L	3.6842 ppb	15:24:07
3	Pb 220.353†	-45.4	12.7	1.9561 ug/L	1.9561 ppb	15:24:07
3	S 181.975 Axial†	30.9	0.9	1.5220 ug/L	1.5220 ppb	15:24:07
3	Sb 206.836†	21.1	-2.5	-1.0139 ug/L	-1.0139 ppb	15:24:07
3	Se 196.026†	-17.9	-1.0	-0.8526 ug/L	-0.8526 ppb	15:24:07
3	Si 251.611†	522.0	36.3	1.3701 ug/L	1.3701 ppb	15:24:07
3	Sn 189.927†	9.5	2.4	0.5431 ug/L	0.5431 ppb	15:24:07
3	Ti 334.940†	-1157.4	-41.8	-0.0736 ug/L	-0.0736 ppb	15:23:47
3	Tl 190.801†	-26.3	2.6	1.0117 ug/L	1.0117 ppb	15:24:07
3	U 409.014†	-2090.9	103.0	3.1251 ug/L	3.1251 ppb	15:23:47
3	V 292.402†	-1369.2	-58.5	-0.4501 ug/L	-0.4501 ppb	15:23:47
3	Zn 213.857†	584.1	16.9	0.2084 ug/L	0.2084 ppb	15:24:07
3	SiO2†	531.2	34.5	2.7955 ug/L	2.7955 ppb	15:25:07

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	819176.6	100.04 %	1.171			1.17%
Sc Radial	4461.8	102 %	2.9			2.90%
Y 371.029	691678.7	100.00 %	1.180			1.18%
Y RADIAL	4845.4	101.8 %	2.97			2.92%
Ag 328.068†	-23.9	-0.1244 ug/L	0.33336	-0.1244 ppb	0.33336	267.92%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	2.5	2.3947 ug/L	5.83674	2.3947 ppb	5.83674	243.73%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.2	1.2128 ug/L	1.08894	1.2128 ppb	1.08894	89.79%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	225.2	6.3158 ug/L	0.42150	6.3158 ppb	0.42150	6.67%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	0.4	0.0032 ug/L	0.04111	0.0032 ppb	0.04111	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	35.5	0.0152 ug/L	0.02288	0.0152 ppb	0.02288	150.99%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1.9	3.5420 ug/L	4.52499	3.5420 ppb	4.52499	127.75%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	0.2 0.0016 ug/L	0.11138 0.0016 ppb	0.11138 >999.9%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	2.0 0.0537 ug/L	0.18063 0.0537 ppb	0.18063 336.65%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	5.3 0.0709 ug/L	0.12370 0.0709 ppb	0.12370 174.51%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-64.8 -0.2151 ug/L	0.17704 -0.2151 ppb	0.17704 82.32%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	1.0 11.328 ug/L	28.7716 11.328 ppb	28.7716 253.99%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	60.3 11.476 ug/L	26.0963 11.476 ppb	26.0963 227.40%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	0.1 2.4023 ug/L	33.57814 2.4023 ppb	33.57814 >999.9%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	33.4 0.0450 ug/L	0.02116 0.0450 ppb	0.02116 47.05%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	5.0 0.4438 ug/L	0.46896 0.4438 ppb	0.46896 105.66%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	44.9 15.826 ug/L	6.8900 15.826 ppb	6.8900 43.54%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-16.8 -0.5349 ug/L	0.12613 -0.5349 ppb	0.12613 23.58%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	3.2 2.3871 ug/L	1.86043 2.3871 ppb	1.86043 77.94%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	3.6 0.5514 ug/L	1.22574 0.5514 ppb	1.22574 222.28%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	1.5 2.7034 ug/L	1.25258 2.7034 ppb	1.25258 46.33%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	7.0 2.9122 ug/L	4.47781 2.9122 ppb	4.47781 153.76%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	1.2 1.0034 ug/L	4.83345 1.0034 ppb	4.83345 481.70%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	25.9 0.9797 ug/L	0.59481 0.9797 ppb	0.59481 60.72%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	-3.0 -0.6781 ug/L	1.15533 -0.6781 ppb	1.15533 170.37%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	9.2 0.0741 ug/L	0.07015 0.0741 ppb	0.07015 94.68%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	6.8 0.0106 ug/L	0.13217 0.0106 ppb	0.13217 >999.9%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	2.9 1.1401 ug/L	1.93830 1.1401 ppb	1.93830 170.01%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	111.9 3.3945 ug/L	2.65336 3.3945 ppb	2.65336 78.17%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-29.2 -0.2222 ug/L	0.32618 -0.2222 ppb	0.32618 146.79%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	14.8 0.1808 ug/L	0.06693 0.1808 ppb	0.06693 37.01%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	27.2 2.2111 ug/L	0.57579 2.2111 ppb	0.57579 26.04%
QC value within limits for SiO2	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 20
 Sample ID: 1202053063|957496|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 38
 Date Collected: 3/19/2010 15:27:18
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202053063|957496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4311.3	4311.3	98.1 %		15:29:30
1	Y RADIAL	4747.7	4747.7	99.73 %		15:29:10
1	Al 396.153Radial†	-71.8	4.9	4.7583 ug/L	4.7583 ppb	15:29:30
1	Ca 317.933Radial†	21.0	5.7	10.842 ug/L	10.842 ppb	15:29:30
1	Fe 238.204 Radial†	8.5	0.2	2.3420 ug/L	2.3420 ppb	15:29:30
1	K 766.490 Radial†	2728.7	183.0	34.849 ug/L	34.849 ppb	15:29:10
1	Mg 279.077 IEC†	3.4	2.0	80.811 ug/L	80.811 ppb	15:29:30
1	Na 589.592 Radial†	-789.0	70.8	24.967 ug/L	24.967 ppb	15:29:10
1	Sr 421.552†	50.0	30.1	0.2415 ug/L	0.2415 ppb	15:29:10
1	Sc 361.383	826346.2	826346.2	100.92 %		15:30:27
1	Y 371.029	697539.6	697539.6	100.85 %		15:30:27
1	Ag 328.068†	165.6	-21.1	-0.1107 ug/L	-0.1107 ppb	15:30:27
1	As 188.979†	-23.6	3.4	1.8886 ug/L	1.8886 ppb	15:30:47
1	B 249.677†	-312.4	227.8	6.3895 ug/L	6.3895 ppb	15:30:47
1	Ba 233.527†	0.3	1.0	0.0104 ug/L	0.0104 ppb	15:30:47
1	Be 313.107†	-3681.2	83.3	0.0364 ug/L	0.0364 ppb	15:30:27
1	Cd 226.502†	-165.5	6.7	0.0972 ug/L	0.0972 ppb	15:30:47
1	Co 228.616†	-43.2	3.4	0.0878 ug/L	0.0878 ppb	15:30:47
1	Cr 267.716†	107.8	35.3	0.4730 ug/L	0.4730 ppb	15:30:47
1	Cu 324.752†	5642.8	39.4	0.1283 ug/L	0.1283 ppb	15:30:27
1	Mn 257.610†	709.8	314.3	0.4101 ug/L	0.4101 ppb	15:30:47
1	Mo 202.031†	16.8	8.1	0.7231 ug/L	0.7231 ppb	15:30:47
1	Ni 231.604†	92.1	7.2	0.2285 ug/L	0.2285 ppb	15:30:47
1	P 214.914†	197.2	8.1	6.0207 ug/L	6.0207 ppb	15:30:47
1	Pb 220.353†	-48.1	10.7	1.6403 ug/L	1.6403 ppb	15:30:47
1	S 181.975 Axial†	33.1	2.6	4.6441 ug/L	4.6441 ppb	15:30:47
1	Sb 206.836†	42.5	18.4	7.7344 ug/L	7.7344 ppb	15:30:47
1	Se 196.026†	-13.5	3.6	3.0323 ug/L	3.0323 ppb	15:30:47
1	Si 251.611†	996.4	499.1	18.939 ug/L	18.939 ppb	15:30:47
1	Sn 189.927†	12.2	5.0	1.1269 ug/L	1.1269 ppb	15:30:47
1	Ti 334.940†	-904.4	225.1	0.3845 ug/L	0.3845 ppb	15:30:27
1	Tl 190.801†	-21.6	7.7	2.9737 ug/L	2.9737 ppb	15:30:47
1	U 409.014†	-2100.9	122.5	3.7137 ug/L	3.7137 ppb	15:30:27
1	V 292.402†	-1293.8	35.4	0.3009 ug/L	0.3009 ppb	15:30:27
1	Zn 213.857†	770.3	193.2	2.3394 ug/L	2.3394 ppb	15:30:47
1	SiO2†	1053.8	544.8	44.445 ug/L	44.445 ppb	15:31:43
2	Sc Radial	4313.5	4313.5	98.1 %		15:29:56
2	Y RADIAL	4820.0	4820.0	101.2 %		15:29:36
2	Al 396.153Radial†	-56.5	20.5	20.180 ug/L	20.180 ppb	15:29:56
2	Ca 317.933Radial†	23.5	8.2	15.599 ug/L	15.599 ppb	15:29:56
2	Fe 238.204 Radial†	10.8	2.6	29.828 ug/L	29.828 ppb	15:29:56
2	K 766.490 Radial†	2763.7	217.2	41.361 ug/L	41.361 ppb	15:29:36
2	Mg 279.077 IEC†	4.5	3.0	124.37 ug/L	124.37 ppb	15:29:56
2	Na 589.592 Radial†	-807.3	52.6	18.540 ug/L	18.540 ppb	15:29:36
2	Sr 421.552†	45.7	25.7	0.2062 ug/L	0.2062 ppb	15:29:36
2	Sc 361.383	826597.8	826597.8	100.95 %		15:30:53
2	Y 371.029	697109.8	697109.8	100.79 %		15:30:53
2	Ag 328.068†	215.3	28.2	0.1495 ug/L	0.1495 ppb	15:30:53
2	As 188.979†	-21.5	5.5	3.0294 ug/L	3.0294 ppb	15:31:13
2	B 249.677†	-326.4	214.1	6.0009 ug/L	6.0009 ppb	15:31:13
2	Ba 233.527†	18.2	18.8	0.1760 ug/L	0.1760 ppb	15:31:13
2	Be 313.107†	-3759.2	7.2	0.0041 ug/L	0.0041 ppb	15:30:53
2	Cd 226.502†	-166.6	5.6	0.0785 ug/L	0.0785 ppb	15:31:13
2	Co 228.616†	-55.5	-8.8	-0.2289 ug/L	-0.2289 ppb	15:31:13
2	Cr 267.716†	97.4	25.0	0.3356 ug/L	0.3356 ppb	15:31:13
2	Cu 324.752†	5686.5	81.0	0.2662 ug/L	0.2662 ppb	15:30:53
2	Mn 257.610†	712.0	316.3	0.4137 ug/L	0.4137 ppb	15:31:13
2	Mo 202.031†	5.9	-2.7	-0.2378 ug/L	-0.2378 ppb	15:31:13
2	Ni 231.604†	81.8	-3.0	-0.0950 ug/L	-0.0950 ppb	15:31:13

2	P 214.914†	183.9	-5.1	-3.8867 ug/L	-3.8867 ppb	15:31:13
2	Pb 220.353†	-54.3	4.5	0.6934 ug/L	0.6934 ppb	15:31:13
2	S 181.975 Axial†	24.8	-5.7	-10.124 ug/L	-10.124 ppb	15:31:13
2	Sb 206.836†	32.6	8.6	3.6245 ug/L	3.6245 ppb	15:31:13
2	Se 196.026†	-17.4	-0.3	-0.1583 ug/L	-0.1583 ppb	15:31:13
2	Si 251.611†	983.9	486.5	18.470 ug/L	18.470 ppb	15:31:13
2	Sn 189.927†	16.8	9.4	2.1414 ug/L	2.1414 ppb	15:31:13
2	Ti 334.940†	-860.9	268.4	0.4563 ug/L	0.4563 ppb	15:30:53
2	Tl 190.801†	-27.0	2.3	0.9112 ug/L	0.9112 ppb	15:31:13
2	U 409.014†	-2051.5	172.0	5.2141 ug/L	5.2141 ppb	15:30:53
2	V 292.402†	-1378.0	-47.6	-0.3760 ug/L	-0.3760 ppb	15:30:53
2	Zn 213.857†	757.6	180.4	2.1818 ug/L	2.1818 ppb	15:31:13
2	SiO2†	1014.4	505.5	41.264 ug/L	41.264 ppb	15:31:48
3	Sc Radial	4284.1	4284.1	97.5 %		15:30:21
3	Y RADIAL	4829.7	4829.7	101.5 %		15:30:01
3	Al 396.153Radial†	-69.2	7.1	6.9835 ug/L	6.9835 ppb	15:30:21
3	Ca 317.933Radial†	27.5	12.5	23.705 ug/L	23.705 ppb	15:30:21
3	Fe 238.204 Radial†	9.6	1.4	16.590 ug/L	16.590 ppb	15:30:21
3	K 766.490 Radial†	2652.8	122.7	23.370 ug/L	23.370 ppb	15:30:01
3	Mg 279.077 IEC†	2.3	0.9	35.605 ug/L	35.605 ppb	15:30:21
3	Na 589.592 Radial†	-797.4	57.1	20.112 ug/L	20.112 ppb	15:30:01
3	Sr 421.552†	38.1	18.3	0.1466 ug/L	0.1466 ppb	15:30:01
3	Sc 361.383	813841.3	813841.3	99.391 %		15:31:18
3	Y 371.029	686956.7	686956.7	99.322 %		15:31:18
3	Ag 328.068†	241.3	57.7	0.3006 ug/L	0.3006 ppb	15:31:18
3	As 188.979†	-24.8	1.9	1.0287 ug/L	1.0287 ppb	15:31:38
3	B 249.677†	-340.1	195.2	5.4743 ug/L	5.4743 ppb	15:31:38
3	Ba 233.527†	3.5	4.2	0.0396 ug/L	0.0396 ppb	15:31:38
3	Be 313.107†	-3657.0	51.6	0.0223 ug/L	0.0223 ppb	15:31:18
3	Cd 226.502†	-180.0	-10.5	-0.1525 ug/L	-0.1525 ppb	15:31:38
3	Co 228.616†	-52.7	-6.8	-0.1762 ug/L	-0.1762 ppb	15:31:38
3	Cr 267.716†	98.2	27.3	0.3661 ug/L	0.3661 ppb	15:31:38
3	Cu 324.752†	5603.4	85.8	0.2819 ug/L	0.2819 ppb	15:31:18
3	Mn 257.610†	722.6	338.0	0.4445 ug/L	0.4445 ppb	15:31:38
3	Mo 202.031†	11.7	3.2	0.2862 ug/L	0.2862 ppb	15:31:38
3	Ni 231.604†	87.7	4.2	0.1323 ug/L	0.1323 ppb	15:31:38
3	P 214.914†	196.5	10.4	7.6609 ug/L	7.6609 ppb	15:31:38
3	Pb 220.353†	-55.4	2.5	0.3912 ug/L	0.3912 ppb	15:31:38
3	S 181.975 Axial†	26.1	-3.9	-6.9898 ug/L	-6.9898 ppb	15:31:38
3	Sb 206.836†	29.4	5.9	2.4708 ug/L	2.4708 ppb	15:31:38
3	Se 196.026†	-10.8	6.1	5.1012 ug/L	5.1012 ppb	15:31:38
3	Si 251.611†	1000.5	518.5	19.679 ug/L	19.679 ppb	15:31:38
3	Sn 189.927†	8.1	1.0	0.2222 ug/L	0.2222 ppb	15:31:38
3	Ti 334.940†	-1030.6	84.3	0.1451 ug/L	0.1451 ppb	15:31:18
3	Tl 190.801†	-32.8	-3.9	-1.4993 ug/L	-1.4993 ppb	15:31:38
3	U 409.014†	-2064.6	127.0	3.8494 ug/L	3.8494 ppb	15:31:18
3	V 292.402†	-1327.4	-18.1	-0.1351 ug/L	-0.1351 ppb	15:31:18
3	Zn 213.857†	751.0	185.5	2.2437 ug/L	2.2437 ppb	15:31:38
3	SiO2†	981.7	488.4	39.849 ug/L	39.849 ppb	15:31:53

Mean Data: 1202053063|957496|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	822261.7	100.42 %		0.891				0.89%
Sc Radial	4302.9	97.9 %		0.37				0.38%
Y 371.029	693868.7	100.32 %		0.866				0.86%
Y RADIAL	4799.1	100.8 %		0.94				0.93%
Ag 328.068†	21.6	0.1131 ug/L		0.20800	0.1131 ppb		0.20800	183.87%
Al 396.153Radial†	10.8	10.641 ug/L		8.3361	10.641 ppb		8.3361	78.34%
As 188.979†	3.6	1.9822 ug/L		1.00365	1.9822 ppb		1.00365	50.63%
B 249.677†	212.3	5.9549 ug/L		0.45937	5.9549 ppb		0.45937	7.71%
Ba 233.527†	8.0	0.0753 ug/L		0.08839	0.0753 ppb		0.08839	117.35%
Be 313.107†	47.4	0.0209 ug/L		0.01616	0.0209 ppb		0.01616	77.23%
Ca 317.933Radial†	8.8	16.715 ug/L		6.5034	16.715 ppb		6.5034	38.91%
Cd 226.502†	0.6	0.0077 ug/L		0.13910	0.0077 ppb		0.13910	>999.9%
Co 228.616†	-4.1	-0.1058 ug/L		0.16968	-0.1058 ppb		0.16968	160.41%
Cr 267.716†	29.2	0.3916 ug/L		0.07214	0.3916 ppb		0.07214	18.42%
Cu 324.752†	68.7	0.2254 ug/L		0.08452	0.2254 ppb		0.08452	37.49%
Fe 238.204 Radial†	1.4	16.253 ug/L		13.7462	16.253 ppb		13.7462	84.57%
K 766.490 Radial†	174.3	33.193 ug/L		9.1092	33.193 ppb		9.1092	27.44%

Mg 279.077 IEC†	1.9	80.261 ug/L	44.3837	80.261 ppb	44.3837	55.30%
Mn 257.610†	322.8	0.4228 ug/L	0.01893	0.4228 ppb	0.01893	4.48%
Mo 202.031†	2.9	0.2572 ug/L	0.48107	0.2572 ppb	0.48107	187.06%
Na 589.592 Radial†	60.2	21.206 ug/L	3.3507	21.206 ppb	3.3507	15.80%
Ni 231.604†	2.8	0.0886 ug/L	0.16609	0.0886 ppb	0.16609	187.44%
P 214.914†	4.4	3.2650 ug/L	6.24755	3.2650 ppb	6.24755	191.35%
Pb 220.353†	5.9	0.9083 ug/L	0.65170	0.9083 ppb	0.65170	71.75%
S 181.975 Axial†	-2.3	-4.1566 ug/L	7.78111	-4.1566 ppb	7.78111	187.20%
Sb 206.836†	11.0	4.6099 ug/L	2.76670	4.6099 ppb	2.76670	60.02%
Se 196.026†	3.1	2.6584 ug/L	2.64962	2.6584 ppb	2.64962	99.67%
Si 251.611†	501.3	19.029 ug/L	0.6093	19.029 ppb	0.6093	3.20%
Sn 189.927†	5.1	1.1635 ug/L	0.96010	1.1635 ppb	0.96010	82.52%
Sr 421.552†	24.7	0.1981 ug/L	0.04798	0.1981 ppb	0.04798	24.22%
Ti 334.940†	192.6	0.3286 ug/L	0.16295	0.3286 ppb	0.16295	49.58%
Tl 190.801†	2.0	0.7952 ug/L	2.23874	0.7952 ppb	2.23874	281.53%
U 409.014†	140.5	4.2591 ug/L	0.82984	4.2591 ppb	0.82984	19.48%
V 292.402†	-10.1	-0.0701 ug/L	0.34310	-0.0701 ppb	0.34310	489.72%
Zn 213.857†	186.4	2.2550 ug/L	0.07939	2.2550 ppb	0.07939	3.52%
SiO2†	512.9	41.853 ug/L	2.3539	41.853 ppb	2.3539	5.62%

Sequence No.: 21
 Sample ID: 1202053068|957496|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 39
 Date Collected: 3/19/2010 15:34:04
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202053068|957496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4524.4	4524.4	103 %		15:36:17
1	Y RADIAL	5423.6	5423.6	113.9 %		15:36:17
1	Al 396.153Radial†	94841.7	92208.8	90551 ug/L	90551 ppb	15:35:57
1	Ca 317.933Radial†	53418.6	51875.9	98160 ug/L	98160 ppb	15:35:57
1	Fe 238.204 Radial†	16176.3	15705.5	182000 ug/L	182000 ppb	15:35:57
1	K 766.490 Radial†	225055.6	216023.7	41119 ug/L	41119 ppb	15:35:57
1	Mg 279.077 IEC†	956.2	927.3	38068 ug/L	38068 ppb	15:36:17
1	Na 589.592 Radial†	28777.6	28830.1	10163 ug/L	10163 ppb	15:35:57
1	Sr 421.552†	289228.7	280940.3	2251.2 ug/L	2251.2 ppb	15:35:57
1	Sc 361.383	819446.2	819446.2	100.08 %		15:37:21
1	Y 371.029	751771.9	751771.9	108.69 %		15:37:21
1	Ag 328.068†	48413.6	48191.8	310.30 ug/L	310.30 ppb	15:37:21
1	As 188.979†	1816.4	1841.8	1102.6 ug/L	1102.6 ppb	15:37:41
1	B 249.677†	53266.0	53762.9	1476.1 ug/L	1476.1 ppb	15:37:21
1	Ba 233.527†	206502.3	206346.4	1941.0 ug/L	1941.0 ppb	15:37:21
1	Be 313.107†	1835774.3	1838113.1	795.77 ug/L	795.77 ppb	15:37:15
1	Cd 226.502†	40891.6	41031.3	577.36 ug/L	577.36 ppb	15:37:41
1	Co 228.616†	35476.0	35495.3	903.76 ug/L	903.76 ppb	15:37:41
1	Cr 267.716†	173001.2	172798.5	2338.3 ug/L	2338.3 ppb	15:37:21
1	Cu 324.752†	550787.8	544818.1	1808.4 ug/L	1808.4 ppb	15:37:21
1	Mn 257.610†	4104139.5	4100638.0	5408.0 ug/L	5408.0 ppb	15:37:15
1	Mo 202.031†	5370.0	5357.4	491.52 ug/L	491.52 ppb	15:37:41
1	Ni 231.604†	41527.2	41411.6	1314.6 ug/L	1314.6 ppb	15:37:21
1	P 214.914†	12058.9	11862.4	8364.7 ug/L	8364.7 ppb	15:37:41
1	Pb 220.353†	5490.7	5544.8	847.54 ug/L	847.54 ppb	15:37:41
1	S 181.975 Axial†	2210.9	2179.0	3884.0 ug/L	3884.0 ppb	15:37:41
1	Sb 206.836†	2771.3	2745.5	1155.2 ug/L	1155.2 ppb	15:37:41
1	Se 196.026†	2945.0	2959.7	3019.2 ug/L	3019.2 ppb	15:37:41
1	Si 251.611†	1184141.1	1182754.9	44895 ug/L	44895 ppb	15:37:15
1	Sn 189.927†	4484.2	4473.6	1022.2 ug/L	1022.2 ppb	15:37:41
1	Ti 334.940†	3316804.8	3315410.6	5774.9 ug/L	5774.9 ppb	15:37:15
1	Tl 190.801†	2969.8	2996.6	1226.6 ug/L	1226.6 ppb	15:37:41
1	U 409.014†	-6913.9	-4704.5	-168.66 ug/L	-168.66 ppb	15:37:21
1	V 292.402†	154688.7	155888.9	1218.5 ug/L	1218.5 ppb	15:37:21
1	Zn 213.857†	474549.1	473619.1	5700.7 ug/L	5700.7 ppb	15:37:21
1	SiO2†	1178055.1	1176662.4	96016 ug/L	96016 ppb	15:38:51
2	Sc Radial	4485.4	4485.4	102 %		15:36:42
2	Y RADIAL	5374.4	5374.4	112.9 %		15:36:42
2	Al 396.153Radial†	97911.7	96017.7	94292 ug/L	94292 ppb	15:36:22
2	Ca 317.933Radial†	54713.1	53595.4	101410 ug/L	101410 ppb	15:36:22
2	Fe 238.204 Radial†	16517.2	16176.1	187460 ug/L	187460 ppb	15:36:22
2	K 766.490 Radial†	230443.5	223203.1	42486 ug/L	42486 ppb	15:36:22
2	Mg 279.077 IEC†	952.5	931.8	38247 ug/L	38247 ppb	15:36:42
2	Na 589.592 Radial†	29511.3	29792.0	10502 ug/L	10502 ppb	15:36:22
2	Sr 421.552†	298432.6	292400.7	2343.1 ug/L	2343.1 ppb	15:36:22
2	Sc 361.383	819256.0	819256.0	100.05 %		15:37:53
2	Y 371.029	752490.4	752490.4	108.80 %		15:37:53
2	Ag 328.068†	48689.4	48478.6	313.45 ug/L	313.45 ppb	15:37:53
2	As 188.979†	1818.5	1844.3	1105.4 ug/L	1105.4 ppb	15:38:13
2	B 249.677†	53463.3	53972.6	1481.1 ug/L	1481.1 ppb	15:37:53
2	Ba 233.527†	206678.8	206570.8	1943.3 ug/L	1943.3 ppb	15:37:53
2	Be 313.107†	1834125.5	1836891.1	795.27 ug/L	795.27 ppb	15:37:47
2	Cd 226.502†	40731.3	40880.4	574.61 ug/L	574.61 ppb	15:38:13
2	Co 228.616†	35386.3	35413.9	901.56 ug/L	901.56 ppb	15:38:13
2	Cr 267.716†	173157.0	172994.3	2341.6 ug/L	2341.6 ppb	15:37:53
2	Cu 324.752†	553122.3	547279.2	1816.8 ug/L	1816.8 ppb	15:37:53
2	Mn 257.610†	4109456.9	4106904.7	5416.8 ug/L	5416.8 ppb	15:37:47
2	Mo 202.031†	5351.5	5340.1	490.45 ug/L	490.45 ppb	15:38:13
2	Ni 231.604†	41617.0	41511.0	1317.7 ug/L	1317.7 ppb	15:37:53

2	P 214.914†	12056.7	11863.1	8360.1 ug/L	8360.1 ppb	15:38:13
2	Pb 220.353†	5454.6	5510.1	842.29 ug/L	842.29 ppb	15:38:13
2	S 181.975 Axial†	2209.3	2177.9	3881.3 ug/L	3881.3 ppb	15:38:13
2	Sb 206.836†	2782.4	2757.3	1159.9 ug/L	1159.9 ppb	15:38:13
2	Se 196.026†	2933.6	2949.0	3027.2 ug/L	3027.2 ppb	15:38:13
2	Si 251.611†	1185166.2	1184054.2	44944 ug/L	44944 ppb	15:37:47
2	Sn 189.927†	4472.9	4463.4	1020.1 ug/L	1020.1 ppb	15:38:13
2	Ti 334.940†	3320344.5	3319717.9	5782.9 ug/L	5782.9 ppb	15:37:47
2	Tl 190.801†	2966.6	2994.1	1225.7 ug/L	1225.7 ppb	15:38:13
2	U 409.014†	-7020.8	-4812.9	-172.57 ug/L	-172.57 ppb	15:37:53
2	V 292.402†	155109.4	156345.2	1221.3 ug/L	1221.3 ppb	15:37:53
2	Zn 213.857†	475337.7	474517.4	5710.7 ug/L	5710.7 ppb	15:37:53
2	SiO2†	1191618.3	1190491.7	97145 ug/L	97145 ppb	15:38:57
3	Sc Radial	4522.4	4522.4	103 %		15:37:07
3	Y RADIAL	5425.5	5425.5	114.0 %		15:37:07
3	Al 396.153Radial†	97569.8	94901.7	93196 ug/L	93196 ppb	15:36:47
3	Ca 317.933Radial†	54544.8	52993.9	100280 ug/L	100280 ppb	15:36:47
3	Fe 238.204 Radial†	16485.1	16012.6	185560 ug/L	185560 ppb	15:36:47
3	K 766.490 Radial†	230350.7	221268.4	42118 ug/L	42118 ppb	15:36:47
3	Mg 279.077 IEC†	956.3	927.8	38086 ug/L	38086 ppb	15:37:07
3	Na 589.592 Radial†	29192.9	29246.4	10310 ug/L	10310 ppb	15:36:47
3	Sr 421.552†	296437.8	288073.4	2308.4 ug/L	2308.4 ppb	15:36:47
3	Sc 361.383	818264.8	818264.8	99.932 %		15:38:25
3	Y 371.029	752176.4	752176.4	108.75 %		15:38:25
3	Ag 328.068†	48674.2	48522.4	313.10 ug/L	313.10 ppb	15:38:25
3	As 188.979†	1787.1	1815.1	1088.7 ug/L	1088.7 ppb	15:38:45
3	B 249.677†	53422.3	53996.2	1482.1 ug/L	1482.1 ppb	15:38:25
3	Ba 233.527†	206139.3	206281.1	1940.5 ug/L	1940.5 ppb	15:38:25
3	Be 313.107†	1831063.2	1836047.3	794.87 ug/L	794.87 ppb	15:38:19
3	Cd 226.502†	40669.1	40867.6	574.62 ug/L	574.62 ppb	15:38:45
3	Co 228.616†	35264.5	35334.9	899.58 ug/L	899.58 ppb	15:38:45
3	Cr 267.716†	172897.8	172944.6	2340.7 ug/L	2340.7 ppb	15:38:25
3	Cu 324.752†	551252.5	546077.7	1812.8 ug/L	1812.8 ppb	15:38:25
3	Mn 257.610†	4091759.9	4094171.2	5399.9 ug/L	5399.9 ppb	15:38:19
3	Mo 202.031†	5348.5	5343.6	490.60 ug/L	490.60 ppb	15:38:45
3	Ni 231.604†	41487.5	41431.8	1315.2 ug/L	1315.2 ppb	15:38:25
3	P 214.914†	11955.4	11776.2	8297.4 ug/L	8297.4 ppb	15:38:45
3	Pb 220.353†	5457.8	5519.8	843.80 ug/L	843.80 ppb	15:38:45
3	S 181.975 Axial†	2186.7	2158.0	3845.8 ug/L	3845.8 ppb	15:38:45
3	Sb 206.836†	2750.1	2728.3	1147.8 ug/L	1147.8 ppb	15:38:45
3	Se 196.026†	2911.0	2930.0	3005.5 ug/L	3005.5 ppb	15:38:45
3	Si 251.611†	1178100.9	1178418.9	44730 ug/L	44730 ppb	15:38:19
3	Sn 189.927†	4449.8	4445.7	1016.0 ug/L	1016.0 ppb	15:38:45
3	Ti 334.940†	3307763.1	3311148.1	5767.8 ug/L	5767.8 ppb	15:38:19
3	Tl 190.801†	2952.6	2983.7	1221.5 ug/L	1221.5 ppb	15:38:45
3	U 409.014†	-6960.0	-4760.5	-170.77 ug/L	-170.77 ppb	15:38:25
3	V 292.402†	154853.1	156276.5	1221.1 ug/L	1221.1 ppb	15:38:25
3	Zn 213.857†	473762.8	473516.9	5698.9 ug/L	5698.9 ppb	15:38:25
3	SiO2†	1187645.3	1187958.8	96938 ug/L	96938 ppb	15:39:03

Mean Data: 1202053068|957496|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	818989.0	100.02 %		0.077			0.08%
Sc Radial	4510.7	103 %		0.5			0.49%
Y 371.029	752146.2	108.75 %		0.052			0.05%
Y RADIAL	5407.8	113.6 %		0.61			0.54%
Ag 328.068†	48397.6	312.28 ug/L		1.727	312.28 ppb	1.727	0.55%
Al 396.153Radial†	94376.0	92680 ug/L		1923.4	92680 ppb	1923.4	2.08%
As 188.979†	1833.7	1098.9 ug/L		8.92	1098.9 ppb	8.92	0.81%
B 249.677†	53910.6	1479.7 ug/L		3.21	1479.7 ppb	3.21	0.22%
Ba 233.527†	206399.4	1941.6 ug/L		1.48	1941.6 ppb	1.48	0.08%
Be 313.107†	1837017.2	795.30 ug/L		0.449	795.30 ppb	0.449	0.06%
Ca 317.933Radial†	52821.7	99950 ug/L		1651.0	99950 ppb	1651.0	1.65%
Cd 226.502†	40926.4	575.53 ug/L		1.586	575.53 ppb	1.586	0.28%
Co 228.616†	35414.7	901.63 ug/L		2.094	901.63 ppb	2.094	0.23%
Cr 267.716†	172912.4	2340.2 ug/L		1.66	2340.2 ppb	1.66	0.07%
Cu 324.752†	546058.3	1812.7 ug/L		4.21	1812.7 ppb	4.21	0.23%
Fe 238.204 Radial†	15964.7	185010 ug/L		2768.3	185010 ppb	2768.3	1.50%
K 766.490 Radial†	220165.1	41907 ug/L		707.1	41907 ppb	707.1	1.69%

Mg 279.077 IEC†	929.0	38134 ug/L	98.7	38134 ppb	98.7	0.26%
Mn 257.610†	4100571.3	5408.2 ug/L	8.46	5408.2 ppb	8.46	0.16%
Mo 202.031†	5347.1	490.86 ug/L	0.584	490.86 ppb	0.584	0.12%
Na 589.592 Radial†	29289.5	10325 ug/L	170.0	10325 ppb	170.0	1.65%
Ni 231.604†	41451.5	1315.8 ug/L	1.67	1315.8 ppb	1.67	0.13%
P 214.914†	11833.9	8340.7 ug/L	37.59	8340.7 ppb	37.59	0.45%
Pb 220.353†	5524.9	844.54 ug/L	2.703	844.54 ppb	2.703	0.32%
S 181.975 Axial†	2171.7	3870.4 ug/L	21.32	3870.4 ppb	21.32	0.55%
Sb 206.836†	2743.7	1154.3 ug/L	6.10	1154.3 ppb	6.10	0.53%
Se 196.026†	2946.2	3017.3 ug/L	10.97	3017.3 ppb	10.97	0.36%
Si 251.611†	1181742.7	44857 ug/L	112.0	44857 ppb	112.0	0.25%
Sn 189.927†	4460.9	1019.4 ug/L	3.15	1019.4 ppb	3.15	0.31%
Sr 421.552†	287138.1	2300.9 ug/L	46.38	2300.9 ppb	46.38	2.02%
Ti 334.940†	3315425.5	5775.2 ug/L	7.52	5775.2 ppb	7.52	0.13%
Tl 190.801†	2991.5	1224.6 ug/L	2.72	1224.6 ppb	2.72	0.22%
U 409.014†	-4759.3	-170.67 ug/L	1.960	-170.67 ppb	1.960	1.15%
V 292.402†	156170.2	1220.3 ug/L	1.56	1220.3 ppb	1.56	0.13%
Zn 213.857†	473884.5	5703.4 ug/L	6.37	5703.4 ppb	6.37	0.11%
SiO2†	1185037.6	96700 ug/L	600.9	96700 ppb	600.9	0.62%

Sequence No.: 23
 Sample ID: 1202053064|957496|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 41
 Date Collected: 3/19/2010 15:48:20
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202053064|957496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4313.7	4313.7	98.1 %		15:50:32
1	Y RADIAL	5708.3	5708.3	119.9 %		15:50:12
1	Al 396.153Radial†	44673.1	45594.4	44786 ug/L	44786 ppb	15:50:12
1	Ca 317.933Radial†	9283.4	9442.9	17868 ug/L	17868 ppb	15:50:12
1	Fe 238.204 Radial†	9868.5	10046.3	116400 ug/L	116400 ppb	15:50:12
1	K 766.490 Radial†	45318.5	43575.1	8294.3 ug/L	8294.3 ppb	15:50:12
1	Mg 279.077 IEC†	260.1	263.5	10748 ug/L	10748 ppb	15:50:32
1	Na 589.592 Radial†	7756.9	8778.4	3094.6 ug/L	3094.6 ppb	15:50:12
1	Sr 421.552†	17124.7	17427.1	139.56 ug/L	139.56 ppb	15:50:12
1	Sc 361.383	849457.7	849457.7	103.74 %		15:51:30
1	Y 371.029	818670.2	818670.2	118.37 %		15:51:30
1	Ag 328.068†	-6219.1	-6179.9	4.4115 ug/L	4.4115 ppb	15:51:35
1	As 188.979†	-55.3	-26.5	44.832 ug/L	44.832 ppb	15:51:55
1	B 249.677†	667.5	1180.8	14.147 ug/L	14.147 ppb	15:51:35
1	Ba 233.527†	57626.1	55548.7	524.14 ug/L	524.14 ppb	15:51:35
1	Be 313.107†	-12991.1	-8791.6	4.6700 ug/L	4.6700 ppb	15:51:35
1	Cd 226.502†	670.9	817.3	-0.1423 ug/L	-0.1423 ppb	15:51:55
1	Co 228.616†	1032.6	1041.6	17.653 ug/L	17.653 ppb	15:51:55
1	Cr 267.716†	12726.8	12196.4	176.17 ug/L	176.17 ppb	15:51:35
1	Cu 324.752†	14641.2	8561.2	34.545 ug/L	34.545 ppb	15:51:35
1	Mn 257.610†	1649903.0	1590015.6	2101.6 ug/L	2101.6 ppb	15:51:30
1	Mo 202.031†	1.2	-7.4	8.5945 ug/L	8.5945 ppb	15:51:55
1	Ni 231.604†	3409.0	3202.0	101.67 ug/L	101.67 ppb	15:51:55
1	P 214.914†	3424.1	3113.3	2230.8 ug/L	2230.8 ppb	15:51:55
1	Pb 220.353†	253.6	302.8	40.093 ug/L	40.093 ppb	15:51:55
1	S 181.975 Axial†	118.1	83.6	141.35 ug/L	141.35 ppb	15:51:55
1	Sb 206.836†	52.9	27.4	-3.0250 ug/L	-3.0250 ppb	15:51:55
1	Se 196.026†	-456.1	-422.7	-3.2470 ug/L	-3.2470 ppb	15:51:55
1	Si 251.611†	1067375.6	1028396.1	39041 ug/L	39041 ppb	15:51:30
1	Sn 189.927†	-47.8	-53.2	-15.589 ug/L	-15.589 ppb	15:51:55
1	Ti 334.940†	2209576.8	2131016.9	3707.5 ug/L	3707.5 ppb	15:51:30
1	Tl 190.801†	-140.3	-106.1	-0.6964 ug/L	-0.6964 ppb	15:51:55
1	U 409.014†	-9644.7	-7092.6	-228.81 ug/L	-228.81 ppb	15:51:30
1	V 292.402†	16829.3	17539.9	118.91 ug/L	118.91 ppb	15:51:35
1	Zn 213.857†	30120.0	28463.8	326.78 ug/L	326.78 ppb	15:51:35
1	SiO2†	1059078.4	1020386.9	83276 ug/L	83276 ppb	15:53:04
2	Sc Radial	4370.1	4370.1	99.4 %		15:50:58
2	Y RADIAL	5667.1	5667.1	119.0 %		15:50:38
2	Al 396.153Radial†	44001.1	44331.1	43545 ug/L	43545 ppb	15:50:38
2	Ca 317.933Radial†	9069.5	9105.7	17230 ug/L	17230 ppb	15:50:38
2	Fe 238.204 Radial†	9659.1	9706.0	112460 ug/L	112460 ppb	15:50:38
2	K 766.490 Radial†	44716.7	42374.0	8065.7 ug/L	8065.7 ppb	15:50:38
2	Mg 279.077 IEC†	257.0	257.0	10482 ug/L	10482 ppb	15:50:58
2	Na 589.592 Radial†	7545.9	8464.2	2983.8 ug/L	2983.8 ppb	15:50:38
2	Sr 421.552†	16810.0	16885.4	135.22 ug/L	135.22 ppb	15:50:38
2	Sc 361.383	852317.6	852317.6	104.09 %		15:52:01
2	Y 371.029	821449.1	821449.1	118.77 %		15:52:01
2	Ag 328.068†	-6415.1	-6348.2	2.3439 ug/L	2.3439 ppb	15:52:06
2	As 188.979†	-67.6	-38.2	37.436 ug/L	37.436 ppb	15:52:26
2	B 249.677†	622.8	1135.7	13.520 ug/L	13.520 ppb	15:52:06
2	Ba 233.527†	58893.3	56579.8	533.69 ug/L	533.69 ppb	15:52:06
2	Be 313.107†	-13360.8	-9104.8	4.5232 ug/L	4.5232 ppb	15:52:06
2	Cd 226.502†	682.2	826.0	0.3905 ug/L	0.3905 ppb	15:52:26
2	Co 228.616†	1029.7	1035.5	17.568 ug/L	17.568 ppb	15:52:26
2	Cr 267.716†	12983.9	12402.2	178.52 ug/L	178.52 ppb	15:52:06
2	Cu 324.752†	15006.5	8864.8	35.341 ug/L	35.341 ppb	15:52:06
2	Mn 257.610†	1652289.1	1586971.4	2097.3 ug/L	2097.3 ppb	15:52:01
2	Mo 202.031†	2.3	-6.3	8.3735 ug/L	8.3735 ppb	15:52:26
2	Ni 231.604†	3426.2	3207.5	101.85 ug/L	101.85 ppb	15:52:26

2	P 214.914†	3407.9	3086.7	2213.7 ug/L	2213.7 ppb	15:52:26
2	Pb 220.353†	270.8	318.5	42.790 ug/L	42.790 ppb	15:52:26
2	S 181.975 Axial†	113.3	78.7	132.72 ug/L	132.72 ppb	15:52:26
2	Sb 206.836†	60.8	34.8	0.1670 ug/L	0.1670 ppb	15:52:26
2	Se 196.026†	-462.2	-427.0	-18.581 ug/L	-18.581 ppb	15:52:26
2	Si 251.611†	1068796.1	1026308.4	38962 ug/L	38962 ppb	15:52:01
2	Sn 189.927†	-52.6	-57.7	-16.494 ug/L	-16.494 ppb	15:52:26
2	Ti 334.940†	2213485.9	2127625.5	3701.5 ug/L	3701.5 ppb	15:52:01
2	Tl 190.801†	-127.7	-93.6	4.0676 ug/L	4.0676 ppb	15:52:26
2	U 409.014†	-9807.3	-7217.7	-232.17 ug/L	-232.17 ppb	15:52:01
2	V 292.402†	17327.5	17964.0	122.86 ug/L	122.86 ppb	15:52:06
2	Zn 213.857†	30762.9	28984.0	333.67 ug/L	333.67 ppb	15:52:06
2	SiO2†	1059342.0	1017214.6	83017 ug/L	83017 ppb	15:53:10
3	Sc Radial	4343.0	4343.0	98.8 %		15:51:23
3	Y RADIAL	5559.7	5559.7	116.8 %		15:51:03
3	Al 396.153Radial†	43141.3	43736.3	42961 ug/L	42961 ppb	15:51:03
3	Ca 317.933Radial†	8877.1	8967.7	16969 ug/L	16969 ppb	15:51:03
3	Fe 238.204 Radial†	9497.4	9602.7	111260 ug/L	111260 ppb	15:51:03
3	K 766.490 Radial†	43806.9	41733.0	7943.7 ug/L	7943.7 ppb	15:51:03
3	Mg 279.077 IEC†	261.0	262.6	10718 ug/L	10718 ppb	15:51:23
3	Na 589.592 Radial†	7286.8	8249.2	2908.0 ug/L	2908.0 ppb	15:51:03
3	Sr 421.552†	16454.0	16630.3	133.18 ug/L	133.18 ppb	15:51:03
3	Sc 361.383	864342.6	864342.6	105.56 %		15:52:32
3	Y 371.029	833654.1	833654.1	120.53 %		15:52:32
3	Ag 328.068†	-6325.9	-6177.9	2.8475 ug/L	2.8475 ppb	15:52:37
3	As 188.979†	-65.4	-35.1	38.644 ug/L	38.644 ppb	15:52:57
3	B 249.677†	578.0	1084.9	12.293 ug/L	12.293 ppb	15:52:37
3	Ba 233.527†	58767.9	55673.7	525.16 ug/L	525.16 ppb	15:52:37
3	Be 313.107†	-13394.7	-8958.3	4.5383 ug/L	4.5383 ppb	15:52:37
3	Cd 226.502†	670.1	805.5	0.2166 ug/L	0.2166 ppb	15:52:57
3	Co 228.616†	1016.8	1009.4	16.951 ug/L	16.951 ppb	15:52:57
3	Cr 267.716†	12959.5	12205.5	175.75 ug/L	175.75 ppb	15:52:37
3	Cu 324.752†	14952.3	8612.9	34.442 ug/L	34.442 ppb	15:52:37
3	Mn 257.610†	1662738.9	1574787.0	2081.1 ug/L	2081.1 ppb	15:52:32
3	Mo 202.031†	-4.4	-12.7	7.7066 ug/L	7.7066 ppb	15:52:57
3	Ni 231.604†	3408.5	3144.9	99.858 ug/L	99.858 ppb	15:52:57
3	P 214.914†	3395.9	3029.7	2172.3 ug/L	2172.3 ppb	15:52:57
3	Pb 220.353†	259.1	303.7	40.557 ug/L	40.557 ppb	15:52:57
3	S 181.975 Axial†	106.5	70.7	118.52 ug/L	118.52 ppb	15:52:57
3	Sb 206.836†	62.9	35.9	0.8162 ug/L	0.8162 ppb	15:52:57
3	Se 196.026†	-460.3	-419.1	-15.551 ug/L	-15.551 ppb	15:52:57
3	Si 251.611†	1078806.5	1021506.4	38779 ug/L	38779 ppb	15:52:32
3	Sn 189.927†	-29.7	-35.3	-11.390 ug/L	-11.390 ppb	15:52:57
3	Ti 334.940†	2232066.8	2115643.3	3680.6 ug/L	3680.6 ppb	15:52:32
3	Tl 190.801†	-128.3	-92.5	4.2738 ug/L	4.2738 ppb	15:52:57
3	U 409.014†	-9716.4	-7000.5	-225.43 ug/L	-225.43 ppb	15:52:32
3	V 292.402†	17286.4	17693.5	120.91 ug/L	120.91 ppb	15:52:37
3	Zn 213.857†	30722.2	28534.2	328.42 ug/L	328.42 ppb	15:52:37
3	SiO2†	1061450.6	1005053.3	82024 ug/L	82024 ppb	15:53:16

Mean Data: 1202053064|957496|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	855372.6	104.46 %	0.965			0.92%
Sc Radial	4342.3	98.8 %	0.64			0.65%
Y 371.029	824591.2	119.22 %	1.152			0.97%
Y RADIAL	5645.1	118.6 %	1.61			1.36%
Ag 328.068†	-6235.3	3.2009 ug/L	1.07816	3.2009 ppb	1.07816	33.68%
Al 396.153Radial†	44553.9	43764 ug/L	932.0	43764 ppb	932.0	2.13%
As 188.979†	-33.3	40.304 ug/L	3.9674	40.304 ppb	3.9674	9.84%
B 249.677†	1133.8	13.320 ug/L	0.9429	13.320 ppb	0.9429	7.08%
Ba 233.527†	55934.1	527.66 ug/L	5.242	527.66 ppb	5.242	0.99%
Be 313.107†	-8951.6	4.5772 ug/L	0.08073	4.5772 ppb	0.08073	1.76%
Ca 317.933Radial†	9172.1	17356 ug/L	462.5	17356 ppb	462.5	2.66%
Cd 226.502†	816.3	0.1549 ug/L	0.27169	0.1549 ppb	0.27169	175.39%
Co 228.616†	1028.8	17.391 ug/L	0.3831	17.391 ppb	0.3831	2.20%
Cr 267.716†	12268.0	176.81 ug/L	1.493	176.81 ppb	1.493	0.84%
Cu 324.752†	8679.7	34.776 ug/L	0.4918	34.776 ppb	0.4918	1.41%
Fe 238.204 Radial†	9785.0	113380 ug/L	2689.6	113380 ppb	2689.6	2.37%
K 766.490 Radial†	42560.7	8101.2 ug/L	177.97	8101.2 ppb	177.97	2.20%

Mg 279.077 IEC†	261.0	10649 ug/L	145.3	10649 ppb	145.3	1.36%
Mn 257.610†	1583924.7	2093.3 ug/L	10.81	2093.3 ppb	10.81	0.52%
Mo 202.031†	-8.8	8.2249 ug/L	0.46221	8.2249 ppb	0.46221	5.62%
Na 589.592 Radial†	8497.3	2995.5 ug/L	93.83	2995.5 ppb	93.83	3.13%
Ni 231.604†	3184.8	101.13 ug/L	1.101	101.13 ppb	1.101	1.09%
P 214.914†	3076.6	2205.6 ug/L	30.11	2205.6 ppb	30.11	1.37%
Pb 220.353†	308.3	41.147 ug/L	1.4419	41.147 ppb	1.4419	3.50%
S 181.975 Axial†	77.7	130.86 ug/L	11.527	130.86 ppb	11.527	8.81%
Sb 206.836†	32.7	-0.6806 ug/L	2.05607	-0.6806 ppb	2.05607	302.10%
Se 196.026†	-422.9	-12.459 ug/L	8.1208	-12.459 ppb	8.1208	65.18%
Si 251.611†	1025403.6	38927 ug/L	134.1	38927 ppb	134.1	0.34%
Sn 189.927†	-48.8	-14.491 ug/L	2.7233	-14.491 ppb	2.7233	18.79%
Sr 421.552†	16981.0	135.99 ug/L	3.258	135.99 ppb	3.258	2.40%
Ti 334.940†	2124761.9	3696.6 ug/L	14.10	3696.6 ppb	14.10	0.38%
Tl 190.801†	-97.4	2.5483 ug/L	2.81187	2.5483 ppb	2.81187	110.34%
U 409.014†	-7103.6	-228.80 ug/L	3.366	-228.80 ppb	3.366	1.47%
V 292.402†	17732.5	120.89 ug/L	1.977	120.89 ppb	1.977	1.64%
Zn 213.857†	28660.7	329.62 ug/L	3.601	329.62 ppb	3.601	1.09%
SiO2†	1014218.2	82772 ug/L	660.6	82772 ppb	660.6	0.80%

Sequence No.: 24
 Sample ID: 1202053066|957496|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 42
 Date Collected: 3/19/2010 15:55:26
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202053066|957496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4471.9	4471.9	102 %		15:57:39
1	Y RADIAL	5520.1	5520.1	116.0 %		15:57:39
1	Al 396.153Radial†	73740.9	72552.4	71244 ug/L	71244 ppb	15:57:19
1	Ca 317.933Radial†	31924.5	31360.5	59341 ug/L	59341 ppb	15:57:19
1	Fe 238.204 Radial†	9884.0	9705.8	112470 ug/L	112470 ppb	15:57:19
1	K 766.490 Radial†	78942.1	74987.5	14262 ug/L	14262 ppb	15:57:19
1	Mg 279.077 IEC†	456.1	446.8	18318 ug/L	18318 ppb	15:57:39
1	Na 589.592 Radial†	24365.9	24822.5	8750.5 ug/L	8750.5 ppb	15:57:19
1	Sr 421.552†	84543.9	83071.0	665.43 ug/L	665.43 ppb	15:57:19
1	Sc 361.383	839680.4	839680.4	102.55 %		15:58:38
1	Y 371.029	802186.5	802186.5	115.98 %		15:58:38
1	Ag 328.068†	90382.7	87952.7	492.94 ug/L	492.94 ppb	15:58:38
1	As 188.979†	833.9	840.0	527.25 ug/L	527.25 ppb	15:58:58
1	B 249.677†	18371.4	18452.5	497.98 ug/L	497.98 ppb	15:58:38
1	Ba 233.527†	119830.9	116855.3	1099.3 ug/L	1099.3 ppb	15:58:38
1	Be 313.107†	1191062.3	1165210.2	506.86 ug/L	506.86 ppb	15:58:38
1	Cd 226.502†	33714.5	33047.7	468.32 ug/L	468.32 ppb	15:58:58
1	Co 228.616†	19767.2	19322.5	489.25 ug/L	489.25 ppb	15:58:58
1	Cr 267.716†	49613.3	48309.5	660.54 ug/L	660.54 ppb	15:58:38
1	Cu 324.752†	179888.8	169868.8	566.63 ug/L	566.63 ppb	15:58:38
1	Mn 257.610†	2056367.5	2004903.2	2646.4 ug/L	2646.4 ppb	15:58:38
1	Mo 202.031†	5338.7	5197.6	471.46 ug/L	471.46 ppb	15:58:58
1	Ni 231.604†	18981.7	18426.1	584.86 ug/L	584.86 ppb	15:58:58
1	P 214.914†	4044.0	3756.2	2618.0 ug/L	2618.0 ppb	15:58:58
1	Pb 220.353†	3356.5	3331.4	513.24 ug/L	513.24 ppb	15:58:58
1	S 181.975 Axial†	2975.9	2871.8	5127.7 ug/L	5127.7 ppb	15:58:58
1	Sb 206.836†	1131.4	1079.7	451.52 ug/L	451.52 ppb	15:58:58
1	Se 196.026†	161.6	174.5	492.84 ug/L	492.84 ppb	15:58:58
1	Si 251.611†	1010364.3	984781.1	37379 ug/L	37379 ppb	15:58:38
1	Sn 189.927†	2005.9	1948.9	446.35 ug/L	446.35 ppb	15:58:58
1	Ti 334.940†	2780081.2	2712151.8	4722.7 ug/L	4722.7 ppb	15:58:38
1	Tl 190.801†	1093.1	1095.0	472.00 ug/L	472.00 ppb	15:58:58
1	U 409.014†	6627.5	8667.1	248.67 ug/L	248.67 ppb	15:58:38
1	V 292.402†	79426.2	78770.9	614.77 ug/L	614.77 ppb	15:58:38
1	Zn 213.857†	69159.9	66872.1	788.95 ug/L	788.95 ppb	15:58:38
1	SiO2†	1008517.3	982968.8	80209 ug/L	80209 ppb	15:59:59
2	Sc Radial	4290.7	4290.7	97.6 %		15:58:04
2	Y RADIAL	5325.9	5325.9	111.9 %		15:58:04
2	Al 396.153Radial†	72673.8	74520.4	73177 ug/L	73177 ppb	15:57:44
2	Ca 317.933Radial†	31341.3	32088.2	60718 ug/L	60718 ppb	15:57:44
2	Fe 238.204 Radial†	9659.7	9886.3	114570 ug/L	114570 ppb	15:57:44
2	K 766.490 Radial†	77840.5	77135.9	14671 ug/L	14671 ppb	15:57:44
2	Mg 279.077 IEC†	452.9	462.4	18961 ug/L	18961 ppb	15:58:04
2	Na 589.592 Radial†	23657.1	25107.9	8851.1 ug/L	8851.1 ppb	15:57:44
2	Sr 421.552†	82843.7	84838.8	679.59 ug/L	679.59 ppb	15:57:44
2	Sc 361.383	834506.2	834506.2	101.92 %		15:59:05
2	Y 371.029	797146.2	797146.2	115.25 %		15:59:05
2	Ag 328.068†	89853.8	87980.2	493.71 ug/L	493.71 ppb	15:59:05
2	As 188.979†	823.6	834.9	525.05 ug/L	525.05 ppb	15:59:26
2	B 249.677†	18269.4	18463.5	497.94 ug/L	497.94 ppb	15:59:05
2	Ba 233.527†	119678.3	117430.1	1104.8 ug/L	1104.8 ppb	15:59:05
2	Be 313.107†	1186805.0	1168234.4	508.17 ug/L	508.17 ppb	15:59:05
2	Cd 226.502†	33545.6	33085.9	468.65 ug/L	468.65 ppb	15:59:26
2	Co 228.616†	19673.5	19350.0	489.91 ug/L	489.91 ppb	15:59:26
2	Cr 267.716†	49422.9	48422.6	662.28 ug/L	662.28 ppb	15:59:05
2	Cu 324.752†	178314.1	169411.3	565.23 ug/L	565.23 ppb	15:59:05
2	Mn 257.610†	2050327.5	2011410.1	2655.2 ug/L	2655.2 ppb	15:59:05
2	Mo 202.031†	5324.2	5215.7	473.24 ug/L	473.24 ppb	15:59:26
2	Ni 231.604†	18892.2	18453.1	585.72 ug/L	585.72 ppb	15:59:26

2	P 214.914†	4038.8	3775.6	2631.5 ug/L	2631.5 ppb	15:59:26
2	Pb 220.353†	3387.1	3381.7	521.13 ug/L	521.13 ppb	15:59:26
2	S 181.975 Axial†	2948.5	2862.9	5111.5 ug/L	5111.5 ppb	15:59:26
2	Sb 206.836†	1106.1	1061.7	443.95 ug/L	443.95 ppb	15:59:26
2	Se 196.026†	164.4	178.3	502.62 ug/L	502.62 ppb	15:59:26
2	Si 251.611†	1004867.6	985496.7	37407 ug/L	37407 ppb	15:59:05
2	Sn 189.927†	1999.8	1955.0	447.86 ug/L	447.86 ppb	15:59:26
2	Ti 334.940†	2767894.2	2717003.1	4731.2 ug/L	4731.2 ppb	15:59:05
2	Tl 190.801†	1088.8	1097.5	473.05 ug/L	473.05 ppb	15:59:26
2	U 409.014†	6690.5	8769.0	251.52 ug/L	251.52 ppb	15:59:05
2	V 292.402†	79075.5	78907.0	615.58 ug/L	615.58 ppb	15:59:05
2	Zn 213.857†	68979.3	67113.0	791.56 ug/L	791.56 ppb	15:59:05
2	SiO2†	1005678.2	986280.9	80479 ug/L	80479 ppb	16:00:05
3	Sc Radial	4436.4	4436.4	101 %		15:58:29
3	Y RADIAL	5485.3	5485.3	115.2 %		15:58:29
3	Al 396.153Radial†	74176.8	73563.7	72237 ug/L	72237 ppb	15:58:09
3	Ca 317.933Radial†	31972.3	31658.7	59905 ug/L	59905 ppb	15:58:09
3	Fe 238.204 Radial†	9850.8	9750.6	112990 ug/L	112990 ppb	15:58:09
3	K 766.490 Radial†	79285.1	75947.6	14445 ug/L	14445 ppb	15:58:09
3	Mg 279.077 IEC†	454.6	448.9	18403 ug/L	18403 ppb	15:58:29
3	Na 589.592 Radial†	24162.9	24812.9	8747.1 ug/L	8747.1 ppb	15:58:09
3	Sr 421.552†	84320.6	83514.1	668.98 ug/L	668.98 ppb	15:58:09
3	Sc 361.383	834025.9	834025.9	101.86 %		15:59:33
3	Y 371.029	798137.7	798137.7	115.40 %		15:59:33
3	Ag 328.068†	90038.0	88211.9	494.45 ug/L	494.45 ppb	15:59:33
3	As 188.979†	828.4	840.1	527.59 ug/L	527.59 ppb	15:59:53
3	B 249.677†	18369.1	18571.7	501.24 ug/L	501.24 ppb	15:59:33
3	Ba 233.527†	119591.8	117412.8	1104.6 ug/L	1104.6 ppb	15:59:33
3	Be 313.107†	1189823.4	1171868.5	509.73 ug/L	509.73 ppb	15:59:33
3	Cd 226.502†	33555.6	33114.7	469.23 ug/L	469.23 ppb	15:59:53
3	Co 228.616†	19639.3	19327.5	489.34 ug/L	489.34 ppb	15:59:53
3	Cr 267.716†	49515.0	48541.0	663.70 ug/L	663.70 ppb	15:59:33
3	Cu 324.752†	178998.9	170184.4	567.70 ug/L	567.70 ppb	15:59:33
3	Mn 257.610†	2050095.8	2012341.4	2656.3 ug/L	2656.3 ppb	15:59:33
3	Mo 202.031†	5315.8	5210.3	472.64 ug/L	472.64 ppb	15:59:53
3	Ni 231.604†	18878.0	18449.8	585.62 ug/L	585.62 ppb	15:59:53
3	P 214.914†	4035.6	3774.8	2631.4 ug/L	2631.4 ppb	15:59:53
3	Pb 220.353†	3362.0	3359.1	517.65 ug/L	517.65 ppb	15:59:53
3	S 181.975 Axial†	2942.4	2858.6	5104.0 ug/L	5104.0 ppb	15:59:53
3	Sb 206.836†	1111.2	1067.3	446.31 ug/L	446.31 ppb	15:59:53
3	Se 196.026†	144.7	159.1	481.77 ug/L	481.77 ppb	15:59:53
3	Si 251.611†	1006456.3	987624.3	37487 ug/L	37487 ppb	15:59:33
3	Sn 189.927†	2002.0	1958.4	448.56 ug/L	448.56 ppb	15:59:53
3	Ti 334.940†	2771003.5	2721619.9	4739.2 ug/L	4739.2 ppb	15:59:33
3	Tl 190.801†	1075.6	1085.1	468.34 ug/L	468.34 ppb	15:59:53
3	U 409.014†	6674.7	8757.3	251.34 ug/L	251.34 ppb	15:59:33
3	V 292.402†	79272.3	79144.9	617.69 ug/L	617.69 ppb	15:59:33
3	Zn 213.857†	69023.0	67194.9	792.78 ug/L	792.78 ppb	15:59:33
3	SiO2†	1004767.2	985954.8	80453 ug/L	80453 ppb	16:00:11

Mean Data: 1202053066|957496|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	836070.9	102.11 %	0.383			0.37%
Sc Radial	4399.7	100 %	2.2			2.18%
Y 371.029	799156.8	115.54 %	0.386			0.33%
Y RADIAL	5443.8	114.4 %	2.18			1.90%
Ag 328.068†	88048.2	493.70 ug/L	0.754	493.70 ppb	0.754	0.15%
Al 396.153Radial†	73545.5	72219 ug/L	966.6	72219 ppb	966.6	1.34%
As 188.979†	838.3	526.63 ug/L	1.383	526.63 ppb	1.383	0.26%
B 249.677†	18495.9	499.05 ug/L	1.892	499.05 ppb	1.892	0.38%
Ba 233.527†	117232.7	1102.9 ug/L	3.09	1102.9 ppb	3.09	0.28%
Be 313.107†	1168437.7	508.25 ug/L	1.438	508.25 ppb	1.438	0.28%
Ca 317.933Radial†	31702.5	59988 ug/L	692.2	59988 ppb	692.2	1.15%
Cd 226.502†	33082.8	468.73 ug/L	0.465	468.73 ppb	0.465	0.10%
Co 228.616†	19333.3	489.50 ug/L	0.363	489.50 ppb	0.363	0.07%
Cr 267.716†	48424.4	662.17 ug/L	1.584	662.17 ppb	1.584	0.24%
Cu 324.752†	169821.5	566.52 ug/L	1.238	566.52 ppb	1.238	0.22%
Fe 238.204 Radial†	9780.9	113340 ug/L	1089.4	113340 ppb	1089.4	0.96%
K 766.490 Radial†	76023.7	14460 ug/L	204.8	14460 ppb	204.8	1.42%

Mg 279.077 IEC†	452.7	18560 ug/L	349.4	18560 ppb	349.4	1.88%
Mn 257.610†	2009551.6	2652.6 ug/L	5.39	2652.6 ppb	5.39	0.20%
Mo 202.031†	5207.9	472.45 ug/L	0.907	472.45 ppb	0.907	0.19%
Na 589.592 Radial†	24914.4	8782.9 ug/L	59.10	8782.9 ppb	59.10	0.67%
Ni 231.604†	18443.0	585.40 ug/L	0.467	585.40 ppb	0.467	0.08%
P 214.914†	3768.9	2627.0 ug/L	7.79	2627.0 ppb	7.79	0.30%
Pb 220.353†	3357.4	517.34 ug/L	3.954	517.34 ppb	3.954	0.76%
S 181.975 Axial†	2864.4	5114.4 ug/L	12.14	5114.4 ppb	12.14	0.24%
Sb 206.836†	1069.5	447.26 ug/L	3.877	447.26 ppb	3.877	0.87%
Se 196.026†	170.6	492.41 ug/L	10.432	492.41 ppb	10.432	2.12%
Si 251.611†	985967.4	37425 ug/L	56.1	37425 ppb	56.1	0.15%
Sn 189.927†	1954.1	447.59 ug/L	1.131	447.59 ppb	1.131	0.25%
Sr 421.552†	83808.0	671.33 ug/L	7.368	671.33 ppb	7.368	1.10%
Ti 334.940†	2716925.0	4731.0 ug/L	8.27	4731.0 ppb	8.27	0.17%
Tl 190.801†	1092.5	471.13 ug/L	2.473	471.13 ppb	2.473	0.52%
U 409.014†	8731.1	250.51 ug/L	1.596	250.51 ppb	1.596	0.64%
V 292.402†	78940.9	616.01 ug/L	1.504	616.01 ppb	1.504	0.24%
Zn 213.857†	67060.0	791.10 ug/L	1.955	791.10 ppb	1.955	0.25%
SiO2†	985068.2	80380 ug/L	148.9	80380 ppb	148.9	0.19%

Sequence No.: 25
 Sample ID: 1202053067|957496|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 43
 Date Collected: 3/19/2010 16:02:22
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202053067|957496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4312.9	4312.9	98.1 %		16:04:34
1	Y RADIAL	5407.2	5407.2	113.6 %		16:04:34
1	Al 396.153Radial†	68423.8	69806.1	68546 ug/L	68546 ppb	16:04:14
1	Ca 317.933Radial†	12493.5	12715.9	24061 ug/L	24061 ppb	16:04:14
1	Fe 238.204 Radial†	10167.8	10353.2	119970 ug/L	119970 ppb	16:04:14
1	K 766.490 Radial†	78742.0	77644.1	14780 ug/L	14780 ppb	16:04:14
1	Mg 279.077 IEC†	438.9	445.7	18266 ug/L	18266 ppb	16:04:34
1	Na 589.592 Radial†	24832.9	26181.3	9229.5 ug/L	9229.5 ppb	16:04:14
1	Sr 421.552†	83386.1	84954.7	680.79 ug/L	680.79 ppb	16:04:14
1	Sc 361.383	831431.7	831431.7	101.54 %		16:05:33
1	Y 371.029	802169.9	802169.9	115.98 %		16:05:33
1	Ag 328.068†	89772.4	88226.1	497.15 ug/L	497.15 ppb	16:05:33
1	As 188.979†	836.4	850.5	534.20 ug/L	534.20 ppb	16:05:54
1	B 249.677†	18351.1	18610.2	501.15 ug/L	501.15 ppb	16:05:33
1	Ba 233.527†	121859.3	120012.3	1129.1 ug/L	1129.1 ppb	16:05:33
1	Be 313.107†	1190616.2	1176294.1	511.43 ug/L	511.43 ppb	16:05:33
1	Cd 226.502†	34283.5	33934.3	480.41 ug/L	480.41 ppb	16:05:54
1	Co 228.616†	20011.3	19754.0	500.46 ug/L	500.46 ppb	16:05:54
1	Cr 267.716†	51215.5	50367.5	688.93 ug/L	688.93 ppb	16:05:33
1	Cu 324.752†	178770.3	170507.6	569.14 ug/L	569.14 ppb	16:05:33
1	Mn 257.610†	2168823.5	2135548.8	2819.0 ug/L	2819.0 ppb	16:05:33
1	Mo 202.031†	5396.5	5306.1	481.27 ug/L	481.27 ppb	16:05:54
1	Ni 231.604†	19368.5	18990.7	602.79 ug/L	602.79 ppb	16:05:54
1	P 214.914†	4046.4	3797.8	2642.1 ug/L	2642.1 ppb	16:05:54
1	Pb 220.353†	3430.6	3436.8	527.31 ug/L	527.31 ppb	16:05:54
1	S 181.975 Axial†	3027.2	2951.1	5270.2 ug/L	5270.2 ppb	16:05:54
1	Sb 206.836†	1112.1	1071.5	448.91 ug/L	448.91 ppb	16:05:54
1	Se 196.026†	154.4	169.0	509.00 ug/L	509.00 ppb	16:05:54
1	Si 251.611†	1018278.6	1002350.4	38046 ug/L	38046 ppb	16:05:33
1	Sn 189.927†	2095.1	2056.2	463.99 ug/L	463.99 ppb	16:05:54
1	Ti 334.940†	2713653.2	2673627.6	4651.0 ug/L	4651.0 ppb	16:05:33
1	Tl 190.801†	1109.9	1122.1	482.71 ug/L	482.71 ppb	16:05:54
1	U 409.014†	6277.4	8386.4	239.24 ug/L	239.24 ppb	16:05:33
1	V 292.402†	78275.7	78406.3	610.95 ug/L	610.95 ppb	16:05:33
1	Zn 213.857†	71461.6	69807.9	823.29 ug/L	823.29 ppb	16:05:33
1	SiO2†	1036057.2	1019848.2	83219 ug/L	83219 ppb	16:06:54
2	Sc Radial	4399.5	4399.5	100 %		16:05:00
2	Y RADIAL	5510.8	5510.8	115.8 %		16:05:00
2	Al 396.153Radial†	69867.9	69876.5	68615 ug/L	68615 ppb	16:04:40
2	Ca 317.933Radial†	12822.4	12794.0	24209 ug/L	24209 ppb	16:04:40
2	Fe 238.204 Radial†	10388.6	10369.8	120170 ug/L	120170 ppb	16:04:40
2	K 766.490 Radial†	79973.0	77294.8	14713 ug/L	14713 ppb	16:04:40
2	Mg 279.077 IEC†	435.1	433.1	17747 ug/L	17747 ppb	16:05:00
2	Na 589.592 Radial†	25239.2	26089.2	9197.0 ug/L	9197.0 ppb	16:04:40
2	Sr 421.552†	85039.4	84934.0	680.63 ug/L	680.63 ppb	16:04:40
2	Sc 361.383	837839.2	837839.2	102.32 %		16:06:01
2	Y 371.029	808076.5	808076.5	116.83 %		16:06:01
2	Ag 328.068†	90590.2	88349.2	497.86 ug/L	497.86 ppb	16:06:01
2	As 188.979†	826.2	834.2	525.37 ug/L	525.37 ppb	16:06:21
2	B 249.677†	18510.9	18628.2	501.64 ug/L	501.64 ppb	16:06:01
2	Ba 233.527†	123099.9	120306.9	1131.9 ug/L	1131.9 ppb	16:06:01
2	Be 313.107†	1201603.2	1178064.4	512.20 ug/L	512.20 ppb	16:06:01
2	Cd 226.502†	34179.7	33574.7	475.17 ug/L	475.17 ppb	16:06:21
2	Co 228.616†	19951.1	19544.5	495.01 ug/L	495.01 ppb	16:06:21
2	Cr 267.716†	51707.4	50462.4	690.23 ug/L	690.23 ppb	16:06:01
2	Cu 324.752†	180427.1	170780.3	570.05 ug/L	570.05 ppb	16:06:01
2	Mn 257.610†	2189700.6	2139617.3	2824.4 ug/L	2824.4 ppb	16:06:01
2	Mo 202.031†	5393.3	5262.3	477.39 ug/L	477.39 ppb	16:06:21
2	Ni 231.604†	19314.2	18791.8	596.47 ug/L	596.47 ppb	16:06:21

2	P 214.914†	4062.5	3783.0	2630.7 ug/L	2630.7 ppb	16:06:21
2	Pb 220.353†	3414.4	3395.2	520.89 ug/L	520.89 ppb	16:06:21
2	S 181.975 Axial†	3006.2	2907.8	5192.7 ug/L	5192.7 ppb	16:06:21
2	Sb 206.836†	1124.7	1075.5	450.39 ug/L	450.39 ppb	16:06:21
2	Se 196.026†	132.0	145.9	490.32 ug/L	490.32 ppb	16:06:21
2	Si 251.611†	1028711.0	1004876.7	38142 ug/L	38142 ppb	16:06:01
2	Sn 189.927†	2095.4	2040.7	460.49 ug/L	460.49 ppb	16:06:21
2	Ti 334.940†	2738706.2	2677673.7	4658.1 ug/L	4658.1 ppb	16:06:01
2	Tl 190.801†	1120.4	1124.0	483.55 ug/L	483.55 ppb	16:06:21
2	U 409.014†	6235.3	8298.0	236.53 ug/L	236.53 ppb	16:06:01
2	V 292.402†	79026.6	78550.6	611.99 ug/L	611.99 ppb	16:06:01
2	Zn 213.857†	72017.3	69812.8	823.36 ug/L	823.36 ppb	16:06:01
2	SiO2†	1028087.6	1004256.2	81946 ug/L	81946 ppb	16:07:00
3	Sc Radial	4401.4	4401.4	100 %		16:05:25
3	Y RADIAL	5490.3	5490.3	115.3 %		16:05:25
3	Al 396.153Radial†	70809.9	70786.2	69509 ug/L	69509 ppb	16:05:05
3	Ca 317.933Radial†	12939.1	12904.8	24419 ug/L	24419 ppb	16:05:05
3	Fe 238.204 Radial†	10506.1	10482.5	121470 ug/L	121470 ppb	16:05:05
3	K 766.490 Radial†	80815.1	78100.1	14867 ug/L	14867 ppb	16:05:05
3	Mg 279.077 IEC†	432.0	429.8	17608 ug/L	17608 ppb	16:05:25
3	Na 589.592 Radial†	25450.9	26289.4	9267.6 ug/L	9267.6 ppb	16:05:05
3	Sr 421.552†	85981.3	85836.9	687.86 ug/L	687.86 ppb	16:05:05
3	Sc 361.383	843740.5	843740.5	103.04 %		16:06:28
3	Y 371.029	814234.6	814234.6	117.72 %		16:06:28
3	Ag 328.068†	90735.6	87871.1	495.77 ug/L	495.77 ppb	16:06:28
3	As 188.979†	823.3	825.8	520.94 ug/L	520.94 ppb	16:06:48
3	B 249.677†	18614.9	18602.6	500.72 ug/L	500.72 ppb	16:06:28
3	Ba 233.527†	123329.7	119688.4	1126.1 ug/L	1126.1 ppb	16:06:28
3	Be 313.107†	1209475.6	1177490.7	511.93 ug/L	511.93 ppb	16:06:28
3	Cd 226.502†	34195.7	33356.5	471.87 ug/L	471.87 ppb	16:06:48
3	Co 228.616†	19987.4	19443.3	492.40 ug/L	492.40 ppb	16:06:48
3	Cr 267.716†	51826.1	50224.1	687.17 ug/L	687.17 ppb	16:06:28
3	Cu 324.752†	181242.7	170338.6	568.66 ug/L	568.66 ppb	16:06:28
3	Mn 257.610†	2197360.4	2132083.1	2814.6 ug/L	2814.6 ppb	16:06:28
3	Mo 202.031†	5408.3	5240.0	475.51 ug/L	475.51 ppb	16:06:48
3	Ni 231.604†	19359.3	18703.5	593.67 ug/L	593.67 ppb	16:06:48
3	P 214.914†	4063.2	3755.9	2610.0 ug/L	2610.0 ppb	16:06:48
3	Pb 220.353†	3409.6	3367.3	516.61 ug/L	516.61 ppb	16:06:48
3	S 181.975 Axial†	3013.8	2894.6	5168.9 ug/L	5168.9 ppb	16:06:48
3	Sb 206.836†	1118.9	1062.2	444.76 ug/L	444.76 ppb	16:06:48
3	Se 196.026†	136.4	149.4	497.20 ug/L	497.20 ppb	16:06:48
3	Si 251.611†	1031581.4	1000630.5	37981 ug/L	37981 ppb	16:06:28
3	Sn 189.927†	2102.5	2033.3	458.77 ug/L	458.77 ppb	16:06:48
3	Ti 334.940†	2751033.4	2670916.3	4646.3 ug/L	4646.3 ppb	16:06:28
3	Tl 190.801†	1128.9	1124.7	483.66 ug/L	483.66 ppb	16:06:48
3	U 409.014†	6282.4	8301.1	236.49 ug/L	236.49 ppb	16:06:28
3	V 292.402†	79382.0	78355.3	610.23 ug/L	610.23 ppb	16:06:28
3	Zn 213.857†	72116.5	69416.8	818.38 ug/L	818.38 ppb	16:06:28
3	SiO2†	1019424.9	988821.8	80687 ug/L	80687 ppb	16:07:06

Mean Data: 1202053067|957496|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	837670.5	102.30 %	0.752			0.73%
Sc Radial	4371.2	99.5 %	1.15			1.16%
Y 371.029	808160.3	116.85 %	0.872			0.75%
Y RADIAL	5469.4	114.9 %	1.15			1.00%
Ag 328.068†	88148.8	496.93 ug/L	1.062	496.93 ppb	1.062	0.21%
Al 396.153Radial†	70156.3	68890 ug/L	537.1	68890 ppb	537.1	0.78%
As 188.979†	836.8	526.84 ug/L	6.750	526.84 ppb	6.750	1.28%
B 249.677†	18613.6	501.17 ug/L	0.462	501.17 ppb	0.462	0.09%
Ba 233.527†	120002.5	1129.0 ug/L	2.88	1129.0 ppb	2.88	0.25%
Be 313.107†	1177283.1	511.85 ug/L	0.390	511.85 ppb	0.390	0.08%
Ca 317.933Radial†	12804.9	24230 ug/L	179.6	24230 ppb	179.6	0.74%
Cd 226.502†	33621.8	475.82 ug/L	4.308	475.82 ppb	4.308	0.91%
Co 228.616†	19580.6	495.96 ug/L	4.110	495.96 ppb	4.110	0.83%
Cr 267.716†	50351.3	688.77 ug/L	1.536	688.77 ppb	1.536	0.22%
Cu 324.752†	170542.2	569.28 ug/L	0.706	569.28 ppb	0.706	0.12%
Fe 238.204 Radial†	10401.8	120540 ug/L	815.1	120540 ppb	815.1	0.68%
K 766.490 Radial†	77679.7	14787 ug/L	76.9	14787 ppb	76.9	0.52%

Mg 279.077 IEC†	436.2	17874 ug/L	346.5	17874 ppb	346.5	1.94%
Mn 257.610†	2135749.8	2819.3 ug/L	4.89	2819.3 ppb	4.89	0.17%
Mo 202.031†	5269.5	478.06 ug/L	2.934	478.06 ppb	2.934	0.61%
Na 589.592 Radial†	26186.7	9231.4 ug/L	35.33	9231.4 ppb	35.33	0.38%
Ni 231.604†	18828.7	597.64 ug/L	4.669	597.64 ppb	4.669	0.78%
P 214.914†	3778.9	2627.6 ug/L	16.27	2627.6 ppb	16.27	0.62%
Pb 220.353†	3399.8	521.60 ug/L	5.385	521.60 ppb	5.385	1.03%
S 181.975 Axial†	2917.8	5210.6 ug/L	52.96	5210.6 ppb	52.96	1.02%
Sb 206.836†	1069.7	448.02 ug/L	2.919	448.02 ppb	2.919	0.65%
Se 196.026†	154.8	498.84 ug/L	9.450	498.84 ppb	9.450	1.89%
Si 251.611†	1002619.2	38057 ug/L	81.1	38057 ppb	81.1	0.21%
Sn 189.927†	2043.4	461.08 ug/L	2.659	461.08 ppb	2.659	0.58%
Sr 421.552†	85241.8	683.10 ug/L	4.130	683.10 ppb	4.130	0.60%
Ti 334.940†	2674072.5	4651.8 ug/L	5.90	4651.8 ppb	5.90	0.13%
Tl 190.801†	1123.6	483.31 ug/L	0.522	483.31 ppb	0.522	0.11%
U 409.014†	8328.5	237.42 ug/L	1.577	237.42 ppb	1.577	0.66%
V 292.402†	78437.4	611.06 ug/L	0.888	611.06 ppb	0.888	0.15%
Zn 213.857†	69679.2	821.67 ug/L	2.852	821.67 ppb	2.852	0.35%
SiO2†	1004308.8	81951 ug/L	1266.0	81951 ppb	1266.0	1.54%

Sequence No.: 26
 Sample ID: 1202053065|957496|5
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 44
 Date Collected: 3/19/2010 16:09:17
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202053065|957496|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4420.1	4420.1	101 %		16:11:10
1	Y RADIAL	4931.1	4931.1	103.6 %		16:11:10
1	Al 396.153Radial†	9048.0	9074.8	8913.9 ug/L	8913.9 ppb	16:11:10
1	Ca 317.933Radial†	2066.2	2038.8	3857.8 ug/L	3857.8 ppb	16:11:30
1	Fe 238.204 Radial†	1893.0	1873.8	21711 ug/L	21711 ppb	16:11:30
1	K 766.490 Radial†	11603.5	8939.0	1701.4 ug/L	1701.4 ppb	16:11:10
1	Mg 279.077 IEC†	60.3	58.4	2385.7 ug/L	2385.7 ppb	16:11:30
1	Na 589.592 Radial†	1056.6	1925.8	678.88 ug/L	678.88 ppb	16:11:10
1	Sr 421.552†	3672.8	3631.1	29.077 ug/L	29.077 ppb	16:11:10
1	Sc 361.383	824757.2	824757.2	100.72 %		16:12:27
1	Y 371.029	710862.0	710862.0	102.78 %		16:12:27
1	Ag 328.068†	-985.7	-1163.8	0.7621 ug/L	0.7621 ppb	16:12:27
1	As 188.979†	-30.2	-3.2	9.6606 ug/L	9.6606 ppb	16:12:47
1	B 249.677†	-36.9	500.7	10.504 ug/L	10.504 ppb	16:12:27
1	Ba 233.527†	12620.3	12530.2	118.08 ug/L	118.08 ppb	16:12:27
1	Be 313.107†	-5512.9	-1742.2	0.9222 ug/L	0.9222 ppb	16:12:27
1	Cd 226.502†	-10.7	160.0	0.0843 ug/L	0.0843 ppb	16:12:47
1	Co 228.616†	173.7	218.6	3.8437 ug/L	3.8437 ppb	16:12:47
1	Cr 267.716†	2693.5	2602.6	37.256 ug/L	37.256 ppb	16:12:27
1	Cu 324.752†	7356.4	1751.5	6.9543 ug/L	6.9543 ppb	16:12:27
1	Mn 257.610†	352061.6	349140.1	461.10 ug/L	461.10 ppb	16:12:27
1	Mo 202.031†	12.4	3.8	2.0676 ug/L	2.0676 ppb	16:12:47
1	Ni 231.604†	766.8	677.2	21.503 ug/L	21.503 ppb	16:12:47
1	P 214.914†	757.4	564.6	404.12 ug/L	404.12 ppb	16:12:47
1	Pb 220.353†	1.6	59.9	8.1344 ug/L	8.1344 ppb	16:12:47
1	S 181.975 Axial†	39.2	8.7	13.927 ug/L	13.927 ppb	16:12:47
1	Sb 206.836†	32.1	8.2	0.4999 ug/L	0.4999 ppb	16:12:47
1	Se 196.026†	-97.3	-79.6	-1.0894 ug/L	-1.0894 ppb	16:12:47
1	Si 251.611†	219978.6	217908.1	8272.4 ug/L	8272.4 ppb	16:12:27
1	Sn 189.927†	-24.9	-31.9	-7.8011 ug/L	-7.8011 ppb	16:12:47
1	Ti 334.940†	423393.5	421469.3	733.28 ug/L	733.28 ppb	16:12:27
1	Tl 190.801†	-45.9	-16.5	1.8062 ug/L	1.8062 ppb	16:12:47
1	U 409.014†	-3573.2	-1343.3	-43.307 ug/L	-43.307 ppb	16:12:27
1	V 292.402†	2084.8	3387.3	23.070 ug/L	23.070 ppb	16:12:27
1	Zn 213.857†	6019.6	5406.2	62.112 ug/L	62.112 ppb	16:12:27
1	SiO2†	222619.2	220518.6	17997 ug/L	17997 ppb	16:13:44
2	Sc Radial	4509.7	4509.7	103 %		16:11:35
2	Y RADIAL	5012.7	5012.7	105.3 %		16:11:35
2	Al 396.153Radial†	9168.3	9013.3	8853.4 ug/L	8853.4 ppb	16:11:35
2	Ca 317.933Radial†	2054.3	1986.4	3758.7 ug/L	3758.7 ppb	16:11:55
2	Fe 238.204 Radial†	1877.3	1821.1	21101 ug/L	21101 ppb	16:11:55
2	K 766.490 Radial†	11521.5	8629.8	1642.5 ug/L	1642.5 ppb	16:11:35
2	Mg 279.077 IEC†	56.2	53.2	2174.6 ug/L	2174.6 ppb	16:11:55
2	Na 589.592 Radial†	1078.5	1926.2	679.01 ug/L	679.01 ppb	16:11:35
2	Sr 421.552†	3763.2	3646.7	29.203 ug/L	29.203 ppb	16:11:35
2	Sc 361.383	819697.7	819697.7	100.11 %		16:12:53
2	Y 371.029	706189.3	706189.3	102.10 %		16:12:53
2	Ag 328.068†	-1014.8	-1198.8	0.3875 ug/L	0.3875 ppb	16:12:53
2	As 188.979†	-32.6	-5.8	8.1204 ug/L	8.1204 ppb	16:13:13
2	B 249.677†	-95.0	442.5	8.9707 ug/L	8.9707 ppb	16:12:53
2	Ba 233.527†	12535.5	12522.8	117.99 ug/L	117.99 ppb	16:12:53
2	Be 313.107†	-5478.2	-1741.3	0.9231 ug/L	0.9231 ppb	16:12:53
2	Cd 226.502†	1.9	172.5	0.3300 ug/L	0.3300 ppb	16:13:13
2	Co 228.616†	171.8	217.8	3.8305 ug/L	3.8305 ppb	16:13:13
2	Cr 267.716†	2746.8	2672.3	38.124 ug/L	38.124 ppb	16:12:53
2	Cu 324.752†	7354.6	1794.8	7.0635 ug/L	7.0635 ppb	16:12:53
2	Mn 257.610†	349873.8	349112.1	461.01 ug/L	461.01 ppb	16:12:53
2	Mo 202.031†	12.1	3.5	1.9955 ug/L	1.9955 ppb	16:13:13
2	Ni 231.604†	777.7	692.9	22.000 ug/L	22.000 ppb	16:13:13

2	P 214.914†	743.6	555.5	397.77 ug/L	397.77 ppb	16:13:13
2	Pb 220.353†	-7.7	50.6	6.7768 ug/L	6.7768 ppb	16:13:13
2	S 181.975 Axial†	47.3	17.1	28.927 ug/L	28.927 ppb	16:13:13
2	Sb 206.836†	34.8	11.1	1.7382 ug/L	1.7382 ppb	16:13:13
2	Se 196.026†	-98.9	-81.8	-4.6902 ug/L	-4.6902 ppb	16:13:13
2	Si 251.611†	218893.1	218171.9	8282.4 ug/L	8282.4 ppb	16:12:53
2	Sn 189.927†	-19.5	-26.7	-6.5983 ug/L	-6.5983 ppb	16:13:13
2	Ti 334.940†	420949.7	421622.6	733.55 ug/L	733.55 ppb	16:12:53
2	Tl 190.801†	-52.9	-23.7	-0.9765 ug/L	-0.9765 ppb	16:13:13
2	U 409.014†	-3465.0	-1257.1	-40.625 ug/L	-40.625 ppb	16:12:53
2	V 292.402†	1976.5	3291.8	22.396 ug/L	22.396 ppb	16:12:53
2	Zn 213.857†	5989.9	5413.5	62.287 ug/L	62.287 ppb	16:12:53
2	SiO2†	220900.7	220166.2	17968 ug/L	17968 ppb	16:13:49
3	Sc Radial	4532.2	4532.2	103 %		16:12:00
3	Y RADIAL	5054.1	5054.1	106.2 %		16:12:00
3	Al 396.153Radial†	9250.3	9048.6	8888.1 ug/L	8888.1 ppb	16:12:00
3	Ca 317.933Radial†	2067.1	1988.9	3763.4 ug/L	3763.4 ppb	16:12:20
3	Fe 238.204 Radial†	1889.5	1823.8	21133 ug/L	21133 ppb	16:12:20
3	K 766.490 Radial†	11709.1	8756.1	1666.6 ug/L	1666.6 ppb	16:12:00
3	Mg 279.077 IEC†	55.0	51.8	2114.1 ug/L	2114.1 ppb	16:12:20
3	Na 589.592 Radial†	1030.4	1874.4	660.76 ug/L	660.76 ppb	16:12:00
3	Sr 421.552†	3759.8	3625.2	29.031 ug/L	29.031 ppb	16:12:00
3	Sc 361.383	828755.4	828755.4	101.21 %		16:13:18
3	Y 371.029	714645.9	714645.9	103.33 %		16:13:18
3	Ag 328.068†	-1073.5	-1245.8	0.1521 ug/L	0.1521 ppb	16:13:18
3	As 188.979†	-35.8	-8.6	6.5658 ug/L	6.5658 ppb	16:13:38
3	B 249.677†	-105.8	432.9	8.6961 ug/L	8.6961 ppb	16:13:18
3	Ba 233.527†	12682.4	12531.1	118.07 ug/L	118.07 ppb	16:13:18
3	Be 313.107†	-5529.8	-1732.5	0.9265 ug/L	0.9265 ppb	16:13:18
3	Cd 226.502†	-7.1	163.6	0.1978 ug/L	0.1978 ppb	16:13:38
3	Co 228.616†	170.1	214.3	3.7389 ug/L	3.7389 ppb	16:13:38
3	Cr 267.716†	2736.0	2631.7	37.582 ug/L	37.582 ppb	16:13:18
3	Cu 324.752†	7386.1	1745.6	6.9013 ug/L	6.9013 ppb	16:13:18
3	Mn 257.610†	353142.8	348522.2	460.24 ug/L	460.24 ppb	16:13:18
3	Mo 202.031†	10.2	1.6	1.8238 ug/L	1.8238 ppb	16:13:38
3	Ni 231.604†	771.7	678.4	21.539 ug/L	21.539 ppb	16:13:38
3	P 214.914†	755.2	558.8	400.29 ug/L	400.29 ppb	16:13:38
3	Pb 220.353†	21.0	79.0	11.152 ug/L	11.152 ppb	16:13:38
3	S 181.975 Axial†	48.6	17.8	30.205 ug/L	30.205 ppb	16:13:38
3	Sb 206.836†	31.9	7.9	0.4110 ug/L	0.4110 ppb	16:13:38
3	Se 196.026†	-97.8	-79.6	-2.7566 ug/L	-2.7566 ppb	16:13:38
3	Si 251.611†	220758.9	217625.5	8261.7 ug/L	8261.7 ppb	16:13:18
3	Sn 189.927†	-16.8	-23.8	-5.9421 ug/L	-5.9421 ppb	16:13:38
3	Ti 334.940†	425498.2	421520.9	733.38 ug/L	733.38 ppb	16:13:18
3	Tl 190.801†	-38.1	-8.6	4.8827 ug/L	4.8827 ppb	16:13:38
3	U 409.014†	-3413.2	-1168.1	-37.927 ug/L	-37.927 ppb	16:13:18
3	V 292.402†	2019.6	3312.8	22.561 ug/L	22.561 ppb	16:13:18
3	Zn 213.857†	6051.4	5408.8	62.229 ug/L	62.229 ppb	16:13:18
3	SiO2†	219093.6	215968.9	17626 ug/L	17626 ppb	16:13:54

Mean Data: 1202053065|957496|5

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	824403.4	100.68 %	0.554			0.55%
Sc Radial	4487.3	102 %	1.3			1.32%
Y 371.029	710565.7	102.74 %	0.612			0.60%
Y RADIAL	4999.3	105.0 %	1.31			1.25%
Ag 328.068†	-1202.8	0.4339 ug/L	0.30764	0.4339 ppb	0.30764	70.90%
Al 396.153Radial†	9045.5	8885.1 ug/L	30.32	8885.1 ppb	30.32	0.34%
As 188.979†	-5.9	8.1156 ug/L	1.54745	8.1156 ppb	1.54745	19.07%
B 249.677†	458.7	9.3903 ug/L	0.97437	9.3903 ppb	0.97437	10.38%
Ba 233.527†	12528.0	118.05 ug/L	0.049	118.05 ppb	0.049	0.04%
Be 313.107†	-1738.7	0.9239 ug/L	0.00228	0.9239 ppb	0.00228	0.25%
Ca 317.933Radial†	2004.7	3793.3 ug/L	55.88	3793.3 ppb	55.88	1.47%
Cd 226.502†	165.4	0.2041 ug/L	0.12297	0.2041 ppb	0.12297	60.26%
Co 228.616†	216.9	3.8043 ug/L	0.05709	3.8043 ppb	0.05709	1.50%
Cr 267.716†	2635.6	37.654 ug/L	0.4386	37.654 ppb	0.4386	1.16%
Cu 324.752†	1764.0	6.9730 ug/L	0.08270	6.9730 ppb	0.08270	1.19%
Fe 238.204 Radial†	1839.6	21315 ug/L	343.7	21315 ppb	343.7	1.61%
K 766.490 Radial†	8775.0	1670.2 ug/L	29.60	1670.2 ppb	29.60	1.77%

Mg 279.077 IEC†	54.5	2224.8 ug/L	142.58	2224.8 ppb	142.58	6.41%
Mn 257.610†	348924.8	460.79 ug/L	0.472	460.79 ppb	0.472	0.10%
Mo 202.031†	3.0	1.9623 ug/L	0.12523	1.9623 ppb	0.12523	6.38%
Na 589.592 Radial†	1908.8	672.88 ug/L	10.496	672.88 ppb	10.496	1.56%
Ni 231.604†	682.8	21.681 ug/L	0.2770	21.681 ppb	0.2770	1.28%
P 214.914†	559.7	400.72 ug/L	3.199	400.72 ppb	3.199	0.80%
Pb 220.353†	63.2	8.6877 ug/L	2.23948	8.6877 ppb	2.23948	25.78%
S 181.975 Axial†	14.5	24.353 ug/L	9.0518	24.353 ppb	9.0518	37.17%
Sb 206.836†	9.0	0.8830 ug/L	0.74193	0.8830 ppb	0.74193	84.02%
Se 196.026†	-80.4	-2.8454 ug/L	1.80204	-2.8454 ppb	1.80204	63.33%
Si 251.611†	217901.8	8272.2 ug/L	10.37	8272.2 ppb	10.37	0.13%
Sn 189.927†	-27.5	-6.7805 ug/L	0.94279	-6.7805 ppb	0.94279	13.90%
Sr 421.552†	3634.4	29.104 ug/L	0.0891	29.104 ppb	0.0891	0.31%
Ti 334.940†	421537.6	733.41 ug/L	0.136	733.41 ppb	0.136	0.02%
Tl 190.801†	-16.3	1.9041 ug/L	2.93080	1.9041 ppb	2.93080	153.92%
U 409.014†	-1256.2	-40.620 ug/L	2.6897	-40.620 ppb	2.6897	6.62%
V 292.402†	3330.6	22.676 ug/L	0.3510	22.676 ppb	0.3510	1.55%
Zn 213.857†	5409.5	62.209 ug/L	0.0894	62.209 ppb	0.0894	0.14%
SiO2†	218884.6	17864 ug/L	206.6	17864 ppb	206.6	1.16%

Sequence No.: 27

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 16:16:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4402.2	4402.2	100 %		16:17:58
1	Y RADIAL	4731.1	4731.1	99.38 %		16:17:58
1	Al 396.153Radial†	5010.2	5080.2	4965.9 ug/L	4965.9 ppb	16:17:58
1	Ca 317.933Radial†	2670.1	2650.1	5014.5 ug/L	5014.5 ppb	16:18:18
1	Fe 238.204 Radial†	441.4	432.2	5023.5 ug/L	5023.5 ppb	16:18:18
1	K 766.490 Radial†	29509.5	26863.0	5111.9 ug/L	5111.9 ppb	16:17:58
1	Mg 279.077 IEC†	125.0	123.3	5085.3 ug/L	5085.3 ppb	16:18:18
1	Na 589.592 Radial†	26730.0	27561.9	9716.2 ug/L	9716.2 ppb	16:17:58
1	Sr 421.552†	62391.5	62269.8	499.10 ug/L	499.10 ppb	16:17:58
1	Sc 361.383	835922.3	835922.3	102.09 %		16:19:15
1	Y 371.029	696126.9	696126.9	100.65 %		16:19:15
1	Ag 328.068†	99594.6	97372.5	508.64 ug/L	508.64 ppb	16:19:20
1	As 188.979†	903.3	911.6	504.79 ug/L	504.79 ppb	16:19:40
1	B 249.677†	17815.0	17988.0	502.36 ug/L	502.36 ppb	16:19:20
1	Ba 233.527†	54809.1	53688.8	504.13 ug/L	504.13 ppb	16:19:20
1	Be 313.107†	1199453.4	1178651.4	503.00 ug/L	503.00 ppb	16:19:15
1	Cd 226.502†	35326.2	34774.3	504.47 ug/L	504.47 ppb	16:19:20
1	Co 228.616†	20209.3	19842.2	512.94 ug/L	512.94 ppb	16:19:20
1	Cr 267.716†	38328.3	37472.9	503.55 ug/L	503.55 ppb	16:19:20
1	Cu 324.752†	160134.4	151307.1	499.52 ug/L	499.52 ppb	16:19:20
1	Mn 257.610†	388179.2	379850.5	499.72 ug/L	499.72 ppb	16:19:15
1	Mo 202.031†	5733.9	5608.1	498.96 ug/L	498.96 ppb	16:19:40
1	Ni 231.604†	16489.1	16067.7	509.96 ug/L	509.96 ppb	16:19:20
1	P 214.914†	3617.5	3356.2	2402.7 ug/L	2402.7 ppb	16:19:40
1	Pb 220.353†	3232.9	3225.1	496.89 ug/L	496.89 ppb	16:19:40
1	S 181.975 Axial†	600.5	558.0	998.05 ug/L	998.05 ppb	16:19:40
1	Sb 206.836†	1231.6	1182.8	512.76 ug/L	512.76 ppb	16:19:40
1	Se 196.026†	598.3	603.0	519.86 ug/L	519.86 ppb	16:19:40
1	Si 251.611†	69465.6	67556.6	2558.5 ug/L	2558.5 ppb	16:19:20
1	Sn 189.927†	2243.4	2190.4	497.66 ug/L	497.66 ppb	16:19:40
1	Ti 334.940†	290256.3	285440.8	496.25 ug/L	496.25 ppb	16:19:20
1	Tl 190.801†	1273.2	1276.3	497.06 ug/L	497.06 ppb	16:19:40
1	U 409.014†	15022.1	16919.0	511.60 ug/L	511.60 ppb	16:19:20
1	V 292.402†	62771.7	62805.3	508.19 ug/L	508.19 ppb	16:19:20
1	Zn 213.857†	43186.0	41732.7	500.99 ug/L	500.99 ppb	16:19:20
1	SiO2†	70045.9	68113.8	5545.3 ug/L	5545.3 ppb	16:20:48
2	Sc Radial	4400.2	4400.2	100 %		16:18:23
2	Y RADIAL	4740.2	4740.2	99.57 %		16:18:23
2	Al 396.153Radial†	4966.4	5038.7	4924.8 ug/L	4924.8 ppb	16:18:23
2	Ca 317.933Radial†	2661.4	2642.6	5000.3 ug/L	5000.3 ppb	16:18:43
2	Fe 238.204 Radial†	440.0	431.1	5010.2 ug/L	5010.2 ppb	16:18:43
2	K 766.490 Radial†	29249.7	26616.9	5065.1 ug/L	5065.1 ppb	16:18:23
2	Mg 279.077 IEC†	125.0	123.3	5087.1 ug/L	5087.1 ppb	16:18:43
2	Na 589.592 Radial†	26393.4	27237.8	9601.9 ug/L	9601.9 ppb	16:18:23
2	Sr 421.552†	61692.4	61599.8	493.73 ug/L	493.73 ppb	16:18:23
2	Sc 361.383	826781.9	826781.9	100.97 %		16:19:46
2	Y 371.029	688677.6	688677.6	99.571 %		16:19:46
2	Ag 328.068†	99730.1	98585.2	514.95 ug/L	514.95 ppb	16:19:51
2	As 188.979†	904.5	922.6	510.83 ug/L	510.83 ppb	16:20:11
2	B 249.677†	17837.7	18203.4	508.39 ug/L	508.39 ppb	16:19:51
2	Ba 233.527†	54922.3	54394.5	510.75 ug/L	510.75 ppb	16:19:51
2	Be 313.107†	1187758.3	1180058.2	503.62 ug/L	503.62 ppb	16:19:46
2	Cd 226.502†	35516.9	35345.8	512.76 ug/L	512.76 ppb	16:19:51
2	Co 228.616†	20183.2	20035.2	517.93 ug/L	517.93 ppb	16:19:51
2	Cr 267.716†	38401.5	37960.4	510.10 ug/L	510.10 ppb	16:19:51
2	Cu 324.752†	159894.7	152803.8	504.46 ug/L	504.46 ppb	16:19:51
2	Mn 257.610†	384237.7	380150.7	500.12 ug/L	500.12 ppb	16:19:46
2	Mo 202.031†	5749.5	5685.7	505.86 ug/L	505.86 ppb	16:20:11
2	Ni 231.604†	16483.3	16240.6	515.44 ug/L	515.44 ppb	16:19:51

2	P 214.914†	3591.6	3369.8	2411.9 ug/L	2411.9 ppb	16:20:11
2	Pb 220.353†	3259.5	3286.4	506.33 ug/L	506.33 ppb	16:20:11
2	S 181.975 Axial†	608.7	572.6	1024.2 ug/L	1024.2 ppb	16:20:11
2	Sb 206.836†	1231.1	1195.6	518.40 ug/L	518.40 ppb	16:20:11
2	Se 196.026†	609.9	621.0	534.85 ug/L	534.85 ppb	16:20:11
2	Si 251.611†	69567.4	68409.8	2590.8 ug/L	2590.8 ppb	16:19:51
2	Sn 189.927†	2257.0	2228.1	506.23 ug/L	506.23 ppb	16:20:11
2	Ti 334.940†	290413.7	288740.0	501.98 ug/L	501.98 ppb	16:19:51
2	Tl 190.801†	1301.1	1317.7	513.10 ug/L	513.10 ppb	16:20:11
2	U 409.014†	14982.4	17042.5	515.33 ug/L	515.33 ppb	16:19:51
2	V 292.402†	62794.7	63507.7	513.90 ug/L	513.90 ppb	16:19:51
2	Zn 213.857†	43252.2	42265.9	507.41 ug/L	507.41 ppb	16:19:51
2	SiO2†	69267.5	68101.6	5544.1 ug/L	5544.1 ppb	16:20:53
3	Sc Radial	4425.7	4425.7	101 %		16:18:48
3	Y RADIAL	4782.7	4782.7	100.5 %		16:18:48
3	Al 396.153Radial†	5033.1	5076.3	4962.1 ug/L	4962.1 ppb	16:18:48
3	Ca 317.933Radial†	2658.8	2624.7	4966.4 ug/L	4966.4 ppb	16:19:08
3	Fe 238.204 Radial†	439.0	427.5	4968.7 ug/L	4968.7 ppb	16:19:08
3	K 766.490 Radial†	29541.6	26738.3	5088.2 ug/L	5088.2 ppb	16:18:48
3	Mg 279.077 IEC†	123.3	120.9	4986.7 ug/L	4986.7 ppb	16:19:08
3	Na 589.592 Radial†	26560.3	27251.5	9606.8 ug/L	9606.8 ppb	16:18:48
3	Sr 421.552†	62301.6	61849.4	495.73 ug/L	495.73 ppb	16:18:48
3	Sc 361.383	831615.2	831615.2	101.56 %		16:20:17
3	Y 371.029	693496.3	693496.3	100.27 %		16:20:17
3	Ag 328.068†	98591.3	96889.8	506.10 ug/L	506.10 ppb	16:20:22
3	As 188.979†	899.5	912.5	505.20 ug/L	505.20 ppb	16:20:42
3	B 249.677†	17618.1	17884.5	499.47 ug/L	499.47 ppb	16:20:22
3	Ba 233.527†	54141.2	53309.2	500.56 ug/L	500.56 ppb	16:20:22
3	Be 313.107†	1195119.8	1180469.7	503.77 ug/L	503.77 ppb	16:20:17
3	Cd 226.502†	34953.8	34586.8	501.75 ug/L	501.75 ppb	16:20:22
3	Co 228.616†	19939.1	19678.7	508.72 ug/L	508.72 ppb	16:20:22
3	Cr 267.716†	37938.4	37283.4	501.00 ug/L	501.00 ppb	16:20:22
3	Cu 324.752†	158213.3	150228.0	495.96 ug/L	495.96 ppb	16:20:22
3	Mn 257.610†	386066.1	379739.2	499.57 ug/L	499.57 ppb	16:20:17
3	Mo 202.031†	5709.6	5613.3	499.41 ug/L	499.41 ppb	16:20:42
3	Ni 231.604†	16250.7	15916.7	505.16 ug/L	505.16 ppb	16:20:22
3	P 214.914†	3588.3	3345.9	2395.8 ug/L	2395.8 ppb	16:20:42
3	Pb 220.353†	3252.5	3260.8	502.39 ug/L	502.39 ppb	16:20:42
3	S 181.975 Axial†	595.0	555.7	993.81 ug/L	993.81 ppb	16:20:42
3	Sb 206.836†	1235.1	1192.4	516.82 ug/L	516.82 ppb	16:20:42
3	Se 196.026†	601.3	609.0	524.74 ug/L	524.74 ppb	16:20:42
3	Si 251.611†	68558.9	67016.2	2538.0 ug/L	2538.0 ppb	16:20:22
3	Sn 189.927†	2236.2	2194.6	498.62 ug/L	498.62 ppb	16:20:42
3	Ti 334.940†	287124.5	283829.7	493.45 ug/L	493.45 ppb	16:20:22
3	Tl 190.801†	1275.0	1284.5	500.25 ug/L	500.25 ppb	16:20:42
3	U 409.014†	14819.1	16795.4	507.86 ug/L	507.86 ppb	16:20:22
3	V 292.402†	62008.3	62372.1	504.74 ug/L	504.74 ppb	16:20:22
3	Zn 213.857†	42612.5	41387.0	496.84 ug/L	496.84 ppb	16:20:22
3	SiO2†	68765.6	67208.7	5471.4 ug/L	5471.4 ppb	16:20:58

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	831439.8	101.54 %	0.558			0.55%
Sc Radial	4409.4	100 %	0.3			0.32%
Y 371.029	692766.9	100.16 %	0.546			0.55%
Y RADIAL	4751.3	99.81 %	0.578			0.58%
Ag 328.068†	97615.8	509.90 ug/L	4.555	509.90 ppb	4.555	0.89%
QC value within limits for Ag 328.068 Recovery = 101.98%						
Al 396.153Radial†	5065.1	4951.0 ug/L	22.71	4951.0 ppb	22.71	0.46%
QC value within limits for Al 396.153Radial Recovery = 99.02%						
As 188.979†	915.6	506.94 ug/L	3.380	506.94 ppb	3.380	0.67%
QC value within limits for As 188.979 Recovery = 101.39%						
B 249.677†	18025.3	503.41 ug/L	4.549	503.41 ppb	4.549	0.90%
QC value within limits for B 249.677 Recovery = 100.68%						
Ba 233.527†	53797.5	505.15 ug/L	5.169	505.15 ppb	5.169	1.02%
QC value within limits for Ba 233.527 Recovery = 101.03%						
Be 313.107†	1179726.4	503.46 ug/L	0.406	503.46 ppb	0.406	0.08%
QC value within limits for Be 313.107 Recovery = 100.69%						
Ca 317.933Radial†	2639.1	4993.7 ug/L	24.71	4993.7 ppb	24.71	0.49%

QC value within limits for Ca 317.933 Radial Recovery = 99.87%

Cd 226.502†	34902.3	506.33 ug/L	5.738	506.33 ppb	5.738	1.13%
QC value within limits for Cd 226.502 Recovery = 101.27%						
Co 228.616†	19852.0	513.19 ug/L	4.611	513.19 ppb	4.611	0.90%
QC value within limits for Co 228.616 Recovery = 102.64%						
Cr 267.716†	37572.2	504.88 ug/L	4.690	504.88 ppb	4.690	0.93%
QC value within limits for Cr 267.716 Recovery = 100.98%						
Cu 324.752†	151446.3	499.98 ug/L	4.270	499.98 ppb	4.270	0.85%
QC value within limits for Cu 324.752 Recovery = 100.00%						
Fe 238.204 Radial†	430.3	5000.8 ug/L	28.54	5000.8 ppb	28.54	0.57%
QC value within limits for Fe 238.204 Radial Recovery = 100.02%						
K 766.490 Radial†	26739.4	5088.4 ug/L	23.43	5088.4 ppb	23.43	0.46%
QC value within limits for K 766.490 Radial Recovery = 101.77%						
Mg 279.077 IEC†	122.5	5053.1 ug/L	57.45	5053.1 ppb	57.45	1.14%
QC value within limits for Mg 279.077 IEC Recovery = 101.06%						
Mn 257.610†	379913.5	499.80 ug/L	0.280	499.80 ppb	0.280	0.06%
QC value within limits for Mn 257.610 Recovery = 99.96%						
Mo 202.031†	5635.7	501.41 ug/L	3.857	501.41 ppb	3.857	0.77%
QC value within limits for Mo 202.031 Recovery = 100.28%						
Na 589.592 Radial†	27350.4	9641.6 ug/L	64.60	9641.6 ppb	64.60	0.67%
QC value within limits for Na 589.592 Radial Recovery = 96.42%						
Ni 231.604†	16075.0	510.19 ug/L	5.144	510.19 ppb	5.144	1.01%
QC value within limits for Ni 231.604 Recovery = 102.04%						
P 214.914†	3357.3	2403.5 ug/L	8.11	2403.5 ppb	8.11	0.34%
QC value within limits for P 214.914 Recovery = 96.14%						
Pb 220.353†	3257.4	501.87 ug/L	4.738	501.87 ppb	4.738	0.94%
QC value within limits for Pb 220.353 Recovery = 100.37%						
S 181.975 Axial†	562.1	1005.4 ug/L	16.46	1005.4 ppb	16.46	1.64%
QC value within limits for S 181.975 Axial Recovery = 100.54%						
Sb 206.836†	1190.3	515.99 ug/L	2.908	515.99 ppb	2.908	0.56%
QC value within limits for Sb 206.836 Recovery = 103.20%						
Se 196.026†	611.0	526.48 ug/L	7.645	526.48 ppb	7.645	1.45%
QC value within limits for Se 196.026 Recovery = 105.30%						
Si 251.611†	67660.9	2562.4 ug/L	26.63	2562.4 ppb	26.63	1.04%
QC value within limits for Si 251.611 Recovery = 102.50%						
Sn 189.927†	2204.4	500.83 ug/L	4.695	500.83 ppb	4.695	0.94%
QC value within limits for Sn 189.927 Recovery = 100.17%						
Sr 421.552†	61906.3	496.19 ug/L	2.714	496.19 ppb	2.714	0.55%
QC value within limits for Sr 421.552 Recovery = 99.24%						
Ti 334.940†	286003.5	497.22 ug/L	4.348	497.22 ppb	4.348	0.87%
QC value within limits for Ti 334.940 Recovery = 99.44%						
Tl 190.801†	1292.8	503.47 ug/L	8.490	503.47 ppb	8.490	1.69%
QC value within limits for Tl 190.801 Recovery = 100.69%						
U 409.014†	16919.0	511.60 ug/L	3.735	511.60 ppb	3.735	0.73%
QC value within limits for U 409.014 Recovery = 102.32%						
V 292.402†	62895.0	508.95 ug/L	4.625	508.95 ppb	4.625	0.91%
QC value within limits for V 292.402 Recovery = 101.79%						
Zn 213.857†	41795.2	501.74 ug/L	5.323	501.74 ppb	5.323	1.06%
QC value within limits for Zn 213.857 Recovery = 100.35%						
SiO2†	67808.0	5520.3 ug/L	42.32	5520.3 ppb	42.32	0.77%
QC value within limits for SiO2 Recovery = 103.23%						

All analyte(s) passed QC.

Sequence No.: 28

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 16:23:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4402.0	4402.0	100 %		16:25:02
1	Y RADIAL	4757.6	4757.6	99.94 %		16:25:02
1	Al 396.153Radial†	-77.9	0.3	0.3043 ug/L	0.3043 ppb	16:25:22
1	Ca 317.933Radial†	14.3	-1.4	-2.6093 ug/L	-2.6093 ppb	16:25:22
1	Fe 238.204 Radial†	7.9	-0.6	-6.4503 ug/L	-6.4503 ppb	16:25:22
1	K 766.490 Radial†	2716.1	113.1	21.549 ug/L	21.549 ppb	16:25:02
1	Mg 279.077 IEC†	0.0	-1.5	-62.540 ug/L	-62.540 ppb	16:25:22
1	Na 589.592 Radial†	-895.3	-18.8	-6.6244 ug/L	-6.6244 ppb	16:25:02
1	Sr 421.552†	32.7	11.8	0.0947 ug/L	0.0947 ppb	16:25:02
1	Sc 361.383	821746.9	821746.9	100.36 %		16:26:19
1	Y 371.029	694626.5	694626.5	100.43 %		16:26:19
1	Ag 328.068†	108.0	-77.5	-0.4023 ug/L	-0.4023 ppb	16:26:19
1	As 188.979†	-22.1	4.8	2.6249 ug/L	2.6249 ppb	16:26:39
1	B 249.677†	-206.5	331.6	9.3033 ug/L	9.3033 ppb	16:26:39
1	Ba 233.527†	4.3	5.0	0.0466 ug/L	0.0466 ppb	16:26:39
1	Be 313.107†	-3672.1	71.9	0.0306 ug/L	0.0306 ppb	16:26:19
1	Cd 226.502†	-188.8	-17.4	-0.2531 ug/L	-0.2531 ppb	16:26:39
1	Co 228.616†	-41.3	5.0	0.1295 ug/L	0.1295 ppb	16:26:39
1	Cr 267.716†	83.9	12.1	0.1627 ug/L	0.1627 ppb	16:26:39
1	Cu 324.752†	5590.5	18.6	0.0614 ug/L	0.0614 ppb	16:26:19
1	Mn 257.610†	421.8	31.3	0.0411 ug/L	0.0411 ppb	16:26:39
1	Mo 202.031†	13.9	5.3	0.4734 ug/L	0.4734 ppb	16:26:39
1	Ni 231.604†	76.1	-8.2	-0.2605 ug/L	-0.2605 ppb	16:26:39
1	P 214.914†	185.6	-2.4	-1.7755 ug/L	-1.7755 ppb	16:26:39
1	Pb 220.353†	-53.2	5.3	0.8103 ug/L	0.8103 ppb	16:26:39
1	S 181.975 Axial†	26.2	-4.0	-7.2355 ug/L	-7.2355 ppb	16:26:39
1	Sb 206.836†	32.7	8.9	3.7302 ug/L	3.7302 ppb	16:26:39
1	Se 196.026†	-18.7	-1.6	-1.3633 ug/L	-1.3633 ppb	16:26:39
1	Si 251.611†	648.1	157.6	5.9844 ug/L	5.9844 ppb	16:26:39
1	Sn 189.927†	3.4	-3.8	-0.8572 ug/L	-0.8572 ppb	16:26:39
1	Ti 334.940†	-1130.0	-4.8	-0.0084 ug/L	-0.0084 ppb	16:26:19
1	Tl 190.801†	-22.7	6.5	2.5070 ug/L	2.5070 ppb	16:26:39
1	U 409.014†	-2156.6	55.2	1.6755 ug/L	1.6755 ppb	16:26:19
1	V 292.402†	-1339.7	-17.5	-0.1400 ug/L	-0.1400 ppb	16:26:19
1	Zn 213.857†	570.6	-1.5	-0.0186 ug/L	-0.0186 ppb	16:26:39
1	SiO2†	681.3	179.5	14.649 ug/L	14.649 ppb	16:27:50
2	Sc Radial	4432.0	4432.0	101 %		16:25:27
2	Y RADIAL	4821.0	4821.0	101.3 %		16:25:27
2	Al 396.153Radial†	-72.5	6.2	6.0880 ug/L	6.0880 ppb	16:25:47
2	Ca 317.933Radial†	15.4	-0.4	-0.8179 ug/L	-0.8179 ppb	16:25:47
2	Fe 238.204 Radial†	7.2	-1.4	-15.743 ug/L	-15.743 ppb	16:25:47
2	K 766.490 Radial†	2711.7	90.3	17.205 ug/L	17.205 ppb	16:25:27
2	Mg 279.077 IEC†	1.1	-0.5	-19.869 ug/L	-19.869 ppb	16:25:47
2	Na 589.592 Radial†	-904.2	-21.5	-7.5925 ug/L	-7.5925 ppb	16:25:27
2	Sr 421.552†	13.6	-7.3	-0.0586 ug/L	-0.0586 ppb	16:25:27
2	Sc 361.383	822185.5	822185.5	100.41 %		16:26:44
2	Y 371.029	693807.7	693807.7	100.31 %		16:26:44
2	Ag 328.068†	147.6	-38.2	-0.1982 ug/L	-0.1982 ppb	16:26:44
2	As 188.979†	-12.6	14.3	7.8372 ug/L	7.8372 ppb	16:27:04
2	B 249.677†	-195.2	342.9	9.6208 ug/L	9.6208 ppb	16:27:04
2	Ba 233.527†	10.5	11.2	0.1047 ug/L	0.1047 ppb	16:27:04
2	Be 313.107†	-3724.4	21.8	0.0093 ug/L	0.0093 ppb	16:26:44
2	Cd 226.502†	-167.3	4.0	0.0581 ug/L	0.0581 ppb	16:27:04
2	Co 228.616†	-30.2	16.1	0.4160 ug/L	0.4160 ppb	16:27:04
2	Cr 267.716†	68.5	-3.3	-0.0441 ug/L	-0.0441 ppb	16:27:04
2	Cu 324.752†	5462.6	-111.7	-0.3688 ug/L	-0.3688 ppb	16:26:44
2	Mn 257.610†	444.6	53.7	0.0706 ug/L	0.0706 ppb	16:27:04
2	Mo 202.031†	16.6	8.0	0.7089 ug/L	0.7089 ppb	16:27:04
2	Ni 231.604†	69.5	-14.9	-0.4717 ug/L	-0.4717 ppb	16:27:04

2	P 214.914†	186.4	-1.6	-1.2135 ug/L	-1.2135 ppb	16:27:04
2	Pb 220.353†	-53.2	5.3	0.8163 ug/L	0.8163 ppb	16:27:04
2	S 181.975 Axial†	33.2	2.8	5.0836 ug/L	5.0836 ppb	16:27:04
2	Sb 206.836†	27.9	4.1	1.7026 ug/L	1.7026 ppb	16:27:04
2	Se 196.026†	-12.2	4.8	4.0243 ug/L	4.0243 ppb	16:27:04
2	Si 251.611†	658.6	167.7	6.3669 ug/L	6.3669 ppb	16:27:04
2	Sn 189.927†	10.4	3.2	0.7291 ug/L	0.7291 ppb	16:27:04
2	Ti 334.940†	-1124.6	1.2	0.0021 ug/L	0.0021 ppb	16:26:44
2	Tl 190.801†	-32.7	-3.5	-1.3397 ug/L	-1.3397 ppb	16:27:04
2	U 409.014†	-2098.0	114.8	3.4824 ug/L	3.4824 ppb	16:26:44
2	V 292.402†	-1355.0	-32.0	-0.2557 ug/L	-0.2557 ppb	16:26:44
2	Zn 213.857†	580.1	7.6	0.0924 ug/L	0.0924 ppb	16:27:04
2	SiO2†	668.5	166.4	13.583 ug/L	13.583 ppb	16:28:10
3	Sc Radial	4423.7	4423.7	101 %		16:25:52
3	Y RADIAL	4803.4	4803.4	100.9 %		16:25:52
3	Al 396.153Radial†	-83.2	-4.6	-4.5035 ug/L	-4.5035 ppb	16:26:12
3	Ca 317.933Radial†	15.6	-0.2	-0.3575 ug/L	-0.3575 ppb	16:26:12
3	Fe 238.204 Radial†	7.7	-0.8	-8.9431 ug/L	-8.9431 ppb	16:26:12
3	K 766.490 Radial†	2752.6	136.0	25.911 ug/L	25.911 ppb	16:25:52
3	Mg 279.077 IEC†	1.4	-0.2	-6.6434 ug/L	-6.6434 ppb	16:26:12
3	Na 589.592 Radial†	-868.6	12.1	4.2660 ug/L	4.2660 ppb	16:25:52
3	Sr 421.552†	4.3	-16.5	-0.1326 ug/L	-0.1326 ppb	16:25:52
3	Sc 361.383	832106.3	832106.3	101.62 %		16:27:09
3	Y 371.029	702928.2	702928.2	101.63 %		16:27:09
3	Ag 328.068†	198.6	10.3	0.0537 ug/L	0.0537 ppb	16:27:09
3	As 188.979†	-19.5	7.6	4.1733 ug/L	4.1733 ppb	16:27:30
3	B 249.677†	-240.1	301.1	8.4460 ug/L	8.4460 ppb	16:27:30
3	Ba 233.527†	2.5	3.1	0.0294 ug/L	0.0294 ppb	16:27:30
3	Be 313.107†	-3735.5	55.1	0.0235 ug/L	0.0235 ppb	16:27:09
3	Cd 226.502†	-164.7	8.6	0.1248 ug/L	0.1248 ppb	16:27:30
3	Co 228.616†	-43.2	3.7	0.0957 ug/L	0.0957 ppb	16:27:30
3	Cr 267.716†	75.6	2.9	0.0384 ug/L	0.0384 ppb	16:27:30
3	Cu 324.752†	5608.0	-33.5	-0.1108 ug/L	-0.1108 ppb	16:27:09
3	Mn 257.610†	409.7	14.1	0.0186 ug/L	0.0186 ppb	16:27:30
3	Mo 202.031†	7.5	-1.2	-0.1033 ug/L	-0.1033 ppb	16:27:30
3	Ni 231.604†	82.8	-2.6	-0.0827 ug/L	-0.0827 ppb	16:27:30
3	P 214.914†	198.1	7.7	5.7109 ug/L	5.7109 ppb	16:27:30
3	Pb 220.353†	-40.8	18.2	2.7924 ug/L	2.7924 ppb	16:27:30
3	S 181.975 Axial†	33.5	2.8	5.0300 ug/L	5.0300 ppb	16:27:30
3	Sb 206.836†	21.6	-2.4	-1.0212 ug/L	-1.0212 ppb	16:27:30
3	Se 196.026†	-25.7	-8.4	-6.9686 ug/L	-6.9686 ppb	16:27:30
3	Si 251.611†	663.2	164.4	6.2424 ug/L	6.2424 ppb	16:27:30
3	Sn 189.927†	13.4	6.0	1.3681 ug/L	1.3681 ppb	16:27:30
3	Ti 334.940†	-1129.3	9.9	0.0172 ug/L	0.0172 ppb	16:27:09
3	Tl 190.801†	-15.3	14.0	5.4354 ug/L	5.4354 ppb	16:27:30
3	U 409.014†	-2077.7	159.7	4.8441 ug/L	4.8441 ppb	16:27:09
3	V 292.402†	-1357.4	-18.3	-0.1459 ug/L	-0.1459 ppb	16:27:09
3	Zn 213.857†	578.2	-1.1	-0.0131 ug/L	-0.0131 ppb	16:27:30
3	SiO2†	635.6	126.1	10.293 ug/L	10.293 ppb	16:28:30

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	825346.3	100.80 %		0.715			0.71%
Sc Radial	4419.2	101 %		0.4			0.35%
Y 371.029	697120.8	100.79 %		0.730			0.72%
Y RADIAL	4794.0	100.7 %		0.69			0.68%
Ag 328.068†	-35.1	-0.1823 ug/L		0.22842	-0.1823 ppb	0.22842	125.31%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	0.6	0.6296 ug/L		5.30325	0.6296 ppb	5.30325	842.29%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	8.9	4.8785 ug/L		2.67674	4.8785 ppb	2.67674	54.87%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	325.2	9.1234 ug/L		0.60771	9.1234 ppb	0.60771	6.66%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	6.4	0.0602 ug/L		0.03944	0.0602 ppb	0.03944	65.50%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	49.6	0.0211 ug/L		0.01086	0.0211 ppb	0.01086	51.39%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-0.7	-1.2616 ug/L		1.18962	-1.2616 ppb	1.18962	94.30%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	-1.6	-0.0234 ug/L	0.20174	-0.0234 ppb	0.20174 862.88%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	8.3	0.2137 ug/L	0.17599	0.2137 ppb	0.17599 82.34%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	3.9	0.0523 ug/L	0.10407	0.0523 ppb	0.10407 198.81%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-42.2	-0.1394 ug/L	0.21654	-0.1394 ppb	0.21654 155.34%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	-0.9	-10.379 ug/L	4.8096	-10.379 ppb	4.8096 46.34%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	113.1	21.555 ug/L	4.3531	21.555 ppb	4.3531 20.20%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	-0.7	-29.684 ug/L	29.2124	-29.684 ppb	29.2124 98.41%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	33.0	0.0434 ug/L	0.02609	0.0434 ppb	0.02609 60.09%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	4.0	0.3597 ug/L	0.41791	0.3597 ppb	0.41791 116.19%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-9.4	-3.3170 ug/L	6.58490	-3.3170 ppb	6.58490 198.52%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-8.6	-0.2717 ug/L	0.19475	-0.2717 ppb	0.19475 71.69%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	1.2	0.9073 ug/L	4.16952	0.9073 ppb	4.16952 459.54%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	9.6	1.4730 ug/L	1.14262	1.4730 ppb	1.14262 77.57%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	0.5	0.9594 ug/L	7.09704	0.9594 ppb	7.09704 739.76%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	3.5	1.4705 ug/L	2.38418	1.4705 ppb	2.38418 162.13%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-1.7	-1.4359 ug/L	5.49684	-1.4359 ppb	5.49684 382.82%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	163.3	6.1979 ug/L	0.19510	6.1979 ppb	0.19510 3.15%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	1.8	0.4133 ug/L	1.14577	0.4133 ppb	1.14577 277.20%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	-4.0	-0.0322 ug/L	0.11597	-0.0322 ppb	0.11597 360.52%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	2.1	0.0037 ug/L	0.01287	0.0037 ppb	0.01287 351.41%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	5.7	2.2009 ug/L	3.39793	2.2009 ppb	3.39793 154.39%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	109.9	3.3340 ug/L	1.58950	3.3340 ppb	1.58950 47.68%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-22.6	-0.1805 ug/L	0.06515	-0.1805 ppb	0.06515 36.09%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	1.7	0.0202 ug/L	0.06256	0.0202 ppb	0.06256 309.04%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	157.4	12.842 ug/L	2.2707	12.842 ppb	2.2707 17.68%
QC value within limits for SiO2 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 30

Sample ID: 247794001|957496|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 46

Date Collected: 3/19/2010 16:38:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247794001|957496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4594.0	4594.0	105 %		16:39:54
1	Y RADIAL	6167.6	6167.6	129.6 %		16:39:54
1	Al 396.153Radial†	12841.7	12363.7	12144 ug/L	12144 ppb	16:39:54
1	Ca 317.933Radial†	1716.6	1626.6	3077.8 ug/L	3077.8 ppb	16:40:14
1	Fe 238.204 Radial†	6447.8	6160.2	71376 ug/L	71376 ppb	16:39:54
1	K 766.490 Radial†	35236.9	31112.3	5924.0 ug/L	5924.0 ppb	16:39:54
1	Mg 279.077 IEC†	58.6	54.5	2174.1 ug/L	2174.1 ppb	16:40:14
1	Na 589.592 Radial†	12185.7	12533.1	4418.2 ug/L	4418.2 ppb	16:39:54
1	Sr 421.552†	2402.2	2277.3	18.231 ug/L	18.231 ppb	16:39:54
1	Sc 361.383	844272.4	844272.4	103.11 %		16:41:12
1	Y 371.029	876042.1	876042.1	126.66 %		16:41:12
1	Ag 328.068†	-4104.4	-4165.8	0.7953 ug/L	0.7953 ppb	16:41:17
1	As 188.979†	-53.3	-24.9	34.840 ug/L	34.840 ppb	16:41:37
1	B 249.677†	145.4	678.4	7.4049 ug/L	7.4049 ppb	16:41:17
1	Ba 233.527†	13612.2	13202.6	125.93 ug/L	125.93 ppb	16:41:17
1	Be 313.107†	-15643.2	-11440.7	3.4672 ug/L	3.4672 ppb	16:41:17
1	Cd 226.502†	403.7	562.2	0.7410 ug/L	0.7410 ppb	16:41:37
1	Co 228.616†	443.0	475.9	3.6611 ug/L	3.6611 ppb	16:41:37
1	Cr 267.716†	1215.4	1107.2	22.575 ug/L	22.575 ppb	16:41:17
1	Cu 324.752†	8073.2	2277.9	11.438 ug/L	11.438 ppb	16:41:17
1	Mn 257.610†	1979838.4	1919774.1	2531.1 ug/L	2531.1 ppb	16:41:12
1	Mo 202.031†	177.8	163.9	20.148 ug/L	20.148 ppb	16:41:37
1	Ni 231.604†	384.7	289.0	9.1710 ug/L	9.1710 ppb	16:41:37
1	P 214.914†	1156.9	934.7	640.40 ug/L	640.40 ppb	16:41:37
1	Pb 220.353†	335.8	384.0	51.595 ug/L	51.595 ppb	16:41:37
1	S 181.975 Axial†	43.6	12.1	19.316 ug/L	19.316 ppb	16:41:37
1	Sb 206.836†	47.4	22.3	-3.3989 ug/L	-3.3989 ppb	16:41:37
1	Se 196.026†	-325.9	-299.1	-40.041 ug/L	-40.041 ppb	16:41:37
1	Si 251.611†	824684.4	799339.0	30345 ug/L	30345 ppb	16:41:12
1	Sn 189.927†	30.4	22.3	1.5179 ug/L	1.5179 ppb	16:41:37
1	Ti 334.940†	2176545.7	2112062.5	3673.3 ug/L	3673.3 ppb	16:41:12
1	Tl 190.801†	-150.5	-116.9	-2.8267 ug/L	-2.8267 ppb	16:41:37
1	U 409.014†	-10859.9	-8328.3	-260.84 ug/L	-260.84 ppb	16:41:12
1	V 292.402†	4590.1	5769.2	31.541 ug/L	31.541 ppb	16:41:17
1	Zn 213.857†	43167.9	41296.7	489.63 ug/L	489.63 ppb	16:41:17
1	SiO2†	822735.0	797437.2	65080 ug/L	65080 ppb	16:42:45
2	Sc Radial	4451.7	4451.7	101 %		16:40:19
2	Y RADIAL	6036.6	6036.6	126.8 %		16:40:19
2	Al 396.153Radial†	12767.1	12682.8	12457 ug/L	12457 ppb	16:40:19
2	Ca 317.933Radial†	1728.1	1690.4	3198.6 ug/L	3198.6 ppb	16:40:39
2	Fe 238.204 Radial†	6382.6	6293.0	72915 ug/L	72915 ppb	16:40:19
2	K 766.490 Radial†	35002.8	31958.9	6085.2 ug/L	6085.2 ppb	16:40:19
2	Mg 279.077 IEC†	59.0	56.7	2262.4 ug/L	2262.4 ppb	16:40:39
2	Na 589.592 Radial†	12061.3	12783.0	4506.3 ug/L	4506.3 ppb	16:40:19
2	Sr 421.552†	2363.0	2312.1	18.510 ug/L	18.510 ppb	16:40:19
2	Sc 361.383	859556.7	859556.7	104.97 %		16:41:43
2	Y 371.029	889870.4	889870.4	128.66 %		16:41:43
2	Ag 328.068†	-4134.1	-4123.3	1.4868 ug/L	1.4868 ppb	16:41:48
2	As 188.979†	-65.6	-35.7	28.580 ug/L	28.580 ppb	16:42:08
2	B 249.677†	103.6	636.0	5.9675 ug/L	5.9675 ppb	16:41:48
2	Ba 233.527†	13590.5	12947.2	123.59 ug/L	123.59 ppb	16:41:48
2	Be 313.107†	-15798.8	-11319.1	3.3414 ug/L	3.3414 ppb	16:41:48
2	Cd 226.502†	412.6	563.7	0.6039 ug/L	0.6039 ppb	16:42:08
2	Co 228.616†	438.4	463.8	3.4865 ug/L	3.4865 ppb	16:42:08
2	Cr 267.716†	1180.9	1053.4	22.015 ug/L	22.015 ppb	16:41:48
2	Cu 324.752†	8138.2	2200.5	11.262 ug/L	11.262 ppb	16:41:48
2	Mn 257.610†	1970543.4	1876775.9	2474.7 ug/L	2474.7 ppb	16:41:43
2	Mo 202.031†	164.9	148.5	18.900 ug/L	18.900 ppb	16:42:08
2	Ni 231.604†	363.3	262.0	8.3143 ug/L	8.3143 ppb	16:42:08

2	P 214.914†	1157.2	915.0	624.59 ug/L	624.59 ppb	16:42:08
2	Pb 220.353†	312.3	355.8	47.121 ug/L	47.121 ppb	16:42:08
2	S 181.975 Axial†	38.0	6.0	8.4706 ug/L	8.4706 ppb	16:42:08
2	Sb 206.836†	50.6	24.5	-2.3068 ug/L	-2.3068 ppb	16:42:08
2	Se 196.026†	-319.0	-286.9	-25.396 ug/L	-25.396 ppb	16:42:08
2	Si 251.611†	823333.5	783829.9	29756 ug/L	29756 ppb	16:41:43
2	Sn 189.927†	23.9	15.6	-0.0793 ug/L	-0.0793 ppb	16:42:08
2	Ti 334.940†	2168760.5	2067110.4	3595.2 ug/L	3595.2 ppb	16:41:43
2	Tl 190.801†	-141.2	-105.4	0.6958 ug/L	0.6958 ppb	16:42:08
2	U 409.014†	-10925.1	-8203.2	-257.21 ug/L	-257.21 ppb	16:41:43
2	V 292.402†	4666.1	5762.4	31.336 ug/L	31.336 ppb	16:41:48
2	Zn 213.857†	43149.5	40534.7	480.17 ug/L	480.17 ppb	16:41:48
2	SiO2†	833210.3	793227.5	64736 ug/L	64736 ppb	16:42:51
3	Sc Radial	4503.2	4503.2	102 %		16:40:44
3	Y RADIAL	6056.0	6056.0	127.2 %		16:40:44
3	Al 396.153Radial†	12790.3	12561.4	12338 ug/L	12338 ppb	16:40:44
3	Ca 317.933Radial†	1724.6	1667.5	3155.3 ug/L	3155.3 ppb	16:41:04
3	Fe 238.204 Radial†	6394.8	6232.8	72218 ug/L	72218 ppb	16:40:44
3	K 766.490 Radial†	34969.1	31530.8	6003.7 ug/L	6003.7 ppb	16:40:44
3	Mg 279.077 IEC†	60.9	57.9	2313.1 ug/L	2313.1 ppb	16:41:04
3	Na 589.592 Radial†	12078.3	12663.5	4464.1 ug/L	4464.1 ppb	16:40:44
3	Sr 421.552†	2345.1	2268.0	18.156 ug/L	18.156 ppb	16:40:44
3	Sc 361.383	852563.1	852563.1	104.12 %		16:42:14
3	Y 371.029	883060.8	883060.8	127.68 %		16:42:14
3	Ag 328.068†	-4112.6	-4135.0	1.2074 ug/L	1.2074 ppb	16:42:19
3	As 188.979†	-58.8	-29.7	31.948 ug/L	31.948 ppb	16:42:39
3	B 249.677†	66.5	601.2	5.1044 ug/L	5.1044 ppb	16:42:19
3	Ba 233.527†	13464.4	12932.3	123.43 ug/L	123.43 ppb	16:42:19
3	Be 313.107†	-15490.7	-11146.7	3.4720 ug/L	3.4720 ppb	16:42:19
3	Cd 226.502†	409.0	563.4	0.6735 ug/L	0.6735 ppb	16:42:39
3	Co 228.616†	448.2	476.6	3.7754 ug/L	3.7754 ppb	16:42:39
3	Cr 267.716†	1195.1	1076.3	22.246 ug/L	22.246 ppb	16:42:19
3	Cu 324.752†	8017.1	2147.8	11.049 ug/L	11.049 ppb	16:42:19
3	Mn 257.610†	1970292.4	1891933.4	2494.6 ug/L	2494.6 ppb	16:42:14
3	Mo 202.031†	161.6	146.7	18.685 ug/L	18.685 ppb	16:42:39
3	Ni 231.604†	372.0	273.2	8.6699 ug/L	8.6699 ppb	16:42:39
3	P 214.914†	1160.8	927.6	634.53 ug/L	634.53 ppb	16:42:39
3	Pb 220.353†	311.4	357.3	47.428 ug/L	47.428 ppb	16:42:39
3	S 181.975 Axial†	38.7	7.0	10.133 ug/L	10.133 ppb	16:42:39
3	Sb 206.836†	46.7	21.1	-3.7617 ug/L	-3.7617 ppb	16:42:39
3	Se 196.026†	-321.0	-291.4	-31.131 ug/L	-31.131 ppb	16:42:39
3	Si 251.611†	822920.7	789867.3	29986 ug/L	29986 ppb	16:42:14
3	Sn 189.927†	33.6	25.1	2.1202 ug/L	2.1202 ppb	16:42:39
3	Ti 334.940†	2166178.2	2081577.8	3620.3 ug/L	3620.3 ppb	16:42:14
3	Tl 190.801†	-135.0	-100.6	2.8766 ug/L	2.8766 ppb	16:42:39
3	U 409.014†	-10697.2	-8069.6	-253.08 ug/L	-253.08 ppb	16:42:14
3	V 292.402†	4616.6	5751.3	31.328 ug/L	31.328 ppb	16:42:19
3	Zn 213.857†	42912.5	40644.2	481.60 ug/L	481.60 ppb	16:42:19
3	SiO2†	818495.5	785606.0	64114 ug/L	64114 ppb	16:42:57

Mean Data: 247794001|957496|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	852130.7	104.07 %		0.934			0.90%
Sc Radial	4516.3	103 %		1.6			1.60%
Y 371.029	882991.1	127.67 %		1.000			0.78%
Y RADIAL	6086.7	127.9 %		1.48			1.16%
Ag 328.068†	-4141.4	1.1631 ug/L		0.34789	1.1631 ppb	0.34789	29.91%
Al 396.153Radial†	12536.0	12313 ug/L		158.2	12313 ppb	158.2	1.28%
As 188.979†	-30.1	31.789 ug/L		3.1332	31.789 ppb	3.1332	9.86%
B 249.677†	638.5	6.1589 ug/L		1.16214	6.1589 ppb	1.16214	18.87%
Ba 233.527†	13027.4	124.32 ug/L		1.403	124.32 ppb	1.403	1.13%
Be 313.107†	-11302.2	3.4269 ug/L		0.07401	3.4269 ppb	0.07401	2.16%
Ca 317.933Radial†	1661.5	3143.9 ug/L		61.19	3143.9 ppb	61.19	1.95%
Cd 226.502†	563.1	0.6728 ug/L		0.06854	0.6728 ppb	0.06854	10.19%
Co 228.616†	472.1	3.6410 ug/L		0.14551	3.6410 ppb	0.14551	4.00%
Cr 267.716†	1079.0	22.279 ug/L		0.2815	22.279 ppb	0.2815	1.26%
Cu 324.752†	2208.7	11.250 ug/L		0.1949	11.250 ppb	0.1949	1.73%
Fe 238.204 Radial†	6228.6	72170 ug/L		770.7	72170 ppb	770.7	1.07%
K 766.490 Radial†	31534.0	6004.3 ug/L		80.63	6004.3 ppb	80.63	1.34%

Mg 279.077 IEC†	56.4	2249.9 ug/L	70.36	2249.9 ppb	70.36	3.13%
Mn 257.610†	1896161.1	2500.1 ug/L	28.60	2500.1 ppb	28.60	1.14%
Mo 202.031†	153.0	19.244 ug/L	0.7896	19.244 ppb	0.7896	4.10%
Na 589.592 Radial†	12659.9	4462.9 ug/L	44.07	4462.9 ppb	44.07	0.99%
Ni 231.604†	274.8	8.7184 ug/L	0.43039	8.7184 ppb	0.43039	4.94%
P 214.914†	925.8	633.17 ug/L	7.990	633.17 ppb	7.990	1.26%
Pb 220.353†	365.7	48.714 ug/L	2.4990	48.714 ppb	2.4990	5.13%
S 181.975 Axial†	8.3	12.640 ug/L	5.8413	12.640 ppb	5.8413	46.21%
Sb 206.836†	22.7	-3.1558 ug/L	0.75728	-3.1558 ppb	0.75728	24.00%
Se 196.026†	-292.4	-32.189 ug/L	7.3794	-32.189 ppb	7.3794	22.92%
Si 251.611†	791012.1	30029 ug/L	296.8	30029 ppb	296.8	0.99%
Sn 189.927†	21.0	1.1863 ug/L	1.13665	1.1863 ppb	1.13665	95.82%
Sr 421.552†	2285.8	18.299 ug/L	0.1863	18.299 ppb	0.1863	1.02%
Ti 334.940†	2086916.9	3629.6 ug/L	39.90	3629.6 ppb	39.90	1.10%
Tl 190.801†	-107.6	0.2486 ug/L	2.87783	0.2486 ppb	2.87783	>999.9%
U 409.014†	-8200.4	-257.04 ug/L	3.879	-257.04 ppb	3.879	1.51%
V 292.402†	5761.0	31.402 ug/L	0.1209	31.402 ppb	0.1209	0.39%
Zn 213.857†	40825.2	483.80 ug/L	5.098	483.80 ppb	5.098	1.05%
SiO2†	792090.3	64643 ug/L	489.4	64643 ppb	489.4	0.76%

Sequence No.: 31
 Sample ID: 247794002|957496|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 47
 Date Collected: 3/19/2010 16:45:09
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 247794002|957496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4510.1	4510.1	103 %		16:47:02
1	Y RADIAL	5775.0	5775.0	121.3 %		16:47:02
1	Al 396.153Radial†	6255.6	6174.1	6064.3 ug/L	6064.3 ppb	16:47:02
1	Ca 317.933Radial†	1009.5	968.0	1831.7 ug/L	1831.7 ppb	16:47:22
1	Fe 238.204 Radial†	5410.4	5264.0	60993 ug/L	60993 ppb	16:47:02
1	K 766.490 Radial†	21412.8	18268.0	3478.4 ug/L	3478.4 ppb	16:47:02
1	Mg 279.077 IEC†	29.5	27.2	1057.9 ug/L	1057.9 ppb	16:47:22
1	Na 589.592 Radial†	5618.7	6350.5	2238.7 ug/L	2238.7 ppb	16:47:02
1	Sr 421.552†	1034.1	986.9	7.8972 ug/L	7.8972 ppb	16:47:02
1	Sc 361.383	849446.8	849446.8	103.74 %		16:48:19
1	Y 371.029	837044.4	837044.4	121.02 %		16:48:19
1	Ag 328.068†	-3452.2	-3512.9	0.8898 ug/L	0.8898 ppb	16:48:24
1	As 188.979†	-61.8	-32.8	21.765 ug/L	21.765 ppb	16:48:44
1	B 249.677†	-56.1	483.3	3.6243 ug/L	3.6243 ppb	16:48:24
1	Ba 233.527†	5512.0	5314.0	51.695 ug/L	51.695 ppb	16:48:24
1	Be 313.107†	-17328.0	-12972.3	1.1586 ug/L	1.1586 ppb	16:48:24
1	Cd 226.502†	305.6	465.2	0.4141 ug/L	0.4141 ppb	16:48:44
1	Co 228.616†	358.1	391.4	3.1034 ug/L	3.1034 ppb	16:48:44
1	Cr 267.716†	991.9	884.7	18.450 ug/L	18.450 ppb	16:48:24
1	Cu 324.752†	7627.0	1800.0	9.2870 ug/L	9.2870 ppb	16:48:24
1	Mn 257.610†	1388384.3	1337944.9	1765.1 ug/L	1765.1 ppb	16:48:19
1	Mo 202.031†	87.4	75.7	11.487 ug/L	11.487 ppb	16:48:44
1	Ni 231.604†	337.9	241.7	7.6686 ug/L	7.6686 ppb	16:48:44
1	P 214.914†	752.3	537.9	351.93 ug/L	351.93 ppb	16:48:44
1	Pb 220.353†	170.9	223.0	26.967 ug/L	26.967 ppb	16:48:44
1	S 181.975 Axial†	45.6	13.7	23.451 ug/L	23.451 ppb	16:48:44
1	Sb 206.836†	41.2	16.0	-3.6065 ug/L	-3.6065 ppb	16:48:44
1	Se 196.026†	-269.4	-242.8	-24.950 ug/L	-24.950 ppb	16:48:44
1	Si 251.611†	496429.1	478045.0	18148 ug/L	18148 ppb	16:48:19
1	Sn 189.927†	14.8	7.1	-1.5582 ug/L	-1.5582 ppb	16:48:44
1	Ti 334.940†	1754657.2	1692524.2	2943.6 ug/L	2943.6 ppb	16:48:19
1	Tl 190.801†	-118.5	-85.1	-0.2044 ug/L	-0.2044 ppb	16:48:44
1	U 409.014†	-9437.4	-6893.0	-216.10 ug/L	-216.10 ppb	16:48:19
1	V 292.402†	2505.2	3732.3	17.514 ug/L	17.514 ppb	16:48:24
1	Zn 213.857†	36306.3	34427.4	407.96 ug/L	407.96 ppb	16:48:24
1	SiO2†	491653.2	473430.2	38637 ug/L	38637 ppb	16:49:52
2	Sc Radial	4495.4	4495.4	102 %		16:47:27
2	Y RADIAL	5763.1	5763.1	121.1 %		16:47:27
2	Al 396.153Radial†	6232.3	6171.3	6061.6 ug/L	6061.6 ppb	16:47:27
2	Ca 317.933Radial†	1020.6	982.1	1858.3 ug/L	1858.3 ppb	16:47:47
2	Fe 238.204 Radial†	5378.5	5250.0	60831 ug/L	60831 ppb	16:47:27
2	K 766.490 Radial†	21294.8	18220.6	3469.3 ug/L	3469.3 ppb	16:47:27
2	Mg 279.077 IEC†	32.0	29.8	1163.9 ug/L	1163.9 ppb	16:47:47
2	Na 589.592 Radial†	5585.4	6335.8	2233.5 ug/L	2233.5 ppb	16:47:27
2	Sr 421.552†	1019.1	975.5	7.8054 ug/L	7.8054 ppb	16:47:27
2	Sc 361.383	849305.8	849305.8	103.72 %		16:48:50
2	Y 371.029	837007.5	837007.5	121.02 %		16:48:50
2	Ag 328.068†	-3506.8	-3566.1	0.5639 ug/L	0.5639 ppb	16:48:55
2	As 188.979†	-61.8	-32.8	21.749 ug/L	21.749 ppb	16:49:15
2	B 249.677†	-33.0	505.6	4.2776 ug/L	4.2776 ppb	16:48:55
2	Ba 233.527†	5532.2	5334.4	51.880 ug/L	51.880 ppb	16:48:55
2	Be 313.107†	-17454.0	-13096.6	1.1080 ug/L	1.1080 ppb	16:48:55
2	Cd 226.502†	312.2	471.6	0.5231 ug/L	0.5231 ppb	16:49:15
2	Co 228.616†	333.5	367.8	2.4940 ug/L	2.4940 ppb	16:49:15
2	Cr 267.716†	894.3	790.7	17.173 ug/L	17.173 ppb	16:48:55
2	Cu 324.752†	7697.7	1869.5	9.5087 ug/L	9.5087 ppb	16:48:55
2	Mn 257.610†	1391373.7	1341049.3	1769.2 ug/L	1769.2 ppb	16:48:50
2	Mo 202.031†	86.6	75.0	11.407 ug/L	11.407 ppb	16:49:15
2	Ni 231.604†	337.9	241.7	7.6696 ug/L	7.6696 ppb	16:49:15

2	P 214.914†	735.0	521.3	339.63 ug/L	339.63 ppb	16:49:15
2	Pb 220.353†	155.6	208.4	24.738 ug/L	24.738 ppb	16:49:15
2	S 181.975 Axial†	35.8	4.3	6.5397 ug/L	6.5397 ppb	16:49:15
2	Sb 206.836†	29.4	4.7	-8.3555 ug/L	-8.3555 ppb	16:49:15
2	Se 196.026†	-257.9	-231.7	-16.151 ug/L	-16.151 ppb	16:49:15
2	Si 251.611†	496609.5	478298.4	18158 ug/L	18158 ppb	16:48:50
2	Sn 189.927†	18.3	10.5	-0.7768 ug/L	-0.7768 ppb	16:49:15
2	Ti 334.940†	1754969.4	1693106.0	2944.6 ug/L	2944.6 ppb	16:48:50
2	Tl 190.801†	-116.6	-83.3	0.5196 ug/L	0.5196 ppb	16:49:15
2	U 409.014†	-9504.6	-6959.3	-218.09 ug/L	-218.09 ppb	16:48:50
2	V 292.402†	2489.3	3717.4	17.415 ug/L	17.415 ppb	16:48:55
2	Zn 213.857†	36518.8	34638.1	410.54 ug/L	410.54 ppb	16:48:55
2	SiO2†	493823.5	475601.2	38814 ug/L	38814 ppb	16:49:58
3	Sc Radial	4369.2	4369.2	99.4 %		16:47:52
3	Y RADIAL	5589.0	5589.0	117.4 %		16:47:52
3	Al 396.153Radial†	6060.8	6174.8	6065.0 ug/L	6065.0 ppb	16:47:52
3	Ca 317.933Radial†	1020.9	1011.3	1913.5 ug/L	1913.5 ppb	16:48:12
3	Fe 238.204 Radial†	5242.6	5265.2	61007 ug/L	61007 ppb	16:47:52
3	K 766.490 Radial†	20717.4	18241.3	3473.3 ug/L	3473.3 ppb	16:47:52
3	Mg 279.077 IEC†	32.1	30.8	1207.3 ug/L	1207.3 ppb	16:48:12
3	Na 589.592 Radial†	5401.5	6308.5	2223.9 ug/L	2223.9 ppb	16:47:52
3	Sr 421.552†	1025.8	1011.0	8.0897 ug/L	8.0897 ppb	16:47:52
3	Sc 361.383	845412.1	845412.1	103.25 %		16:49:21
3	Y 371.029	831941.5	831941.5	120.28 %		16:49:21
3	Ag 328.068†	-3452.3	-3528.8	0.8169 ug/L	0.8169 ppb	16:49:26
3	As 188.979†	-57.0	-28.4	24.261 ug/L	24.261 ppb	16:49:46
3	B 249.677†	-99.2	441.3	2.4452 ug/L	2.4452 ppb	16:49:26
3	Ba 233.527†	5559.3	5385.2	52.362 ug/L	52.362 ppb	16:49:26
3	Be 313.107†	-17301.8	-13026.7	1.1547 ug/L	1.1547 ppb	16:49:26
3	Cd 226.502†	307.9	468.8	0.4639 ug/L	0.4639 ppb	16:49:46
3	Co 228.616†	334.4	370.1	2.5355 ug/L	2.5355 ppb	16:49:46
3	Cr 267.716†	951.5	850.1	17.992 ug/L	17.992 ppb	16:49:26
3	Cu 324.752†	7567.1	1777.2	9.2162 ug/L	9.2162 ppb	16:49:26
3	Mn 257.610†	1389558.4	1345469.2	1775.0 ug/L	1775.0 ppb	16:49:21
3	Mo 202.031†	88.5	77.2	11.621 ug/L	11.621 ppb	16:49:46
3	Ni 231.604†	342.4	247.6	7.8572 ug/L	7.8572 ppb	16:49:46
3	P 214.914†	747.0	536.2	350.66 ug/L	350.66 ppb	16:49:46
3	Pb 220.353†	170.9	223.8	27.086 ug/L	27.086 ppb	16:49:46
3	S 181.975 Axial†	35.8	4.5	6.9269 ug/L	6.9269 ppb	16:49:46
3	Sb 206.836†	46.1	21.0	-1.5490 ug/L	-1.5490 ppb	16:49:46
3	Se 196.026†	-266.9	-241.5	-23.849 ug/L	-23.849 ppb	16:49:46
3	Si 251.611†	496736.7	480626.7	18246 ug/L	18246 ppb	16:49:21
3	Sn 189.927†	21.5	13.7	-0.0634 ug/L	-0.0634 ppb	16:49:46
3	Ti 334.940†	1751376.0	1697418.3	2952.1 ug/L	2952.1 ppb	16:49:21
3	Tl 190.801†	-118.9	-86.1	-0.4444 ug/L	-0.4444 ppb	16:49:46
3	U 409.014†	-9640.6	-7133.2	-223.39 ug/L	-223.39 ppb	16:49:21
3	V 292.402†	2517.9	3756.2	17.684 ug/L	17.684 ppb	16:49:26
3	Zn 213.857†	36723.7	34998.7	414.88 ug/L	414.88 ppb	16:49:26
3	SiO2†	492148.0	476171.1	38861 ug/L	38861 ppb	16:50:03

Mean Data: 247794002|957496|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Units			Conc. Units		
Sc 361.383	848054.9	103.57 %		0.280			0.27%
Sc Radial	4458.3	101 %		1.8			1.74%
Y 371.029	835331.1	120.77 %		0.424			0.35%
Y RADIAL	5709.0	119.9 %		2.19			1.82%
Ag 328.068†	-3535.9	0.7569 ug/L		0.17102	0.7569 ppb	0.17102	22.60%
Al 396.153Radial†	6173.4	6063.6 ug/L		1.83	6063.6 ppb	1.83	0.03%
As 188.979†	-31.3	22.592 ug/L		1.4460	22.592 ppb	1.4460	6.40%
B 249.677†	476.7	3.4490 ug/L		0.92865	3.4490 ppb	0.92865	26.93%
Ba 233.527†	5344.5	51.979 ug/L		0.3446	51.979 ppb	0.3446	0.66%
Be 313.107†	-13031.9	1.1404 ug/L		0.02817	1.1404 ppb	0.02817	2.47%
Ca 317.933Radial†	987.1	1867.9 ug/L		41.74	1867.9 ppb	41.74	2.23%
Cd 226.502†	468.5	0.4670 ug/L		0.05457	0.4670 ppb	0.05457	11.68%
Co 228.616†	376.4	2.7109 ug/L		0.34052	2.7109 ppb	0.34052	12.56%
Cr 267.716†	841.8	17.872 ug/L		0.6469	17.872 ppb	0.6469	3.62%
Cu 324.752†	1815.6	9.3373 ug/L		0.15260	9.3373 ppb	0.15260	1.63%
Fe 238.204 Radial†	5259.7	60943 ug/L		97.9	60943 ppb	97.9	0.16%
K 766.490 Radial†	18243.3	3473.7 ug/L		4.53	3473.7 ppb	4.53	0.13%

Mg 279.077 IEC†	29.3	1143.0 ug/L	76.86	1143.0 ppb	76.86	6.72%
Mn 257.610†	1341487.8	1769.8 ug/L	4.97	1769.8 ppb	4.97	0.28%
Mo 202.031†	76.0	11.505 ug/L	0.1081	11.505 ppb	0.1081	0.94%
Na 589.592 Radial†	6331.6	2232.0 ug/L	7.51	2232.0 ppb	7.51	0.34%
Ni 231.604†	243.7	7.7318 ug/L	0.10862	7.7318 ppb	0.10862	1.40%
P 214.914†	531.8	347.41 ug/L	6.762	347.41 ppb	6.762	1.95%
Pb 220.353†	218.4	26.263 ug/L	1.3226	26.263 ppb	1.3226	5.04%
S 181.975 Axial†	7.5	12.306 ug/L	9.6541	12.306 ppb	9.6541	78.45%
Sb 206.836†	13.9	-4.5037 ug/L	3.49082	-4.5037 ppb	3.49082	77.51%
Se 196.026†	-238.6	-21.650 ug/L	4.7942	-21.650 ppb	4.7942	22.14%
Si 251.611†	478990.0	18184 ug/L	54.0	18184 ppb	54.0	0.30%
Sn 189.927†	10.4	-0.7995 ug/L	0.74769	-0.7995 ppb	0.74769	93.53%
Sr 421.552†	991.1	7.9308 ug/L	0.14509	7.9308 ppb	0.14509	1.83%
Ti 334.940†	1694349.5	2946.8 ug/L	4.65	2946.8 ppb	4.65	0.16%
Tl 190.801†	-84.8	-0.0431 ug/L	0.50184	-0.0431 ppb	0.50184	>999.9%
U 409.014†	-6995.2	-219.19 ug/L	3.768	-219.19 ppb	3.768	1.72%
V 292.402†	3735.3	17.538 ug/L	0.1363	17.538 ppb	0.1363	0.78%
Zn 213.857†	34688.1	411.13 ug/L	3.497	411.13 ppb	3.497	0.85%
SiO2†	475067.5	38771 ug/L	118.0	38771 ppb	118.0	0.30%

Sequence No.: 32
 Sample ID: 247794003|957496|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 48
 Date Collected: 3/19/2010 16:52:15
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 247794003|957496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4470.2	4470.2	102 %		16:54:08
1	Y RADIAL	5970.7	5970.7	125.4 %		16:54:08
1	Al 396.153Radial†	10519.9	10421.2	10236 ug/L	10236 ppb	16:54:08
1	Ca 317.933Radial†	1425.8	1386.2	2622.9 ug/L	2622.9 ppb	16:54:28
1	Fe 238.204 Radial†	5291.8	5194.4	60186 ug/L	60186 ppb	16:54:08
1	K 766.490 Radial†	30140.2	27034.9	5147.7 ug/L	5147.7 ppb	16:54:08
1	Mg 279.077 IEC†	30.9	28.9	1128.9 ug/L	1128.9 ppb	16:54:28
1	Na 589.592 Radial†	10583.4	11280.7	3976.7 ug/L	3976.7 ppb	16:54:08
1	Sr 421.552†	2521.9	2458.7	19.689 ug/L	19.689 ppb	16:54:08
1	Sc 361.383	845120.2	845120.2	103.21 %		16:55:25
1	Y 371.029	874368.3	874368.3	126.42 %		16:55:25
1	Ag 328.068†	-3268.8	-3352.2	1.5076 ug/L	1.5076 ppb	16:55:31
1	As 188.979†	-48.8	-20.4	29.979 ug/L	29.979 ppb	16:55:51
1	B 249.677†	-79.7	460.1	3.1051 ug/L	3.1051 ppb	16:55:31
1	Ba 233.527†	11125.6	10780.1	102.87 ug/L	102.87 ppb	16:55:31
1	Be 313.107†	-15987.2	-11758.7	2.0997 ug/L	2.0997 ppb	16:55:31
1	Cd 226.502†	304.5	465.6	0.4948 ug/L	0.4948 ppb	16:55:51
1	Co 228.616†	348.8	384.2	2.5576 ug/L	2.5576 ppb	16:55:51
1	Cr 267.716†	1234.1	1124.2	21.597 ug/L	21.597 ppb	16:55:31
1	Cu 324.752†	7392.6	1610.6	8.6424 ug/L	8.6424 ppb	16:55:31
1	Mn 257.610†	1594165.6	1544175.1	2036.2 ug/L	2036.2 ppb	16:55:25
1	Mo 202.031†	74.7	63.9	10.380 ug/L	10.380 ppb	16:55:51
1	Ni 231.604†	321.0	226.9	7.2006 ug/L	7.2006 ppb	16:55:51
1	P 214.914†	902.9	687.5	465.22 ug/L	465.22 ppb	16:55:51
1	Pb 220.353†	171.7	224.7	28.269 ug/L	28.269 ppb	16:55:51
1	S 181.975 Axial†	38.7	7.3	11.142 ug/L	11.142 ppb	16:55:51
1	Sb 206.836†	45.8	20.7	-2.3090 ug/L	-2.3090 ppb	16:55:51
1	Se 196.026†	-258.3	-233.3	-18.026 ug/L	-18.026 ppb	16:55:51
1	Si 251.611†	754392.7	730432.1	27729 ug/L	27729 ppb	16:55:25
1	Sn 189.927†	37.6	29.3	3.6509 ug/L	3.6509 ppb	16:55:51
1	Ti 334.940†	1856646.7	1799999.5	3130.7 ug/L	3130.7 ppb	16:55:25
1	Tl 190.801†	-118.5	-85.7	2.4250 ug/L	2.4250 ppb	16:55:51
1	U 409.014†	-10838.6	-8297.1	-258.62 ug/L	-258.62 ppb	16:55:25
1	V 292.402†	2780.4	4011.4	19.565 ug/L	19.565 ppb	16:55:31
1	Zn 213.857†	30073.9	28568.1	337.09 ug/L	337.09 ppb	16:55:31
1	SiO2†	741095.6	717537.5	58559 ug/L	58559 ppb	16:56:58
2	Sc Radial	4439.4	4439.4	101 %		16:54:33
2	Y RADIAL	5953.6	5953.6	125.1 %		16:54:33
2	Al 396.153Radial†	10492.7	10466.0	10280 ug/L	10280 ppb	16:54:33
2	Ca 317.933Radial†	1429.7	1399.8	2648.6 ug/L	2648.6 ppb	16:54:53
2	Fe 238.204 Radial†	5250.8	5189.8	60134 ug/L	60134 ppb	16:54:33
2	K 766.490 Radial†	29979.4	27081.2	5156.5 ug/L	5156.5 ppb	16:54:33
2	Mg 279.077 IEC†	34.6	32.7	1287.0 ug/L	1287.0 ppb	16:54:53
2	Na 589.592 Radial†	10580.7	11350.1	4001.2 ug/L	4001.2 ppb	16:54:33
2	Sr 421.552†	2533.1	2487.0	19.916 ug/L	19.916 ppb	16:54:33
2	Sc 361.383	841705.8	841705.8	102.79 %		16:55:56
2	Y 371.029	870471.1	870471.1	125.85 %		16:55:56
2	Ag 328.068†	-3356.3	-3450.2	0.9828 ug/L	0.9828 ppb	16:56:02
2	As 188.979†	-50.4	-22.2	28.907 ug/L	28.907 ppb	16:56:22
2	B 249.677†	-89.5	450.3	2.8400 ug/L	2.8400 ppb	16:56:02
2	Ba 233.527†	11157.3	10854.7	103.57 ug/L	103.57 ppb	16:56:02
2	Be 313.107†	-16029.9	-11863.1	2.0374 ug/L	2.0374 ppb	16:56:02
2	Cd 226.502†	303.6	466.0	0.5064 ug/L	0.5064 ppb	16:56:22
2	Co 228.616†	338.4	375.4	2.3519 ug/L	2.3519 ppb	16:56:22
2	Cr 267.716†	1187.2	1083.4	21.045 ug/L	21.045 ppb	16:56:02
2	Cu 324.752†	7334.4	1583.0	8.5460 ug/L	8.5460 ppb	16:56:02
2	Mn 257.610†	1588010.8	1544453.2	2036.6 ug/L	2036.6 ppb	16:55:56
2	Mo 202.031†	86.8	75.9	11.444 ug/L	11.444 ppb	16:56:22
2	Ni 231.604†	324.0	231.1	7.3330 ug/L	7.3330 ppb	16:56:22

2	P 214.914†	902.5	690.7	467.63 ug/L	467.63 ppb	16:56:22
2	Pb 220.353†	163.8	217.7	27.214 ug/L	27.214 ppb	16:56:22
2	S 181.975 Axial†	34.7	3.6	4.4867 ug/L	4.4867 ppb	16:56:22
2	Sb 206.836†	44.0	19.2	-2.9245 ug/L	-2.9245 ppb	16:56:22
2	Se 196.026†	-248.4	-224.7	-11.037 ug/L	-11.037 ppb	16:56:22
2	Si 251.611†	751120.7	730214.0	27721 ug/L	27721 ppb	16:55:56
2	Sn 189.927†	31.6	23.6	2.3647 ug/L	2.3647 ppb	16:56:22
2	Ti 334.940†	1844506.4	1795486.4	3122.8 ug/L	3122.8 ppb	16:55:56
2	Tl 190.801†	-131.1	-98.4	-2.5604 ug/L	-2.5604 ppb	16:56:22
2	U 409.014†	-10640.0	-8146.5	-254.04 ug/L	-254.04 ppb	16:55:56
2	V 292.402†	2909.1	4147.4	20.695 ug/L	20.695 ppb	16:56:02
2	Zn 213.857†	30355.3	28960.1	341.85 ug/L	341.85 ppb	16:56:02
2	SiO2†	756587.0	735520.6	60027 ug/L	60027 ppb	16:57:04
3	Sc Radial	4500.9	4500.9	102 %		16:54:58
3	Y RADIAL	6005.6	6005.6	126.2 %		16:54:58
3	Al 396.153Radial†	10638.9	10467.0	10281 ug/L	10281 ppb	16:54:58
3	Ca 317.933Radial†	1418.2	1369.2	2590.8 ug/L	2590.8 ppb	16:55:18
3	Fe 238.204 Radial†	5329.4	5195.7	60201 ug/L	60201 ppb	16:54:58
3	K 766.490 Radial†	30235.6	26926.2	5127.0 ug/L	5127.0 ppb	16:54:58
3	Mg 279.077 IEC†	30.8	28.6	1115.5 ug/L	1115.5 ppb	16:55:18
3	Na 589.592 Radial†	10653.7	11278.5	3975.9 ug/L	3975.9 ppb	16:54:58
3	Sr 421.552†	2551.1	2470.3	19.782 ug/L	19.782 ppb	16:54:58
3	Sc 361.383	841901.1	841901.1	102.82 %		16:56:28
3	Y 371.029	870712.8	870712.8	125.89 %		16:56:28
3	Ag 328.068†	-3356.2	-3449.4	1.0120 ug/L	1.0120 ppb	16:56:33
3	As 188.979†	-46.1	-18.0	31.337 ug/L	31.337 ppb	16:56:53
3	B 249.677†	-35.7	502.7	4.2965 ug/L	4.2965 ppb	16:56:33
3	Ba 233.527†	10968.8	10668.9	101.83 ug/L	101.83 ppb	16:56:33
3	Be 313.107†	-15739.2	-11576.8	2.1863 ug/L	2.1863 ppb	16:56:33
3	Cd 226.502†	292.1	454.8	0.3357 ug/L	0.3357 ppb	16:56:53
3	Co 228.616†	355.3	391.8	2.7470 ug/L	2.7470 ppb	16:56:53
3	Cr 267.716†	1178.4	1074.6	20.936 ug/L	20.936 ppb	16:56:33
3	Cu 324.752†	7343.8	1590.5	8.5772 ug/L	8.5772 ppb	16:56:33
3	Mn 257.610†	1593084.2	1549029.2	2042.6 ug/L	2042.6 ppb	16:56:28
3	Mo 202.031†	82.7	71.9	11.095 ug/L	11.095 ppb	16:56:53
3	Ni 231.604†	331.6	238.4	7.5656 ug/L	7.5656 ppb	16:56:53
3	P 214.914†	908.1	695.9	471.50 ug/L	471.50 ppb	16:56:53
3	Pb 220.353†	176.0	229.5	29.016 ug/L	29.016 ppb	16:56:53
3	S 181.975 Axial†	30.1	-0.9	-3.5797 ug/L	-3.5797 ppb	16:56:53
3	Sb 206.836†	39.3	14.6	-4.8730 ug/L	-4.8730 ppb	16:56:53
3	Se 196.026†	-257.7	-233.6	-18.275 ug/L	-18.275 ppb	16:56:53
3	Si 251.611†	753055.3	731926.1	27786 ug/L	27786 ppb	16:56:28
3	Sn 189.927†	35.3	27.2	3.1693 ug/L	3.1693 ppb	16:56:53
3	Ti 334.940†	1851949.1	1802308.9	3134.7 ug/L	3134.7 ppb	16:56:28
3	Tl 190.801†	-133.6	-100.9	-3.3855 ug/L	-3.3855 ppb	16:56:53
3	U 409.014†	-10820.6	-8319.8	-259.30 ug/L	-259.30 ppb	16:56:28
3	V 292.402†	2871.5	4110.2	20.357 ug/L	20.357 ppb	16:56:33
3	Zn 213.857†	29905.9	28516.1	336.46 ug/L	336.46 ppb	16:56:33
3	SiO2†	752968.4	731830.4	59726 ug/L	59726 ppb	16:57:09

Mean Data: 247794003|957496|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	842909.0	102.94 %	0.234			0.23%
Sc Radial	4470.2	102 %	0.7			0.69%
Y 371.029	871850.8	126.05 %	0.316			0.25%
Y RADIAL	5976.6	125.5 %	0.56			0.44%
Ag 328.068†	-3417.3	1.1675 ug/L	0.29490	1.1675 ppb	0.29490	25.26%
Al 396.153Radial†	10451.4	10266 ug/L	25.7	10266 ppb	25.7	0.25%
As 188.979†	-20.2	30.074 ug/L	1.2177	30.074 ppb	1.2177	4.05%
B 249.677†	471.0	3.4139 ug/L	0.77582	3.4139 ppb	0.77582	22.73%
Ba 233.527†	10767.9	102.76 ug/L	0.875	102.76 ppb	0.875	0.85%
Be 313.107†	-11732.9	2.1078 ug/L	0.07477	2.1078 ppb	0.07477	3.55%
Ca 317.933Radial†	1385.0	2620.8 ug/L	28.99	2620.8 ppb	28.99	1.11%
Cd 226.502†	462.1	0.4456 ug/L	0.09535	0.4456 ppb	0.09535	21.40%
Co 228.616†	383.8	2.5522 ug/L	0.19760	2.5522 ppb	0.19760	7.74%
Cr 267.716†	1094.1	21.193 ug/L	0.3548	21.193 ppb	0.3548	1.67%
Cu 324.752†	1594.7	8.5885 ug/L	0.04918	8.5885 ppb	0.04918	0.57%
Fe 238.204 Radial†	5193.3	60174 ug/L	35.6	60174 ppb	35.6	0.06%
K 766.490 Radial†	27014.1	5143.7 ug/L	15.14	5143.7 ppb	15.14	0.29%

Mg 279.077 IEC†	30.1	1177.1 ug/L	95.34	1177.1 ppb	95.34	8.10%
Mn 257.610†	1545885.8	2038.5 ug/L	3.59	2038.5 ppb	3.59	0.18%
Mo 202.031†	70.5	10.973 ug/L	0.5423	10.973 ppb	0.5423	4.94%
Na 589.592 Radial†	11303.1	3984.6 ug/L	14.37	3984.6 ppb	14.37	0.36%
Ni 231.604†	232.1	7.3664 ug/L	0.18475	7.3664 ppb	0.18475	2.51%
P 214.914†	691.4	468.12 ug/L	3.165	468.12 ppb	3.165	0.68%
Pb 220.353†	224.0	28.166 ug/L	0.9049	28.166 ppb	0.9049	3.21%
S 181.975 Axial†	3.3	4.0164 ug/L	7.37218	4.0164 ppb	7.37218	183.55%
Sb 206.836†	18.2	-3.3688 ug/L	1.33851	-3.3688 ppb	1.33851	39.73%
Se 196.026†	-230.5	-15.779 ug/L	4.1090	-15.779 ppb	4.1090	26.04%
Si 251.611†	730857.4	27745 ug/L	35.4	27745 ppb	35.4	0.13%
Sn 189.927†	26.7	3.0616 ug/L	0.64981	3.0616 ppb	0.64981	21.22%
Sr 421.552†	2472.0	19.796 ug/L	0.1139	19.796 ppb	0.1139	0.58%
Ti 334.940†	1799264.9	3129.4 ug/L	6.04	3129.4 ppb	6.04	0.19%
Tl 190.801†	-95.0	-1.1736 ug/L	3.14368	-1.1736 ppb	3.14368	267.86%
U 409.014†	-8254.5	-257.32 ug/L	2.862	-257.32 ppb	2.862	1.11%
V 292.402†	4089.7	20.206 ug/L	0.5798	20.206 ppb	0.5798	2.87%
Zn 213.857†	28681.4	338.46 ug/L	2.947	338.46 ppb	2.947	0.87%
SiO2†	728296.1	59437 ug/L	775.1	59437 ppb	775.1	1.30%

Sequence No.: 33
 Sample ID: 247794004|957496|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 49
 Date Collected: 3/19/2010 16:59:21
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 247794004|957496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4610.7	4610.7	105 %		17:01:14
1	Y RADIAL	6257.8	6257.8	131.4 %		17:01:14
1	Al 396.153Radial†	11416.7	10961.0	10766 ug/L	10766 ppb	17:01:14
1	Ca 317.933Radial†	1504.6	1418.5	2684.1 ug/L	2684.1 ppb	17:01:34
1	Fe 238.204 Radial†	6123.0	5828.2	67531 ug/L	67531 ppb	17:01:14
1	K 766.490 Radial†	32474.8	28357.6	5399.5 ug/L	5399.5 ppb	17:01:14
1	Mg 279.077 IEC†	40.9	37.5	1474.9 ug/L	1474.9 ppb	17:01:34
1	Na 589.592 Radial†	11512.5	11849.3	4177.1 ug/L	4177.1 ppb	17:01:14
1	Sr 421.552†	2797.7	2646.0	21.190 ug/L	21.190 ppb	17:01:14
1	Sc 361.383	842917.0	842917.0	102.94 %		17:02:32
1	Y 371.029	884306.5	884306.5	127.86 %		17:02:32
1	Ag 328.068†	-3812.2	-3888.4	1.0123 ug/L	1.0123 ppb	17:02:37
1	As 188.979†	-67.5	-38.8	26.069 ug/L	26.069 ppb	17:02:57
1	B 249.677†	-12.2	525.5	3.7437 ug/L	3.7437 ppb	17:02:37
1	Ba 233.527†	12548.3	12190.3	116.31 ug/L	116.31 ppb	17:02:37
1	Be 313.107†	-18482.3	-14223.0	2.2110 ug/L	2.2110 ppb	17:02:37
1	Cd 226.502†	360.2	520.6	0.5329 ug/L	0.5329 ppb	17:02:57
1	Co 228.616†	411.7	446.2	2.9879 ug/L	2.9879 ppb	17:02:57
1	Cr 267.716†	2384.1	2244.4	37.405 ug/L	37.405 ppb	17:02:37
1	Cu 324.752†	7198.2	1440.5	8.4737 ug/L	8.4737 ppb	17:02:37
1	Mn 257.610†	1838460.1	1785524.3	2354.3 ug/L	2354.3 ppb	17:02:32
1	Mo 202.031†	99.0	87.7	13.067 ug/L	13.067 ppb	17:02:57
1	Ni 231.604†	381.1	286.1	9.0789 ug/L	9.0789 ppb	17:02:57
1	P 214.914†	903.7	690.6	461.81 ug/L	461.81 ppb	17:02:57
1	Pb 220.353†	194.3	247.1	30.788 ug/L	30.788 ppb	17:02:57
1	S 181.975 Axial†	34.9	3.7	4.5723 ug/L	4.5723 ppb	17:02:57
1	Sb 206.836†	50.4	25.3	-2.1413 ug/L	-2.1413 ppb	17:02:57
1	Se 196.026†	-294.8	-269.4	-26.864 ug/L	-26.864 ppb	17:02:57
1	Si 251.611†	785782.9	762835.6	28959 ug/L	28959 ppb	17:02:32
1	Sn 189.927†	33.0	24.9	2.2527 ug/L	2.2527 ppb	17:02:57
1	Ti 334.940†	2154425.4	2093969.0	3641.9 ug/L	3641.9 ppb	17:02:32
1	Tl 190.801†	-138.0	-105.0	0.6941 ug/L	0.6941 ppb	17:02:57
1	U 409.014†	-11062.5	-8542.1	-266.92 ug/L	-266.92 ppb	17:02:32
1	V 292.402†	3159.4	4386.6	20.967 ug/L	20.967 ppb	17:02:37
1	Zn 213.857†	34504.3	32948.0	389.05 ug/L	389.05 ppb	17:02:37
1	SiO2†	786900.5	763910.0	62344 ug/L	62344 ppb	17:04:05
2	Sc Radial	4471.1	4471.1	102 %		17:01:39
2	Y RADIAL	6083.1	6083.1	127.8 %		17:01:39
2	Al 396.153Radial†	11337.4	11222.8	11023 ug/L	11023 ppb	17:01:39
2	Ca 317.933Radial†	1496.4	1455.2	2753.6 ug/L	2753.6 ppb	17:01:59
2	Fe 238.204 Radial†	6094.5	5982.5	69318 ug/L	69318 ppb	17:01:39
2	K 766.490 Radial†	32210.5	29064.3	5534.0 ug/L	5534.0 ppb	17:01:39
2	Mg 279.077 IEC†	35.7	33.6	1312.2 ug/L	1312.2 ppb	17:01:59
2	Na 589.592 Radial†	11423.7	12104.6	4267.1 ug/L	4267.1 ppb	17:01:39
2	Sr 421.552†	2762.1	2694.3	21.576 ug/L	21.576 ppb	17:01:39
2	Sc 361.383	850532.7	850532.7	103.87 %		17:03:03
2	Y 371.029	891481.3	891481.3	128.89 %		17:03:03
2	Ag 328.068†	-3759.4	-3804.4	1.9999 ug/L	1.9999 ppb	17:03:08
2	As 188.979†	-55.8	-26.9	33.022 ug/L	33.022 ppb	17:03:28
2	B 249.677†	-0.2	537.2	3.7811 ug/L	3.7811 ppb	17:03:08
2	Ba 233.527†	12442.9	11979.8	114.39 ug/L	114.39 ppb	17:03:08
2	Be 313.107†	-18208.7	-13798.9	2.3971 ug/L	2.3971 ppb	17:03:08
2	Cd 226.502†	371.9	528.6	0.4665 ug/L	0.4665 ppb	17:03:28
2	Co 228.616†	412.1	443.0	2.8711 ug/L	2.8711 ppb	17:03:28
2	Cr 267.716†	2338.7	2180.0	36.730 ug/L	36.730 ppb	17:03:08
2	Cu 324.752†	7182.1	1362.4	8.3083 ug/L	8.3083 ppb	17:03:08
2	Mn 257.610†	1857182.7	1787557.8	2357.1 ug/L	2357.1 ppb	17:03:03
2	Mo 202.031†	87.4	75.6	12.133 ug/L	12.133 ppb	17:03:28
2	Ni 231.604†	391.7	293.1	9.3001 ug/L	9.3001 ppb	17:03:28

2	P 214.914†	917.3	695.8	464.44 ug/L	464.44 ppb	17:03:28
2	Pb 220.353†	213.0	263.4	33.092 ug/L	33.092 ppb	17:03:28
2	S 181.975 Axial†	31.0	-0.3	-2.6617 ug/L	-2.6617 ppb	17:03:28
2	Sb 206.836†	53.2	27.5	-1.2053 ug/L	-1.2053 ppb	17:03:28
2	Se 196.026†	-292.8	-264.9	-17.896 ug/L	-17.896 ppb	17:03:28
2	Si 251.611†	793466.7	763398.1	28981 ug/L	28981 ppb	17:03:03
2	Sn 189.927†	48.6	39.7	5.5128 ug/L	5.5128 ppb	17:03:28
2	Ti 334.940†	2175358.0	2095381.8	3644.3 ug/L	3644.3 ppb	17:03:03
2	Tl 190.801†	-139.9	-105.6	0.5072 ug/L	0.5072 ppb	17:03:28
2	U 409.014†	-11042.7	-8426.8	-263.62 ug/L	-263.62 ppb	17:03:03
2	V 292.402†	3270.2	4465.7	21.325 ug/L	21.325 ppb	17:03:08
2	Zn 213.857†	34433.0	32579.2	384.31 ug/L	384.31 ppb	17:03:08
2	SiO2†	792840.7	762784.3	62252 ug/L	62252 ppb	17:04:11
3	Sc Radial	4460.2	4460.2	101 %		17:02:04
3	Y RADIAL	6072.2	6072.2	127.6 %		17:02:04
3	Al 396.153Radial†	11334.5	11247.0	11047 ug/L	11047 ppb	17:02:04
3	Ca 317.933Radial†	1496.7	1459.1	2761.0 ug/L	2761.0 ppb	17:02:24
3	Fe 238.204 Radial†	6045.6	5948.9	68928 ug/L	68928 ppb	17:02:04
3	K 766.490 Radial†	32025.2	28958.8	5514.0 ug/L	5514.0 ppb	17:02:04
3	Mg 279.077 IEC†	38.4	36.3	1424.0 ug/L	1424.0 ppb	17:02:24
3	Na 589.592 Radial†	11283.1	11993.5	4228.0 ug/L	4228.0 ppb	17:02:04
3	Sr 421.552†	2776.2	2714.9	21.741 ug/L	21.741 ppb	17:02:04
3	Sc 361.383	847789.6	847789.6	103.54 %		17:03:34
3	Y 371.029	888816.7	888816.7	128.51 %		17:03:34
3	Ag 328.068†	-3777.1	-3833.2	1.7325 ug/L	1.7325 ppb	17:03:39
3	As 188.979†	-57.8	-29.1	31.777 ug/L	31.777 ppb	17:03:59
3	B 249.677†	-13.7	524.1	3.4765 ug/L	3.4765 ppb	17:03:39
3	Ba 233.527†	12532.1	12104.6	115.55 ug/L	115.55 ppb	17:03:39
3	Be 313.107†	-18308.7	-13952.2	2.3423 ug/L	2.3423 ppb	17:03:39
3	Cd 226.502†	359.2	517.6	0.3460 ug/L	0.3460 ppb	17:03:59
3	Co 228.616†	407.9	440.2	2.7961 ug/L	2.7961 ppb	17:03:59
3	Cr 267.716†	2309.0	2158.6	36.403 ug/L	36.403 ppb	17:03:39
3	Cu 324.752†	7105.7	1310.9	8.1188 ug/L	8.1188 ppb	17:03:39
3	Mn 257.610†	1853154.9	1789452.7	2359.6 ug/L	2359.6 ppb	17:03:34
3	Mo 202.031†	84.8	73.4	11.907 ug/L	11.907 ppb	17:03:59
3	Ni 231.604†	404.2	306.4	9.7225 ug/L	9.7225 ppb	17:03:59
3	P 214.914†	904.0	685.8	457.31 ug/L	457.31 ppb	17:03:59
3	Pb 220.353†	206.8	258.1	32.335 ug/L	32.335 ppb	17:03:59
3	S 181.975 Axial†	29.8	-1.4	-4.5932 ug/L	-4.5932 ppb	17:03:59
3	Sb 206.836†	46.9	21.6	-3.7177 ug/L	-3.7177 ppb	17:03:59
3	Se 196.026†	-293.9	-266.9	-20.653 ug/L	-20.653 ppb	17:03:59
3	Si 251.611†	792772.7	765199.4	29049 ug/L	29049 ppb	17:03:34
3	Sn 189.927†	44.6	35.9	4.6750 ug/L	4.6750 ppb	17:03:59
3	Ti 334.940†	2171058.2	2098005.1	3648.9 ug/L	3648.9 ppb	17:03:34
3	Tl 190.801†	-143.3	-109.4	-0.9062 ug/L	-0.9062 ppb	17:03:59
3	U 409.014†	-11057.5	-8475.5	-265.05 ug/L	-265.05 ppb	17:03:34
3	V 292.402†	3302.0	4506.7	21.700 ug/L	21.700 ppb	17:03:39
3	Zn 213.857†	34509.7	32760.6	386.57 ug/L	386.57 ppb	17:03:39
3	SiO2†	792476.0	764901.7	62425 ug/L	62425 ppb	17:04:17

Mean Data: 247794004|957496|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Units			Conc. Units		
Sc 361.383	847079.8	103.45 %		0.471			0.46%
Sc Radial	4514.0	103 %		1.9			1.86%
Y 371.029	888201.5	128.42 %		0.524			0.41%
Y RADIAL	6137.7	128.9 %		2.19			1.70%
Ag 328.068†	-3842.0	1.5816 ug/L		0.51081	1.5816 ppb	0.51081	32.30%
Al 396.153Radial†	11143.6	10946 ug/L		155.8	10946 ppb	155.8	1.42%
As 188.979†	-31.6	30.289 ug/L		3.7075	30.289 ppb	3.7075	12.24%
B 249.677†	528.9	3.6671 ug/L		0.16612	3.6671 ppb	0.16612	4.53%
Ba 233.527†	12091.6	115.42 ug/L		0.965	115.42 ppb	0.965	0.84%
Be 313.107†	-13991.3	2.3168 ug/L		0.09565	2.3168 ppb	0.09565	4.13%
Ca 317.933Radial†	1444.3	2732.9 ug/L		42.40	2732.9 ppb	42.40	1.55%
Cd 226.502†	522.3	0.4485 ug/L		0.09474	0.4485 ppb	0.09474	21.12%
Co 228.616†	443.1	2.8850 ug/L		0.09662	2.8850 ppb	0.09662	3.35%
Cr 267.716†	2194.4	36.846 ug/L		0.5108	36.846 ppb	0.5108	1.39%
Cu 324.752†	1371.3	8.3003 ug/L		0.17758	8.3003 ppb	0.17758	2.14%
Fe 238.204 Radial†	5919.9	68592 ug/L		939.8	68592 ppb	939.8	1.37%
K 766.490 Radial†	28793.6	5482.5 ug/L		72.61	5482.5 ppb	72.61	1.32%

Mg 279.077 IEC†	35.8	1403.7 ug/L	83.18	1403.7 ppb	83.18	5.93%
Mn 257.610†	1787511.6	2357.0 ug/L	2.66	2357.0 ppb	2.66	0.11%
Mo 202.031†	78.9	12.369 ug/L	0.6152	12.369 ppb	0.6152	4.97%
Na 589.592 Radial†	11982.5	4224.1 ug/L	45.13	4224.1 ppb	45.13	1.07%
Ni 231.604†	295.2	9.3671 ug/L	0.32701	9.3671 ppb	0.32701	3.49%
P 214.914†	690.7	461.19 ug/L	3.604	461.19 ppb	3.604	0.78%
Pb 220.353†	256.2	32.072 ug/L	1.1746	32.072 ppb	1.1746	3.66%
S 181.975 Axial†	0.6	-0.8942 ug/L	4.83164	-0.8942 ppb	4.83164	540.35%
Sb 206.836†	24.8	-2.3548 ug/L	1.26973	-2.3548 ppb	1.26973	53.92%
Se 196.026†	-267.1	-21.804 ug/L	4.5936	-21.804 ppb	4.5936	21.07%
Si 251.611†	763811.0	28996 ug/L	46.9	28996 ppb	46.9	0.16%
Sn 189.927†	33.5	4.1469 ug/L	1.69300	4.1469 ppb	1.69300	40.83%
Sr 421.552†	2685.1	21.502 ug/L	0.2829	21.502 ppb	0.2829	1.32%
Ti 334.940†	2095785.3	3645.0 ug/L	3.57	3645.0 ppb	3.57	0.10%
Tl 190.801†	-106.7	0.0984 ug/L	0.87500	0.0984 ppb	0.87500	889.66%
U 409.014†	-8481.5	-265.20 ug/L	1.653	-265.20 ppb	1.653	0.62%
V 292.402†	4453.0	21.331 ug/L	0.3667	21.331 ppb	0.3667	1.72%
Zn 213.857†	32762.6	386.64 ug/L	2.369	386.64 ppb	2.369	0.61%
SiO2†	763865.3	62340 ug/L	86.5	62340 ppb	86.5	0.14%

Sequence No.: 34
 Sample ID: 247794005|957496|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 50
 Date Collected: 3/19/2010 17:06:29
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 247794005|957496|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4341.6	4341.6	98.8 %		17:08:42
1	Y RADIAL	5709.0	5709.0	119.9 %		17:08:22
1	Al 396.153Radial†	7284.8	7452.7	7320.2 ug/L	7320.2 ppb	17:08:22
1	Ca 317.933Radial†	1375.8	1377.0	2605.6 ug/L	2605.6 ppb	17:08:42
1	Fe 238.204 Radial†	5445.4	5504.0	63774 ug/L	63774 ppb	17:08:22
1	K 766.490 Radial†	23205.8	20893.1	3978.0 ug/L	3978.0 ppb	17:08:22
1	Mg 279.077 IEC†	35.8	34.7	1364.7 ug/L	1364.7 ppb	17:08:42
1	Na 589.592 Radial†	6821.7	7781.0	2743.0 ug/L	2743.0 ppb	17:08:22
1	Sr 421.552†	1798.4	1799.7	14.407 ug/L	14.407 ppb	17:08:22
1	Sc 361.383	854325.4	854325.4	104.34 %		17:09:39
1	Y 371.029	849103.6	849103.6	122.77 %		17:09:39
1	Ag 328.068†	-3537.6	-3575.7	1.4299 ug/L	1.4299 ppb	17:09:44
1	As 188.979†	-54.3	-25.2	27.016 ug/L	27.016 ppb	17:10:04
1	B 249.677†	-74.2	466.3	2.6951 ug/L	2.6951 ppb	17:09:44
1	Ba 233.527†	6752.2	6472.4	62.633 ug/L	62.633 ppb	17:09:44
1	Be 313.107†	-14303.8	-9978.4	2.5495 ug/L	2.5495 ppb	17:09:44
1	Cd 226.502†	314.9	472.5	0.2301 ug/L	0.2301 ppb	17:10:04
1	Co 228.616†	363.3	394.4	3.0419 ug/L	3.0419 ppb	17:10:04
1	Cr 267.716†	839.3	732.9	16.718 ug/L	16.718 ppb	17:09:44
1	Cu 324.752†	8124.5	2234.9	10.876 ug/L	10.876 ppb	17:09:44
1	Mn 257.610†	1579117.4	1513109.7	1995.7 ug/L	1995.7 ppb	17:09:39
1	Mo 202.031†	99.0	86.3	12.654 ug/L	12.654 ppb	17:10:04
1	Ni 231.604†	352.5	253.8	8.0541 ug/L	8.0541 ppb	17:10:04
1	P 214.914†	991.9	763.4	517.72 ug/L	517.72 ppb	17:10:04
1	Pb 220.353†	255.6	303.3	39.197 ug/L	39.197 ppb	17:10:04
1	S 181.975 Axial†	36.3	4.6	6.8843 ug/L	6.8843 ppb	17:10:04
1	Sb 206.836†	49.6	23.8	-0.5254 ug/L	-0.5254 ppb	17:10:04
1	Se 196.026†	-262.5	-234.6	-9.7378 ug/L	-9.7378 ppb	17:10:04
1	Si 251.611†	598502.5	573144.2	21758 ug/L	21758 ppb	17:09:39
1	Sn 189.927†	23.8	15.7	0.3559 ug/L	0.3559 ppb	17:10:04
1	Ti 334.940†	1795420.2	1721934.6	2994.9 ug/L	2994.9 ppb	17:09:39
1	Tl 190.801†	-124.9	-90.6	-0.8068 ug/L	-0.8068 ppb	17:10:04
1	U 409.014†	-9894.7	-7279.4	-228.14 ug/L	-228.14 ppb	17:09:39
1	V 292.402†	2758.4	3961.3	18.880 ug/L	18.880 ppb	17:09:44
1	Zn 213.857†	35298.4	33261.5	393.41 ug/L	393.41 ppb	17:09:44
1	SiO2†	596818.0	571518.5	46642 ug/L	46642 ppb	17:11:12
2	Sc Radial	4379.3	4379.3	99.6 %		17:09:07
2	Y RADIAL	5757.4	5757.4	120.9 %		17:08:47
2	Al 396.153Radial†	7294.6	7399.0	7267.4 ug/L	7267.4 ppb	17:08:47
2	Ca 317.933Radial†	1392.0	1381.3	2613.7 ug/L	2613.7 ppb	17:09:07
2	Fe 238.204 Radial†	5475.2	5486.5	63571 ug/L	63571 ppb	17:08:47
2	K 766.490 Radial†	23416.6	20902.2	3979.7 ug/L	3979.7 ppb	17:08:47
2	Mg 279.077 IEC†	36.3	34.9	1374.3 ug/L	1374.3 ppb	17:09:07
2	Na 589.592 Radial†	6876.3	7776.2	2741.3 ug/L	2741.3 ppb	17:08:47
2	Sr 421.552†	1833.8	1819.6	14.566 ug/L	14.566 ppb	17:08:47
2	Sc 361.383	844537.9	844537.9	103.14 %		17:10:10
2	Y 371.029	837506.9	837506.9	121.09 %		17:10:10
2	Ag 328.068†	-3505.1	-3583.6	1.3302 ug/L	1.3302 ppb	17:10:15
2	As 188.979†	-55.7	-27.2	25.915 ug/L	25.915 ppb	17:10:35
2	B 249.677†	-172.2	370.4	0.0393 ug/L	0.0393 ppb	17:10:15
2	Ba 233.527†	6712.3	6508.6	62.967 ug/L	62.967 ppb	17:10:15
2	Be 313.107†	-14111.5	-9950.9	2.5700 ug/L	2.5700 ppb	17:10:15
2	Cd 226.502†	330.4	490.9	0.5189 ug/L	0.5189 ppb	17:10:35
2	Co 228.616†	347.1	382.8	2.7386 ug/L	2.7386 ppb	17:10:35
2	Cr 267.716†	850.8	753.3	16.971 ug/L	16.971 ppb	17:10:15
2	Cu 324.752†	7993.0	2197.6	10.744 ug/L	10.744 ppb	17:10:15
2	Mn 257.610†	1568720.2	1520569.3	2005.5 ug/L	2005.5 ppb	17:10:10
2	Mo 202.031†	109.6	97.7	13.650 ug/L	13.650 ppb	17:10:35
2	Ni 231.604†	366.4	271.1	8.6044 ug/L	8.6044 ppb	17:10:35

2	P 214.914†	990.9	773.5	525.36 ug/L	525.36 ppb	17:10:35
2	Pb 220.353†	245.7	296.5	38.170 ug/L	38.170 ppb	17:10:35
2	S 181.975 Axial†	40.2	8.8	14.395 ug/L	14.395 ppb	17:10:35
2	Sb 206.836†	45.6	20.5	-1.9015 ug/L	-1.9015 ppb	17:10:35
2	Se 196.026†	-265.6	-240.6	-15.305 ug/L	-15.305 ppb	17:10:35
2	Si 251.611†	591762.5	573257.4	21762 ug/L	21762 ppb	17:10:10
2	Sn 189.927†	24.0	16.1	0.4679 ug/L	0.4679 ppb	17:10:35
2	Ti 334.940†	1777145.6	1724159.1	2998.7 ug/L	2998.7 ppb	17:10:10
2	Tl 190.801†	-126.9	-93.9	-1.9953 ug/L	-1.9953 ppb	17:10:35
2	U 409.014†	-9873.2	-7368.4	-230.81 ug/L	-230.81 ppb	17:10:10
2	V 292.402†	2778.6	4011.4	19.315 ug/L	19.315 ppb	17:10:15
2	Zn 213.857†	35104.8	33465.9	395.92 ug/L	395.92 ppb	17:10:15
2	SiO2†	589821.3	571364.0	46630 ug/L	46630 ppb	17:11:18
3	Sc Radial	4324.4	4324.4	98.4 %		17:09:32
3	Y RADIAL	5748.4	5748.4	120.7 %		17:09:12
3	Al 396.153Radial†	7271.9	7468.8	7335.9 ug/L	7335.9 ppb	17:09:12
3	Ca 317.933Radial†	1373.2	1379.9	2611.1 ug/L	2611.1 ppb	17:09:32
3	Fe 238.204 Radial†	5426.9	5507.1	63810 ug/L	63810 ppb	17:09:12
3	K 766.490 Radial†	23165.4	20945.2	3987.9 ug/L	3987.9 ppb	17:09:12
3	Mg 279.077 IEC†	34.9	34.0	1334.9 ug/L	1334.9 ppb	17:09:32
3	Na 589.592 Radial†	6690.4	7674.9	2705.6 ug/L	2705.6 ppb	17:09:12
3	Sr 421.552†	1796.9	1805.4	14.452 ug/L	14.452 ppb	17:09:12
3	Sc 361.383	860880.1	860880.1	105.14 %		17:10:41
3	Y 371.029	854700.3	854700.3	123.57 %		17:10:41
3	Ag 328.068†	-3522.9	-3536.0	1.6482 ug/L	1.6482 ppb	17:10:46
3	As 188.979†	-47.4	-18.3	30.823 ug/L	30.823 ppb	17:11:06
3	B 249.677†	-61.1	479.3	3.0547 ug/L	3.0547 ppb	17:10:46
3	Ba 233.527†	6742.5	6413.8	62.086 ug/L	62.086 ppb	17:10:46
3	Be 313.107†	-14097.9	-9678.2	2.6716 ug/L	2.6716 ppb	17:10:46
3	Cd 226.502†	309.0	464.5	0.1109 ug/L	0.1109 ppb	17:11:06
3	Co 228.616†	349.9	379.1	2.6529 ug/L	2.6529 ppb	17:11:06
3	Cr 267.716†	844.4	731.6	16.704 ug/L	16.704 ppb	17:10:46
3	Cu 324.752†	7856.1	1920.3	9.8394 ug/L	9.8394 ppb	17:10:46
3	Mn 257.610†	1590286.1	1512209.1	1994.5 ug/L	1994.5 ppb	17:10:41
3	Mo 202.031†	113.3	99.2	13.802 ug/L	13.802 ppb	17:11:06
3	Ni 231.604†	341.1	240.3	7.6265 ug/L	7.6265 ppb	17:11:06
3	P 214.914†	985.5	750.0	507.94 ug/L	507.94 ppb	17:11:06
3	Pb 220.353†	236.9	283.6	36.172 ug/L	36.172 ppb	17:11:06
3	S 181.975 Axial†	38.2	6.2	9.7161 ug/L	9.7161 ppb	17:11:06
3	Sb 206.836†	48.7	22.6	-0.9775 ug/L	-0.9775 ppb	17:11:06
3	Se 196.026†	-269.9	-239.7	-13.897 ug/L	-13.897 ppb	17:11:06
3	Si 251.611†	602702.9	572771.8	21744 ug/L	21744 ppb	17:10:41
3	Sn 189.927†	30.0	21.4	1.6554 ug/L	1.6554 ppb	17:11:06
3	Ti 334.940†	1807673.4	1720487.0	2992.3 ug/L	2992.3 ppb	17:10:41
3	Tl 190.801†	-123.7	-88.5	-0.0218 ug/L	-0.0218 ppb	17:11:06
3	U 409.014†	-9963.2	-7272.3	-227.92 ug/L	-227.92 ppb	17:10:41
3	V 292.402†	2817.0	3996.8	19.177 ug/L	19.177 ppb	17:10:46
3	Zn 213.857†	34779.0	32509.9	384.31 ug/L	384.31 ppb	17:10:46
3	SiO2†	599098.3	569332.1	46464 ug/L	46464 ppb	17:11:23

Mean Data: 247794005|957496|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	853247.8	104.20 %	1.004			0.96%
Sc Radial	4348.4	98.9 %	0.64			0.65%
Y 371.029	847103.6	122.48 %	1.268			1.04%
Y RADIAL	5738.3	120.5 %	0.54			0.45%
Ag 328.068†	-3565.1	1.4695 ug/L	0.16265	1.4695 ppb	0.16265	11.07%
Al 396.153Radial†	7440.2	7307.8 ug/L	35.89	7307.8 ppb	35.89	0.49%
As 188.979†	-23.6	27.918 ug/L	2.5754	27.918 ppb	2.5754	9.22%
B 249.677†	438.6	1.9297 ug/L	1.64694	1.9297 ppb	1.64694	85.35%
Ba 233.527†	6465.0	62.562 ug/L	0.4447	62.562 ppb	0.4447	0.71%
Be 313.107†	-9869.2	2.5971 ug/L	0.06540	2.5971 ppb	0.06540	2.52%
Ca 317.933Radial†	1379.4	2610.1 ug/L	4.10	2610.1 ppb	4.10	0.16%
Cd 226.502†	476.0	0.2866 ug/L	0.20978	0.2866 ppb	0.20978	73.19%
Co 228.616†	385.4	2.8111 ug/L	0.20441	2.8111 ppb	0.20441	7.27%
Cr 267.716†	739.3	16.798 ug/L	0.1505	16.798 ppb	0.1505	0.90%
Cu 324.752†	2117.6	10.487 ug/L	0.5644	10.487 ppb	0.5644	5.38%
Fe 238.204 Radial†	5499.2	63718 ug/L	128.7	63718 ppb	128.7	0.20%
K 766.490 Radial†	20913.5	3981.9 ug/L	5.31	3981.9 ppb	5.31	0.13%

Mg 279.077 IEC†	34.5	1357.9 ug/L	20.54	1357.9 ppb	20.54	1.51%
Mn 257.610†	1515296.1	1998.6 ug/L	6.02	1998.6 ppb	6.02	0.30%
Mo 202.031†	94.4	13.369 ug/L	0.6236	13.369 ppb	0.6236	4.66%
Na 589.592 Radial†	7744.0	2729.9 ug/L	21.13	2729.9 ppb	21.13	0.77%
Ni 231.604†	255.1	8.0950 ug/L	0.49024	8.0950 ppb	0.49024	6.06%
P 214.914†	762.3	517.01 ug/L	8.732	517.01 ppb	8.732	1.69%
Pb 220.353†	294.5	37.846 ug/L	1.5383	37.846 ppb	1.5383	4.06%
S 181.975 Axial†	6.5	10.332 ug/L	3.7930	10.332 ppb	3.7930	36.71%
Sb 206.836†	22.3	-1.1348 ug/L	0.70140	-1.1348 ppb	0.70140	61.81%
Se 196.026†	-238.3	-12.980 ug/L	2.8946	-12.980 ppb	2.8946	22.30%
Si 251.611†	573057.8	21755 ug/L	9.6	21755 ppb	9.6	0.04%
Sn 189.927†	17.7	0.8264 ug/L	0.72008	0.8264 ppb	0.72008	87.14%
Sr 421.552†	1808.3	14.475 ug/L	0.0821	14.475 ppb	0.0821	0.57%
Ti 334.940†	1722193.6	2995.3 ug/L	3.22	2995.3 ppb	3.22	0.11%
Tl 190.801†	-91.0	-0.9413 ug/L	0.99357	-0.9413 ppb	0.99357	105.55%
U 409.014†	-7306.7	-228.96 ug/L	1.611	-228.96 ppb	1.611	0.70%
V 292.402†	3989.8	19.124 ug/L	0.2223	19.124 ppb	0.2223	1.16%
Zn 213.857†	33079.1	391.21 ug/L	6.111	391.21 ppb	6.111	1.56%
SiO2†	570738.2	46579 ug/L	99.6	46579 ppb	99.6	0.21%

Sequence No.: 35

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/19/2010 17:13:34

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	4409.1	4409.1	100 %		17:15:26
1	Y RADIAL	4770.5	4770.5	100.2 %		17:15:26
1	Al 396.153Radial†	5041.8	5103.8	4989.2 ug/L	4989.2 ppb	17:15:26
1	Ca 317.933Radial†	2707.7	2683.4	5077.5 ug/L	5077.5 ppb	17:15:46
1	Fe 238.204 Radial†	457.3	447.4	5199.1 ug/L	5199.1 ppb	17:15:46
1	K 766.490 Radial†	29717.2	27023.8	5142.3 ug/L	5142.3 ppb	17:15:26
1	Mg 279.077 IEC†	130.1	128.2	5288.4 ug/L	5288.4 ppb	17:15:46
1	Na 589.592 Radial†	28142.3	28927.8	10198 ug/L	10198 ppb	17:15:26
1	Sr 421.552†	63922.3	63697.9	510.55 ug/L	510.55 ppb	17:15:26
1	Sc 361.383	843711.2	843711.2	103.04 %		17:16:44
1	Y 371.029	702661.7	702661.7	101.59 %		17:16:44
1	Ag 328.068†	99412.1	96294.7	503.08 ug/L	503.08 ppb	17:16:49
1	As 188.979†	911.4	911.3	504.62 ug/L	504.62 ppb	17:17:09
1	B 249.677†	17621.4	17639.0	492.55 ug/L	492.55 ppb	17:16:49
1	Ba 233.527†	54798.5	53182.9	499.38 ug/L	499.38 ppb	17:16:49
1	Be 313.107†	1217454.2	1185274.8	505.81 ug/L	505.81 ppb	17:16:44
1	Cd 226.502†	35499.2	34622.7	502.25 ug/L	502.25 ppb	17:16:49
1	Co 228.616†	20188.5	19639.2	507.69 ug/L	507.69 ppb	17:16:49
1	Cr 267.716†	38370.0	37166.7	499.46 ug/L	499.46 ppb	17:16:49
1	Cu 324.752†	159562.0	149303.5	492.92 ug/L	492.92 ppb	17:16:49
1	Mn 257.610†	392941.7	380962.3	501.19 ug/L	501.19 ppb	17:16:44
1	Mo 202.031†	5766.5	5587.9	497.18 ug/L	497.18 ppb	17:17:09
1	Ni 231.604†	16495.4	15924.7	505.42 ug/L	505.42 ppb	17:16:49
1	P 214.914†	3634.7	3340.2	2392.0 ug/L	2392.0 ppb	17:17:09
1	Pb 220.353†	3290.1	3251.4	500.92 ug/L	500.92 ppb	17:17:09
1	S 181.975 Axial†	608.2	560.1	1001.7 ug/L	1001.7 ppb	17:17:09
1	Sb 206.836†	1259.8	1198.9	519.53 ug/L	519.53 ppb	17:17:09
1	Se 196.026†	613.1	611.9	527.84 ug/L	527.84 ppb	17:17:09
1	Si 251.611†	69303.3	66770.9	2528.7 ug/L	2528.7 ppb	17:16:49
1	Sn 189.927†	2276.0	2201.7	500.23 ug/L	500.23 ppb	17:17:09
1	Ti 334.940†	289593.2	282172.4	490.56 ug/L	490.56 ppb	17:16:49
1	Tl 190.801†	1307.5	1298.0	505.48 ug/L	505.48 ppb	17:17:09
1	U 409.014†	14904.2	16668.8	503.99 ug/L	503.99 ppb	17:16:49
1	V 292.402†	62763.7	62229.8	503.54 ug/L	503.54 ppb	17:16:49
1	Zn 213.857†	43263.2	41417.0	497.17 ug/L	497.17 ppb	17:16:49
1	SiO2†	69849.8	67290.1	5478.1 ug/L	5478.1 ppb	17:18:16
2	Sc Radial	4326.0	4326.0	98.4 %		17:15:51
2	Y RADIAL	4647.1	4647.1	97.62 %		17:15:51
2	Al 396.153Radial†	4947.8	5104.9	4989.9 ug/L	4989.9 ppb	17:15:51
2	Ca 317.933Radial†	2694.3	2721.6	5149.9 ug/L	5149.9 ppb	17:16:11
2	Fe 238.204 Radial†	451.1	449.8	5227.6 ug/L	5227.6 ppb	17:16:11
2	K 766.490 Radial†	29435.1	27306.3	5196.1 ug/L	5196.1 ppb	17:15:51
2	Mg 279.077 IEC†	128.3	128.8	5312.3 ug/L	5312.3 ppb	17:16:11
2	Na 589.592 Radial†	27557.4	28872.5	10178 ug/L	10178 ppb	17:15:51
2	Sr 421.552†	62842.9	63825.4	511.57 ug/L	511.57 ppb	17:15:51
2	Sc 361.383	835050.7	835050.7	101.98 %		17:17:15
2	Y 371.029	694943.8	694943.8	100.48 %		17:17:15
2	Ag 328.068†	99343.8	97228.3	507.94 ug/L	507.94 ppb	17:17:20
2	As 188.979†	910.9	920.0	509.39 ug/L	509.39 ppb	17:17:40
2	B 249.677†	17614.7	17809.8	497.33 ug/L	497.33 ppb	17:17:20
2	Ba 233.527†	54530.3	53471.4	502.09 ug/L	502.09 ppb	17:17:20
2	Be 313.107†	1202715.9	1183076.9	504.88 ug/L	504.88 ppb	17:17:15
2	Cd 226.502†	35302.9	34787.6	504.64 ug/L	504.64 ppb	17:17:20
2	Co 228.616†	20128.7	19783.8	511.44 ug/L	511.44 ppb	17:17:20
2	Cr 267.716†	38090.7	37279.0	500.97 ug/L	500.97 ppb	17:17:20
2	Cu 324.752†	159454.9	150804.5	497.87 ug/L	497.87 ppb	17:17:20
2	Mn 257.610†	389286.4	381333.1	501.68 ug/L	501.68 ppb	17:17:15
2	Mo 202.031†	5781.4	5660.5	503.64 ug/L	503.64 ppb	17:17:40
2	Ni 231.604†	16386.2	15983.7	507.29 ug/L	507.29 ppb	17:17:20

2	P 214.914†	3646.8	3388.6	2427.1 ug/L	2427.1 ppb	17:17:40
2	Pb 220.353†	3297.7	3292.0	507.16 ug/L	507.16 ppb	17:17:40
2	S 181.975 Axial†	610.2	568.2	1016.3 ug/L	1016.3 ppb	17:17:40
2	Sb 206.836†	1264.6	1216.3	527.01 ug/L	527.01 ppb	17:17:40
2	Se 196.026†	616.6	621.6	535.96 ug/L	535.96 ppb	17:17:40
2	Si 251.611†	69107.6	67276.6	2547.8 ug/L	2547.8 ppb	17:17:20
2	Sn 189.927†	2277.8	2226.4	505.85 ug/L	505.85 ppb	17:17:40
2	Ti 334.940†	289022.4	284527.6	494.66 ug/L	494.66 ppb	17:17:20
2	Tl 190.801†	1301.7	1305.5	508.39 ug/L	508.39 ppb	17:17:40
2	U 409.014†	15028.9	16941.1	512.25 ug/L	512.25 ppb	17:17:20
2	V 292.402†	62467.0	62570.6	506.36 ug/L	506.36 ppb	17:17:20
2	Zn 213.857†	43096.7	41689.2	500.45 ug/L	500.45 ppb	17:17:20
2	SiO2†	69859.7	68002.9	5536.1 ug/L	5536.1 ppb	17:18:21
3	Sc Radial	4448.9	4448.9	101 %		17:16:16
3	Y RADIAL	4790.1	4790.1	100.6 %		17:16:16
3	Al 396.153Radial†	5049.0	5066.0	4952.1 ug/L	4952.1 ppb	17:16:16
3	Ca 317.933Radial†	2695.2	2646.8	5008.4 ug/L	5008.4 ppb	17:16:36
3	Fe 238.204 Radial†	450.3	436.3	5070.9 ug/L	5070.9 ppb	17:16:36
3	K 766.490 Radial†	29831.9	26872.0	5113.5 ug/L	5113.5 ppb	17:16:16
3	Mg 279.077 IEC†	128.2	125.2	5163.2 ug/L	5163.2 ppb	17:16:36
3	Na 589.592 Radial†	27913.0	28450.2	10029 ug/L	10029 ppb	17:16:16
3	Sr 421.552†	63987.5	63192.0	506.49 ug/L	506.49 ppb	17:16:16
3	Sc 361.383	843734.6	843734.6	103.04 %		17:17:46
3	Y 371.029	702967.9	702967.9	101.64 %		17:17:46
3	Ag 328.068†	99387.3	96267.9	502.90 ug/L	502.90 ppb	17:17:51
3	As 188.979†	907.7	907.7	502.57 ug/L	502.57 ppb	17:18:11
3	B 249.677†	17673.9	17689.5	493.99 ug/L	493.99 ppb	17:17:51
3	Ba 233.527†	54834.3	53216.1	499.69 ug/L	499.69 ppb	17:17:51
3	Be 313.107†	1221640.0	1189304.2	507.52 ug/L	507.52 ppb	17:17:46
3	Cd 226.502†	35570.5	34690.9	503.25 ug/L	503.25 ppb	17:17:51
3	Co 228.616†	20136.2	19587.9	506.37 ug/L	506.37 ppb	17:17:51
3	Cr 267.716†	38361.0	37157.0	499.32 ug/L	499.32 ppb	17:17:51
3	Cu 324.752†	158721.7	148483.7	490.21 ug/L	490.21 ppb	17:17:51
3	Mn 257.610†	393553.5	381545.5	501.95 ug/L	501.95 ppb	17:17:46
3	Mo 202.031†	5766.4	5587.6	497.15 ug/L	497.15 ppb	17:18:11
3	Ni 231.604†	16529.5	15957.4	506.46 ug/L	506.46 ppb	17:17:51
3	P 214.914†	3640.4	3345.6	2396.6 ug/L	2396.6 ppb	17:18:11
3	Pb 220.353†	3286.8	3248.1	500.42 ug/L	500.42 ppb	17:18:11
3	S 181.975 Axial†	608.2	560.0	1001.6 ug/L	1001.6 ppb	17:18:11
3	Sb 206.836†	1264.6	1203.5	521.40 ug/L	521.40 ppb	17:18:11
3	Se 196.026†	605.8	604.9	521.59 ug/L	521.59 ppb	17:18:11
3	Si 251.611†	69096.7	66568.6	2521.0 ug/L	2521.0 ppb	17:17:51
3	Sn 189.927†	2259.5	2185.6	496.58 ug/L	496.58 ppb	17:18:11
3	Ti 334.940†	288901.4	281493.3	489.38 ug/L	489.38 ppb	17:17:51
3	Tl 190.801†	1289.8	1280.8	498.82 ug/L	498.82 ppb	17:18:11
3	U 409.014†	14852.7	16618.4	502.48 ug/L	502.48 ppb	17:17:51
3	V 292.402†	62683.4	62150.3	502.92 ug/L	502.92 ppb	17:17:51
3	Zn 213.857†	43190.9	41345.6	496.32 ug/L	496.32 ppb	17:17:51
3	SiO2†	69346.6	66800.0	5438.1 ug/L	5438.1 ppb	17:18:26

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	840832.2	102.69 %	0.611			0.60%
Sc Radial	4394.7	100.0 %	1.43			1.43%
Y 371.029	700191.2	101.24 %	0.657			0.65%
Y RADIAL	4735.9	99.48 %	1.629			1.64%
Ag 328.068†	96597.0	504.64 ug/L	2.859	504.64 ppb	2.859	0.57%
QC value within limits for Ag 328.068 Recovery = 100.93%						
Al 396.153Radial†	5091.6	4977.1 ug/L	21.66	4977.1 ppb	21.66	0.44%
QC value within limits for Al 396.153Radial Recovery = 99.54%						
As 188.979†	913.0	505.53 ug/L	3.503	505.53 ppb	3.503	0.69%
QC value within limits for As 188.979 Recovery = 101.11%						
B 249.677†	17712.8	494.62 ug/L	2.450	494.62 ppb	2.450	0.50%
QC value within limits for B 249.677 Recovery = 98.92%						
Ba 233.527†	53290.1	500.39 ug/L	1.484	500.39 ppb	1.484	0.30%
QC value within limits for Ba 233.527 Recovery = 100.08%						
Be 313.107†	1185885.3	506.07 ug/L	1.339	506.07 ppb	1.339	0.26%
QC value within limits for Be 313.107 Recovery = 101.21%						
Ca 317.933Radial†	2683.9	5078.6 ug/L	70.78	5078.6 ppb	70.78	1.39%

QC value within limits for Ca 317.933Radial Recovery = 101.57%							
Cd 226.502†	34700.4	503.38 ug/L	1.201	503.38 ppb	1.201	0.24%	
QC value within limits for Cd 226.502 Recovery = 100.68%							
Co 228.616†	19670.3	508.50 ug/L	2.628	508.50 ppb	2.628	0.52%	
QC value within limits for Co 228.616 Recovery = 101.70%							
Cr 267.716†	37200.9	499.92 ug/L	0.916	499.92 ppb	0.916	0.18%	
QC value within limits for Cr 267.716 Recovery = 99.98%							
Cu 324.752†	149530.6	493.67 ug/L	3.887	493.67 ppb	3.887	0.79%	
QC value within limits for Cu 324.752 Recovery = 98.73%							
Fe 238.204 Radial†	444.5	5165.9 ug/L	83.47	5165.9 ppb	83.47	1.62%	
QC value within limits for Fe 238.204 Radial Recovery = 103.32%							
K 766.490 Radial†	27067.4	5150.6 ug/L	41.94	5150.6 ppb	41.94	0.81%	
QC value within limits for K 766.490 Radial Recovery = 103.01%							
Mg 279.077 IEC†	127.4	5254.6 ug/L	80.07	5254.6 ppb	80.07	1.52%	
QC value within limits for Mg 279.077 IEC Recovery = 105.09%							
Mn 257.610†	381280.3	501.61 ug/L	0.385	501.61 ppb	0.385	0.08%	
QC value within limits for Mn 257.610 Recovery = 100.32%							
Mo 202.031†	5612.0	499.32 ug/L	3.738	499.32 ppb	3.738	0.75%	
QC value within limits for Mo 202.031 Recovery = 99.86%							
Na 589.592 Radial†	28750.2	10135 ug/L	92.1	10135 ppb	92.1	0.91%	
QC value within limits for Na 589.592 Radial Recovery = 101.35%							
Ni 231.604†	15955.3	506.39 ug/L	0.937	506.39 ppb	0.937	0.18%	
QC value within limits for Ni 231.604 Recovery = 101.28%							
P 214.914†	3358.1	2405.2 ug/L	19.09	2405.2 ppb	19.09	0.79%	
QC value within limits for P 214.914 Recovery = 96.21%							
Pb 220.353†	3263.8	502.83 ug/L	3.756	502.83 ppb	3.756	0.75%	
QC value within limits for Pb 220.353 Recovery = 100.57%							
S 181.975 Axial†	562.8	1006.5 ug/L	8.42	1006.5 ppb	8.42	0.84%	
QC value within limits for S 181.975 Axial Recovery = 100.65%							
Sb 206.836†	1206.3	522.65 ug/L	3.892	522.65 ppb	3.892	0.74%	
QC value within limits for Sb 206.836 Recovery = 104.53%							
Se 196.026†	612.8	528.47 ug/L	7.204	528.47 ppb	7.204	1.36%	
QC value within limits for Se 196.026 Recovery = 105.69%							
Si 251.611†	66872.1	2532.5 ug/L	13.80	2532.5 ppb	13.80	0.54%	
QC value within limits for Si 251.611 Recovery = 101.30%							
Sn 189.927†	2204.6	500.89 ug/L	4.668	500.89 ppb	4.668	0.93%	
QC value within limits for Sn 189.927 Recovery = 100.18%							
Sr 421.552†	63571.8	509.54 ug/L	2.685	509.54 ppb	2.685	0.53%	
QC value within limits for Sr 421.552 Recovery = 101.91%							
Ti 334.940†	282731.1	491.53 ug/L	2.771	491.53 ppb	2.771	0.56%	
QC value within limits for Ti 334.940 Recovery = 98.31%							
Tl 190.801†	1294.8	504.23 ug/L	4.907	504.23 ppb	4.907	0.97%	
QC value within limits for Tl 190.801 Recovery = 100.85%							
U 409.014†	16742.7	506.24 ug/L	5.258	506.24 ppb	5.258	1.04%	
QC value within limits for U 409.014 Recovery = 101.25%							
V 292.402†	62316.9	504.28 ug/L	1.834	504.28 ppb	1.834	0.36%	
QC value within limits for V 292.402 Recovery = 100.86%							
Zn 213.857†	41483.9	497.98 ug/L	2.178	497.98 ppb	2.178	0.44%	
QC value within limits for Zn 213.857 Recovery = 99.60%							
SiO2†	67364.3	5484.1 ug/L	49.27	5484.1 ppb	49.27	0.90%	
QC value within limits for SiO2 Recovery = 102.56%							
All analyte(s) passed QC.							

Sequence No.: 36

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/19/2010 17:20:36

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	4503.5	4503.5	102 %		17:22:28
1	Y RADIAL	4860.9	4860.9	102.1 %		17:22:28
1	Al 396.153Radial†	-77.0	2.9	2.8653 ug/L	2.8653 ppb	17:22:48
1	Ca 317.933Radial†	16.1	-0.0	-0.0436 ug/L	-0.0436 ppb	17:22:48
1	Fe 238.204 Radial†	7.7	-0.9	-10.748 ug/L	-10.748 ppb	17:22:48
1	K 766.490 Radial†	2619.4	-42.5	-8.0961 ug/L	-8.0961 ppb	17:22:28
1	Mg 279.077 IEC†	1.6	0.0	0.5237 ug/L	0.5237 ppb	17:22:48
1	Na 589.592 Radial†	-840.9	54.5	19.207 ug/L	19.207 ppb	17:22:28
1	Sr 421.552†	33.6	11.9	0.0957 ug/L	0.0957 ppb	17:22:28
1	Sc 361.383	833138.7	833138.7	101.75 %		17:23:45
1	Y 371.029	704182.7	704182.7	101.81 %		17:23:45
1	Ag 328.068†	257.2	67.7	0.3464 ug/L	0.3464 ppb	17:23:45
1	As 188.979†	-22.3	4.9	2.6933 ug/L	2.6933 ppb	17:24:05
1	B 249.677†	-336.1	207.0	5.8092 ug/L	5.8092 ppb	17:24:05
1	Ba 233.527†	6.3	6.9	0.0642 ug/L	0.0642 ppb	17:24:05
1	Be 313.107†	-3663.1	130.9	0.0554 ug/L	0.0554 ppb	17:23:45
1	Cd 226.502†	-173.4	0.2	0.0042 ug/L	0.0042 ppb	17:24:05
1	Co 228.616†	-45.9	1.1	0.0290 ug/L	0.0290 ppb	17:24:05
1	Cr 267.716†	85.5	12.5	0.1653 ug/L	0.1653 ppb	17:24:05
1	Cu 324.752†	5577.8	-70.0	-0.2330 ug/L	-0.2330 ppb	17:23:45
1	Mn 257.610†	420.8	24.5	0.0312 ug/L	0.0312 ppb	17:24:05
1	Mo 202.031†	8.2	-0.5	-0.0422 ug/L	-0.0422 ppb	17:24:05
1	Ni 231.604†	61.4	-23.7	-0.7541 ug/L	-0.7541 ppb	17:24:05
1	P 214.914†	201.3	10.6	7.9331 ug/L	7.9331 ppb	17:24:05
1	Pb 220.353†	-74.3	-14.7	-2.2625 ug/L	-2.2625 ppb	17:24:05
1	S 181.975 Axial†	30.0	-0.7	-1.2452 ug/L	-1.2452 ppb	17:24:05
1	Sb 206.836†	30.0	5.9	2.4707 ug/L	2.4707 ppb	17:24:05
1	Se 196.026†	-20.2	-2.9	-2.4540 ug/L	-2.4540 ppb	17:24:05
1	Si 251.611†	552.3	54.6	2.0738 ug/L	2.0738 ppb	17:24:05
1	Sn 189.927†	14.2	6.8	1.5484 ug/L	1.5484 ppb	17:24:05
1	Ti 334.940†	-1220.1	-77.9	-0.1366 ug/L	-0.1366 ppb	17:23:45
1	Tl 190.801†	-24.1	5.4	2.0705 ug/L	2.0705 ppb	17:24:05
1	U 409.014†	-2163.4	78.0	2.3668 ug/L	2.3668 ppb	17:23:45
1	V 292.402†	-1329.7	10.5	0.0897 ug/L	0.0897 ppb	17:23:45
1	Zn 213.857†	590.1	9.9	0.1270 ug/L	0.1270 ppb	17:24:05
1	SiO2†	550.0	41.2	3.3657 ug/L	3.3657 ppb	17:25:01
2	Sc Radial	4482.3	4482.3	102 %		17:22:54
2	Y RADIAL	4855.5	4855.5	102.0 %		17:22:54
2	Al 396.153Radial†	-74.4	5.1	5.0272 ug/L	5.0272 ppb	17:23:14
2	Ca 317.933Radial†	16.1	0.1	0.2028 ug/L	0.2028 ppb	17:23:14
2	Fe 238.204 Radial†	9.3	0.7	8.0057 ug/L	8.0057 ppb	17:23:14
2	K 766.490 Radial†	2773.7	120.9	23.036 ug/L	23.036 ppb	17:22:54
2	Mg 279.077 IEC†	0.9	-0.6	-24.638 ug/L	-24.638 ppb	17:23:14
2	Na 589.592 Radial†	-889.8	2.7	0.9423 ug/L	0.9423 ppb	17:22:54
2	Sr 421.552†	20.7	-0.5	-0.0041 ug/L	-0.0041 ppb	17:22:54
2	Sc 361.383	833212.5	833212.5	101.76 %		17:24:11
2	Y 371.029	702995.6	702995.6	101.64 %		17:24:11
2	Ag 328.068†	186.5	-1.9	-0.0120 ug/L	-0.0120 ppb	17:24:11
2	As 188.979†	-14.0	13.0	7.1584 ug/L	7.1584 ppb	17:24:31
2	B 249.677†	-345.9	197.4	5.5391 ug/L	5.5391 ppb	17:24:31
2	Ba 233.527†	0.2	0.9	0.0084 ug/L	0.0084 ppb	17:24:31
2	Be 313.107†	-3698.2	96.7	0.0416 ug/L	0.0416 ppb	17:24:11
2	Cd 226.502†	-180.9	-7.1	-0.1037 ug/L	-0.1037 ppb	17:24:31
2	Co 228.616†	-65.5	-18.1	-0.4689 ug/L	-0.4689 ppb	17:24:31
2	Cr 267.716†	71.4	-1.3	-0.0191 ug/L	-0.0191 ppb	17:24:31
2	Cu 324.752†	5671.8	21.9	0.0697 ug/L	0.0697 ppb	17:24:11
2	Mn 257.610†	428.6	32.1	0.0440 ug/L	0.0440 ppb	17:24:31
2	Mo 202.031†	9.2	0.5	0.0466 ug/L	0.0466 ppb	17:24:31
2	Ni 231.604†	75.0	-10.3	-0.3279 ug/L	-0.3279 ppb	17:24:31

2	P 214.914†	199.9	9.2	6.7923 ug/L	6.7923 ppb	17:24:31
2	Pb 220.353†	-54.8	4.5	0.6839 ug/L	0.6839 ppb	17:24:31
2	S 181.975 Axial†	29.8	-0.9	-1.5486 ug/L	-1.5486 ppb	17:24:31
2	Sb 206.836†	27.5	3.3	1.3643 ug/L	1.3643 ppb	17:24:31
2	Se 196.026†	-14.4	2.8	2.3984 ug/L	2.3984 ppb	17:24:31
2	Si 251.611†	547.4	49.7	1.8880 ug/L	1.8880 ppb	17:24:31
2	Sn 189.927†	-0.4	-7.6	-1.7168 ug/L	-1.7168 ppb	17:24:31
2	Ti 334.940†	-1014.8	123.9	0.2153 ug/L	0.2153 ppb	17:24:11
2	Tl 190.801†	-26.1	3.4	1.3359 ug/L	1.3359 ppb	17:24:31
2	U 409.014†	-2067.8	172.1	5.2216 ug/L	5.2216 ppb	17:24:11
2	V 292.402†	-1356.2	-15.4	-0.1141 ug/L	-0.1141 ppb	17:24:11
2	Zn 213.857†	595.4	15.1	0.1833 ug/L	0.1833 ppb	17:24:31
2	SiO2†	589.4	79.9	6.5188 ug/L	6.5188 ppb	17:25:06
3	Sc Radial	4421.7	4421.7	101 %		17:23:19
3	Y RADIAL	4838.4	4838.4	101.6 %		17:23:19
3	Al 396.153Radial†	-74.4	4.1	4.0218 ug/L	4.0218 ppb	17:23:39
3	Ca 317.933Radial†	17.7	1.9	3.5393 ug/L	3.5393 ppb	17:23:39
3	Fe 238.204 Radial†	10.2	1.7	19.134 ug/L	19.134 ppb	17:23:39
3	K 766.490 Radial†	2675.4	60.6	11.543 ug/L	11.543 ppb	17:23:19
3	Mg 279.077 IEC†	4.5	3.0	122.85 ug/L	122.85 ppb	17:23:39
3	Na 589.592 Radial†	-882.3	-1.9	-0.6664 ug/L	-0.6664 ppb	17:23:19
3	Sr 421.552†	15.0	-5.9	-0.0470 ug/L	-0.0470 ppb	17:23:19
3	Sc 361.383	833605.8	833605.8	101.81 %		17:24:36
3	Y 371.029	704512.9	704512.9	101.86 %		17:24:36
3	Ag 328.068†	126.0	-61.4	-0.3157 ug/L	-0.3157 ppb	17:24:36
3	As 188.979†	-18.2	8.9	4.8742 ug/L	4.8742 ppb	17:24:56
3	B 249.677†	-337.3	206.0	5.7763 ug/L	5.7763 ppb	17:24:56
3	Ba 233.527†	12.9	13.4	0.1264 ug/L	0.1264 ppb	17:24:56
3	Be 313.107†	-3697.8	98.8	0.0424 ug/L	0.0424 ppb	17:24:36
3	Cd 226.502†	-170.8	2.9	0.0409 ug/L	0.0409 ppb	17:24:56
3	Co 228.616†	-53.8	-6.6	-0.1700 ug/L	-0.1700 ppb	17:24:56
3	Cr 267.716†	67.3	-5.4	-0.0715 ug/L	-0.0715 ppb	17:24:56
3	Cu 324.752†	5634.2	-17.7	-0.0600 ug/L	-0.0600 ppb	17:24:36
3	Mn 257.610†	419.3	22.8	0.0268 ug/L	0.0268 ppb	17:24:56
3	Mo 202.031†	17.9	9.0	0.8031 ug/L	0.8031 ppb	17:24:56
3	Ni 231.604†	87.6	2.0	0.0632 ug/L	0.0632 ppb	17:24:56
3	P 214.914†	187.1	-3.5	-2.5974 ug/L	-2.5974 ppb	17:24:56
3	Pb 220.353†	-45.6	13.5	2.0789 ug/L	2.0789 ppb	17:24:56
3	S 181.975 Axial†	26.1	-4.6	-8.1918 ug/L	-8.1918 ppb	17:24:56
3	Sb 206.836†	33.3	9.0	3.7885 ug/L	3.7885 ppb	17:24:56
3	Se 196.026†	-12.9	4.3	3.6286 ug/L	3.6286 ppb	17:24:56
3	Si 251.611†	553.4	55.4	2.0934 ug/L	2.0934 ppb	17:24:56
3	Sn 189.927†	7.7	0.4	0.0839 ug/L	0.0839 ppb	17:24:56
3	Ti 334.940†	-1054.1	85.8	0.1378 ug/L	0.1378 ppb	17:24:36
3	Tl 190.801†	-24.7	4.8	1.8557 ug/L	1.8557 ppb	17:24:56
3	U 409.014†	-2093.5	147.8	4.4815 ug/L	4.4815 ppb	17:24:36
3	V 292.402†	-1314.7	26.0	0.2271 ug/L	0.2271 ppb	17:24:36
3	Zn 213.857†	593.1	12.5	0.1478 ug/L	0.1478 ppb	17:24:56
3	SiO2†	584.2	74.5	6.0608 ug/L	6.0608 ppb	17:25:11

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	833319.0	101.77 %	0.031			0.03%
Sc Radial	4469.2	102 %	1.0			0.95%
Y 371.029	703897.1	101.77 %	0.115			0.11%
Y RADIAL	4851.6	101.9 %	0.25			0.24%
Ag 328.068†	1.5	0.0062 ug/L	0.33143	0.0062 ppb	0.33143	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	4.1	3.9714 ug/L	1.08184	3.9714 ppb	1.08184	27.24%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	8.9	4.9086 ug/L	2.23275	4.9086 ppb	2.23275	45.49%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	203.5	5.7082 ug/L	0.14736	5.7082 ppb	0.14736	2.58%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.0	0.0663 ug/L	0.05901	0.0663 ppb	0.05901	88.98%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	108.8	0.0465 ug/L	0.00774	0.0465 ppb	0.00774	16.65%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	0.7	1.2328 ug/L	2.00123	1.2328 ppb	2.00123	162.33%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	-1.3	-0.0196 ug/L	0.07515	-0.0196 ppb	0.07515 384.30%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	-7.9	-0.2033 ug/L	0.25059	-0.2033 ppb	0.25059 123.26%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	1.9	0.0249 ug/L	0.12441	0.0249 ppb	0.12441 499.39%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-22.0	-0.0744 ug/L	0.15185	-0.0744 ppb	0.15185 204.00%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	0.5	5.4640 ug/L	15.10249	5.4640 ppb	15.10249 276.40%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	46.3	8.8276 ug/L	15.74271	8.8276 ppb	15.74271 178.34%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	0.8	32.912 ug/L	78.8985	32.912 ppb	78.8985 239.72%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	26.5	0.0340 ug/L	0.00893	0.0340 ppb	0.00893 26.26%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	3.0	0.2692 ug/L	0.46452	0.2692 ppb	0.46452 172.55%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	18.4	6.4943 ug/L	11.03877	6.4943 ppb	11.03877 169.98%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-10.7	-0.3396 ug/L	0.40877	-0.3396 ppb	0.40877 120.38%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	5.4	4.0427 ug/L	5.77866	4.0427 ppb	5.77866 142.94%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	1.1	0.1667 ug/L	2.21641	0.1667 ppb	2.21641 >999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	-2.0	-3.6619 ug/L	3.92597	-3.6619 ppb	3.92597 107.21%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	6.1	2.5412 ug/L	1.21364	2.5412 ppb	1.21364 47.76%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	1.4	1.1910 ug/L	3.21606	1.1910 ppb	3.21606 270.03%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	53.3	2.0184 ug/L	0.11336	2.0184 ppb	0.11336 5.62%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	-0.1	-0.0282 ug/L	1.63546	-0.0282 ppb	1.63546 >999.9%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	1.9	0.0149 ug/L	0.07320	0.0149 ppb	0.07320 492.72%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	44.0	0.0721 ug/L	0.18487	0.0721 ppb	0.18487 256.24%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	4.5	1.7540 ug/L	0.37771	1.7540 ppb	0.37771 21.53%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	132.6	4.0233 ug/L	1.48156	4.0233 ppb	1.48156 36.82%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	7.1	0.0676 ug/L	0.17167	0.0676 ppb	0.17167 254.14%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	12.5	0.1527 ug/L	0.02849	0.1527 ppb	0.02849 18.66%
QC value within limits for Zn 213.857 Recovery = Not calculated					
Sio2†	65.2	5.3151 ug/L	1.70367	5.3151 ppb	1.70367 32.05%
QC value within limits for Sio2 Recovery = Not calculated					
All analyte(s) passed QC.					

ICPMS#3 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Tuesday, April 20, 2010 12:50:55

Sample Description:

Method File: c:\elandata\Method\daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.8297

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	1055.0	1055.039	35.527	3.4
Mg	24.0	7070.3	7070.350	158.540	2.2
Co	58.9	22832.0	22832.034	306.240	1.3
Rh	102.9	69087.3	69087.262	551.509	0.8
In	114.9	97980.1	97980.085	1034.898	1.1
Pb	208.0	80634.1	80634.132	522.676	0.6
[> Ba	137.9	79714.1	79714.135	934.401	1.2
[Ba++	69.0	1297.2	0.016	0.000	1.4
[> Ce	139.9	103461.7	103461.706	487.799	0.5
[CeO	155.9	2503.6	0.024	0.001	3.0
Bkgd	220.0	3.5	3.500	0.791	22.6

Current Optimization File Data

Current Value	Description
1.09	Nebulizer Gas Flow
6.00	Lens Voltage
1450.00	ICP RF Power
-1975.00	Analog Stage Voltage
1400.00	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	5.8	950.4
Co	59	13	6.5	21779.6
In	115	13	7.3	124445.3

ICPMS#3 Instrument Tuning Report

File Name: 100420.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	588	2060	0.636
Be	9.0	9.0	2069	2040	0.656
Mg	24.0	24.0	5708	2110	0.605
Mg	25.0	24.9	5883	2020	0.672
Mg	26.0	26.0	6215	2140	0.643
Co	58.9	59.0	14208	2115	0.633
Rh	102.9	102.9	24900	2165	0.657
In	114.9	114.9	27825	2180	0.652
Ce	139.9	139.9	33913	2220	0.615
Pb	206.0	206.0	49991	2280	0.624
Pb	207.0	206.9	50272	2310	0.626
Pb	208.0	208.0	50486	2300	0.631
U	238.1	238.0	57839	2340	0.658

ICPMS#3 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, April 20, 2010 13:33:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: C:\elandata\Dataset\100420\Blank.010

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L		4	
> Sc	45		ug/L		181124	
V	51		ug/L		3584	
Ni	60		ug/L		34	
Zn	66		ug/L		306	
Zn	67		ug/L		2723	
Zn	68		ug/L		449	
> Ge	74		ug/L		136986	
As	75		ug/L		138	
Se	77		ug/L		973	
Se	82		ug/L		-0	
Kr	83		ug/L		34	
> Lu	175		ug/L		216975	
Tl	205		ug/L		2616	
U	238		ug/L		120	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	
Ni	60	Linear Thru Zero	
Zn	66	Linear Thru Zero	
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	
U	238	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45					
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74					
As	75					
Se	77					

Sample ID: Blank
Report Date/Time: Tuesday, April 20, 2010 13:34:26
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	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: Tuesday, April 20, 2010 13:36:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\Standard 1.011

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	10.830	720	0.004
> Sc	45		ug/L		182727	182727.487
V	51	10.000	ug/L	3.811	21388	0.097
Ni	60	10.000	ug/L	3.329	3379	0.018
Zn	66	10.000	ug/L	4.277	3232	0.021
Zn	67		ug/L		3454	0.005
Zn	68		ug/L		3118	0.019
> Ge	74		ug/L		139302	139301.666
As	75	10.000	ug/L	1.372	4077	0.028
Se	77		ug/L		1389	0.003
Se	82	10.000	ug/L	1.186	390	0.003
Kr	83		ug/L		23	-0.000
> Lu	175		ug/L		219168	219167.744
Tl	205	10.000	ug/L	1.357	107679	0.479
U	238	10.000	ug/L	0.522	153997	0.702

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45					
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74					
As	75					
Se	77					

Sample ID: Standard 1

Report Date/Time: Tuesday, April 20, 2010 13:37:44

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	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: Tuesday, April 20, 2010 13:40:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\Standard 2.012

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	99.933	ug/L	7.836	6470	0.037
> Sc 45		ug/L		176300	176300.162
V 51	100.017	ug/L	2.910	177962	0.990
Ni 60	99.953	ug/L	0.572	30835	0.175
Zn 66	100.018	ug/L	0.442	28517	0.213
Zn 67		ug/L		8200	0.042
Zn 68		ug/L		24922	0.185
> Ge 74		ug/L		132216	132215.584
As 75	100.060	ug/L	0.910	39915	0.301
Se 77		ug/L		4374	0.026
Se 82	100.080	ug/L	1.439	4032	0.031
Kr 83		ug/L		26	-0.000
> Lu 175		ug/L		213822	213821.892
Tl 205	99.985	ug/L	0.801	1011920	4.721
U 238	99.977	ug/L	0.600	1467886	6.865

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Ni	60Linear 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	
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					
V 51					
Ni 60					
Zn 66					
Zn 67					
Zn 68					
> Ge 74					
As 75					
Se 77					

Sample ID: Standard 2

Report Date/Time: Tuesday, April 20, 2010 13:41:02

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	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: Tuesday, April 20, 2010 13:43:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 1.013

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	50.432	ug/L	8.966	3338	0.018
> Sc	45		ug/L		180259	180259.466
V	51	48.853	ug/L	2.522	90729	0.484
Ni	60	52.210	ug/L	1.674	16485	0.091
Zn	66	50.651	ug/L	3.547	14976	0.108
Zn	67		ug/L		5706	0.022
Zn	68		ug/L		13047	0.093
> Ge	74		ug/L		135744	135743.556
As	75	50.717	ug/L	0.453	20842	0.153
Se	77		ug/L		2687	0.013
Se	82	49.632	ug/L	4.296	2053	0.015
Kr	83		ug/L		20	-0.000
> Lu	175		ug/L		217492	217492.056
Tl	205	49.890	ug/L	1.050	514898	2.356
U	238	51.723	ug/L	1.000	772468	3.551

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9	100.865				
> Sc	45		99.5			
V	51	97.706				
Ni	60	104.420				
Zn	66	101.303				
Zn	67					
Zn	68					
> Ge	74		99.1			
As	75	101.434				
Se	77					

Sample ID: QC Std 1

Report Date/Time: Tuesday, April 20, 2010 13:44:22

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	Se	82	99.264	
	Kr	83		
[>	Lu	175		100.2
	Tl	205	99.781	
	U	238	103.446	

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Tuesday, April 20, 2010 13:46:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 2.014

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.016	ug/L	152.736	3	-0.000
> Sc	45		ug/L		182699	182699.227
V	51	-0.122	ug/L	190.084	3386	-0.001
Ni	60	-0.023	ug/L	56.484	27	-0.000
Zn	66	-0.048	ug/L	189.265	289	-0.000
Zn	67		ug/L		2816	0.001
Zn	68		ug/L		466	0.000
> Ge	74		ug/L		135290	135290.394
As	75	0.016	ug/L	798.046	143	0.000
Se	77		ug/L		1036	0.001
Se	82	0.691	ug/L	14.418	28	0.000
Kr	83		ug/L		15	-0.000
> Lu	175		ug/L		216138	216137.824
Tl	205	-0.009	ug/L	423.740	2520	-0.000
U	238	-0.001	ug/L	48.432	112	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Ni	60Linear 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	
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		100.9			
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		98.8			
As	75					
Se	77					

Sample ID: QC Std 2

Report Date/Time: Tuesday, April 20, 2010 13:47:46

Page 1

|	Se	82	
|	Kr	83	
|>	Lu	175	99.6
|	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 3

Sample Date/Time: Tuesday, April 20, 2010 13:50:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 3.015

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.674	ug/L	7.749	50	0.000
> Sc	45		ug/L		184617	184617.098
V	51	11.389	ug/L	8.724	24438	0.113
Ni	60	2.398	ug/L	2.126	808	0.004
Zn	66	11.973	ug/L	1.355	3808	0.026
Zn	67		ug/L		3577	0.006
Zn	68		ug/L		3469	0.022
> Ge	74		ug/L		137075	137074.554
As	75	6.111	ug/L	10.292	2657	0.018
Se	77		ug/L		1261	0.002
Se	82	5.851	ug/L	5.070	244	0.002
Kr	83		ug/L		18	-0.000
> Lu	175		ug/L		217855	217854.611
Tl	205	1.032	ug/L	0.492	13241	0.049
U	238	0.291	ug/L	1.140	4472	0.020

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9	134.802				
> Sc	45		101.9			
V	51	113.893				
Ni	60	119.907				
Zn	66	119.726				
Zn	67					
Zn	68					
> Ge	74		100.1			
As	75	122.224				
Se	77					

Sample ID: QC Std 3

Report Date/Time: Tuesday, April 20, 2010 13:51:06

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	Se	82	117.027	
	Kr	83		
[>	Lu	175		100.4
	Tl	205	103.198	
	U	238	145.442	

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 3	Be	9CRDL is out of limits
QC Std 3	U	238CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, April 20, 2010 13:53:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 4.016

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.096	ug/L	108.017	8	0.000
> Sc	45		ug/L		146033	146033.064
V	51	-1.905	ug/L	22.162	137	-0.019
Ni	60	3.036	ug/L	4.019	802	0.005
Zn	66	2.872	ug/L	5.119	955	0.006
Zn	67		ug/L		1962	-0.003
Zn	68		ug/L		484	0.001
> Ge	74		ug/L		114234	114233.716
As	75	0.502	ug/L	131.692	288	0.002
Se	77		ug/L		1361	0.005
Se	82	-0.173	ug/L	235.710	-6	-0.000
Kr	83		ug/L		72	0.000
> Lu	175		ug/L		173870	173870.092
Tl	205	-0.178	ug/L	2.554	633	-0.008
U	238	-0.004	ug/L	11.885	44	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		80.6			
V	51					
Ni	60	91.729				
Zn	66	76.396				
Zn	67					
Zn	68					
> Ge	74		83.4			
As	75					
Se	77					

Sample ID: QC Std 4

Report Date/Time: Tuesday, April 20, 2010 13:54:26

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	Se	82	
	Kr	83	
[>	Lu	175	80.1
	Tl	205	
	U	238	

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, April 20, 2010 13:56:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 5.017

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	19.389	ug/L	4.639	1315	0.007
> Sc	45		ug/L		184321	184320.743
V	51	18.936	ug/L	5.961	38161	0.187
Ni	60	19.960	ug/L	2.502	6467	0.035
Zn	66	20.444	ug/L	1.966	6237	0.044
Zn	67		ug/L		4051	0.010
Zn	68		ug/L		5562	0.038
> Ge	74		ug/L		135985	135984.583
As	75	19.400	ug/L	1.233	8072	0.058
Se	77		ug/L		1620	0.005
Se	82	18.899	ug/L	5.890	783	0.006
Kr	83		ug/L		23	-0.000
> Lu	175		ug/L		220515	220515.148
Tl	205	19.638	ug/L	0.841	207115	0.927
U	238	19.676	ug/L	0.965	298029	1.351

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9	96.945				
> Sc	45		101.8			
V	51	94.678				
Ni	60	85.630				
Zn	66	86.045				
Zn	67					
Zn	68					
> Ge	74		99.3			
As	75	97.001				
Se	77					

Sample ID: QC Std 5

Report Date/Time: Tuesday, April 20, 2010 13:57:48

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	Se	82	94.494	
	Kr	83		
[>	Lu	175		101.6
	Tl	205	98.188	
	U	238	98.381	

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: Tuesday, April 20, 2010 14:00:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 6.018

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	48.844	ug/L	6.470	3282	0.018
> Sc	45		ug/L		183015	183014.911
V	51	49.482	ug/L	2.283	93255	0.490
Ni	60	51.421	ug/L	0.535	16483	0.090
Zn	66	51.145	ug/L	1.272	14968	0.109
Zn	67		ug/L		5845	0.024
Zn	68		ug/L		13203	0.095
> Ge	74		ug/L		134382	134382.483
As	75	50.755	ug/L	1.251	20648	0.153
Se	77		ug/L		2798	0.014
Se	82	51.554	ug/L	3.613	2111	0.016
Kr	83		ug/L		22	-0.000
> Lu	175		ug/L		216548	216548.097
Tl	205	49.968	ug/L	1.580	513461	2.359
U	238	52.297	ug/L	1.451	777696	3.591

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9	97.688				
> Sc	45		101.0			
V	51	98.965				
Ni	60	102.841				
Zn	66	102.291				
Zn	67					
Zn	68					
> Ge	74		98.1			
As	75	101.510				
Se	77					

Sample ID: QC Std 6

Report Date/Time: Tuesday, April 20, 2010 14:01:09

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	Se	82	103.107	
	Kr	83		
[>	Lu	175		99.8
	Tl	205	99.935	
	U	238	104.595	

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: Tuesday, April 20, 2010 14:03:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 7.019

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.013	ug/L	209.553	5	0.000
|>	Sc 45		ug/L		187970	187970.345
|	V 51	-0.407	ug/L	39.083	2968	-0.004
[	Ni 60	-0.019	ug/L	97.466	29	-0.000
|	Zn 66	0.077	ug/L	71.325	331	0.000
|	Zn 67		ug/L		3083	0.002
|	Zn 68		ug/L		486	0.000
|>	Ge 74		ug/L		138003	138003.435
|	As 75	-0.033	ug/L	1090.234	125	-0.000
|	Se 77		ug/L		1049	0.000
|	Se 82	0.692	ug/L	12.928	29	0.000
[	Kr 83		ug/L		22	-0.000
|>	Lu 175		ug/L		218730	218730.358
|	Tl 205	0.022	ug/L	167.989	2870	0.001
[	U 238	0.000	ug/L	499.983	124	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Ni	60Linear 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	
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		103.8			
| V 51					
[Ni 60					
| Zn 66					
| Zn 67					
| Zn 68					
|> Ge 74		100.7			
As 75					
Se 77					

Sample ID: QC Std 7

Report Date/Time: Tuesday, April 20, 2010 14:04:33

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	Se	82	
	Kr	83	
[>	Lu	175	100.8
	Tl	205	
	U	238	

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202053069

Sample Date/Time: Tuesday, April 20, 2010 14:06:52

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 957498[2]prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\1202053069.020

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.001	ug/L	1624.422	4	0.000
> Sc	45		ug/L		192734	192734.392
V	51	-0.655	ug/L	8.137	2562	-0.006
Ni	60	0.042	ug/L	32.443	50	0.000
Zn	66	0.279	ug/L	21.497	391	0.001
Zn	67		ug/L		2512	-0.002
Zn	68		ug/L		522	0.001
> Ge	74		ug/L		138109	138109.452
As	75	0.045	ug/L	237.726	158	0.000
Se	77		ug/L		835	-0.001
Se	82	0.432	ug/L	69.178	18	0.000
Kr	83		ug/L		15	-0.000
> Lu	175		ug/L		225451	225451.429
Tl	205	-0.137	ug/L	7.274	1263	-0.006
U	238	0.012	ug/L	8.932	308	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Ni	60Linear 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	
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		106.4			
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		100.8			
As	75					
Se	77					

Sample ID: 1202053069

Report Date/Time: Tuesday, April 20, 2010 14:07:53

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	Se	82	
	Kr	83	
>	Lu	175	103.9
	Tl	205	
	U	238	

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202053074

Sample Date/Time: Tuesday, April 20, 2010 14:10:13

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 957498|40|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\1202053074.021

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	19.583	ug/L	0.193	1373	0.007
> Sc	45		ug/L		190737	190737.211
V	51	21.353	ug/L	3.141	44077	0.211
Ni	60	36.448	ug/L	1.785	12185	0.064
Zn	66	158.314	ug/L	1.255	47209	0.338
Zn	67		ug/L		11302	0.062
Zn	68		ug/L		41536	0.296
> Ge	74		ug/L		138812	138811.573
As	75	27.469	ug/L	2.314	11606	0.083
Se	77		ug/L		3531	0.018
Se	82	75.174	ug/L	1.377	3180	0.023
Kr	83		ug/L		26	-0.000
> Lu	175		ug/L		221937	221936.886
Tl	205	31.773	ug/L	1.355	335600	1.500
U	238	0.593	ug/L	1.718	9155	0.041

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		105.3			
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		101.3			
As	75					
Se	77					

Sample ID: 1202053074

Report Date/Time: Tuesday, April 20, 2010 14:11:14

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	Se	82	
	Kr	83	
>	Lu	175	102.3
	Tl	205	
	U	238	

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202053070

Sample Date/Time: Tuesday, April 20, 2010 14:16:56

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 957498[2]prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\1202053070.023

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.025	ug/L	10.767	153	0.001
> Sc	45		ug/L		200806	200805.973
V	51	43.047	ug/L	2.160	89532	0.426
Ni	60	26.509	ug/L	1.073	9341	0.046
Zn	66	106.024	ug/L	1.700	29802	0.226
Zn	67		ug/L		7547	0.038
Zn	68		ug/L		27822	0.210
> Ge	74		ug/L		130425	130424.983
As	75	3.835	ug/L	12.170	1636	0.012
Se	77		ug/L		709	-0.002
Se	82	0.620	ug/L	105.413	24	0.000
Kr	83		ug/L		49	0.000
> Lu	175		ug/L		226690	226690.375
Tl	205	0.293	ug/L	3.006	5874	0.014
U	238	9.045	ug/L	0.587	140903	0.621

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		110.9			
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		95.2			
As	75					
Se	77					

Sample ID: 1202053070

Report Date/Time: Tuesday, April 20, 2010 14:17:57

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	Se	82	
	Kr	83	
[>	Lu	175	104.5
	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: 1202053072

Sample Date/Time: Tuesday, April 20, 2010 14:20:17

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 957498|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\1202053072.024

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	23.312	ug/L	3.004	1727	0.009
> Sc	45		ug/L		201543	201542.554
V	51	69.304	ug/L	3.288	142229	0.686
Ni	60	49.999	ug/L	1.843	17648	0.087
Zn	66	136.053	ug/L	2.228	37710	0.290
Zn	67		ug/L		9070	0.050
Zn	68		ug/L		35298	0.271
> Ge	74		ug/L		128900	128899.876
As	75	43.860	ug/L	0.814	17132	0.132
Se	77		ug/L		953	0.000
Se	82	8.727	ug/L	3.298	343	0.003
Kr	83		ug/L		54	0.000
> Lu	175		ug/L		224516	224516.447
Tl	205	50.159	ug/L	0.865	534392	2.368
U	238	37.599	ug/L	0.872	579714	2.582

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		111.3			
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		94.1			
As	75					
Se	77					

Sample ID: 1202053072

Report Date/Time: Tuesday, April 20, 2010 14:21:19

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	Se	82	
	Kr	83	
[>	Lu	175	103.5
	Tl	205	
	U	238	

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202053073

Sample Date/Time: Tuesday, April 20, 2010 14:23:40

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 957498|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\1202053073.025

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	21.662	ug/L	5.304	1592	0.008
> Sc	45		ug/L		199942	199941.980
V	51	75.540	ug/L	1.477	153461	0.748
Ni	60	51.565	ug/L	0.875	18056	0.090
Zn	66	133.999	ug/L	1.684	36737	0.286
Zn	67		ug/L		9121	0.052
Zn	68		ug/L		34923	0.271
> Ge	74		ug/L		127469	127469.467
As	75	42.073	ug/L	0.871	16258	0.127
Se	77		ug/L		899	-0.000
Se	82	8.884	ug/L	5.618	345	0.003
Kr	83		ug/L		56	0.000
> Lu	175		ug/L		222623	222622.768
Tl	205	47.870	ug/L	0.046	505851	2.260
U	238	34.965	ug/L	0.829	534576	2.401

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		110.4			
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		93.1			
As	75					
Se	77					

Sample ID: 1202053073

Report Date/Time: Tuesday, April 20, 2010 14:24:42

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	Se	82	
	Kr	83	
[>	Lu	175	102.6
	Tl	205	
	U	238	

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202053071

Sample Date/Time: Tuesday, April 20, 2010 14:27:04

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 957498|10|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\1202053071.026

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	0.559	ug/L	16.471	43	0.000
> Sc 45		ug/L		190583	190583.358
V 51	12.609	ug/L	2.988	27560	0.125
Ni 60	7.962	ug/L	1.331	2688	0.014
Zn 66	32.441	ug/L	2.292	9495	0.069
Zn 67		ug/L		4370	0.013
Zn 68		ug/L		8851	0.063
> Ge 74		ug/L		132840	132839.840
As 75	0.859	ug/L	16.632	477	0.003
Se 77		ug/L		781	-0.001
Se 82	0.381	ug/L	60.725	15	0.000
Kr 83		ug/L		27	-0.000
> Lu 175		ug/L		221891	221890.920
Tl 205	0.107	ug/L	5.075	3794	0.005
U 238	3.050	ug/L	1.444	46587	0.209

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Ni	60Linear 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	
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		105.2			
V 51					
Ni 60					
Zn 66					
Zn 67					
Zn 68					
> Ge 74		97.0			
As 75					
Se 77					

Sample ID: 1202053071

Report Date/Time: Tuesday, April 20, 2010 14:28:06

Page 1

|	Se	82	
|	Kr	83	
[>	Lu	175	102.3
|	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: Tuesday, April 20, 2010 14:30:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 6.027

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	47.584 ug/L	7.879	3313	0.017
>	Sc	45	ug/L		189531	189531.043
|	V	51	48.478 ug/L	2.705	94672	0.480
|	Ni	60	50.814 ug/L	1.206	16866	0.089
[	Zn	66	51.080 ug/L	1.420	15344	0.109
|	Zn	67	ug/L		5916	0.023
|	Zn	68	ug/L		13604	0.095
>	Ge	74	ug/L		137938	137937.530
|	As	75	50.196 ug/L	0.723	20961	0.151
|	Se	77	ug/L		2766	0.013
|	Se	82	48.395 ug/L	2.797	2034	0.015
|	Kr	83	ug/L		24	-0.000
>	Lu	175	ug/L		219488	219487.858
|	Tl	205	49.751 ug/L	1.304	518175	2.349
|	U	238	52.119 ug/L	0.984	785545	3.579

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Ni	60Linear 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	
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	95.167			
>	Sc	45		104.6		
|	V	51	96.956			
|	Ni	60	101.628			
[	Zn	66	102.160			
|	Zn	67				
|	Zn	68				
>	Ge	74		100.7		
|	As	75	100.392			
|	Se	77				

Sample ID: QC Std 6

Report Date/Time: Tuesday, April 20, 2010 14:31:28

Page 1

|	Se	82	96.790	
|	Kr	83		
|>	Lu	175		101.2
|	Tl	205	99.501	
|	U	238	104.237	

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: Tuesday, April 20, 2010 14:33:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 7.028

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.001	ug/L	5243.308	4	0.000
> Sc	45		ug/L		192429	192428.706
V	51	0.294	ug/L	108.369	4359	0.003
Ni	60	-0.024	ug/L	71.557	28	-0.000
Zn	66	0.250	ug/L	59.824	380	0.001
Zn	67		ug/L		2990	0.002
Zn	68		ug/L		507	0.000
> Ge	74		ug/L		137232	137232.084
As	75	0.219	ug/L	119.381	229	0.001
Se	77		ug/L		1098	0.001
Se	82	0.561	ug/L	11.137	23	0.000
Kr	83		ug/L		23	-0.000
> Lu	175		ug/L		220497	220496.897
Tl	205	-0.053	ug/L	57.762	2108	-0.002
U	238	-0.002	ug/L	10.479	96	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		106.2			
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		100.2			
As	75					
Se	77					

Sample ID: QC Std 7

Report Date/Time: Tuesday, April 20, 2010 14:34:52

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	Se	82	
	Kr	83	
[>	Lu	175	101.6
	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: 247794001

Sample Date/Time: Tuesday, April 20, 2010 14:40:33

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957498[2]prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\247794001.030

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	4.316	ug/L	10.228	329	0.002
> Sc	45		ug/L		205088	205087.712
V	51	102.626	ug/L	1.695	212418	1.016
Ni	60	9.213	ug/L	0.407	3340	0.016
Zn	66	404.565	ug/L	1.169	112820	0.863
Zn	67		ug/L		22029	0.149
Zn	68		ug/L		105017	0.802
> Ge	74		ug/L		130344	130344.255
As	75	3.081	ug/L	7.383	1340	0.009
Se	77		ug/L		721	-0.002
Se	82	0.704	ug/L	11.080	28	0.000
Kr	83		ug/L		72	0.000
> Lu	175		ug/L		232260	232259.837
Tl	205	0.371	ug/L	2.400	6872	0.018
U	238	3.267	ug/L	0.962	52228	0.224

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		113.2			
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		95.2			
As	75					
Se	77					

Sample ID: 247794001

Report Date/Time: Tuesday, April 20, 2010 14:41:34

Page 1

|	Se	82	
|	Kr	83	
[>	Lu	175	107.0
|	Tl	205	
|	U	238	

QC Out Of Limits

Measurement Type Analyte
V 51 Upper, S, EEE V

MassOut of Limits Message
51Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 247794002

Sample Date/Time: Tuesday, April 20, 2010 14:43:54

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957498|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\247794002.031

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.099	ug/L	13.663	84	0.000
> Sc	45		ug/L		197689	197688.759
V	51	4.850	ug/L	3.035	13401	0.048
Ni	60	1.829	ug/L	3.978	669	0.003
Zn	66	108.899	ug/L	1.374	31181	0.232
Zn	67		ug/L		7564	0.037
Zn	68		ug/L		27045	0.200
> Ge	74		ug/L		132880	132880.306
As	75	1.061	ug/L	15.583	558	0.003
Se	77		ug/L		658	-0.002
Se	82	0.546	ug/L	83.763	22	0.000
Kr	83		ug/L		40	0.000
> Lu	175		ug/L		228613	228613.463
Tl	205	-0.175	ug/L	2.745	870	-0.008
U	238	2.153	ug/L	0.671	33920	0.148

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		109.1			
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		97.0			
As	75					
Se	77					

Sample ID: 247794002

Report Date/Time: Tuesday, April 20, 2010 14:44:56

Page 1

|	Se	82	
|	Kr	83	
[>	Lu	175	105.4
|	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: 247794003

Sample Date/Time: Tuesday, April 20, 2010 14:47:17

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957498|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\247794003.032

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.136	ug/L	8.361	86	0.000
> Sc	45		ug/L		197053	197052.954
V	51	5.230	ug/L	3.916	14099	0.052
Ni	60	1.745	ug/L	4.116	638	0.003
Zn	66	106.360	ug/L	1.426	29860	0.227
Zn	67		ug/L		7209	0.035
Zn	68		ug/L		25762	0.194
> Ge	74		ug/L		130271	130270.929
As	75	1.286	ug/L	13.329	636	0.004
Se	77		ug/L		674	-0.002
Se	82	0.428	ug/L	80.335	17	0.000
Kr	83		ug/L		39	0.000
> Lu	175		ug/L		230733	230733.042
Tl	205	-0.172	ug/L	2.379	903	-0.008
U	238	1.785	ug/L	2.039	28405	0.123

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		108.8			
V	51					
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		95.1			
As	75					
Se	77					

Sample ID: 247794003

Report Date/Time: Tuesday, April 20, 2010 14:48:18

Page 1

|	Se	82	
|	Kr	83	
|>	Lu	175	106.3
|	Tl	205	
	U	238	

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 247794004

Sample Date/Time: Tuesday, April 20, 2010 14:50:40

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957498|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\247794004.033

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
|	Be 9	1.363	ug/L	4.791	103	0.000
|>	Sc 45		ug/L		196735	196735.166
|	V 51	7.547	ug/L	6.615	18591	0.075
|	Ni 60	2.471	ug/L	2.809	886	0.004
|	Zn 66	127.488	ug/L	2.326	35482	0.272
|	Zn 67		ug/L		8138	0.043
|	Zn 68		ug/L		31043	0.237
|>	Ge 74		ug/L		129342	129341.535
|	As 75	1.759	ug/L	10.863	815	0.005
|	Se 77		ug/L		660	-0.002
|	Se 82	0.215	ug/L	55.275	8	0.000
|	Kr 83		ug/L		49	0.000
|>	Lu 175		ug/L		229439	229439.434
|	Tl 205	-0.171	ug/L	1.282	914	-0.008
|	U 238	1.996	ug/L	0.688	31579	0.137

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Ni	60Linear 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	
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		108.6		
|	V 51				
|	Ni 60				
|	Zn 66				
|	Zn 67				
|	Zn 68				
|>	Ge 74		94.4		
|	As 75				
|	Se 77				

Sample ID: 247794004

Report Date/Time: Tuesday, April 20, 2010 14:51:42

Page 1

|	Se	82	
|	Kr	83	
|>	Lu	175	105.7
|	Tl	205	
	U	238	

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 247794005

Sample Date/Time: Tuesday, April 20, 2010 14:54:03

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957498|2|prb

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\247794005.034

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be 9	1.379	ug/L	6.553	103	0.001
> Sc 45		ug/L		195751	195751.082
| V 51	5.434	ug/L	1.380	14404	0.054
[Ni 60	2.317	ug/L	0.769	829	0.004
[Zn 66	105.793	ug/L	0.907	29691	0.226
| Zn 67		ug/L		7143	0.035
| Zn 68		ug/L		25572	0.193
> Ge 74		ug/L		130223	130222.823
| As 75	0.777	ug/L	20.887	435	0.002
| Se 77		ug/L		628	-0.002
| Se 82	0.747	ug/L	12.380	29	0.000
[Kr 83		ug/L		33	0.000
> Lu 175		ug/L		227948	227948.199
| Tl 205	-0.180	ug/L	0.140	815	-0.008
[U 238	2.167	ug/L	0.952	34042	0.149

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	1.0000
Ni	60Linear 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	
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		108.1			
| V 51					
[Ni 60					
[Zn 66					
| Zn 67					
| Zn 68					
> Ge 74		95.1			
| As 75					
| Se 77					

Sample ID: 247794005

Report Date/Time: Tuesday, April 20, 2010 14:55:05

Page 1

|	Se	82	
|	Kr	83	
|>	Lu	175	105.1
|	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: Tuesday, April 20, 2010 14:57:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 6.035

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	47.371	ug/L	9.491	3286	0.017
> Sc	45		ug/L		188810	188810.075
V	51	46.430	ug/L	3.285	90486	0.460
Ni	60	49.428	ug/L	1.072	16349	0.086
Zn	66	52.694	ug/L	3.179	15201	0.112
Zn	67		ug/L		5646	0.023
Zn	68		ug/L		13275	0.097
> Ge	74		ug/L		132557	132557.190
As	75	50.320	ug/L	3.476	20190	0.151
Se	77		ug/L		2594	0.012
Se	82	47.879	ug/L	2.943	1934	0.015
Kr	83		ug/L		22	-0.000
> Lu	175		ug/L		216622	216621.663
Tl	205	49.973	ug/L	1.851	513645	2.359
U	238	52.081	ug/L	1.430	774662	3.576

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9	94.742				
> Sc	45		104.2			
V	51	92.860				
Ni	60	98.856				
Zn	66	105.389				
Zn	67					
Zn	68					
> Ge	74		96.8			
As	75	100.641				
Se	77					

Sample ID: QC Std 6

Report Date/Time: Tuesday, April 20, 2010 14:58:27

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	Se	82	95.757	
	Kr	83		
>	Lu	175		99.8
	Tl	205	99.945	
	U	238	104.161	

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, April 20, 2010 15:00:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 7.036

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.011	ug/L	394.889	5	0.000
> Sc	45		ug/L		191719	191718.561
V	51	0.320	ug/L	56.695	4399	0.003
Ni	60	-0.030	ug/L	54.744	26	-0.000
Zn	66	0.400	ug/L	13.432	417	0.001
Zn	67		ug/L		2961	0.002
Zn	68		ug/L		574	0.001
> Ge	74		ug/L		135207	135207.221
As	75	0.298	ug/L	129.202	258	0.001
Se	77		ug/L		1041	0.001
Se	82	0.673	ug/L	20.512	27	0.000
Kr	83		ug/L		20	-0.000
> Lu	175		ug/L		216522	216522.342
Tl	205	-0.039	ug/L	97.167	2211	-0.002
U	238	-0.001	ug/L	11.825	102	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel.	% Diff
Be	9										
> Sc	45				105.8						
V	51										
Ni	60										
Zn	66										
Zn	67										
Zn	68										
> Ge	74				98.7						
As	75										
Se	77										

Sample ID: QC Std 7

Report Date/Time: Tuesday, April 20, 2010 15:01:51

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	Se	82	
	Kr	83	
>	Lu	175	99.8
	Tl	205	
	U	238	

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

=====
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\030810S1.SIF

Batch ID:

Results Data Set: 030810S1

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: 3/8/2010 09:08:29

Analyst:

Data Type: Original

Replicate Data: Calib Blank

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.00]	0.0005	0.0034	0.0005	09:09:19	Yes
2		[0.00]	0.0002	-0.0008	0.0002	09:09:49	Yes
Mean:		[0.00]	0.0004				
SD:		0.00	0.0002				
%RSD:		0.00	58.13				

Auto-zero performed.

Sequence No.: 2

Autosampler Location: 2

Sample ID: S0.2

Date Collected: 3/8/2010 09:10:08

Analyst:

Data Type: Original

Replicate Data: S0.2

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.2]	0.0023	0.0101	0.0027	09:10:58	Yes
2		[0.2]	0.0020	0.0074	0.0024	09:11:28	Yes
Mean:		[0.2]	0.0022				
SD:		0.0	0.0002				
%RSD:		0.0	9.02				

Standard number 1 applied. [0.2]

Correlation Coef.: 1.000000 Slope: 0.01091 Intercept: 0.00000

Sequence No.: 3

Autosampler Location: 3

Sample ID: S0.5

Date Collected: 3/8/2010 09:11:47

Analyst:

Data Type: Original

Replicate Data: S0.5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.5]	0.0060	0.0258	0.0064	09:12:38	Yes
2		[0.5]	0.0060	0.0252	0.0064	09:13:07	Yes
Mean:		[0.5]	0.0060				
SD:		0.0	0.0000				
%RSD:		0.0	0.04				

Standard number 2 applied. [0.5]

Correlation Coef.: 0.999167 Slope: 0.01204 Intercept: -0.00009

Sequence No.: 4

Autosampler Location: 4

Sample ID: S2.0

Date Collected: 3/8/2010 09:13:27

Analyst:

Data Type: Original

Replicate Data: S2.0

Repl	SampleConc	StdndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[2.0]	0.0249	0.1095	0.0253	09:14:18	Yes
2		[2.0]	0.0248	0.1097	0.0252	09:14:48	Yes
Mean:		[2.0]	0.0249				
SD:		0.0	0.0000				
%RSD:		0.0	0.10				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999923 Slope: 0.01251 Intercept: -0.00018

Sequence No.: 5

Sample ID: S5.0

Analyst:

Autosampler Location: 5

Date Collected: 3/8/2010 09:15:08

Data Type: Original

Replicate Data: S5.0

Repl	SampleConc	StdndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[5.0]	0.0607	0.2659	0.0611	09:15:59	Yes
2		[5.0]	0.0608	0.2652	0.0611	09:16:29	Yes
Mean:		[5.0]	0.0607				
SD:		0.0	0.0000				
%RSD:		0.0	0.05				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999931 Slope: 0.01219 Intercept: -0.00001

Sequence No.: 6

Sample ID: S10.0

Analyst:

Autosampler Location: 6

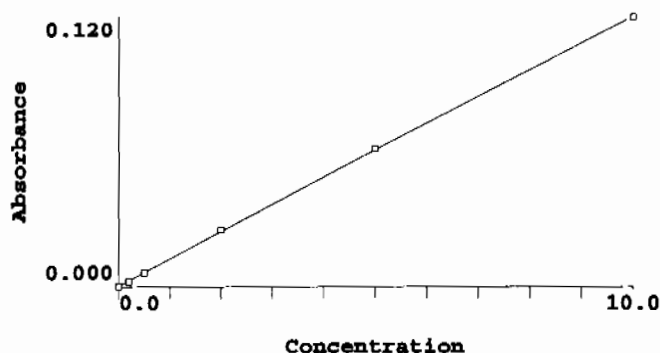
Date Collected: 3/8/2010 09:16:49

Data Type: Original

Replicate Data: S10.0

Repl	SampleConc	StdndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[10.0]	0.1209	0.5312	0.1212	09:17:40	Yes
2		[10.0]	0.1196	0.5255	0.1199	09:18:10	Yes
Mean:		[10.0]	0.1202				
SD:		0.0	0.0009				
%RSD:		0.0	0.76				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999961 Slope: 0.01204 Intercept: 0.00016

-----
Calibration data for Hg 253.7

Equation: Linear, Calculated Intercept

ID	Mean Signal	Entered	Calculated	Standard	%RSD
	(Abs)	Conc.	Conc.	Deviation	
		ug/L	ug/L		
Calib Blank	0.0000	0	-0.013	0.00	58.1
S0.2	0.0022	0.2	0.168	0.00	9.0
S0.5	0.0060	0.5	0.485	0.00	0.0
S2.0	0.0249	2.0	2.053	0.00	0.1

S5.0 0.0607 5.0 5.033 0.00 0.1
S10.0 0.1202 10.0 9.974 0.00 0.8
Correlation Coef.: 0.999961 Slope: 0.01204 Intercept: 0.00016

Sequence No.: 7

Sample ID: ICV

Analyst:

Autosampler Location: 9

Date Collected: 3/8/2010 09:18:29

Data Type: Original

Replicate Data: ICV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.227	5.227	0.0631	0.2766	0.0634	09:19:19	Yes
2	5.168	5.168	0.0624	0.2730	0.0627	09:19:49	Yes
Mean:	5.198	5.198	0.0627				
SD:	0.042	0.042	0.0005				
%RSD:	0.800	0.800	0.80				

QC value within limits for Hg 253.7 Recovery = 103.95%
All analyte(s) passed QC.

Sequence No.: 8

Sample ID: ICB

Analyst:

Autosampler Location: 10

Date Collected: 3/8/2010 09:20:09

Data Type: Original

Replicate Data: ICB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.017	-0.017	-0.0000	0.0001	0.0003	09:21:00	Yes
2	-0.022	-0.022	-0.0001	-0.0004	0.0003	09:21:30	Yes
Mean:	-0.019	-0.019	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	16.88	16.88	51.71				

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: 3/8/2010 09:21:50

Data Type: Original

Replicate Data: CRDL

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.192	0.192	0.0025	0.0115	0.0028	09:22:41	Yes
2	0.191	0.191	0.0025	0.0114	0.0028	09:23:11	Yes
Mean:	0.192	0.192	0.0025				
SD:	0.001	0.001	0.0000				
%RSD:	0.407	0.407	0.38				

QC value within limits for Hg 253.7 Recovery = 95.92%
All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/8/2010 09:23:31

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.175	5.175	0.0624	0.2740	0.0628	09:24:21	Yes
2	5.178	5.178	0.0625	0.2737	0.0629	09:24:51	Yes
Mean:	5.176	5.176	0.0625				
SD:	0.002	0.002	0.0000				
%RSD:	0.043	0.043	0.04				

QC value within limits for Hg 253.7 Recovery = 103.53%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 3/8/2010 09:25:10
Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.017	-0.017	-0.0000	0.0006	0.0003	09:26:01	Yes
2	-0.021	-0.021	-0.0001	0.0001	0.0003	09:26:31	Yes
Mean:	-0.019	-0.019	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	16.17	16.17	52.61				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: 1202056019|958678|1
Analyst: JXL

Autosampler Location: 12
Date Collected: 3/8/2010 09:26:50
Data Type: Original

Replicate Data: 1202056019|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.022	-0.022	-0.0001	-0.0003	0.0003	09:27:41	Yes
2	-0.010	-0.010	0.0000	0.0013	0.0004	09:28:11	Yes
Mean:	-0.016	-0.016	-0.0000				
SD:	0.009	0.009	0.0001				
%RSD:	53.16	53.16	296.29				

Sequence No.: 13
Sample ID: 1202056020|958678|10
Analyst: JXL

Autosampler Location: 13
Date Collected: 3/8/2010 09:28:31
Data Type: Original

Replicate Data: 1202056020|958678|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.733	3.733	0.0451	0.1992	0.0455	09:29:24	Yes
2	3.742	3.742	0.0452	0.1979	0.0456	09:29:53	Yes
Mean:	3.738	3.738	0.0452				
SD:	0.006	0.006	0.0001				
%RSD:	0.163	0.163	0.16				

Sequence No.: 14
Sample ID: 247539001|958678|1
Analyst: JXL

Autosampler Location: 14
Date Collected: 3/8/2010 09:30:14
Data Type: Original

Replicate Data: 247539001|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.033	0.033	0.0006	0.0032	0.0009	09:31:04	Yes
2	0.029	0.029	0.0005	0.0028	0.0009	09:31:34	Yes
Mean:	0.031	0.031	0.0005				
SD:	0.003	0.003	0.0000				
%RSD:	8.928	8.928	6.29				

Sequence No.: 15
Sample ID: 1202056021|958678|1
Analyst: JXL

Autosampler Location: 15
Date Collected: 3/8/2010 09:31:53
Data Type: Original

Replicate Data: 1202056021|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
------	------------	---------	---------	------	------	------	------

Replicate Data: 247539003|958678|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.107	0.107	0.0014	0.0080	0.0018	09:41:02	Yes
2	0.097	0.097	0.0013	0.0065	0.0017	09:41:32	Yes
Mean:	0.102	0.102	0.0014				
SD:	0.007	0.007	0.0001				
%RSD:	6.950	6.950	6.16				

Sequence No.: 21

Sample ID: 247539004|958678|1

Analyst: JXL

Autosampler Location: 21

Date Collected: 3/8/2010 09:41:51

Data Type: Original

Replicate Data: 247539004|958678|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.111	0.111	0.0015	0.0075	0.0019	09:42:42	Yes
2	0.116	0.116	0.0016	0.0084	0.0019	09:43:12	Yes
Mean:	0.113	0.113	0.0015				
SD:	0.004	0.004	0.0000				
%RSD:	3.327	3.327	2.98				

Sequence No.: 22

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/8/2010 09:43:32

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.320	5.320	0.0642	0.2780	0.0646	09:44:22	Yes
2	5.284	5.284	0.0638	0.2751	0.0641	09:44:52	Yes
Mean:	5.302	5.302	0.0640				
SD:	0.025	0.025	0.0003				
%RSD:	0.480	0.480	0.48				

QC value within limits for Hg 253.7 Recovery = 106.05%
All analyte(s) passed QC.

Sequence No.: 23

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/8/2010 09:45:11

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.026	-0.026	-0.0002	-0.0003	0.0002	09:46:01	Yes
2	-0.017	-0.017	-0.0000	0.0007	0.0003	09:46:31	Yes
Mean:	-0.022	-0.022	-0.0001				
SD:	0.007	0.007	0.0001				
%RSD:	31.30	31.30	79.37				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24

Sample ID: 247539005|958678|1

Analyst: JXL

Autosampler Location: 22

Date Collected: 3/8/2010 09:46:51

Data Type: Original

Replicate Data: 247539005|958678|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.210	0.210	0.0027	0.0134	0.0031	09:47:42	Yes
2	0.205	0.205	0.0026	0.0124	0.0030	09:48:12	Yes

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.018	0.018	0.0004	0.0033	0.0007	09:56:08	Yes
2	0.022	0.022	0.0004	0.0041	0.0008	09:56:38	Yes
Mean:	0.020	0.020	0.0004				
SD:	0.003	0.003	0.0000				
%RSD:	14.52	14.52	8.71				

Sequence No.: 30

Autosampler Location: 28

Sample ID: 247539011|958678|1

Date Collected: 3/8/2010 09:56:57

Analyst: JXL

Data Type: Original

Replicate Data: 247539011|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.413	1.413	0.0172	0.0772	0.0175	09:57:48	Yes
2	1.412	1.412	0.0172	0.0760	0.0175	09:58:18	Yes
Mean:	1.413	1.413	0.0172				
SD:	0.000	0.000	0.0000				
%RSD:	0.020	0.020	0.02				

Sequence No.: 31

Autosampler Location: 29

Sample ID: 247542001|958678|1

Date Collected: 3/8/2010 09:58:37

Analyst: JXL

Data Type: Original

Replicate Data: 247542001|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.257	0.257	0.0033	0.0180	0.0036	09:59:28	Yes
2	0.237	0.237	0.0030	0.0154	0.0034	09:59:58	Yes
Mean:	0.247	0.247	0.0031				
SD:	0.014	0.014	0.0002				
%RSD:	5.704	5.704	5.42				

Sequence No.: 32

Autosampler Location: 30

Sample ID: 247542002|958678|1

Date Collected: 3/8/2010 10:00:17

Analyst: JXL

Data Type: Original

Replicate Data: 247542002|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.141	0.141	0.0019	0.0110	0.0022	10:01:08	Yes
2	0.131	0.131	0.0017	0.0093	0.0021	10:01:37	Yes
Mean:	0.136	0.136	0.0018				
SD:	0.007	0.007	0.0001				
%RSD:	5.121	5.121	4.67				

Sequence No.: 33

Autosampler Location: 31

Sample ID: 247543001|958678|1

Date Collected: 3/8/2010 10:01:57

Analyst: JXL

Data Type: Original

Replicate Data: 247543001|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.144	0.144	0.0019	0.0096	0.0023	10:02:47	Yes
2	0.145	0.145	0.0019	0.0096	0.0023	10:03:17	Yes
Mean:	0.145	0.145	0.0019				
SD:	0.001	0.001	0.0000				
%RSD:	0.432	0.432	0.40				

Sequence No.: 34

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/8/2010 10:03:36

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.404	5.404	0.0652	0.2837	0.0656	10:04:27	Yes
2	5.395	5.395	0.0651	0.2816	0.0655	10:04:57	Yes
Mean:	5.399	5.399	0.0652				
SD:	0.006	0.006	0.0001				
%RSD:	0.120	0.120	0.12				

QC value within limits for Hg 253.7 Recovery = 107.99%
All analyte(s) passed QC.

=====

Sequence No.: 35

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/8/2010 10:05:16

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.020	-0.020	-0.0001	0.0005	0.0003	10:06:06	Yes
2	-0.018	-0.018	-0.0001	0.0008	0.0003	10:06:36	Yes
Mean:	-0.019	-0.019	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	8.088	8.088	25.37				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 36

Autosampler Location: 32

Sample ID: 247543002|958678|1

Date Collected: 3/8/2010 10:06:55

Analyst: JXL

Data Type: Original

Replicate Data: 247543002|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.056	0.056	0.0008	0.0051	0.0012	10:07:46	Yes
2	0.062	0.062	0.0009	0.0053	0.0013	10:08:16	Yes
Mean:	0.059	0.059	0.0009				
SD:	0.004	0.004	0.0001				
%RSD:	7.214	7.214	5.91				

=====

Sequence No.: 37

Autosampler Location: 33

Sample ID: 247543003|958678|1

Date Collected: 3/8/2010 10:08:35

Analyst: JXL

Data Type: Original

Replicate Data: 247543003|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.046	0.046	0.0007	0.0047	0.0011	10:09:26	Yes
2	0.045	0.045	0.0007	0.0048	0.0011	10:09:56	Yes
Mean:	0.045	0.045	0.0007				
SD:	0.001	0.001	0.0000				
%RSD:	1.588	1.588	1.23				

=====

Sequence No.: 38

Autosampler Location: 34

Sample ID: 247543004|958678|1

Date Collected: 3/8/2010 10:10:16

Analyst: JXL

Data Type: Original

Replicate Data: 247543004|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.081	0.081	0.0011	0.0070	0.0015	10:11:07	Yes

Replicate Data: 1202056044|958689|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.345	2.345	0.0284	0.1251	0.0288	10:19:34	Yes
2	2.337	2.337	0.0283	0.1236	0.0287	10:20:04	Yes
Mean:	2.341	2.341	0.0283				
SD:	0.006	0.006	0.0001				
%RSD:	0.242	0.242	0.24				

Sequence No.: 44

Autosampler Location: 40

Sample ID: 1202056051|958689|1

Date Collected: 3/8/2010 10:20:23

Analyst: JXL

Data Type: Original

Replicate Data: 1202056051|958689|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.398	2.398	0.0290	0.1280	0.0294	10:21:14	Yes
2	2.397	2.397	0.0290	0.1287	0.0294	10:21:44	Yes
Mean:	2.398	2.398	0.0290				
SD:	0.000	0.000	0.0000				
%RSD:	0.013	0.013	0.01				

Sequence No.: 45

Autosampler Location: 41

Sample ID: 1202056050|958689|5

Date Collected: 3/8/2010 10:22:04

Analyst: JXL

Data Type: Original

Replicate Data: 1202056050|958689|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.023	0.023	0.0004	0.0037	0.0008	10:22:55	Yes
2	0.020	0.020	0.0004	0.0035	0.0008	10:23:25	Yes
Mean:	0.021	0.021	0.0004				
SD:	0.003	0.003	0.0000				
%RSD:	12.05	12.05	7.48				

Sequence No.: 46

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/8/2010 10:23:44

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.108	5.108	0.0616	0.2685	0.0620	10:24:35	Yes
2	5.093	5.093	0.0615	0.2684	0.0618	10:25:05	Yes
Mean:	5.101	5.101	0.0616				
SD:	0.010	0.010	0.0001				
%RSD:	0.202	0.202	0.20				

QC value within limits for Hg 253.7 Recovery = 102.01%

All analyte(s) passed QC.

Sequence No.: 47

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/8/2010 10:25:24

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.013	-0.013	0.0000	0.0015	0.0004	10:26:14	Yes
2	-0.011	-0.011	0.0000	0.0021	0.0004	10:26:44	Yes
Mean:	-0.012	-0.012	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	7.968	7.968	83.24				

QC value within limits for Hg 253.7 Recovery = Not calculated

Replicate Data: 247770003|958689|1

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.019	-0.019	-0.0001	0.0010	0.0003	10:43:02	Yes
2	-0.015	-0.015	-0.0000	0.0019	0.0003	10:43:32	Yes
Mean:	-0.017	-0.017	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	15.47	15.47	69.20				

Sequence No.: 58

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/8/2010 10:43:52

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.183	5.183	0.0626	0.2692	0.0629	10:44:42	Yes
2	5.170	5.170	0.0624	0.2687	0.0628	10:45:12	Yes
Mean:	5.177	5.177	0.0625				
SD:	0.009	0.009	0.0001				
%RSD:	0.180	0.180	0.18				

QC value within limits for Hg 253.7 Recovery = 103.54%
All analyte(s) passed QC.

Sequence No.: 59

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/8/2010 10:45:31

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.016	-0.016	-0.0000	0.0009	0.0003	10:46:21	Yes
2	-0.018	-0.018	-0.0001	0.0007	0.0003	10:46:51	Yes
Mean:	-0.017	-0.017	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	8.223	8.223	37.77				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60

Sample ID: 247770004|958689|1

Analyst: JXL

Autosampler Location: 52

Date Collected: 3/8/2010 10:47:11

Data Type: Original

Replicate Data: 247770004|958689|1

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.019	-0.019	-0.0001	0.0009	0.0003	10:48:01	Yes
2	-0.023	-0.023	-0.0001	0.0002	0.0002	10:48:31	Yes
Mean:	-0.021	-0.021	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	11.38	11.38	29.91				

Sequence No.: 61

Sample ID: 247770005|958689|1

Analyst: JXL

Autosampler Location: 53

Date Collected: 3/8/2010 10:48:51

Data Type: Original

Replicate Data: 247770005|958689|1

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.025	-0.025	-0.0001	0.0006	0.0002	10:49:42	Yes
2	-0.017	-0.017	-0.0000	0.0015	0.0003	10:50:12	Yes
Mean:	-0.021	-0.021	-0.0001				

#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.018	-0.018	-0.0001	0.0014	0.0003	10:58:05	Yes
2	-0.020	-0.020	-0.0001	0.0010	0.0003	10:58:35	Yes
Mean:	-0.019	-0.019	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	7.691	7.691	25.40				

Sequence No.: 67

Autosampler Location: 59

Sample ID: 247770011|958689|1

Date Collected: 3/8/2010 10:58:55

Analyst: JXL

Data Type: Original

Replicate Data: 247770011|958689|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.032	-0.032	-0.0002	-0.0008	0.0001	10:59:46	Yes
2	-0.025	-0.025	-0.0001	0.0004	0.0002	11:00:16	Yes
Mean:	-0.029	-0.029	-0.0002				
SD:	0.005	0.005	0.0001				
%RSD:	18.50	18.50	34.26				

Sequence No.: 68

Autosampler Location: 60

Sample ID: 1202056088|958710|1

Date Collected: 3/8/2010 11:00:36

Analyst: JXL

Data Type: Original

Replicate Data: 1202056088|958710|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.028	-0.028	-0.0002	0.0005	0.0002	11:01:28	Yes
2	-0.024	-0.024	-0.0001	0.0013	0.0002	11:01:58	Yes
Mean:	-0.026	-0.026	-0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	11.70	11.70	23.67				

Sequence No.: 69

Autosampler Location: 61

Sample ID: 1202056089|958710|10

Date Collected: 3/8/2010 11:02:18

Analyst: JXL

Data Type: Original

Replicate Data: 1202056089|958710|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.455	3.455	0.0417	0.1788	0.0421	11:03:09	Yes
2	3.449	3.449	0.0417	0.1781	0.0420	11:03:39	Yes
Mean:	3.452	3.452	0.0417				
SD:	0.004	0.004	0.0001				
%RSD:	0.122	0.122	0.12				

Sequence No.: 70

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/8/2010 11:04:00

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.205	5.205	0.0628	0.2687	0.0632	11:04:50	Yes
2	5.192	5.192	0.0627	0.2674	0.0630	11:05:20	Yes
Mean:	5.199	5.199	0.0627				
SD:	0.009	0.009	0.0001				
%RSD:	0.171	0.171	0.17				

QC value within limits for Hg 253.7 Recovery = 103.97%
All analyte(s) passed QC.

Sequence No.: 71

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/8/2010 11:05:39

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.020	-0.020	-0.0001	0.0006	0.0003	11:06:30	Yes
2	-0.023	-0.023	-0.0001	-0.0000	0.0003	11:07:00	Yes
Mean:	-0.021	-0.021	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	9.829	9.829	26.09				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 72
Sample ID: 247794001|958710|1
Analyst: JXL

Autosampler Location: 62
Date Collected: 3/8/2010 11:07:19
Data Type: Original

Replicate Data: 247794001|958710|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.012	-0.012	0.0000	0.0018	0.0004	11:08:10	Yes
2	-0.015	-0.015	-0.0000	0.0015	0.0003	11:08:40	Yes
Mean:	-0.013	-0.013	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	12.21	12.21	593.80				

=====

Sequence No.: 73
Sample ID: 1202056090|958710|1
Analyst: JXL

Autosampler Location: 63
Date Collected: 3/8/2010 11:08:59
Data Type: Original

Replicate Data: 1202056090|958710|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.016	-0.016	-0.0000	0.0012	0.0003	11:09:50	Yes
2	-0.018	-0.018	-0.0001	0.0011	0.0003	11:10:20	Yes
Mean:	-0.017	-0.017	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	8.344	8.344	38.31				

=====

Sequence No.: 74
Sample ID: 1202056091|958710|1
Analyst: JXL

Autosampler Location: 64
Date Collected: 3/8/2010 11:10:40
Data Type: Original

Replicate Data: 1202056091|958710|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.327	2.327	0.0282	0.1218	0.0285	11:11:31	Yes
2	2.327	2.327	0.0282	0.1215	0.0285	11:12:01	Yes
Mean:	2.327	2.327	0.0282				
SD:	0.000	0.000	0.0000				
%RSD:	0.013	0.013	0.01				

=====

Sequence No.: 75
Sample ID: 1202056093|958710|1
Analyst: JXL

Autosampler Location: 65
Date Collected: 3/8/2010 11:12:21
Data Type: Original

Replicate Data: 1202056093|958710|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.307	2.307	0.0279	0.1207	0.0283	11:13:12	Yes
2	2.290	2.290	0.0277	0.1192	0.0281	11:13:42	Yes

Mean: 2.299 2.299 0.0278
SD: 0.012 0.012 0.0001
%RSD: 0.507 0.507 0.50

Sequence No.: 76

Sample ID: 1202056092|958710|5

Analyst: JXL

Autosampler Location: 66

Date Collected: 3/8/2010 11:14:01

Data Type: Original

Replicate Data: 1202056092|958710|5

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.017	-0.017	-0.0001	0.0011	0.0003	11:14:52	Yes
2	-0.018	-0.018	-0.0001	0.0008	0.0003	11:15:22	Yes
Mean:	-0.018	-0.018	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	1.562	1.562	6.26				

Sequence No.: 77

Sample ID: 247794002|958710|1

Analyst: JXL

Autosampler Location: 67

Date Collected: 3/8/2010 11:15:42

Data Type: Original

Replicate Data: 247794002|958710|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.020	-0.020	-0.0001	0.0011	0.0003	11:16:34	Yes
2	-0.018	-0.018	-0.0001	0.0014	0.0003	11:17:04	Yes
Mean:	-0.019	-0.019	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	6.588	6.588	22.03				

Sequence No.: 78

Sample ID: 247794003|958710|1

Analyst: JXL

Autosampler Location: 68

Date Collected: 3/8/2010 11:17:23

Data Type: Original

Replicate Data: 247794003|958710|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.014	-0.014	-0.0000	0.0013	0.0004	11:18:14	Yes
2	-0.008	-0.008	-0.0001	0.0018	0.0004	11:18:44	Yes
Mean:	-0.011	-0.011	0.0000				
SD:	0.004	0.004	0.0001				
%RSD:	38.54	38.54	227.15				

Sequence No.: 79

Sample ID: 247794004|958710|1

Analyst: JXL

Autosampler Location: 69

Date Collected: 3/8/2010 11:19:04

Data Type: Original

Replicate Data: 247794004|958710|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.018	-0.018	-0.0001	0.0010	0.0003	11:19:55	Yes
2	-0.025	-0.025	-0.0001	-0.0001	0.0002	11:20:25	Yes
Mean:	-0.022	-0.022	-0.0001				
SD:	0.006	0.006	0.0001				
%RSD:	25.85	25.85	66.42				

Sequence No.: 80

Sample ID: 247794005|958710|1

Analyst: JXL

Autosampler Location: 70

Date Collected: 3/8/2010 11:20:45

Data Type: Original

Replicate Data: 247794005|958710|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.015	-0.015	-0.0000	0.0022	0.0003	11:21:35	Yes
2	-0.021	-0.021	-0.0001	0.0008	0.0003	11:22:06	Yes
Mean:	-0.018	-0.018	-0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	25.62	25.62	93.90				

Sequence No.: 81

Sample ID: 247811002|958710|1

Analyst: JXL

Autosampler Location: 71

Date Collected: 3/8/2010 11:22:25

Data Type: Original

Replicate Data: 247811002|958710|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.168	0.168	0.0022	0.0111	0.0025	11:23:16	Yes
2	0.166	0.166	0.0022	0.0108	0.0025	11:23:46	Yes
Mean:	0.167	0.167	0.0022				
SD:	0.002	0.002	0.0000				
%RSD:	1.025	1.025	0.95				

Sequence No.: 82

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/8/2010 11:24:06

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.377	5.377	0.0649	0.2780	0.0653	11:24:57	Yes
2	5.377	5.377	0.0649	0.2772	0.0652	11:25:27	Yes
Mean:	5.377	5.377	0.0649				
SD:	0.001	0.001	0.0000				
%RSD:	0.011	0.011	0.01				

QC value within limits for Hg 253.7 Recovery = 107.54%
All analyte(s) passed QC.

Sequence No.: 83

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/8/2010 11:25:46

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.013	-0.013	0.0000	0.0013	0.0004	11:26:36	Yes
2	-0.011	-0.011	0.0000	0.0019	0.0004	11:27:06	Yes
Mean:	-0.012	-0.012	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	13.40	13.40	126.41				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 84

Sample ID: 247822001|958710|1

Analyst: JXL

Autosampler Location: 72

Date Collected: 3/8/2010 11:27:25

Data Type: Original

Replicate Data: 247822001|958710|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.057	0.057	0.0008	0.0051	0.0012	11:28:17	Yes
2	0.065	0.065	0.0009	0.0064	0.0013	11:28:47	Yes
Mean:	0.061	0.061	0.0009				
SD:	0.005	0.005	0.0001				
%RSD:	8.982	8.982	7.39				

Miscellaneous

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

Batch ID: 957497.0 Verified by: _____ Lab SOP: GL-MA-E-009 REV# 19
Analyst: Anthony Green Instrument: BAL-001
Method: SW846 3050B

Sample ID	Run Date	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check
1202053069 MB	26-FEB-2010 06:00:00	0.517	50	96.7118	1
1202053074 LCS	26-FEB-2010 06:00:00	0.503	50	99.40358	
247790002	26-FEB-2010 06:00:00	0.504	50	99.20635	
1202053070 DUP (247790002)	26-FEB-2010 06:00:00	0.528	50	94.69697	
1202053071 SDILT (247790002)	26-FEB-2010 06:00:00	0.504	50	99.20635	
1202053072 MS (247790002)	26-FEB-2010 06:00:00	0.504	50	99.20635	
1202053073 MSD (247790002)	26-FEB-2010 06:00:00	0.526	50	95.05703	
247790003	26-FEB-2010 06:00:00	0.506	50	98.81423	
247794001	26-FEB-2010 06:00:00	0.508	50	98.4252	
247794002	26-FEB-2010 06:00:00	0.525	50	95.2381	
247794003	26-FEB-2010 06:00:00	0.519	50	96.33911	
247794004	26-FEB-2010 06:00:00	0.52	50	96.15385	
247794005	26-FEB-2010 06:00:00	0.515	50	97.08738	

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202053074	Metals Soil LCS SRM ICPMS	U1062540-MS	.503	g	
MS	1202053072	ICP-MS Spike for soil products.	U1090827-A	.5	mL	
MS	1202053072	ICP-MS Spike for Soil Products	U1090827-B	.5	mL	
MSD	1202053073	ICP-MS Spike for soil products.	U1090827-A	.5	mL	
MSD	1202053073	ICP-MS Spike for Soil Products	U1090827-B	.5	mL	
REGNT All		Hydrogen Peroxide 30%	1250038-02	1.5	mL	
REGNT All		Nitric Acid CONC.	1274969	.5	mL	

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

Batch ID: 957495.0
Analyst: Anthony Green
Method: SW846 3050B
Lab SOP: GL-MA-E-009 REV# 19
Instrument: BAL-001

Verified by: _____

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202053068	Metals Soil LCS SRM ICP/Hg	U1062540-1	.509	g
MS	1202053066	Metals Spike Mix I	U1100205-01	.25	mL
MS	1202053066	Metals Spike Mix II	U1100205-06	.25	mL
MSD	1202053067	Metals Spike Mix I	U1100205-01	.25	mL
MSD	1202053067	Metals Spike Mix II	U1100205-06	.25	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check I
1202053063 MB	26-FEB-2010 07:30:00	Soil	0.513	50	97.46589	
1202053068 LCS	26-FEB-2010 07:30:00	Soil	0.509	50	98.23183	
247790002	26-FEB-2010 07:30:00	Soil	0.51	50	98.03922	
1202053064 DUP (247790002)	26-FEB-2010 07:30:00	Soil	0.515	50	97.08738	
1202053065 SDILT (247790002)	26-FEB-2010 07:30:00	Soil	0.51	50	98.03922	
1202053066 MS (247790002)	26-FEB-2010 07:30:00	Soil	0.506	50	98.81423	
1202053067 MSD (247790002)	26-FEB-2010 07:30:00	Soil	0.511	50	97.84736	
247790003	26-FEB-2010 07:30:00	Soil	0.515	50	97.08738	
247794001	26-FEB-2010 07:30:00	Soil	0.502	50	99.60159	
247794002	26-FEB-2010 07:30:00	Soil	0.518	50	96.5251	
247794003	26-FEB-2010 07:30:00	Soil	0.516	50	96.89922	
247794004	26-FEB-2010 07:30:00	Soil	0.502	50	99.60159	
247794005	26-FEB-2010 07:30:00	Soil	0.516	50	96.89922	

Reagent/Solvent Lot ID	Description	Amount	Comments:
1265209	HYDROCHLORIC ACID	10 mL	Sample 247790002 consist of tan, rocky soil.
1274969	Nitric Acid CONC.	1.25 mL	

Prep Logbook

Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Batch ID: 958704.0
Analyst: Tara Griffin
Method: SW846 7471A Prep
Lab SOP: GL-MA-E-010 REV# 23
Instrument: BAL-002

Verified by:

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202056089	Metals LCS Soil SRM	U1031809A	.208	g
MS	1202056091	Mercury soil working intermediate standard for MS	WHG100306-14	.3	mL
MSD	1202056093	Mercury soil working intermediate standard for MS	WHG100306-14	.3	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202056088 MB	06-MAR-2010 14:10:00	Soil	0.506	30	59.28854	
1202056089 LCS	06-MAR-2010 14:10:00	Soil	0.208	30	144.23077	
247794001	06-MAR-2010 14:10:00	Soil	0.59	30	50.84746	
1202056090 DUP (247794001)	06-MAR-2010 14:10:00	Soil	0.536	30	55.97015	
1202056091 MS (247794001)	06-MAR-2010 14:10:00	Soil	0.512	30	58.59375	
1202056093 MSD (247794001)	06-MAR-2010 14:10:00	Soil	0.526	30	57.03422	
1202056092 SDILT (247794001)	06-MAR-2010 14:10:00	Soil	0.59	30	50.84746	
247794002	06-MAR-2010 14:10:00	Soil	0.585	30	51.28205	
247794003	06-MAR-2010 14:10:00	Soil	0.553	30	54.24955	
247794004	06-MAR-2010 14:10:00	Soil	0.503	30	59.64215	
247794005	06-MAR-2010 14:10:00	Soil	0.516	30	58.13953	
247811002	06-MAR-2010 14:10:00	Soil	0.533	30	56.28518	
247822001	06-MAR-2010 14:10:00	Soil	0.554	30	54.15162	
247822002	06-MAR-2010 14:10:00	Soil	0.589	30	50.93379	
247822003	06-MAR-2010 14:10:00	Soil	0.594	30	50.50505	
247822004	06-MAR-2010 14:10:00	Soil	0.542	30	55.35055	
247822005	06-MAR-2010 14:10:00	Soil	0.552	30	54.34783	
247822006	06-MAR-2010 14:10:00	Soil	0.554	30	54.15162	
247835001	06-MAR-2010 14:10:00	Soil	0.557	30	53.85996	
247835002	06-MAR-2010 14:10:00	Soil	0.509	30	58.9391	
247835003	06-MAR-2010 14:10:00	Soil	0.509	30	58.9391	
247835004	06-MAR-2010 14:10:00	Soil	0.588	30	51.02041	
247835005	06-MAR-2010 14:10:00	Soil	0.572	30	52.44755	

Reagent/Solvent Lot ID	Description	Amount	Comments:
1255332-C	Hg reducing agent	2 mL	Sample 247794001 is a dry brown soil.

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

Prep Logbook

Batch ID: 958704.0
Analyst: Tara Griffin
Method: SW846 7471A Prep
Lab SOP: GL-MA-E-010 REV# 23
Instrument: BAL-002

Verified by: _____

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1	Serial Number	Spike Amount	Spike Units
1255532-C	Hg reducing agent	2 mL							
1274391-1	NITRIC ACID	.375 mL					U1031809A	.208	g
1277235-A	Hydrochloric Acid Conc.	1.125 mL							
1277238-C	5% KMnO4 solution	7.5 mL							
WHG100306-07	Mercury Working Standard 1st Source CAL S 30 uL						WHG100306-14	.3	mL
WHG100306-08	0.2/CRA								
WHG100306-09	Mercury Working Standard 1st Source CAL S 75 uL								
WHG100306-10	Mercury Working 1st Source CAL S 2.0	300 uL							
WHG100306-11	Mercury Working 1st Source CAL S 5.0/CCV	750 uL							
WHG100306-12	Mercury Working 1st Source CAL S 10.0	1.5 mL							
	Mercury Working 2nd Source S 5.0/ICV	750 uL					WHG100306-14	.3	mL

Digestion Start Date: 06-MAR-10 14:10
 Digestion End Date: 06-MAR-10 14:40

DATA EXCEPTION REPORT

Mo. Day Yr. 22-MAR-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: ICP	Test / Method: SW846 3050B/6010B	Matrix Type: Solid	Client Code: LANL
Batch ID: 957496	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 247790(10-1981),247794(10-1983-1)			
Application Issues: Failed Recovery for MS/PS Failed RPD for MS/MSD, or PS/PSD Failed Recovery for MSD/PSD Failed Recovery for LCS/LCSD			
Specification and Requirements Exception Description:		DER Disposition:	
1. Failed Recovery for MS/PS: QC 1202053066MS 2. Failed RPD for MS/MSD, or PS/PSD: QC 1202053067MSD 3. Failed Recovery for LCS/LCSD: QC 1202053068LCS 4. Failed Recovery for MSD/PSD: QC 1202053067MSD		1. The matrix spike recovery failed outside of the control limits for calcium and magnesium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for calcium due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 3. 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. 4. The matrix spike duplicate recovery failed outside of the control limits for magnesium and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.	

Originator's Name:

Helen Camello

22-MAR-10

Data Validator/Group Leader:

Christopher Louviere

22-MAR-10

DATA EXCEPTION REPORT

Mo.Day Yr. 20-APR-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: 957498	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 247790(10-1981),247794(10-1983-1)			
Application Issues: Failed RPD for DUP Failed Recovery for MSD/PSD Failed Recovery for MS/PS			
Specification and Requirements Exception Description:		DER Disposition:	
1. Failed Recovery for MS/PS: QC 1202053072MS 2. Failed RPD for DUP: QC 1202053070DUP 3. Failed Recovery for MSD/PSD: QC 1202053073MSD		The matrix spike failed outside of the control limits for Ni. The matrix spike duplicate failed outside of the control limits for Ni. The sample and sample duplicate % RPD failed outside the control limits for Ni and U. These failures were 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-APR-10

Data Validator/Group Leader:

Kristen Parson

20-APR-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:** 12-JUN-10
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:** 12-JUN-10
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICPMS
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	67.4 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.6 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Lithium	10.6 mg/kg
Magnesium	4000 mg/kg	Manganese	558 mg/kg
Mercury	8.46 mg/kg	Molybdenum	48.6 mg/kg
Nickel	134 mg/kg	Phosphorous	755 mg/kg
Potassium	4300 mg/kg	Selenium	286 mg/kg
Silver	30.1 mg/kg	Sodium	1020 mg/kg

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Strontium	227 mg/kg	Thallium	121 mg/kg
Thorium	9.84 mg/kg	Tin	104 mg/kg
Titanium	462 mg/kg	Uranium	2.13 mg/kg
Uranium-235	.0153 mg/kg	Uranium-238	2.11 mg/kg
Vanadium	92.4 mg/kg	Zinc	594 mg/kg
Zirconium	10.6 mg/kg		

Serial ID: UI090421-40 **Opened:** 09-OCT-09 **Amount :** 250 mL
Name: TRACE ICP Na-1000SOUR **Received:** 21-APR-09 **Catalog Number :** HP100052-1
Type: Source Material **Expires:** 09-OCT-10 **Lot Number :** 0830227
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: ENVIRONMENTAL EXPRESS
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP 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: UI090612-02 **Opened:** 12-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L **Received:** 12-JUN-09 **Lot Number :** 1016377
Type: Source Material **Expires:** 12-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Standard Logbook

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
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Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090827-A **Opened:** 27-AUG-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 27-AUG-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 27-AUG-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: UI090827-B **Opened:** 27-AUG-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 27-AUG-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 27-AUG-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H₂O(NH₄)₂SiF₆
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H₂O(NH₄)₂SiF₆
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO₃
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO₃
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
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Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H2O/tr HF
Supplier: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI100205-01 **Opened:** 05-FEB-10 **Lot Number :** 1018514
Name: METALSPIKE-1 **Received:** 05-FEB-10
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI100205-06 **Opened:** 05-FEB-10 **Lot Number :** 1018515
Name: METALSPIKE-2 **Received:** 05-FEB-10
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Uranium-235	.72 ug/mL	Uranium-238	99.28 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI100310-48 **Opened:** 19-MAR-10 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 12-MAR-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 19-MAR-11 **Lot Number :** 1019141
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI100312-40 **Opened:** 14-MAR-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 12-MAR-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 14-MAR-11 **Lot Number :** 1018981
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: O2SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Standard Logbook

Serial ID: UI100312-41 **Opened:** 14-MAR-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 12-MAR-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 14-MAR-11 **Lot Number :** 1018981
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI100317-06 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-MAR-10 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019161
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI100317-07 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-MAR-10 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019162
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Standard Logbook

Serial ID: UI100317-08 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-MAR-10 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019163
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI100405-12 **Opened:** 05-APR-10 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 05-APR-10 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019466
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: UI100405-13 **Opened:** 05-APR-10 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 05-APR-10 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019467
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: UI100415-11 **Opened:** 15-APR-10 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 15-APR-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 15-APR-11 **Lot Number :** 1018321
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: O2SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UMS100415-01 **Opened:** 15-APR-10 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 15-APR-10 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-11 **Lot Number :** 22-20JB
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: UMS100415-02 **Opened:** 15-APR-10 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 15-APR-10 **Lot Number :** 22-21JB
Type: Source Material **Expires:** 28-FEB-11
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS100415-03 **Opened:** 15-APR-11 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 15-APR-10 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-11 **Lot Number :** 22-22JB
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: IHG100306-01 **Opened:** 06-MAR-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 06-MAR-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 07-MAR-10 **Solvent :** 1mL HNO3 + TypeI 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: IHG100306-02 **Opened:** 06-MAR-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 06-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Intermediate **Expires:** 07-MAR-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG100306-07 **Opened:** 06-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 06-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 13-MAR-10
Employee: Tara Griffin
Supplier: GEL

Standard Logbook

Description: Mercury Working Standard 1st Source CAL S 0.2/CRA

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100306-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG100306-08 **Opened:** 06-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 06-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 13-MAR-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL

Description: Mercury Working Standard 1st Source CAL S 0.5

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100306-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100306-09 **Opened:** 06-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 06-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 13-MAR-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL

Description: Mercury Working 1st Source CAL S 2.0

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100306-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG100306-10 **Opened:** 06-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 06-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 13-MAR-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL

Description: Mercury Working 1st Source CAL S 5.0/CCV

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100306-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100306-11 **Opened:** 06-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 06-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 13-MAR-10
Employee: Tara Griffin
Supplier: GEL

Description: Mercury Working 1st Source CAL S 10.0

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
IHG100306-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Serial ID: WHG100306-12 Opened: 06-MAR-10 Pipet Id : Hg1289245
 Name: MHGWORKS5.0ICV Received: 06-MAR-10 Solvent : 2% HNO3-1274391
 Type: Working Expires: 13-MAR-10
 Employee: Tara Griffin Verified: 20-JUL-07
 Supplier: GEL
 Description: Mercury Working 2nd Source S 5.0/ICV
 Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
IHG100306-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100306-14 Opened: 06-MAR-10 Pipet Id : Hg1289245
 Name: MHGSOILMSSPIKE Received: 06-MAR-10 Solvent : 2% HNO3-1274391
 Type: Working Expires: 13-MAR-10
 Employee: Tara Griffin Verified: 20-JUL-07
 Supplier: GEL
 Description: Mercury soil working intermediate standard for MS
 Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI100319-42 Opened: 19-MAR-10 Balance Id : 216
 Name: TRACE ICP 0.1 PPM STD. Received: 02-NOV-09 Pipet Id : 3581809
 Type: Working Expires: 20-MAR-10 Solvent : 3%HCL and 1%HNO3 -1285629
 Employee: Helen Camello
 Supplier: GEL
 Description: TRACE ICP 0.1 PPM CALIBRATION STD.
 Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
WI100319-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100319-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100319-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100319-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100319-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100319-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100319-43 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-MAR-10 **Solvent :** 3%HCL and 1%HNO3 --1285629
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090421-40	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L

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Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI100319-44 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-MAR-10 **Solvent :** 3%HCL and 1 %HNO3-1285629
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI100319-45 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1285629
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI090421-40	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L

Serial ID: WI100319-46 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-MAR-10 **Solvent :** 3%HCL AND 1%HNO3-1285629
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100319-47 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-MAR-10 **Solvent :** 3%HCL &1%HNO3-1285629
Employee: Helen Camello
Supplier: O2si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100420-04 **Opened:** 20-APR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 20-APR-10 **Balance Id :** 4025216
Type: Working **Expires:** 21-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1303289
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100415-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100415-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100415-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100420-04A **Opened:** 20-APR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 20-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 21-APR-10 **Solvent :** 2%HNO3/1%HCl - 1303289
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100420-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100420-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100420-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100420-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
WMS100420-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100420-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100420-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100420-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100420-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100420-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100420-05

Name: ICPMS ICV

Type: Working

Employee: Paul Boyd

Supplier: GEL

Description: ICPMS ICV

Comments: None

Opened: 20-APR-10

Received: 20-APR-10

Expires: 21-APR-10

Balance Id : 40245216

Pipet Id : 3541598

Solvent : 2%HNO3/1%HCl - 1303289

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI100317-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI100317-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI100317-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Alliquot	Final Vol.	Final Conc.
UI100317-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100420-06 **Opened:** 20-APR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 20-APR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 21-APR-10 **Solvent :** 2%HNO3/1%HCl - 1303289
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100420-07 **Opened:** 20-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 20-APR-10 **Lot Number :** 1010773
Type: Working **Expires:** 21-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1303289
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100415-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100415-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100415-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100420-08 **Opened:** 20-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 20-APR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 21-APR-10 **Solvent :** 2%HNO3/1%HCl - 1303289
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100405-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI100405-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI100405-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI100405-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI100405-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI100405-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI100405-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI100405-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI100405-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100415-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100415-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100415-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Titanium	20 mg/L	5 mL	50 mL	2000 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: 1228372-A **Opened:** 12-NOV-09 **Lot Number :** 49215936
Name: B-NH2OH.HCl-MER **Received:** 12-NOV-09
Type: Reagent/Solvent **Expires:** 12-NOV-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxylamine Hydrochloride
Comments: None

Serial ID: 1250038-02 **Opened:** 04-JAN-10 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 04-JAN-10
Type: Reagent/Solvent **Expires:** 04-JAN-11
Employee: Bryan Davis
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 1255532-C **Opened:** 15-JAN-10 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 15-JAN-10
Type: Reagent/Solvent **Expires:** 15-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1265209 **Opened:** 04-FEB-10 **Lot Number :** J02039
Name: I-HCL **Received:** 04-FEB-10 **Preservative Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-FEB-11
Employee: Bryan Davis
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1274391-1 **Opened:** 24-FEB-10 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 24-FEB-10 **Lot Number :** H44025
Type: Reagent/Solvent **Expires:** 24-FEB-11
Employee: Tara Griffin
Supplier: Mallinckrodt Chemicals
Description: NITRIC ACID
Comments: None

Standard Logbook

Serial ID: 1274969 **Opened:** 24-FEB-10 **Lot Number :** J 04043 L
Name: I-HNO3 **Received:** 24-FEB-10
Type: Reagent/Solvent **Expires:** 24-FEB-11
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1277235-A **Opened:** 01-MAR-10 **Lot Number :** J02039
Name: B-HCl-MER **Received:** 01-MAR-10
Type: Reagent/Solvent **Expires:** 01-MAR-11
Employee: Tara Griffin
Supplier: J T Baker
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1277238-C **Opened:** 01-MAR-10 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-MAR-10
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1277916 **Opened:** 02-MAR-10 **Lot Number :** J02039
Name: I-HCL **Received:** 02-MAR-10 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 02-MAR-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1285629 **Opened:** 15-MAR-10 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 05-MAR-10 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 21-MAR-10 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Standard Logbook

Serial ID: 1291278 Opened: 25-MAR-10 Lot Number : J 08035 L
Name: I-HNO3 Received: 25-MAR-10
Type: Reagent/Solvent Expires: 25-MAR-11
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1303289 Opened: 19-APR-10 Solvent : Type I Water
Name: B-2%HNO3/1%HCl-ICPMS Received: 19-APR-10
Type: Reagent/Solvent Expires: 26-APR-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.
1277916	I-HCL	36.5-38.0	90 mL	9 l	N/A
1291278	I-HNO3	69.0-70.0	180 mL	9 l	N/A

General Chemistry

Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1983**

Method/Analysis Information

Product: Cyanide, Total
Analytical Batch: 956940 **Method:** SW9012A Cyanide and Total
Prep Batch : 956939 **Method:** SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
247793001	RE15-10-8330
1202051809	Method Blank (MB)
1202051810	247817002(CAPA-10-13095) Sample Duplicate (DUP)
1202051811	247817002(CAPA-10-13095) Matrix Spike (MS)
1202051812	247817002(CAPA-10-13095) Matrix Spike Duplicate (MSD)
1202051813	Laboratory Control Sample (LCS)
1202053279	247771001(RE15-10-8272) Sample Duplicate (DUP)
1202053280	247771001(RE15-10-8272) Matrix Spike (MS)
1202053281	247771001(RE15-10-8272) Matrix Spike Duplicate (MSD)

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: 247771001 (RE15-10-8272) and 247817002 (CAPA-10-13095).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement

The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1202051810 (CAPA-10-13095) and 1202053279 (RE15-10-8272).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times

All samples in this SDG met the specified holding time.

Sample Preservation/Integrity

All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-analysis

The samples in this SDG did not require re-analysis.

Miscellaneous Information

Data Exception (DER) Documentation

A DER was not required for this SDG.

Additional Comments

Additional comments were not required for this SDG.

Electronic Packaging Comment

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

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

Method/Analysis Information

Product: Nitrate Nitrite by Cadmium Reduction

Analytical Batch: 958150

Method: EPA 353.2 Nitrogen and Nitrate/Nitrite

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 353.2:

Sample ID	Client ID
247793001	RE15-10-8330
1202054725	Method Blank (MB)
1202054726	247793001(RE15-10-8330) Sample Duplicate (DUP)
1202054727	248044001(CAPA-10-12770) Sample Duplicate (DUP)
1202054728	248074001(SWWS46-10-13636) Sample Duplicate (DUP)
1202054729	247793001(RE15-10-8330) Post Spike (PS)
1202054730	248044001(CAPA-10-12770) Post Spike (PS)
1202054731	248074001(SWWS46-10-13636) Post Spike (PS)
1202054732	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-128 REV# 5.

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 Nutrient analysis was performed on a Lachat QuickChem FIA+ 8500 Series.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) 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: 247793001 (RE15-10-8330), 248044001 (CAPA-10-12770) and 248074001 (SWWS46-10-13636).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required 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. 1202054726 (RE15-10-8330) and 247793001 (RE15-10-8330).

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: 1202054728 (SWWS46-10-13636) and 1202054731 (SWWS46-10-13636). The following samples in this sample group were diluted due to matrix interference: 1202054726 (RE15-10-8330), 1202054727 (CAPA-10-12770), 1202054729 (RE15-10-8330), 1202054730 (CAPA-10-12770) and 247793001 (RE15-10-8330).

Sample Re-analysis

The samples in this SDG did not require re-analysis.

Miscellaneous Information**Data Exception (DER) Documentation**

A DER was not required for this SDG.

Additional Comments

Additional comments were not required for this SDG.

Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted: Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

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

Review Validation:

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

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

Reviewer:  Date: 20Mar10

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: 10-1983 GEL Work Order: 247793

The Qualifiers in this report are defined as follows:

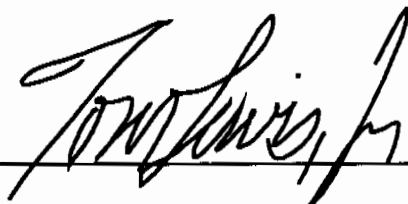
- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

A handwritten signature in black ink, appearing to read 'Valerie Davis', is written over a horizontal line.

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: March 15, 2010

Client SDG: 10-1983

Client Sample ID: RE15-10-8330
Sample ID: 247793001
Matrix: W
Collect Date: 17-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	03/02/10	1549	956940	1
Nutrient Analysis											
<i>EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"</i>											
Nitrogen, Nitrate/Nitrite	U	ND	0.100	0.500	mg/L	10	AXH3	03/03/10	1132	958150	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1321	956939

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	
2	EPA 353.2	

Quality Control Summary

GEL LABORATORIES LLC

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

QC Summary

Report Date: March 15, 2010

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

Contact: Ms. Joylene Valdez

Workorder: 247793

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis											
Batch	956940										
QC1202051810 247817002 DUP											
Cyanide, Total	U	ND	U	ND	ug/L	N/A			AXC2	03/02/10	15:58
QC1202053279 247771001 DUP											
Cyanide, Total	U	ND	U	ND	ug/L	N/A				03/02/10	15:46
QC1202051813 LCS											
Cyanide, Total	50.0			54.8	ug/L		110	(90%-110%)		03/02/10	15:40
QC1202051809 MB											
Cyanide, Total			U	5.00	ug/L					03/02/10	15:39
QC1202051811 247817002 MS											
Cyanide, Total	100	U	ND	114	ug/L		114	(60%-144%)		03/02/10	15:59
QC1202053280 247771001 MS											
Cyanide, Total	100	U	ND	117	ug/L		117	(60%-144%)		03/02/10	15:47
QC1202051812 247817002 MSD											
Cyanide, Total	100	U	ND	105	ug/L	8.22	105	(0%-20%)		03/02/10	16:00
QC1202053281 247771001 MSD											
Cyanide, Total	100	U	ND	115	ug/L	1.72	115	(0%-20%)		03/02/10	15:48
Nutrient Analysis											
Batch	958150										
QC1202054726 247793001 DUP											
Nitrogen, Nitrate/Nitrite	U	ND	J	0.111	mg/L	200		(+/-0.500)	AXH3	03/03/10	11:38
QC1202054727 248044001 DUP											
Nitrogen, Nitrate/Nitrite		0.446		0.428	mg/L	4.12 ^		(+/-0.250)		03/03/10	11:11
QC1202054728 248074001 DUP											
Nitrogen, Nitrate/Nitrite		1.97		1.94	mg/L	1.28		(0%-20%)		03/03/10	11:28
QC1202054732 LCS											
Nitrogen, Nitrate/Nitrite	1.00			0.986	mg/L		98.6	(90%-110%)		03/03/10	10:50
QC1202054725 MB											
Nitrogen, Nitrate/Nitrite			J	0.0124	mg/L					03/03/10	10:49
QC1202054729 247793001 PS											
Nitrogen, Nitrate/Nitrite	1.00	U	ND	1.01	mg/L		100	(90%-110%)		03/03/10	11:40
QC1202054730 248044001 PS											
Nitrogen, Nitrate/Nitrite	1.00		0.0892	1.05	mg/L		96.1	(90%-110%)		03/03/10	11:12
QC1202054731 248074001 PS											
Nitrogen, Nitrate/Nitrite	1.00		0.393	1.39	mg/L		99.7	(90%-110%)		03/03/10	11:29

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: 247793

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.										
C	Analyte has been confirmed by GC/MS analysis										
D	Results are reported from a diluted aliquot of the sample										
E	General Chemistry--Concentration of the target analyte exceeds the instrument calibration range										
E	Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria										
E	Organics--Concentration of the target analyte exceeds the instrument calibration range										
F	Estimated Value										
H	Analytical holding time was exceeded										
J	Value is estimated										
M	Matrix Related Failure										
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor										
N/A	RPD or %Recovery limits do not apply.										
ND	Analyte concentration is not detected above the detection limit										
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%										
R	Sample results are rejected										
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.										
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-MAR-2010 11:01

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1983

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	02-MAR-2010 08:53:45	OM_3-2-2010_08-43-10	144	150	96	(90%-110%)	Yes
CCV	02-MAR-2010 15:29:15	OM_3-2-2010_14-50-22	107	100	107	(90%-110%)	Yes
CCV	02-MAR-2010 15:41:44	OM_3-2-2010_14-50-22	107	100	107	(90%-110%)	Yes
CCV	02-MAR-2010 15:54:17	OM_3-2-2010_14-50-22	106	100	106	(90%-110%)	Yes
CCV	02-MAR-2010 16:06:46	OM_3-2-2010_14-50-22	107	100	107	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	02-MAR-2010 08:55:35	OM_3-2-2010_08-43-10	-1.14	10	Yes
CCB	02-MAR-2010 15:31:06	OM_3-2-2010_14-50-22	-2.57	10	Yes
CCB	02-MAR-2010 15:43:34	OM_3-2-2010_14-50-22	-0.884	10	Yes
CCB	02-MAR-2010 15:56:06	OM_3-2-2010_14-50-22	-2.36	10	Yes
CCB	02-MAR-2010 16:08:37	OM_3-2-2010_14-50-22	-1.91	10	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 15-MAR-2010 11:01

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1983

Nutrient Analysis

Method: EPA 353.2

Concentration Units:mg/L

Instrument: Lachat Quickchem FIA+ 8500 Series

Parmname: Nitrogen, Nitrate/Nitrite

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	03-MAR-2010 10:40:18	OM_3-3-2010_10-30-06	0.983	1	98.3	(90%-110%)	Yes
CCV	03-MAR-2010 11:01:46	OM_3-3-2010_10-30-06	0.983	1	98.3	(90%-110%)	Yes
CCV	03-MAR-2010 11:17:24	OM_3-3-2010_10-30-06	1	1	100	(90%-110%)	Yes
CCV	03-MAR-2010 11:34:09	OM_3-3-2010_10-30-06	0.985	1	98.5	(90%-110%)	Yes
CCV	03-MAR-2010 11:50:55	OM_3-3-2010_10-30-06	0.968	1	96.8	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	03-MAR-2010 10:42:40	OM_3-3-2010_10-30-06	0.00396	0.05	Yes
CCB	03-MAR-2010 11:04:08	OM_3-3-2010_10-30-06	0.00204	0.05	Yes
CCB	03-MAR-2010 11:19:46	OM_3-3-2010_10-30-06	0.00357	0.05	Yes
CCB	03-MAR-2010 11:36:31	OM_3-3-2010_10-30-06	0.00385	0.05	Yes
CCB	03-MAR-2010 11:53:16	OM_3-3-2010_10-30-06	0.00438	0.05	Yes

Cyanide, Total

Prep Logbook

Cyanide Sample Distillation

Batch ID: 956939.0
Analyst: Alan Stanley
Method: SW846 9010C Distillation SW846 9010B Prep E
 Verified by:

Lab SOP: GL-GC-E-067 REV# 13
Instrument: Sartorius Balance B-007

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202051813	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.0125	mL
MS	1202051811	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202053280	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202051812	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202053281	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202051809 MB	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
1202051813 LCS	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
247771001	02-MAR-2010 13:21:00	Water	25	25	1	>12
1202053279 DUP (247771001)	02-MAR-2010 13:21:00	Water	25	25	1	>12
1202053280 MS (247771001)	02-MAR-2010 13:21:00	Water	25	25	1	>12
1202053281 MSD (247771001)	02-MAR-2010 13:21:00	Water	25	25	1	>12
247780001	02-MAR-2010 13:21:00	Water	25	25	1	>12
247793001	02-MAR-2010 13:21:00	Water	25	25	1	>12
247807001	02-MAR-2010 13:21:00	Water	25	25	1	>12
247807002	02-MAR-2010 13:21:00	Water	25	25	1	>12
247807003	02-MAR-2010 13:21:00	Water	25	25	1	>12
247807004	02-MAR-2010 13:21:00	Water	25	25	1	>12
247817002	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
1202051810 DUP (247817002)	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
1202051811 MS (247817002)	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
1202051812 MSD (247817002)	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
247819001	02-MAR-2010 13:21:00	Misc Liquid	25	25	1	>12
247858001	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
247858002	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
247858003	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

Prep Logbook

Batch ID: 956939.0
 Analyst: Alan Stanley
 Method: SW846 9010C Distillation SW846 9010B Prep

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202051813	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.0125	mL
MS	1202051811	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202053280	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202051812	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202053281	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL

Lab SOP: GL-GC-E-067 REV# 13
 Instrument: Sartorius Balance B-007

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
247858004	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
247858005	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
247858006	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12

Comments:

Reagent/Solvent Lot ID	Description	Amount
1260189-C	50% H2SO4 CN Prep	2.5 mL
1270661-C	Bismuth Nitrate Solution	1.25 mL
1270663-C	0.8N H3NO3S	1.25 mL
1270669-C	51% MgCl2 Soln	1 mL
1273851-C	0.25N Sodium Hydroxide Solution	25 mL
WCN100302-07	150 ppb CN Distilled ICV Standard	.0375 mL

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	3/2/2010 8:46:36	OM_3-2-2010_08-43-10
150 ppb		1	axc2	3/2/2010 8:47:27	OM_3-2-2010_08-43-10
100 ppb		1	axc2	3/2/2010 8:48:20	OM_3-2-2010_08-43-10
50 ppb		1	axc2	3/2/2010 8:49:13	OM_3-2-2010_08-43-10
10 ppb		1	axc2	3/2/2010 8:50:06	OM_3-2-2010_08-43-10
CRDL 5.0 ppb		1	axc2	3/2/2010 8:51:00	OM_3-2-2010_08-43-10
ICAL-00		1	axc2	3/2/2010 8:51:54	OM_3-2-2010_08-43-10
ICV		1	axc2	3/2/2010 8:53:45	OM_3-2-2010_08-43-10
ICB		1	axc2	3/2/2010 8:55:35	OM_3-2-2010_08-43-10
CRDL		1	axc2	3/2/2010 8:57:25	OM_3-2-2010_08-43-10
1202053271	957571	1	axc2	3/2/2010 8:59:13	OM_3-2-2010_08-43-10
1202053278*	957571	25	axc2	3/2/2010 9:00:05	OM_3-2-2010_08-43-10
247806007	957571	1	axc2	3/2/2010 9:00:59	OM_3-2-2010_08-43-10
1202053272	957571	1	axc2	3/2/2010 9:01:53	OM_3-2-2010_08-43-10
1202053274	957571	1	axc2	3/2/2010 9:02:46	OM_3-2-2010_08-43-10
1202053276	957571	1	axc2	3/2/2010 9:03:40	OM_3-2-2010_08-43-10
247806008	957571	1	axc2	3/2/2010 9:04:33	OM_3-2-2010_08-43-10
1202053273	957571	1	axc2	3/2/2010 9:05:26	OM_3-2-2010_08-43-10
1202053275	957571	1	axc2	3/2/2010 9:06:19	OM_3-2-2010_08-43-10
1202053277	957571	1	axc2	3/2/2010 9:07:12	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010 9:08:05	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010 9:09:55	OM_3-2-2010_08-43-10
1202053278	957571	25	axc2	3/2/2010 9:11:42	OM_3-2-2010_08-43-10
247806009	957571	1	axc2	3/2/2010 9:12:35	OM_3-2-2010_08-43-10
247806010	957571	1	axc2	3/2/2010 9:13:28	OM_3-2-2010_08-43-10
247806011	957571	1	axc2	3/2/2010 9:14:20	OM_3-2-2010_08-43-10
247806012	957571	1	axc2	3/2/2010 9:15:13	OM_3-2-2010_08-43-10
247822001	957571	1	axc2	3/2/2010 9:16:04	OM_3-2-2010_08-43-10
247822002	957571	1	axc2	3/2/2010 9:16:57	OM_3-2-2010_08-43-10
247822003	957571	1	axc2	3/2/2010 9:17:49	OM_3-2-2010_08-43-10
247822004	957571	1	axc2	3/2/2010 9:18:43	OM_3-2-2010_08-43-10
247822005	957571	1	axc2	3/2/2010 9:19:37	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010 9:20:30	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010 9:22:20	OM_3-2-2010_08-43-10
247822006	957571	1	axc2	3/2/2010 9:24:10	OM_3-2-2010_08-43-10
247840001	957571	1	axc2	3/2/2010 9:25:03	OM_3-2-2010_08-43-10
247840002	957571	1	axc2	3/2/2010 9:25:56	OM_3-2-2010_08-43-10
247840003	957571	1	axc2	3/2/2010 9:26:50	OM_3-2-2010_08-43-10
247842001	957571	1	axc2	3/2/2010 9:27:43	OM_3-2-2010_08-43-10
247842002	957571	1	axc2	3/2/2010 9:28:37	OM_3-2-2010_08-43-10
247842003	957571	1	axc2	3/2/2010 9:29:29	OM_3-2-2010_08-43-10
247842004	957571	1	axc2	3/2/2010 9:30:22	OM_3-2-2010_08-43-10
247905001	957571	1	axc2	3/2/2010 9:31:14	OM_3-2-2010_08-43-10
1202053252	957563	1	axc2	3/2/2010 9:32:07	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010 9:32:59	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010 9:34:51	OM_3-2-2010_08-43-10
1202053254	957563	1	axc2	3/2/2010 9:36:38	OM_3-2-2010_08-43-10
247831001	957563	1	axc2	3/2/2010 9:37:31	OM_3-2-2010_08-43-10
1202053253	957563	1	axc2	3/2/2010 9:38:22	OM_3-2-2010_08-43-10
247840001	957563	1	axc2	3/2/2010 9:39:17	OM_3-2-2010_08-43-10
247840002	957563	1	axc2	3/2/2010 9:40:12	OM_3-2-2010_08-43-10
247840003	957563	1	axc2	3/2/2010 9:41:05	OM_3-2-2010_08-43-10
247842001	957563	1	axc2	3/2/2010 9:41:59	OM_3-2-2010_08-43-10
247842002	957563	1	axc2	3/2/2010 9:42:53	OM_3-2-2010_08-43-10
247842003	957563	1	axc2	3/2/2010 9:43:46	OM_3-2-2010_08-43-10
247842004	957563	1	axc2	3/2/2010 9:44:39	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010 9:45:32	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010 9:47:22	OM_3-2-2010_08-43-10

247902001	957563	1	axc2	3/2/2010	9:49:11	OM_3-2-2010_08-43-10
247905001	957563	1	axc2	3/2/2010	9:50:04	OM_3-2-2010_08-43-10
1202054733	958153	1	axc2	3/2/2010	9:50:57	OM_3-2-2010_08-43-10
1202054740	958153	25	axc2	3/2/2010	9:51:50	OM_3-2-2010_08-43-10
247838002	958153	1	axc2	3/2/2010	9:52:42	OM_3-2-2010_08-43-10
248037001	958153	1	axc2	3/2/2010	9:53:36	OM_3-2-2010_08-43-10
1202054734	958153	1	axc2	3/2/2010	9:54:28	OM_3-2-2010_08-43-10
1202054736	958153	1	axc2	3/2/2010	9:55:20	OM_3-2-2010_08-43-10
1202054738	958153	1	axc2	3/2/2010	9:56:14	OM_3-2-2010_08-43-10
248037002	958153	1	axc2	3/2/2010	9:57:09	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010	9:58:00	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010	9:59:51	OM_3-2-2010_08-43-10
1202054735	958153	1	axc2	3/2/2010	10:01:42	OM_3-2-2010_08-43-10
1202054737	958153	1	axc2	3/2/2010	10:02:36	OM_3-2-2010_08-43-10
1202054739	958153	1	axc2	3/2/2010	10:03:30	OM_3-2-2010_08-43-10
248037003	958153	1	axc2	3/2/2010	10:04:24	OM_3-2-2010_08-43-10
248037004	958153	1	axc2	3/2/2010	10:05:18	OM_3-2-2010_08-43-10
248037005	958153	1	axc2	3/2/2010	10:06:10	OM_3-2-2010_08-43-10
248037006	958153	1	axc2	3/2/2010	10:07:03	OM_3-2-2010_08-43-10
248037007	958153	1	axc2	3/2/2010	10:07:56	OM_3-2-2010_08-43-10
248037008	958153	1	axc2	3/2/2010	10:08:50	OM_3-2-2010_08-43-10
248037009	958153	1	axc2	3/2/2010	10:09:42	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010	10:10:35	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010	10:12:25	OM_3-2-2010_08-43-10
248037010*	958153	1	axc2	3/2/2010	10:14:13	OM_3-2-2010_08-43-10
248037011*	958153	1	axc2	3/2/2010	10:15:06	OM_3-2-2010_08-43-10
248037012*	958153	1	axc2	3/2/2010	10:15:59	OM_3-2-2010_08-43-10
248037013*	958153	1	axc2	3/2/2010	10:16:53	OM_3-2-2010_08-43-10
248037014*	958153	1	axc2	3/2/2010	10:17:48	OM_3-2-2010_08-43-10
248037015*	958153	1	axc2	3/2/2010	10:18:42	OM_3-2-2010_08-43-10
248037016*	958153	1	axc2	3/2/2010	10:19:36	OM_3-2-2010_08-43-10
248037017*	958153	1	axc2	3/2/2010	10:20:31	OM_3-2-2010_08-43-10
248037018*	958153	1	axc2	3/2/2010	10:21:26	OM_3-2-2010_08-43-10
248037019*	958153	1	axc2	3/2/2010	10:22:19	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010	10:23:11	OM_3-2-2010_08-43-10

Original Run Filename: OM_3-2-2010_08-43-10.OMN created 3/2/2010 08:43:10
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_3-2-2010_08-43-10.OMN last modified 3/2/2010 10:24:17
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1		Detection Time	ADF	MDF	Description
			TCYANIDE Conc. (ug/L)	Area (Vs)				
WCN100302-01	1	S1	200	9.17	3/2/2010@08:46:36			200 ppb
WCN100302-02	1	S2	150	7.02	3/2/2010@08:47:27			150 ppb
WCN100302-03	1	S3	100	4.67	3/2/2010@08:48:20			100 ppb
WCN100302-04	1	S4	50.0	2.38	3/2/2010@08:49:13			50 ppb
WCN100302-05	1	S5	10.0	0.547	3/2/2010@08:50:06			10 ppb
WCN100302-06	1	S6	5.00	0.398	3/2/2010@08:51:00			CRDL 5.0 ppb
WCN100302-08	1	S7	0.00	0.0805	3/2/2010@08:51:54			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99991 > 0.99500					
Message			Pass					
Action			Continue					
WCN100302-07	1	S8	144	6.68	3/2/2010@08:53:45			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-3.9 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-3.9 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100302-08	1	S7	-1.14	0.0645	3/2/2010@08:55:35			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.14 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.14 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100302-06	1	S6	4.39	0.316	3/2/2010@08:57:25			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			4.39 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			4.39 > 2.50					
Message			Pass					
Action			None					
1202053271|957571|MB	1	29	-1.73	0.0380	3/2/2010@08:59:13			
1202053278|LCS	1	30	491	22.5	3/2/2010@09:00:05		25.00	
247806007	1	31	-1.20	0.0620	3/2/2010@09:00:59			
1202053272|DUP	1	32	0.127	0.122	3/2/2010@09:01:53			
1202053274|MS	1	33	89.2	4.18	3/2/2010@09:02:46			
1202053276|MSD	1	34	73.9	3.48	3/2/2010@09:03:40			
247806008	1	35	2.38	0.225	3/2/2010@09:04:33			
1202053273|DUP	1	36	2.16	0.215	3/2/2010@09:05:26			
1202053275|MS	1	37	51.3	2.45	3/2/2010@09:06:19			
1202053277|MSD	1	38	45.8	2.20	3/2/2010@09:07:12			
WCN100302-03	1	S3	106	4.92	3/2/2010@09:08:05			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.6 < 10.0					

		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	5.6 < 10.0				
		Message	CCV Passed				
		Action	Continue				
WCN100302-08	1	S7	-1.95	0.0279	3/2/2010@09:09:55		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	-1.95 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	-1.95 > -5.00				
		Message	CCB Passed				
		Action	Continue				
1202053278|LCS	1	30	19.6	1.01	3/2/2010@09:11:42	25.00	
247806009	1	39	-1.05	0.0686	3/2/2010@09:12:35		
247806010	1	40	-0.889	0.0760	3/2/2010@09:13:28		
247806011	1	41	-1.37	0.0543	3/2/2010@09:14:20		
247806012	1	42	-2.58	-8.78e-4	3/2/2010@09:15:13		
247822001	1	43	-1.79	0.0348	3/2/2010@09:16:04		
247822002	1	44	-2.00	0.0255	3/2/2010@09:16:57		
247822003	1	45	-1.52	0.0472	3/2/2010@09:17:49		
247822004	1	46	-2.00	0.0252	3/2/2010@09:18:43		
247822005	1	47	-2.01	0.0252	3/2/2010@09:19:37		
WCN100302-03	1	S3	106	4.92	3/2/2010@09:20:30		CCV
		Known Conc:	100				
DQM Test: > + Percent Relative Difference							
		Result:	5.6 < 10.0				
		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	5.6 < 10.0				
		Message	CCV Passed				
		Action	Continue				
WCN100302-08	1	S7	-2.66	-0.00455	3/2/2010@09:22:20		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	-2.66 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	-2.66 > -5.00				
		Message	CCB Passed				
		Action	Continue				
247822006	1	48	-0.812	0.0795	3/2/2010@09:24:10		
247840001	1	49	-0.505	0.0935	3/2/2010@09:25:03		
247840002	1	50	-1.81	0.0341	3/2/2010@09:25:56		
247840003	1	51	-0.808	0.0797	3/2/2010@09:26:50		
247842001	1	52	-0.181	0.108	3/2/2010@09:27:43		
247842002	1	53	3.80	0.289	3/2/2010@09:28:37		
247842003	1	54	-0.365	0.0999	3/2/2010@09:29:29		
247842004	1	55	0.0716	0.120	3/2/2010@09:30:22		
247905001	1	56	1.52e+3	69.3	3/2/2010@09:31:14		
1202053252|957563|MB	1	57	0.312	0.131	3/2/2010@09:32:07		
WCN100302-03	1	S3	107	5.00	3/2/2010@09:32:59		CCV
		Known Conc:	100				
DQM Test: > + Percent Relative Difference							
		Result:	7.2 < 10.0				
		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	7.2 < 10.0				
		Message	CCV Passed				
		Action	Continue				
WCN100302-08	1	S7	-2.71	-0.00706	3/2/2010@09:34:51		CCB
		Known Conc:	0.00				

DQM Test: > + Concentration Limit						
Result:		-2.71 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-2.71 > -5.00				
Message		CCB Passed				
Action		Continue				
1202053254||LCS	1	58	-1.30	0.0574	3/2/2010@09:36:38	
247831001	1	59	21.5	1.10	3/2/2010@09:37:31	
1202053253||DUP	1	60	18.0	0.935	3/2/2010@09:38:22	
247840001	1	61	18.8	0.974	3/2/2010@09:39:17	
247840002	1	62	-0.323	0.102	3/2/2010@09:40:12	
247840003	1	63	18.0	0.935	3/2/2010@09:41:05	
247842001	1	64	20.6	1.06	3/2/2010@09:41:59	
247842002	1	65	19.2	0.992	3/2/2010@09:42:53	
247842003	1	66	14.2	0.761	3/2/2010@09:43:46	
247842004	1	67	20.6	1.05	3/2/2010@09:44:39	
WCN100302-03	1	S3	107	4.99	3/2/2010@09:45:32	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:		7.1 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		7.1 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100302-08	1	S7	-2.56	-1.26e-4	3/2/2010@09:47:22	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-2.56 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-2.56 > -5.00				
Message		CCB Passed				
Action		Continue				
247902001	1	68	1.41e+3	64.1	3/2/2010@09:49:11	
247905001	1	69	1.23e+3	56.2	3/2/2010@09:50:04	
1202054733|958153|MB	1	70	-0.200	0.107	3/2/2010@09:50:57	
1202054740||LCS	1	71	17.4	0.907	3/2/2010@09:51:50	25.00
247838002	1	72	-0.972	0.0723	3/2/2010@09:52:42	
248037001	1	73	-1.62	0.0428	3/2/2010@09:53:36	
1202054734||DUP	1	74	-1.80	0.0346	3/2/2010@09:54:28	
1202054736||MS	1	75	107	4.98	3/2/2010@09:55:20	
1202054738||MSD	1	76	104	4.83	3/2/2010@09:56:14	
248037002	1	77	-0.939	0.0738	3/2/2010@09:57:09	
WCN100302-03	1	S3	107	5.00	3/2/2010@09:58:00	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:		7.2 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		7.2 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100302-08	1	S7	-2.55	3.95e-4	3/2/2010@09:59:51	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-2.55 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-2.55 > -5.00				
Message		CCB Passed				
Action		Continue				

1202054735	DUP	1	78	-1.07	0.0678	3/2/2010@10:01:42	
1202054737	MS	1	79	98.6	4.61	3/2/2010@10:02:36	
1202054739	MSD	1	80	96.1	4.49	3/2/2010@10:03:30	
248037003		1	81	0.707	0.149	3/2/2010@10:04:24	
248037004		1	82	1.09	0.166	3/2/2010@10:05:18	
248037005		1	83	0.359	0.133	3/2/2010@10:06:10	
248037006		1	84	0.328	0.131	3/2/2010@10:07:03	
248037007		1	85	0.0201	0.117	3/2/2010@10:07:56	
248037008		1	86	-2.66	-0.00454	3/2/2010@10:08:50	
248037009		1	87	-2.26	0.0136	3/2/2010@10:09:42	
WCN100302-03		1	S3	108	5.03	3/2/2010@10:10:35	CCV
Known Conc:				100			
DQM Test: > + Percent Relative Difference							
Result:				7.8 < 10.0			
Message				CCV Passed			
Action				Continue			
DQM Test: < - Percent Relative Difference							
Result:				7.8 < 10.0			
Message				CCV Passed			
Action				Continue			
WCN100302-08		1	S7	-2.63	-0.00301	3/2/2010@10:12:25	CCB
Known Conc:				0.00			
DQM Test: > + Concentration Limit							
Result:				-2.63 < 5.00			
Message				CCB Passed			
Action				Continue			
DQM Test: < - Concentration Limit							
Result:				-2.63 > -5.00			
Message				CCB Passed			
Action				Continue			
248037010		1	88	0.394	0.134	3/2/2010@10:14:13	
248037011		1	89	0.366	0.133	3/2/2010@10:15:06	
248037012		1	90	-2.34	0.00976	3/2/2010@10:15:59	
248037013		1	91	-1.30	0.0573	3/2/2010@10:16:53	
248037014		1	92	1.83	0.200	3/2/2010@10:17:48	
248037015		1	93	0.0806	0.120	3/2/2010@10:18:42	
248037016		1	94	-1.39	0.0532	3/2/2010@10:19:36	
248037017		1	95	0.328	0.131	3/2/2010@10:20:31	
248037018		1	96	-1.63	0.0424	3/2/2010@10:21:26	
248037019		1	97	-0.215	0.107	3/2/2010@10:22:19	
WCN100302-03		1	S3	118	5.48	3/2/2010@10:23:11	CCV
Known Conc:				100			
DQM Test: > + Percent Relative Difference							
Result:				17.8 > 10.0			
Message				CCV Failed			
Action				Stop Run			
DQM Test: < - Percent Relative Difference							
Result:				17.8 > 10.0			
Message				CCV Passed			
Action				Continue			

Analyte Properties Table for OM_3-2-2010_08-43-10.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	9.17	0.613	0.6	3/2/2010	08:47:39
2	150	1	7.02	0.465	-1.1	3/2/2010	08:48:31
3	100	1	4.67	0.309	0.1	3/2/2010	08:49:23
4	50.0	1	2.38	0.162	0.5	3/2/2010	08:50:16
5	10.0	1	0.547	0.0492	4.4	3/2/2010	08:51:09
6	5.00	1	0.398	0.0229	-15.5	3/2/2010	08:52:03
7	0.00	1	0.0805	0.00272		3/2/2010	08:52:57

Peak Area(V.s)

9.17

0.00

TCYANIDE concentration, ug/L

200

Area = 0.0455 * Conc + 0.117
 Conc = 22.0 * Area - 2.56
 Correlation Coefficient (r) = 0.99991

No Weighting

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	3/2/2010 14:51:53	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 14:53:44	OM_3-2-2010_14-50-22
247539011	956938	1	axc2	3/2/2010 14:55:33	OM_3-2-2010_14-50-22
247546001	956938	1	axc2	3/2/2010 14:56:26	OM_3-2-2010_14-50-22
247546002	956938	1	axc2	3/2/2010 14:57:19	OM_3-2-2010_14-50-22
247546003	956938	1	axc2	3/2/2010 14:58:12	OM_3-2-2010_14-50-22
247546004	956938	1	axc2	3/2/2010 14:59:05	OM_3-2-2010_14-50-22
247550001	956938	1	axc2	3/2/2010 14:59:57	OM_3-2-2010_14-50-22
247770001	956938	1	axc2	3/2/2010 15:00:49	OM_3-2-2010_14-50-22
247770002	956938	1	axc2	3/2/2010 15:01:42	OM_3-2-2010_14-50-22
247831001	956938	1	axc2	3/2/2010 15:02:33	OM_3-2-2010_14-50-22
1202049763*	955994	1	axc2	3/2/2010 15:03:26	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010 15:04:18	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 15:06:08	OM_3-2-2010_14-50-22
1202049763	955994	1	axc2	3/2/2010 15:07:57	OM_3-2-2010_14-50-22
1202049770	955994	25	axc2	3/2/2010 15:08:48	OM_3-2-2010_14-50-22
247321007	955994	1	axc2	3/2/2010 15:09:43	OM_3-2-2010_14-50-22
1202049764	955994	1	axc2	3/2/2010 15:10:37	OM_3-2-2010_14-50-22
1202049766	955994	1	axc2	3/2/2010 15:11:30	OM_3-2-2010_14-50-22
1202049768	955994	1	axc2	3/2/2010 15:12:23	OM_3-2-2010_14-50-22
247325001	955994	1	axc2	3/2/2010 15:13:17	OM_3-2-2010_14-50-22
1202049765	955994	1	axc2	3/2/2010 15:14:10	OM_3-2-2010_14-50-22
1202049767	955994	1	axc2	3/2/2010 15:15:03	OM_3-2-2010_14-50-22
1202049769	955994	1	axc2	3/2/2010 15:15:56	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010 15:16:48	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 15:18:39	OM_3-2-2010_14-50-22
247456001	955994	1	axc2	3/2/2010 15:20:27	OM_3-2-2010_14-50-22
247456002	955994	1	axc2	3/2/2010 15:21:20	OM_3-2-2010_14-50-22
247456003	955994	1	axc2	3/2/2010 15:22:12	OM_3-2-2010_14-50-22
247456004	955994	1	axc2	3/2/2010 15:23:05	OM_3-2-2010_14-50-22
247456005	955994	1	axc2	3/2/2010 15:23:57	OM_3-2-2010_14-50-22
247456006	955994	1	axc2	3/2/2010 15:24:49	OM_3-2-2010_14-50-22
247463001	955994	1	axc2	3/2/2010 15:25:41	OM_3-2-2010_14-50-22
247463002	955994	1	axc2	3/2/2010 15:26:35	OM_3-2-2010_14-50-22
247463003	955994	1	axc2	3/2/2010 15:27:29	OM_3-2-2010_14-50-22
247463004	955994	1	axc2	3/2/2010 15:28:23	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010 15:29:15	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 15:31:06	OM_3-2-2010_14-50-22
247463005	955994	1	axc2	3/2/2010 15:32:56	OM_3-2-2010_14-50-22
247463006	955994	1	axc2	3/2/2010 15:33:49	OM_3-2-2010_14-50-22
247469001	955994	1	axc2	3/2/2010 15:34:42	OM_3-2-2010_14-50-22
247469002	955994	1	axc2	3/2/2010 15:35:36	OM_3-2-2010_14-50-22
247469003*	955994	1	axc2	3/2/2010 15:36:28	OM_3-2-2010_14-50-22
247539001	955994	1	axc2	3/2/2010 15:37:21	OM_3-2-2010_14-50-22
247539002	955994	1	axc2	3/2/2010 15:38:14	OM_3-2-2010_14-50-22
247539003	955994	1	axc2	3/2/2010 15:39:07	OM_3-2-2010_14-50-22
1202051809	956940	1	axc2	3/2/2010 15:39:59	OM_3-2-2010_14-50-22
1202051813	956940	1	axc2	3/2/2010 15:40:51	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010 15:41:44	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 15:43:34	OM_3-2-2010_14-50-22
247771001	956940	1	axc2	3/2/2010 15:45:22	OM_3-2-2010_14-50-22
1202053279	956940	1	axc2	3/2/2010 15:46:14	OM_3-2-2010_14-50-22
1202053280	956940	1	axc2	3/2/2010 15:47:08	OM_3-2-2010_14-50-22
1202053281	956940	1	axc2	3/2/2010 15:48:02	OM_3-2-2010_14-50-22
247780001	956940	1	axc2	3/2/2010 15:48:57	OM_3-2-2010_14-50-22
247793001	956940	1	axc2	3/2/2010 15:49:50	OM_3-2-2010_14-50-22
247807001	956940	1	axc2	3/2/2010 15:50:43	OM_3-2-2010_14-50-22
247807002	956940	1	axc2	3/2/2010 15:51:37	OM_3-2-2010_14-50-22

247807003	956940	1	axc2	3/2/2010	15:52:31	OM_3-2-2010_14-50-22
247807004	956940	1	axc2	3/2/2010	15:53:24	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	15:54:17	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	15:56:06	OM_3-2-2010_14-50-22
247817002	956940	1	axc2	3/2/2010	15:57:55	OM_3-2-2010_14-50-22
1202051810	956940	1	axc2	3/2/2010	15:58:48	OM_3-2-2010_14-50-22
1202051811	956940	1	axc2	3/2/2010	15:59:41	OM_3-2-2010_14-50-22
1202051812	956940	1	axc2	3/2/2010	16:00:34	OM_3-2-2010_14-50-22
247819001	956940	1	axc2	3/2/2010	16:01:26	OM_3-2-2010_14-50-22
247858001	956940	1	axc2	3/2/2010	16:02:19	OM_3-2-2010_14-50-22
247858002	956940	1	axc2	3/2/2010	16:03:11	OM_3-2-2010_14-50-22
247858003	956940	1	axc2	3/2/2010	16:04:05	OM_3-2-2010_14-50-22
247858004	956940	1	axc2	3/2/2010	16:05:00	OM_3-2-2010_14-50-22
247858005	956940	1	axc2	3/2/2010	16:05:54	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:06:46	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:08:37	OM_3-2-2010_14-50-22
247858006	956940	1	axc2	3/2/2010	16:10:27	OM_3-2-2010_14-50-22
1202053255	957567	1	axc2	3/2/2010	16:11:21	OM_3-2-2010_14-50-22
1202053262	957567	25	axc2	3/2/2010	16:12:15	OM_3-2-2010_14-50-22
247770003	957567	1	axc2	3/2/2010	16:13:08	OM_3-2-2010_14-50-22
247770004	957567	1	axc2	3/2/2010	16:14:01	OM_3-2-2010_14-50-22
247770005	957567	1	axc2	3/2/2010	16:14:54	OM_3-2-2010_14-50-22
247770006	957567	1	axc2	3/2/2010	16:15:47	OM_3-2-2010_14-50-22
247770007	957567	1	axc2	3/2/2010	16:16:41	OM_3-2-2010_14-50-22
247781001	957567	1	axc2	3/2/2010	16:17:34	OM_3-2-2010_14-50-22
1202053256	957567	1	axc2	3/2/2010	16:18:26	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:19:18	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:21:08	OM_3-2-2010_14-50-22
1202053258	957567	1	axc2	3/2/2010	16:22:57	OM_3-2-2010_14-50-22
1202053260	957567	1	axc2	3/2/2010	16:23:49	OM_3-2-2010_14-50-22
247781002	957567	1	axc2	3/2/2010	16:24:44	OM_3-2-2010_14-50-22
1202053257	957567	1	axc2	3/2/2010	16:25:38	OM_3-2-2010_14-50-22
1202053259	957567	1	axc2	3/2/2010	16:26:32	OM_3-2-2010_14-50-22
1202053261	957567	1	axc2	3/2/2010	16:27:27	OM_3-2-2010_14-50-22
247781003	957567	1	axc2	3/2/2010	16:28:21	OM_3-2-2010_14-50-22
247781004	957567	1	axc2	3/2/2010	16:29:15	OM_3-2-2010_14-50-22
247781005	957567	1	axc2	3/2/2010	16:30:09	OM_3-2-2010_14-50-22
247781006	957567	1	axc2	3/2/2010	16:31:03	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:31:55	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:33:45	OM_3-2-2010_14-50-22
247781007	957567	1	axc2	3/2/2010	16:35:34	OM_3-2-2010_14-50-22
247781008	957567	1	axc2	3/2/2010	16:36:28	OM_3-2-2010_14-50-22
247781009	957567	1	axc2	3/2/2010	16:37:21	OM_3-2-2010_14-50-22
247781010	957567	1	axc2	3/2/2010	16:38:14	OM_3-2-2010_14-50-22
247781011	957567	1	axc2	3/2/2010	16:39:07	OM_3-2-2010_14-50-22
247781012	957567	1	axc2	3/2/2010	16:40:00	OM_3-2-2010_14-50-22
247781013	957567	1	axc2	3/2/2010	16:40:52	OM_3-2-2010_14-50-22
247781014	957567	1	axc2	3/2/2010	16:41:47	OM_3-2-2010_14-50-22
247781015	957567	1	axc2	3/2/2010	16:42:42	OM_3-2-2010_14-50-22
1202053263	957569	1	axc2	3/2/2010	16:43:36	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:44:28	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:46:19	OM_3-2-2010_14-50-22
1202053270	957569	25	axc2	3/2/2010	16:48:09	OM_3-2-2010_14-50-22
247770008	957569	1	axc2	3/2/2010	16:49:03	OM_3-2-2010_14-50-22
1202053264	957569	1	axc2	3/2/2010	16:49:57	OM_3-2-2010_14-50-22
1202053266	957569	1	axc2	3/2/2010	16:50:51	OM_3-2-2010_14-50-22
1202053268	957569	1	axc2	3/2/2010	16:51:45	OM_3-2-2010_14-50-22
247770009	957569	1	axc2	3/2/2010	16:52:39	OM_3-2-2010_14-50-22
1202053265	957569	1	axc2	3/2/2010	16:53:32	OM_3-2-2010_14-50-22
1202053267	957569	1	axc2	3/2/2010	16:54:26	OM_3-2-2010_14-50-22

1202053269	957569	1	axc2	3/2/2010	16:55:19	OM_3-2-2010_14-50-22
247770010	957569	1	axc2	3/2/2010	16:56:12	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:57:04	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:58:55	OM_3-2-2010_14-50-22
247770011	957569	1	axc2	3/2/2010	17:00:44	OM_3-2-2010_14-50-22
247784002	957569	1	axc2	3/2/2010	17:01:37	OM_3-2-2010_14-50-22
247790002	957569	1	axc2	3/2/2010	17:02:32	OM_3-2-2010_14-50-22
247790003	957569	1	axc2	3/2/2010	17:03:26	OM_3-2-2010_14-50-22
247794001	957569	1	axc2	3/2/2010	17:04:21	OM_3-2-2010_14-50-22
247794002	957569	1	axc2	3/2/2010	17:05:15	OM_3-2-2010_14-50-22
247794003	957569	1	axc2	3/2/2010	17:06:10	OM_3-2-2010_14-50-22
247794004	957569	1	axc2	3/2/2010	17:07:04	OM_3-2-2010_14-50-22
247794005	957569	1	axc2	3/2/2010	17:07:58	OM_3-2-2010_14-50-22
247806001	957569	1	axc2	3/2/2010	17:08:52	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	17:09:44	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	17:11:35	OM_3-2-2010_14-50-22
247806002	957569	1	axc2	3/2/2010	17:13:25	OM_3-2-2010_14-50-22
247806003	957569	1	axc2	3/2/2010	17:14:18	OM_3-2-2010_14-50-22
247806004	957569	1	axc2	3/2/2010	17:15:12	OM_3-2-2010_14-50-22
247806005*	957569	1	axc2	3/2/2010	17:16:06	OM_3-2-2010_14-50-22
247806006	957569	1	axc2	3/2/2010	17:16:59	OM_3-2-2010_14-50-22
247855002	957569	1	axc2	3/2/2010	17:17:52	OM_3-2-2010_14-50-22
247902001	957569	1	axc2	3/2/2010	17:18:45	OM_3-2-2010_14-50-22
247806005*	957569	1	axc2	3/2/2010	17:19:38	OM_3-2-2010_14-50-22
247858001	956940	2	axc2	3/2/2010	17:20:31	OM_3-2-2010_14-50-22
247858002	956940	2	axc2	3/2/2010	17:21:23	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	17:22:15	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	17:24:05	OM_3-2-2010_14-50-22
247469003	955994	1	axc2	3/2/2010	17:25:55	OM_3-2-2010_14-50-22
247902001	957569	50	axc2	3/2/2010	17:26:48	OM_3-2-2010_14-50-22
247806005	957569	1	axc2	3/2/2010	17:27:41	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	17:28:34	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	17:30:24	OM_3-2-2010_14-50-22

Original Run Filename: OM_3-2-2010_14-50-22.OMN created 3/2/2010 14:50:22
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_3-2-2010_14-50-22.OMN last modified 3/2/2010 17:31:29
 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)				
WCN100302-03	1	S3	107	4.98	3/2/2010@14:51:53			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.9 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.9 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100302-08	1	S7	-1.63	0.0424	3/2/2010@14:53:44			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.63 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.63 > -5.00					
Message			CCB Passed					
Action			Continue					
247539011|956938|	1	16	-0.875	0.0767	3/2/2010@14:55:33			
247546001	1	21	-2.72	-0.00747	3/2/2010@14:56:26			
247546002	1	22	-1.55	0.0460	3/2/2010@14:57:19			
247546003	1	23	-2.56	0.00	3/2/2010@14:58:12			
247546004	1	24	-2.51	0.00213	3/2/2010@14:59:05			
247550001	1	25	-1.50	0.0482	3/2/2010@14:59:57			
247770001	1	26	-2.55	3.43e-4	3/2/2010@15:00:49			
247770002	1	27	-2.56	-1.49e-4	3/2/2010@15:01:42			
247831001	1	28	-0.925	0.0744	3/2/2010@15:02:33			
1202049763|955994|MB	1	29	6.09	0.394	3/2/2010@15:03:26			
WCN100302-03	1	S3	107	4.97	3/2/2010@15:04:18			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.7 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.7 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100302-08	1	S7	-2.56	-1.64e-4	3/2/2010@15:06:08			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.56 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.56 > -5.00					
Message			CCB Passed					
Action			Continue					
1202049763|955994|MB	1	29	-1.20	0.0618	3/2/2010@15:07:57			
1202049770|LCS	1	30	26.0	1.30	3/2/2010@15:08:48		25.00	
247321007	1	31	-0.848	0.0779	3/2/2010@15:09:43			
1202049764|DUP	1	32	-1.10	0.0663	3/2/2010@15:10:37			
1202049766|MS	1	33	38.7	1.88	3/2/2010@15:11:30			
1202049768|MSD	1	34	55.0	2.62	3/2/2010@15:12:23			

247325001	1	35	2.97	0.252	3/2/2010@15:13:17		
1202049765|DUP	1	36	-1.44	0.0511	3/2/2010@15:14:10		
1202049767|MS	1	37	105	4.89	3/2/2010@15:15:03		
1202049769|MSD	1	38	100	4.68	3/2/2010@15:15:56		
WCN100302-03	1	S3	106	4.94	3/2/2010@15:16:48		CCV
Known Conc:		100					
DQM Test: > + Percent Relative Difference							
Result:		5.9 < 10.0					
Message		CCV Passed					
Action		Continue					
DQM Test: < - Percent Relative Difference							
Result:		5.9 < 10.0					
Message		CCV Passed					
Action		Continue					
WCN100302-08	1	S7	-1.63	0.0424	3/2/2010@15:18:39		CCB
Known Conc:		0.00					
DQM Test: > + Concentration Limit							
Result:		-1.63 < 5.00					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-1.63 > -5.00					
Message		CCB Passed					
Action		Continue					
247456001	1	39	-1.60	0.0434	3/2/2010@15:20:27		
247456002	1	40	5.61	0.372	3/2/2010@15:21:20		
247456003	1	41	-0.655	0.0867	3/2/2010@15:22:12		
247456004	1	42	0.189	0.125	3/2/2010@15:23:05		
247456005	1	43	-1.49	0.0487	3/2/2010@15:23:57		
247456006	1	44	-2.76	-0.00917	3/2/2010@15:24:49		
247463001	1	45	3.46	0.274	3/2/2010@15:25:41		
247463002	1	46	-1.67	0.0403	3/2/2010@15:26:35		
247463003	1	47	-1.52	0.0473	3/2/2010@15:27:29		
247463004	1	48	-1.35	0.0551	3/2/2010@15:28:23		
WCN100302-03	1	S3	107	4.97	3/2/2010@15:29:15		CCV
Known Conc:		100					
DQM Test: > + Percent Relative Difference							
Result:		6.6 < 10.0					
Message		CCV Passed					
Action		Continue					
DQM Test: < - Percent Relative Difference							
Result:		6.6 < 10.0					
Message		CCV Passed					
Action		Continue					
WCN100302-08	1	S7	-2.57	-4.02e-4	3/2/2010@15:31:06		CCB
Known Conc:		0.00					
DQM Test: > + Concentration Limit							
Result:		-2.57 < 5.00					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-2.57 > -5.00					
Message		CCB Passed					
Action		Continue					
247463005	1	49	-1.35	0.0551	3/2/2010@15:32:56		
247463006	1	50	-2.56	0.00	3/2/2010@15:33:49		
247469001	1	51	-3.03	-0.0213	3/2/2010@15:34:42		
247469002	1	52	-1.91	0.0295	3/2/2010@15:35:36		
247469003	1	53	12.1	0.667	3/2/2010@15:36:28		
247539001	1	54	2.67	0.238	3/2/2010@15:37:21		
247539002	1	55	-1.81	0.0340	3/2/2010@15:38:14		
247539003	1	56	-1.67	0.0406	3/2/2010@15:39:07		
1202051809|956940|MB	1	57	-1.40	0.0526	3/2/2010@15:39:59		
1202051813|LCS	1	58	54.8	2.61	3/2/2010@15:40:51		
WCN100302-03	1	S3	107	5.00	3/2/2010@15:41:44		CCV
Known Conc:		100					
DQM Test: > + Percent Relative Difference							
Result:		7.3 < 10.0					

			Message	CCV Passed				
			Action	Continue				
DQM Test: < - Percent Relative Difference								
			Result:	7.3 < 10.0				
			Message	CCV Passed				
			Action	Continue				
WCN100302-08	1	S7		-0.884	0.0763	3/2/2010@15:43:34		CCB
			Known Conc:	0.00				
DQM Test: > + Concentration Limit								
			Result:	-0.884 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	-0.884 > -5.00				
			Message	CCB Passed				
			Action	Continue				
247771001	1	59		-1.58	0.0446	3/2/2010@15:45:22		
1202053279||DUP	1	60		-2.56	-2.17e-4	3/2/2010@15:46:14		
1202053280||MS	1	61		117	5.44	3/2/2010@15:47:08		
1202053281||MSD	1	62		115	5.35	3/2/2010@15:48:02		
247780001	1	63		-2.82	-0.0117	3/2/2010@15:48:57		
247793001	1	64		-2.05	0.0233	3/2/2010@15:49:50		
247807001	1	65		-2.55	3.61e-4	3/2/2010@15:50:43		
247807002	1	66		-2.09	0.0216	3/2/2010@15:51:37		
247807003	1	67		-2.55	3.04e-4	3/2/2010@15:52:31		
247807004	1	68		-2.56	-1.55e-4	3/2/2010@15:53:24		
WCN100302-03	1	S3		106	4.96	3/2/2010@15:54:17		CCV
			Known Conc:	100				
DQM Test: > + Percent Relative Difference								
			Result:	6.3 < 10.0				
			Message	CCV Passed				
			Action	Continue				
DQM Test: < - Percent Relative Difference								
			Result:	6.3 < 10.0				
			Message	CCV Passed				
			Action	Continue				
WCN100302-08	1	S7		-2.36	0.00888	3/2/2010@15:56:06		CCB
			Known Conc:	0.00				
DQM Test: > + Concentration Limit								
			Result:	-2.36 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	-2.36 > -5.00				
			Message	CCB Passed				
			Action	Continue				
247817002	1	69		-1.44	0.0509	3/2/2010@15:57:55		
1202051810||DUP	1	70		-2.52	0.00194	3/2/2010@15:58:48		
1202051811||MS	1	71		114	5.31	3/2/2010@15:59:41		
1202051812||MSD	1	72		105	4.92	3/2/2010@16:00:34		
247819001	1	73		31.6	1.55	3/2/2010@16:01:26		
247858001	1	74		209	9.63	3/2/2010@16:02:19		
247858002	1	75		209	9.62	3/2/2010@16:03:11		
247858003	1	76		18.8	0.973	3/2/2010@16:04:05		
247858004	1	77		80.7	3.79	3/2/2010@16:05:00		
247858005	1	78		45.1	2.17	3/2/2010@16:05:54		
WCN100302-03	1	S3		107	5.00	3/2/2010@16:06:46		CCV
			Known Conc:	100				
DQM Test: > + Percent Relative Difference								
			Result:	7.2 < 10.0				
			Message	CCV Passed				
			Action	Continue				
DQM Test: < - Percent Relative Difference								
			Result:	7.2 < 10.0				
			Message	CCV Passed				
			Action	Continue				
WCN100302-08	1	S7		-1.91	0.0295	3/2/2010@16:08:37		CCB
			Known Conc:	0.00				

DQM Test: > + Concentration Limit						
Result:		-1.91 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.91 > -5.00				
Message		CCB Passed				
Action		Continue				
247858006	1	79	-0.616	0.0885	3/2/2010@16:10:27	
1202053255|957567|MB	1	80	-2.57	-3.76e-4	3/2/2010@16:11:21	
1202053262||LCS	1	81	15.5	0.824	3/2/2010@16:12:15	25.00
247770003	1	82	-2.10	0.0209	3/2/2010@16:13:08	
247770004	1	83	-2.01	0.0248	3/2/2010@16:14:01	
247770005	1	84	-2.68	-0.00534	3/2/2010@16:14:54	
247770006	1	85	-2.55	2.76e-4	3/2/2010@16:15:47	
247770007	1	86	-2.45	0.00519	3/2/2010@16:16:41	
247781001	1	87	-0.808	0.0797	3/2/2010@16:17:34	
1202053256||DUP	1	88	-0.969	0.0724	3/2/2010@16:18:26	
WCN100302-03	1	S3	107	5.00	3/2/2010@16:19:18	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:		7.2 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		7.2 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100302-08	1	S7	-2.72	-0.00736	3/2/2010@16:21:08	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-2.72 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-2.72 > -5.00				
Message		CCB Passed				
Action		Continue				
1202053258||MS	1	89	97.5	4.56	3/2/2010@16:22:57	
1202053260||MSD	1	90	105	4.92	3/2/2010@16:23:49	
247781002	1	91	-2.75	-0.00887	3/2/2010@16:24:44	
1202053257||DUP	1	92	-2.62	-0.00284	3/2/2010@16:25:38	
1202053259||MS	1	93	110	5.13	3/2/2010@16:26:32	
1202053261||MSD	1	94	104	4.86	3/2/2010@16:27:27	
247781003	1	95	-1.94	0.0281	3/2/2010@16:28:21	
247781004	1	96	-2.57	-3.51e-4	3/2/2010@16:29:15	
247781005	1	97	4.38	0.316	3/2/2010@16:30:09	
247781006	1	98	-2.66	-0.00478	3/2/2010@16:31:03	
WCN100302-03	1	S3	105	4.91	3/2/2010@16:31:55	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:		5.2 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		5.2 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100302-08	1	S7	-2.09	0.0214	3/2/2010@16:33:45	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-2.09 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-2.09 > -5.00				
Message		CCB Passed				
Action		Continue				

247781007	1	99	-2.56	1.11e-4	3/2/2010@16:35:34		
247781008	1	100	-2.55	3.30e-4	3/2/2010@16:36:28		
247781009	1	101	-2.12	0.0202	3/2/2010@16:37:21		
247781010	1	102	0.184	0.125	3/2/2010@16:38:14		
247781011	1	103	-0.587	0.0898	3/2/2010@16:39:07		
247781012	1	104	11.5	0.639	3/2/2010@16:40:00		
247781013	1	105	-2.62	-0.00267	3/2/2010@16:40:52		
247781014	1	106	2.25	0.219	3/2/2010@16:41:47		
247781015	1	107	-1.14	0.0648	3/2/2010@16:42:42		
1202053263|957569|MB	1	108	-2.86	-0.0138	3/2/2010@16:43:36		
WCN100302-03	1	S3	104	4.87	3/2/2010@16:44:28		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			4.4 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			4.4 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100302-08	1	S7	-1.95	0.0280	3/2/2010@16:46:19		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.95 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.95 > -5.00				
Message			CCB Passed				
Action			Continue				
1202053270|LCS	1	109	28.4	1.41	3/2/2010@16:48:09	25.00	
247770008	1	110	-1.72	0.0381	3/2/2010@16:49:03		
1202053264|DUP	1	111	-1.87	0.0315	3/2/2010@16:49:57		
1202053266|MS	1	112	106	4.96	3/2/2010@16:50:51		
1202053268|MSD	1	113	109	5.07	3/2/2010@16:51:45		
247770009	1	114	-2.46	0.00432	3/2/2010@16:52:39		
1202053265|DUP	1	115	-2.01	0.0249	3/2/2010@16:53:32		
1202053267|MS	1	116	121	5.63	3/2/2010@16:54:26		
1202053269|MSD	1	117	104	4.87	3/2/2010@16:55:19		
247770010	1	118	-1.54	0.0462	3/2/2010@16:56:12		
WCN100302-03	1	S3	105	4.90	3/2/2010@16:57:04		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			5.1 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			5.1 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100302-08	1	S7	-2.55	3.56e-4	3/2/2010@16:58:55		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-2.55 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-2.55 > -5.00				
Message			CCB Passed				
Action			Continue				
247770011	1	119	-2.56	-1.49e-4	3/2/2010@17:00:44		
247784002	1	120	-1.29	0.0576	3/2/2010@17:01:37		
247790002	1	121	-2.12	0.0200	3/2/2010@17:02:32		
247790003	1	122	-2.56	0.00	3/2/2010@17:03:26		
247794001	1	123	-2.56	-1.49e-4	3/2/2010@17:04:21		
247794002	1	124	-2.55	3.61e-4	3/2/2010@17:05:15		
247794003	1	125	-2.72	-0.00709	3/2/2010@17:06:10		
247794004	1	126	-2.78	-0.00991	3/2/2010@17:07:04		

247794005	1	127	-1.86	0.0318	3/2/2010@17:07:58			
Calibration:			Table/Fig. 1					
247806001	1	128	-1.31	0.0567	3/2/2010@17:08:52			
WCN100302-03	1	S3	106	4.93	3/2/2010@17:09:44			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.7 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			5.7 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100302-08	1	S7	-1.98	0.0263	3/2/2010@17:11:35			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					
247806002	1	129	-2.57	-6.55e-4	3/2/2010@17:13:25			
247806003	1	130	-1.47	0.0495	3/2/2010@17:14:18			
247806004	1	131	-1.86	0.0317	3/2/2010@17:15:12			
247806005	1	132	8.20	0.490	3/2/2010@17:16:06			
247806006	1	133	-0.684	0.0854	3/2/2010@17:16:59			
247855002	1	134	-2.09	0.0216	3/2/2010@17:17:52			
247902001	1	135	1.78e+3	81.4	3/2/2010@17:18:45			
247806005	1	132	6.30	0.403	3/2/2010@17:19:38			
247858001|956940|	1	74	125	5.79	3/2/2010@17:20:31		2.00	
247858002	1	75	103	4.82	3/2/2010@17:21:23		2.00	
WCN100302-03	1	S3	106	4.94	3/2/2010@17:22:15			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.8 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			5.8 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100302-08	1	S7	-2.56	-1.85e-4	3/2/2010@17:24:05			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.56 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.56 > -5.00					
Message			CCB Passed					
Action			Continue					
247469003|955994|	1	53	-1.40	0.0528	3/2/2010@17:25:55			
247902001|957569|	1	135	66.2	3.13	3/2/2010@17:26:48		50.00	
247806005	1	132	-1.46	0.0501	3/2/2010@17:27:41			
WCN100302-03	1	S3	106	4.94	3/2/2010@17:28:34			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.0 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.0 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100302-08	1	S7	-0.316	0.102	3/2/2010@17:30:24			CCB
Known Conc:			0.00					

DQM Test: > + Concentration Limit					
Result:	-0.316 < 5.00				
Message	CCB Passed				
Action	Continue				
DQM Test: < - Concentration Limit					
Result:	-0.316 > -5.00				
Message	CCB Passed				
Action	Continue				

Analyte Properties Table for OM_3-2-2010_14-50-22.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

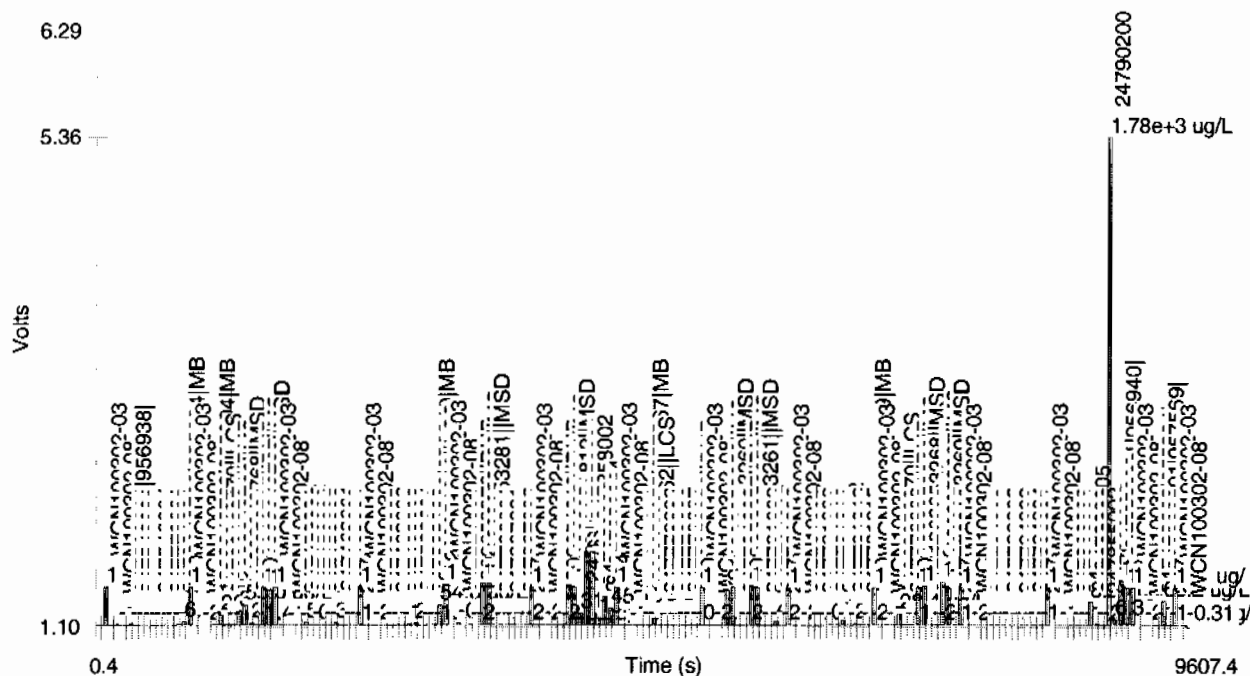
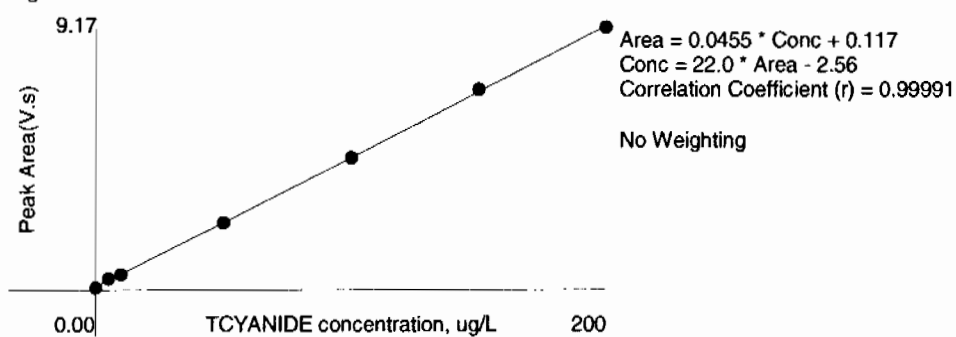


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.17	0.613	0.6	3/2/2010	08:47:39
2	150	1	7.02	0.465	-1.1	3/2/2010	08:48:31
3	100	1	4.67	0.309	0.1	3/2/2010	08:49:23
4	50.0	1	2.38	0.162	0.5	3/2/2010	08:50:16
5	10.0	1	0.547	0.0492	4.4	3/2/2010	08:51:09
6	5.00	1	0.398	0.0229	-15.5	3/2/2010	08:52:03
7	0.00	1	0.0805	0.00272		3/2/2010	08:52:57

Figure 1: TCYANIDE



Nitrate Nitrite by Cadmium Reduction

This is runlog lachat3

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
1.5 PPM		1	axh3	3/3/2010 10:31:50	OM_3-3-2010_10-30-06
1.0 PPM		1	axh3	3/3/2010 10:33:02	OM_3-3-2010_10-30-06
0.5 ppm		1	axh3	3/3/2010 10:34:15	OM_3-3-2010_10-30-06
0.1 ppm		1	axh3	3/3/2010 10:35:29	OM_3-3-2010_10-30-06
0.05 ppm		1	axh3	3/3/2010 10:36:42	OM_3-3-2010_10-30-06
ICAL-00		1	axh3	3/3/2010 10:37:56	OM_3-3-2010_10-30-06
1.0 ppm ICV		1	axh3	3/3/2010 10:40:18	OM_3-3-2010_10-30-06
ICB		1	axh3	3/3/2010 10:42:40	OM_3-3-2010_10-30-06
Nitrate 1.0 ppm		1	axh3	3/3/2010 10:44:59	OM_3-3-2010_10-30-06
Nitrite 1.0 ppm		1	axh3	3/3/2010 10:47:19	OM_3-3-2010_10-30-06
1202054725	958150	1	axh3	3/3/2010 10:49:40	OM_3-3-2010_10-30-06
1202054732	958150	1	axh3	3/3/2010 10:50:53	OM_3-3-2010_10-30-06
247793001	958150	5	axh3	3/3/2010 10:52:06	OM_3-3-2010_10-30-06
1202054726	958150	5	axh3	3/3/2010 10:53:20	OM_3-3-2010_10-30-06
1202054729	958150	5	axh3	3/3/2010 10:54:32	OM_3-3-2010_10-30-06
247997001	958150	5	axh3	3/3/2010 10:55:44	OM_3-3-2010_10-30-06
248001001	958150	5	axh3	3/3/2010 10:56:57	OM_3-3-2010_10-30-06
248019001	958150	5	axh3	3/3/2010 10:58:10	OM_3-3-2010_10-30-06
248023001	958150	5	axh3	3/3/2010 10:59:22	OM_3-3-2010_10-30-06
248024002	958150	10	axh3	3/3/2010 11:00:34	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010 11:01:46	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010 11:04:08	OM_3-3-2010_10-30-06
248024004	958150	10	axh3	3/3/2010 11:05:20	OM_3-3-2010_10-30-06
248038001	958150	5	axh3	3/3/2010 11:06:32	OM_3-3-2010_10-30-06
248038002	958150	5	axh3	3/3/2010 11:07:44	OM_3-3-2010_10-30-06
248039001	958150	5	axh3	3/3/2010 11:08:55	OM_3-3-2010_10-30-06
248044001*	958150	5	axh3	3/3/2010 11:10:07	OM_3-3-2010_10-30-06
1202054727	958150	5	axh3	3/3/2010 11:11:20	OM_3-3-2010_10-30-06
1202054730	958150	5	axh3	3/3/2010 11:12:34	OM_3-3-2010_10-30-06
248044003	958150	5	axh3	3/3/2010 11:13:47	OM_3-3-2010_10-30-06
248046001	958150	5	axh3	3/3/2010 11:14:59	OM_3-3-2010_10-30-06
248046002	958150	5	axh3	3/3/2010 11:16:12	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010 11:17:24	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010 11:19:46	OM_3-3-2010_10-30-06
248044001	958150	5	axh3	3/3/2010 11:22:05	OM_3-3-2010_10-30-06
248053001	958150	5	axh3	3/3/2010 11:23:18	OM_3-3-2010_10-30-06
248053002	958150	5	axh3	3/3/2010 11:24:30	OM_3-3-2010_10-30-06
248053003	958150	5	axh3	3/3/2010 11:25:43	OM_3-3-2010_10-30-06
248074001	958150	5	axh3	3/3/2010 11:26:55	OM_3-3-2010_10-30-06
1202054728	958150	5	axh3	3/3/2010 11:28:07	OM_3-3-2010_10-30-06
1202054731	958150	5	axh3	3/3/2010 11:29:19	OM_3-3-2010_10-30-06
248074002	958150	5	axh3	3/3/2010 11:30:31	OM_3-3-2010_10-30-06
248074003	958150	5	axh3	3/3/2010 11:31:43	OM_3-3-2010_10-30-06
247793001	958150	10	axh3	3/3/2010 11:32:57	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010 11:34:09	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010 11:36:31	OM_3-3-2010_10-30-06
1202054726	958150	10	axh3	3/3/2010 11:38:51	OM_3-3-2010_10-30-06
1202054729	958150	10	axh3	3/3/2010 11:40:03	OM_3-3-2010_10-30-06
248039001	958150	10	axh3	3/3/2010 11:41:15	OM_3-3-2010_10-30-06
248046001	958150	10	axh3	3/3/2010 11:42:28	OM_3-3-2010_10-30-06
1202057088	959199	1	axh3	3/3/2010 11:43:39	OM_3-3-2010_10-30-06
1202057095	959199	1	axh3	3/3/2010 11:44:50	OM_3-3-2010_10-30-06
247853003	959199	5	axh3	3/3/2010 11:46:04	OM_3-3-2010_10-30-06
1202057089	959199	5	axh3	3/3/2010 11:47:17	OM_3-3-2010_10-30-06
1202057092	959199	5	axh3	3/3/2010 11:48:30	OM_3-3-2010_10-30-06
247853006	959199	25	axh3	3/3/2010 11:49:43	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010 11:50:55	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010 11:53:16	OM_3-3-2010_10-30-06

247853009	959199	5	axh3	3/3/2010	11:55:37	OM_3-3-2010_10-30-06
247853012	959199	10	axh3	3/3/2010	11:56:49	OM_3-3-2010_10-30-06
247853015	959199	10	axh3	3/3/2010	11:58:02	OM_3-3-2010_10-30-06
247853018	959199	50	axh3	3/3/2010	11:59:14	OM_3-3-2010_10-30-06
247966003	959199	5	axh3	3/3/2010	12:00:27	OM_3-3-2010_10-30-06
1202057096	959199	5	axh3	3/3/2010	12:01:39	OM_3-3-2010_10-30-06
1202057097	959199	5	axh3	3/3/2010	12:02:51	OM_3-3-2010_10-30-06
247966011	959199	5	axh3	3/3/2010	12:04:03	OM_3-3-2010_10-30-06
248044005	959199	5	axh3	3/3/2010	12:05:15	OM_3-3-2010_10-30-06
1202059915	959199	5	axh3	3/3/2010	12:06:27	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010	12:07:39	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010	12:10:01	OM_3-3-2010_10-30-06
1202059916	959199	5	axh3	3/3/2010	12:12:21	OM_3-3-2010_10-30-06
248072001	959199	5	axh3	3/3/2010	12:13:31	OM_3-3-2010_10-30-06
1202057091	959199	5	axh3	3/3/2010	12:14:43	OM_3-3-2010_10-30-06
1202057094	959199	5	axh3	3/3/2010	12:15:56	OM_3-3-2010_10-30-06
248072002	959199	5	axh3	3/3/2010	12:17:09	OM_3-3-2010_10-30-06
248072003	959199	5	axh3	3/3/2010	12:18:23	OM_3-3-2010_10-30-06
248103003	959199	5	axh3	3/3/2010	12:19:36	OM_3-3-2010_10-30-06
248108001	959199	5	axh3	3/3/2010	12:20:48	OM_3-3-2010_10-30-06
1202057090	959199	5	axh3	3/3/2010	12:22:01	OM_3-3-2010_10-30-06
1202057093	959199	5	axh3	3/3/2010	12:23:13	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010	12:24:25	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010	12:26:48	OM_3-3-2010_10-30-06
248117001	959199	5	axh3	3/3/2010	12:29:08	OM_3-3-2010_10-30-06
248126003	959199	5	axh3	3/3/2010	12:30:20	OM_3-3-2010_10-30-06
248127001	959199	5	axh3	3/3/2010	12:31:32	OM_3-3-2010_10-30-06
248199001	959199	5	axh3	3/3/2010	12:32:44	OM_3-3-2010_10-30-06
248238001	959199	5	axh3	3/3/2010	12:33:56	OM_3-3-2010_10-30-06
248238002	959199	5	axh3	3/3/2010	12:35:08	OM_3-3-2010_10-30-06
247966003	959199	5	axh3	3/3/2010	12:36:20	OM_3-3-2010_10-30-06
1202057096	959199	5	axh3	3/3/2010	12:37:32	OM_3-3-2010_10-30-06
1202057097	959199	5	axh3	3/3/2010	12:38:45	OM_3-3-2010_10-30-06
248108001	959199	10	axh3	3/3/2010	12:39:57	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010	12:41:09	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010	12:43:31	OM_3-3-2010_10-30-06
1202057090	959199	10	axh3	3/3/2010	12:45:52	OM_3-3-2010_10-30-06
1202057093	959199	10	axh3	3/3/2010	12:47:05	OM_3-3-2010_10-30-06
1202058290	959715	1	axh3	3/3/2010	12:48:17	OM_3-3-2010_10-30-06
1202058297	959715	1	axh3	3/3/2010	12:49:29	OM_3-3-2010_10-30-06
248044006	959715	5	axh3	3/3/2010	12:50:42	OM_3-3-2010_10-30-06
1202058291	959715	5	axh3	3/3/2010	12:51:54	OM_3-3-2010_10-30-06
1202058294	959715	5	axh3	3/3/2010	12:53:07	OM_3-3-2010_10-30-06
248164001	959715	5	axh3	3/3/2010	12:54:19	OM_3-3-2010_10-30-06
248164003	959715	5	axh3	3/3/2010	12:55:31	OM_3-3-2010_10-30-06
248261001	959715	5	axh3	3/3/2010	12:56:43	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010	12:57:55	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010	13:00:17	OM_3-3-2010_10-30-06
1202058292	959715	5	axh3	3/3/2010	13:02:37	OM_3-3-2010_10-30-06
1202058295	959715	5	axh3	3/3/2010	13:03:49	OM_3-3-2010_10-30-06
248298001	959715	5	axh3	3/3/2010	13:05:01	OM_3-3-2010_10-30-06
1202058293	959715	5	axh3	3/3/2010	13:06:15	OM_3-3-2010_10-30-06
1202058296	959715	5	axh3	3/3/2010	13:07:28	OM_3-3-2010_10-30-06
248298002	959715	5	axh3	3/3/2010	13:08:41	OM_3-3-2010_10-30-06
248298003	959715	5	axh3	3/3/2010	13:09:53	OM_3-3-2010_10-30-06
248382001	959715	5	axh3	3/3/2010	13:11:06	OM_3-3-2010_10-30-06
248382004	959715	5	axh3	3/3/2010	13:12:19	OM_3-3-2010_10-30-06
248401001	959715	5	axh3	3/3/2010	13:13:31	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010	13:14:44	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010	13:17:05	OM_3-3-2010_10-30-06

248401003	959715	5	axh3	3/3/2010	13:19:26	OM_3-3-2010_10-30-06
248401006	959715	5	axh3	3/3/2010	13:20:37	OM_3-3-2010_10-30-06
248407001	959715	5	axh3	3/3/2010	13:21:49	OM_3-3-2010_10-30-06
248419001	959715	5	axh3	3/3/2010	13:23:01	OM_3-3-2010_10-30-06
248419002	959715	5	axh3	3/3/2010	13:24:13	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010	13:26:33	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010	13:28:56	OM_3-3-2010_10-30-06

Original Run Filename: OM_3-3-2010_10-30-06.OMN created 3/3/2010 10:30:06
 Original Run Author's Signature: [lachat]
 Current Run Filename: OM_3-3-2010_10-30-06.OMN last modified 3/3/2010 13:30:17
 Current Run Author's Signature: [lachat]
 Description: EPA 353.2
 Cadmium Column 9056CAJ
 LCS nominal 1.0 mg/L

Sample	Rep.	Cup No.	Channel 1		Detection Time	ADF	MDF	Description
			NO3 + NO2 Conc. (mg/L)	Area (Vs)				
WTR100303-26	1	S9	1.50	14.8	3/3/2010@10:31:50			1.5 PPM
WTR100303-25	1	S10	1.00	9.68	3/3/2010@10:33:02			1.0 PPM
WTR100303-24	1	S11	0.500	4.89	3/3/2010@10:34:15			0.5 ppm
WTR100303-23	1	S12	0.100	1.02	3/3/2010@10:35:29			0.1 ppm
WTR100303-21	1	S13	0.0500	0.312	3/3/2010@10:36:42			0.05 ppm
0.0ppm	1	S15	0.00	-0.0280	3/3/2010@10:37:56			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
Result:			0.99989 > 0.99500					
Message			Calibration Passed					
Action			Continue					
WTR100303-27 ICV	1	S16	0.983	9.62	3/3/2010@10:40:18			1.0 ppm ICV
Known Conc:			1.00					
DQM Test: > + Concentration Limit								
Result:			0.983 < 1.10					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.983 > 0.894					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
ICB	1	S15	0.00396	-0.0247	3/3/2010@10:42:40			ICB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			0.00396 < 0.0500					
Message			ICB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.00396 > -0.0500					
Message			ICB Passed					
Action			Continue					
WTR100303-22	1	S1	0.943	9.22	3/3/2010@10:44:59			Nitrate 1.0 ppm
Known Conc:			1.00					
DQM Test: > + Concentration Limit								
Result:			0.943 < 1.10					
Message			Nitrate Standard Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.943 > 0.894					
Message			Nitrate Standard Passed					
Action			Continue					
WTR100303-28	1	S2	0.937	9.17	3/3/2010@10:47:19			Nitrite 1.0 ppm
Known Conc:			1.00					
DQM Test: > + Concentration Limit								
Result:			0.937 < 1.10					
Message			Nitrite Standard Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.937 > 0.894					
Message			Nitrite Standard Passed					
Action			Continue					
1202054725|958150|MB	1	1	0.0124	0.0582	3/3/2010@10:49:40			
1202054732|LCS	1	2	0.986	9.65	3/3/2010@10:50:53			
247793001	1	3	-0.0329	-0.388	3/3/2010@10:52:06		5.00	
1202054726|DUP	1	4	-0.0360	-0.419	3/3/2010@10:53:20		5.00	
1202054729|PS	1	5	0.348	3.36	3/3/2010@10:54:32		5.00	

247997001	1	6	0.0124	0.0585	3/3/2010@10:55:44	5.00	
248001001	1	7	0.0131	0.0653	3/3/2010@10:56:57	5.00	
248019001	1	8	0.196	1.87	3/3/2010@10:58:10	5.00	
248023001	1	9	0.0844	0.767	3/3/2010@10:59:22	5.00	
248024002	1	10	0.425	4.12	3/3/2010@11:00:34	10.00	
WTR100303-25 CCV	1	S10	0.983	9.62	3/3/2010@11:01:46		1.0 ppm CCV
Known Conc:			1.00				
DQM Test: > + Concentration Limit							
Result:			0.983 < 1.10				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			0.983 > 0.894				
Message			CCV Passed				
Action			Continue				
CCB	1	S15	0.00204	-0.0437	3/3/2010@11:04:08		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			0.00204 < 0.0500				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			0.00204 > -0.0500				
Message			CCB Passed				
Action			Continue				
248024004	1	11	0.430	4.17	3/3/2010@11:05:20	10.00	
248038001	1	12	0.0214	0.147	3/3/2010@11:06:32	5.00	
248038002	1	13	0.0741	0.666	3/3/2010@11:07:44	5.00	
248039001	1	14	-0.0529	-0.584	3/3/2010@11:08:55	5.00	
248044001	1	15	2.97	29.2	3/3/2010@11:10:07	5.00	
1202054727||DUP	1	16	0.0856	0.779	3/3/2010@11:11:20	5.00	
1202054730||PS	1	17	1.05	10.3	3/3/2010@11:12:34	5.00	
248044003	1	18	0.0366	0.297	3/3/2010@11:13:47	5.00	
248046001	1	19	-0.0557	-0.613	3/3/2010@11:14:59	5.00	
248046002	1	20	-0.0479	-0.535	3/3/2010@11:16:12	5.00	
WTR100303-25 CCV	1	S10	1.00	9.80	3/3/2010@11:17:24		1.0 ppm CCV
Known Conc:			1.00				
DQM Test: > + Concentration Limit							
Result:			1.00 < 1.10				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			1.00 > 0.894				
Message			CCV Passed				
Action			Continue				
CCB	1	S15	0.00357	-0.0286	3/3/2010@11:19:46		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			0.00357 < 0.0500				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			0.00357 > -0.0500				
Message			CCB Passed				
Action			Continue				
248044001	1	15	0.0892	0.815	3/3/2010@11:22:05	5.00	
248053001	1	21	0.0149	0.0826	3/3/2010@11:23:18	5.00	
248053002	1	22	0.0149	0.0834	3/3/2010@11:24:30	5.00	
248053003	1	23	0.0120	0.0547	3/3/2010@11:25:43	5.00	
248074001	1	24	0.393	3.81	3/3/2010@11:26:55	5.00	
1202054728||DUP	1	25	0.388	3.76	3/3/2010@11:28:07	5.00	
1202054731||PS	1	26	1.39	13.6	3/3/2010@11:29:19	5.00	
248074002	1	27	0.131	1.23	3/3/2010@11:30:31	5.00	
248074003	1	28	0.276	2.66	3/3/2010@11:31:43	5.00	
247793001	1	3	0.00533	-0.0112	3/3/2010@11:32:57	10.00	
WTR100303-25 CCV	1	S10	0.985	9.64	3/3/2010@11:34:09		1.0 ppm CCV
Known Conc:			1.00				
DQM Test: > + Concentration Limit							

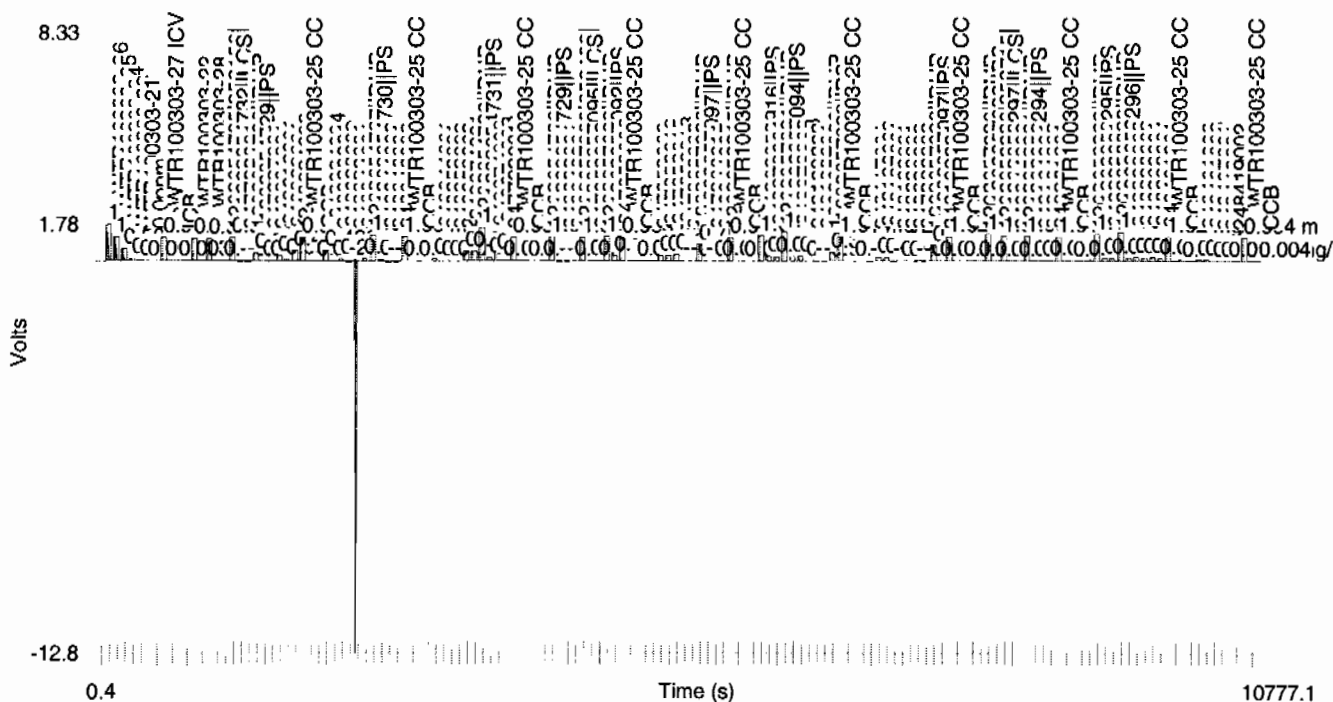
		Result:	0.985 < 1.10				
		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	0.985 > 0.894				
		Message	CCV Passed				
		Action	Continue				
CCB	1	S15	0.00385	-0.0258	3/3/2010@11:36:31		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	0.00385 < 0.0500				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	0.00385 > -0.0500				
		Message	CCB Passed				
		Action	Continue				
1202054726||DUP	1	4	0.0111	0.0460	3/3/2010@11:38:51		10.00
1202054729||PS	1	5	1.01	9.86	3/3/2010@11:40:03		10.00
248039001	1	14	-0.0350	-0.408	3/3/2010@11:41:15		10.00
248046001	1	19	-0.0330	-0.389	3/3/2010@11:42:28		10.00
1202057088|959199|MB	1	29	0.0116	0.0509	3/3/2010@11:43:39		
1202057095||LCS	1	30	1.00	9.79	3/3/2010@11:44:50		
247853003	1	31	0.0341	0.272	3/3/2010@11:46:04		5.00
1202057089||DUP	1	32	0.0331	0.263	3/3/2010@11:47:17		5.00
1202057092||PS	1	33	1.02	10.0	3/3/2010@11:48:30		5.00
247853006	1	34	0.196	1.87	3/3/2010@11:49:43		25.00
WTR100303-25 CCV	1	S10	0.968	9.47	3/3/2010@11:50:55		1.0 ppm CCV
		Known Conc:	1.00				
DQM Test: > + Concentration Limit							
		Result:	0.968 < 1.10				
		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	0.968 > 0.894				
		Message	CCV Passed				
		Action	Continue				
CCB	1	S15	0.00438	-0.0206	3/3/2010@11:53:16		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	0.00438 < 0.0500				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	0.00438 > -0.0500				
		Message	CCB Passed				
		Action	Continue				
247853009	1	35	0.0177	0.110	3/3/2010@11:55:37		5.00
247853012	1	36	0.204	1.94	3/3/2010@11:56:49		10.00
247853015	1	37	0.219	2.09	3/3/2010@11:58:02		10.00
247853018	1	38	0.268	2.58	3/3/2010@11:59:14		50.00
247966003	1	39	-0.0241	-0.301	3/3/2010@12:00:27		5.00
1202057096||DUP	1	40	-0.0245	-0.305	3/3/2010@12:01:39		5.00
1202057097||PS	1	41	0.767	7.49	3/3/2010@12:02:51		5.00
247966011	1	42	-0.0241	-0.301	3/3/2010@12:04:03		5.00
248044005	1	43	0.00946	0.0294	3/3/2010@12:05:15		5.00
1202059915||DUP	1	89	0.00965	0.0313	3/3/2010@12:06:27		5.00
WTR100303-25 CCV	1	S10	0.981	9.60	3/3/2010@12:07:39		1.0 ppm CCV
		Known Conc:	1.00				
DQM Test: > + Concentration Limit							
		Result:	0.981 < 1.10				
		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	0.981 > 0.894				
		Message	CCV Passed				
		Action	Continue				
CCB	1	S15	0.00404	-0.0239	3/3/2010@12:10:01		CCB

Known Conc:		0.00					
DQM Test: > + Concentration Limit							
Result:		0.00404 < 0.0500					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		0.00404 > -0.0500					
Message		CCB Passed					
Action		Continue					
1202059916||PS	1	90	1.04	10.2	3/3/2010@12:12:21	5.00	
248072001	1	44	0.170	1.61	3/3/2010@12:13:31	5.00	
1202057091||DUP	1	45	0.165	1.56	3/3/2010@12:14:43	5.00	
1202057094||PS	1	46	1.18	11.6	3/3/2010@12:15:56	5.00	
248072002	1	47	0.165	1.56	3/3/2010@12:17:09	5.00	
248072003	1	48	0.184	1.75	3/3/2010@12:18:23	5.00	
248103003	1	49	0.00535	-0.0110	3/3/2010@12:19:36	5.00	
248108001	1	50	-0.0372	-0.430	3/3/2010@12:20:48	5.00	
1202057090||DUP	1	51	-0.0370	-0.429	3/3/2010@12:22:01	5.00	
1202057093||PS	1	52	0.357	3.45	3/3/2010@12:23:13	5.00	
WTR100303-25 CCV	1	S10	1.01	9.89	3/3/2010@12:24:25		1.0 ppm CCV
Known Conc:		1.00					
DQM Test: > + Concentration Limit							
Result:		1.01 < 1.10					
Message		CCV Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		1.01 > 0.894					
Message		CCV Passed					
Action		Continue					
CCB	1	S15	0.00458	-0.0186	3/3/2010@12:26:48		CCB
Known Conc:		0.00					
DQM Test: > + Concentration Limit							
Result:		0.00458 < 0.0500					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		0.00458 > -0.0500					
Message		CCB Passed					
Action		Continue					
248117001	1	53	-0.0357	-0.415	3/3/2010@12:29:08	5.00	
248126003	1	54	0.138	1.29	3/3/2010@12:30:20	5.00	
248127001	1	55	0.126	1.17	3/3/2010@12:31:32	5.00	
248199001	1	56	-0.0330	-0.389	3/3/2010@12:32:44	5.00	
248238001	1	57	0.0119	0.0531	3/3/2010@12:33:56	5.00	
248238002	1	58	0.0133	0.0676	3/3/2010@12:35:08	5.00	
247966003	1	39	-0.0228	-0.288	3/3/2010@12:36:20	5.00	
1202057096||DUP	1	40	-0.0241	-0.301	3/3/2010@12:37:32	5.00	
1202057097||PS	1	41	0.737	7.19	3/3/2010@12:38:45	5.00	
248108001	1	50	0.00805	0.0156	3/3/2010@12:39:57	10.00	
WTR100303-25 CCV	1	S10	1.02	10.0	3/3/2010@12:41:09		1.0 ppm CCV
Known Conc:		1.00					
DQM Test: > + Concentration Limit							
Result:		1.02 < 1.10					
Message		CCV Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		1.02 > 0.894					
Message		CCV Passed					
Action		Continue					
CCB	1	S15	0.00556	-0.00893	3/3/2010@12:43:31		CCB
Known Conc:		0.00					
DQM Test: > + Concentration Limit							
Result:		0.00556 < 0.0500					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		0.00556 > -0.0500					
Message		CCB Passed					

		Action	Continue						
1202057090	DUP	1	51	0.0123	0.0576	3/3/2010@12:45:52		10.00	
1202057093	PS	1	52	1.10	10.8	3/3/2010@12:47:05		10.00	
1202058290	959715	1	66	0.0112	0.0462	3/3/2010@12:48:17			
1202058297	LCS	1	67	1.02	10.0	3/3/2010@12:49:29			
248044006		1	68	0.00987	0.0335	3/3/2010@12:50:42		5.00	
1202058291	DUP	1	69	0.00950	0.0299	3/3/2010@12:51:54		5.00	
1202058294	PS	1	70	1.03	10.1	3/3/2010@12:53:07		5.00	
248164001		1	71	0.0321	0.253	3/3/2010@12:54:19		5.00	
248164003		1	72	0.0323	0.254	3/3/2010@12:55:31		5.00	
248261001		1	73	0.0490	0.418	3/3/2010@12:56:43		5.00	
WTR100303-25	CCV	1	S10	1.01	9.92	3/3/2010@12:57:55			1.0 ppm CCV
Known Conc:				1.00					
DQM Test: > + Concentration Limit									
Result:				1.01 < 1.10					
Message				CCV Passed					
Action				Continue					
DQM Test: < - Concentration Limit									
Result:				1.01 > 0.894					
Message				CCV Passed					
Action				Continue					
CCB		1	S15	0.00422	-0.0221	3/3/2010@13:00:17			CCB
Known Conc:				0.00					
DQM Test: > + Concentration Limit									
Result:				0.00422 < 0.0500					
Message				CCB Passed					
Action				Continue					
DQM Test: < - Concentration Limit									
Result:				0.00422 > -0.0500					
Message				CCB Passed					
Action				Continue					
1202058292	DUP	1	74	0.0484	0.413	3/3/2010@13:02:37		5.00	
1202058295	PS	1	75	1.11	10.8	3/3/2010@13:03:49		5.00	
248298001		1	76	0.132	1.24	3/3/2010@13:05:01		5.00	
1202058293	DUP	1	77	0.126	1.18	3/3/2010@13:06:15		5.00	
1202058296	PS	1	78	1.18	11.6	3/3/2010@13:07:28		5.00	
248298002		1	79	0.127	1.19	3/3/2010@13:08:41		5.00	
248298003		1	80	0.152	1.44	3/3/2010@13:09:53		5.00	
248382001		1	81	0.146	1.37	3/3/2010@13:11:06		5.00	
248382004		1	82	0.151	1.42	3/3/2010@13:12:19		5.00	
248401001		1	83	0.0983	0.904	3/3/2010@13:13:31		5.00	
WTR100303-25	CCV	1	S10	1.02	9.94	3/3/2010@13:14:44			1.0 ppm CCV
Known Conc:				1.00					
DQM Test: > + Concentration Limit									
Result:				1.02 < 1.10					
Message				CCV Passed					
Action				Continue					
DQM Test: < - Concentration Limit									
Result:				1.02 > 0.894					
Message				CCV Passed					
Action				Continue					
CCB		1	S15	0.00434	-0.0210	3/3/2010@13:17:05			CCB
Known Conc:				0.00					
DQM Test: > + Concentration Limit									
Result:				0.00434 < 0.0500					
Message				CCB Passed					
Action				Continue					
DQM Test: < - Concentration Limit									
Result:				0.00434 > -0.0500					
Message				CCB Passed					
Action				Continue					
248401003		1	84	0.0611	0.538	3/3/2010@13:19:26		5.00	
248401006		1	85	0.0756	0.681	3/3/2010@13:20:37		5.00	
248407001		1	86	0.0122	0.0564	3/3/2010@13:21:49		5.00	
248419001		1	87	0.0150	0.0844	3/3/2010@13:23:01		5.00	
248419002		1	88	0.0129	0.0637	3/3/2010@13:24:13		5.00	
WTR100303-25	CCV	1	S10	0.994	9.72	3/3/2010@13:26:33			1.0 ppm CCV
Known Conc:				1.00					

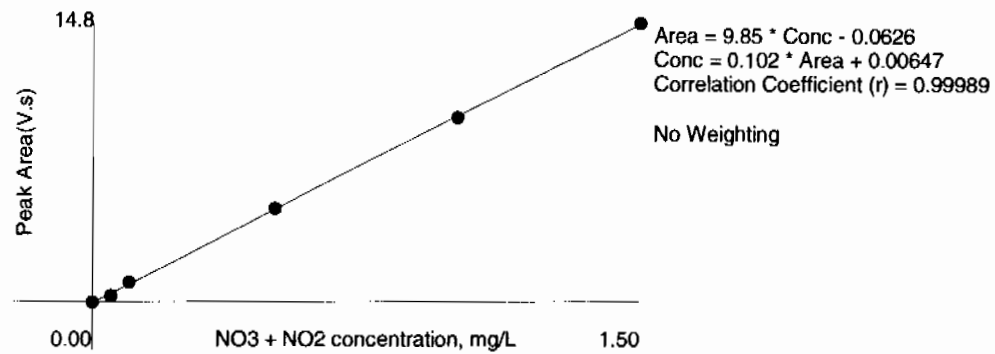
DQM Test: > + Concentration Limit						
Result:		0.994 < 1.10				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		0.994 > 0.894				
Message		CCV Passed				
Action		Continue				
CCB	1	S15	0.00455	-0.0189	3/3/2010@13:28:56	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		0.00455 < 0.0500				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		0.00455 > -0.0500				
Message		CCB Passed				
Action		Continue				

Channel 1 (NO3 + NO2) : Current View

Table 1: NO₃ + NO₂

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	1.50	1	14.8	1.22	-0.4	3/3/2010	10:33:10
2	1.00	1	9.68	0.804	1.1	3/3/2010	10:34:23
3	0.500	1	4.89	0.403	-0.6	3/3/2010	10:35:35
4	0.100	1	1.02	0.0833	-10.8	3/3/2010	10:36:48
5	0.0500	1	0.312	0.0247	27.4	3/3/2010	10:38:02
6	0.00	1	-0.0280	-0.00133		3/3/2010	10:39:16

Figure 1: NO3 + NO2



General Chemistry

Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1983-1**

Method/Analysis Information

Product: pH
Analytical Batch: 956998 **Method:** SW9045C pH

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9045C/9045D:

Sample ID	Client ID
247794001	RE15-10-8317
247794002	RE15-10-8319
247794003	RE15-10-8316
247794004	RE15-10-8326
247794005	RE15-10-8318
1202051942	247784002(WST15-10-11622) Sample Duplicate (DUP)
1202051943	247790002(RE15-10-8386) Sample Duplicate (DUP)
1202051944	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-008 REV# 17.

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 Electrode analysis was performed on a PerpHect pH Meter Orion 370.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

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: 247784002 (WST15-10-11622) and 247790002 (RE15-10-8386).

Duplicate Relative Percent Difference (RPD) Statement

The RPD between the sample and its duplicate met the acceptance limits.

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

The following samples from this sample group were received by the lab outside of the method specified holding time: 1202051942 (WST15-10-11622), 1202051943 (RE15-10-8386), 247794001 (RE15-10-8317), 247794002 (RE15-10-8319), 247794003 (RE15-10-8316), 247794004 (RE15-10-8326) and 247794005 (RE15-10-8318).

Sample Re-analysis

The samples in this SDG did not require re-analysis.

Miscellaneous Information**Data Exception (DER) Documentation**

A DER was not required for this SDG.

Additional Comments

Additional comments were not required for this SDG.

Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted: Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Method/Analysis Information

Product: Cyanide, Total

Analytical Batch: 957569 **Method:** SW9012A Cyanide and Total

Prep Batch : 957568 **Method:** SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
247794001	RE15-10-8317
247794002	RE15-10-8319
247794003	RE15-10-8316
247794004	RE15-10-8326
247794005	RE15-10-8318
1202053263	Method Blank (MB)
1202053264	247770008(RE15-10-8256) Sample Duplicate (DUP)
1202053265	247770009(RE15-10-8262) Sample Duplicate (DUP)
1202053266	247770008(RE15-10-8256) Matrix Spike (MS)
1202053267	247770009(RE15-10-8262) Matrix Spike (MS)
1202053268	247770008(RE15-10-8256) Matrix Spike Duplicate (MSD)
1202053269	247770009(RE15-10-8262) Matrix Spike Duplicate (MSD)
1202053270	Laboratory Control Sample (LCS)

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

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC, and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information**Method Blank (MB) Statement**

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 247770008 (RE15-10-8256) and 247770009 (RE15-10-8262).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement

The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times

All samples in this SDG met the specified holding time.

Sample Preservation/Integrity

All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions

The following sample in this sample group was diluted due to high concentration: 1202053270 (LCS).

Sample Re-analysis

The samples in this SDG did not require re-analysis.

Miscellaneous Information**Data Exception (DER) Documentation**

A DER was not required for this SDG.

Additional Comments

Additional comments were not required for this SDG.

Electronic Packaging Comment

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

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

Method/Analysis Information

Product: Ion Chromatography
Analytical Batch: 957881 **Method:** EPA 300.0 Nitrate in Soil
Prep Batch : 957878 **Method:** EPA 300.0 PREP

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 300.0:

Sample ID	Client ID
247794001	RE15-10-8317
247794002	RE15-10-8319
247794003	RE15-10-8316
247794004	RE15-10-8326
247794005	RE15-10-8318
1202054065	Method Blank (MB)
1202054066	247546004(RE46-10-13380) Sample Duplicate (DUP)
1202054067	247822006(CAPU-10-12538) Sample Duplicate (DUP)
1202054068	247546004(RE46-10-13380) Matrix Spike (MS)
1202054069	247822006(CAPU-10-12538) Matrix Spike (MS)
1202054070	247546004(RE46-10-13380) Matrix Spike Duplicate (MSD)
1202054071	247822006(CAPU-10-12538) Matrix Spike Duplicate (MSD)
1202054072	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-086 REV# 17.

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 Ion Chromatography analysis was performed on a Dionex ICS-3000 Ion Chromatograph.

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: 247546004 (RE46-10-13380) and 247822006 (CAPU-10-12538).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement

The RPD between the sample and its duplicate met the acceptance limits.

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 Dilutions

The samples in this SDG did not require dilutions.

Sample Re-analysis

The samples in this SDG did not require re-analysis.

Miscellaneous Information**Data Exception (DER) Documentation**

A DER was not required for this SDG.

Manual Integrations

The following sample from this sample group had to be manually integrated due to errors in the instrument software peak integration: 1202054066 (RE46-10-13380).

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: 20Mar10

Sample Data Summary

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Certificate of Analysis Report for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-1983-1 GEL Work Order: 247794

The Qualifiers in this report are defined as follows:

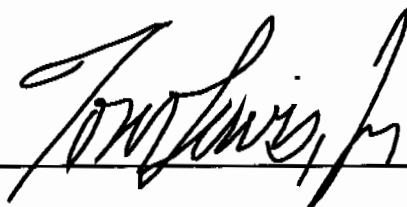
- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by



GEL LABORATORIES LLC

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Certificate of Analysis

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

Report Date: March 17, 2010

Client SDG: 10-1983-1

Client Sample ID: RE15-10-8317
Sample ID: 247794001
Matrix: R
Collect Date: 17-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 6.34%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.8C	H	7.59	0.010	0.100	SU	1	TXT1	02/24/10	1518	956998	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	69.8	257	ug/kg	1	AXC2	03/02/10	1704	957569	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.320	1.07	mg/kg	1	MAR1	03/10/10	1822	957881	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	MAR1	03/10/10	1030	957878
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1528	957568

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Certificate of Analysis

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

Report Date: March 17, 2010

Client SDG: 10-1983-1

Client Sample ID: RE15-10-8319
Sample ID: 247794002
Matrix: R
Collect Date: 17-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 3.28%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.4C	H	7.96	0.010	0.100	SU	1	TXT1	02/24/10	1527	956998	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	68.9	253	ug/kg	1	AXC2	03/02/10	1705	957569	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.310	1.03	mg/kg	1	MAR1	03/10/10	1851	957881	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	MAR1	03/10/10	1030	957878
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1528	957568

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Certificate of Analysis

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

Report Date: March 17, 2010

Client SDG: 10-1983-1

Client Sample ID: RE15-10-8316
Sample ID: 247794003
Matrix: R
Collect Date: 17-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 4.02%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.5C	H	7.41	0.010	0.100	SU	1	TXT1	02/24/10	1528	956998	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	63.3	233	ug/kg	1	AXC2	03/02/10	1706	957569	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.313	1.04	mg/kg	1	MAR1	03/10/10	1920	957881	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	MAR1	03/10/10	1030	957878
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1528	957568

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Certificate of Analysis

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

Report Date: March 17, 2010

Client SDG: 10-1983-1

Client Sample ID: RE15-10-8326
Sample ID: 247794004
Matrix: R
Collect Date: 17-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 4.01%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.4C	H	7.71	0.010	0.100	SU	1	TXT1	02/24/10	1536	956998	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	64.4	237	ug/kg	1	AXC2	03/02/10	1707	957569	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.313	1.04	mg/kg	1	MAR1	03/10/10	1949	957881	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	MAR1	03/10/10	1030	957878
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1528	957568

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

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Certificate of Analysis

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

Report Date: March 17, 2010

Client SDG: 10-1983-1

Client Sample ID: RE15-10-8318
Sample ID: 247794005
Matrix: R
Collect Date: 17-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 4.55%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.3C	H	7.90	0.010	0.100	SU	1	TXT1	02/24/10	1541	956998	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	62.5	230	ug/kg	1	AXC2	03/02/10	1707	957569	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.314	1.05	mg/kg	1	MAR1	03/10/10	2018	957881	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	MAR1	03/10/10	1030	957878
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1528	957568

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

Quality Control Summary

GEL LABORATORIES LLC

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QC Summary

Report Date: March 17, 2010

Page 1 of 3

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

Contact: Ms. Joylene Valdez

Workorder: 247794

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Electrode Analysis											
Batch	956998										
QC1202051942	247784002	DUP									
pH		H	8.39	H	8.43	SU	0.476	(0%-10%)	TXT1	02/24/10	15:10
QC1202051943	247790002	DUP									
pH		H	8.89	H	8.91	SU	0.225	(0%-10%)		02/24/10	15:13
QC1202051944	LCS										
pH	7.00				6.98	SU		99.7	(95%-105%)		02/24/10 15:02
Flow Injection Analysis											
Batch	957569										
QC1202053264	247770008	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	03/02/10	16:49
QC1202053265	247770009	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			03/02/10	16:53
QC1202053270	LCS										
Cyanide, Total	67900				71000	ug/kg		105	(32%-157%)		03/02/10 16:48
QC1202053263	MB										
Cyanide, Total				U	250	ug/kg					03/02/10 16:43
QC1202053266	247770008	MS									
Cyanide, Total	5040	U	ND		5350	ug/kg		106	(26%-158%)		03/02/10 16:50
QC1202053267	247770009	MS									
Cyanide, Total	4890	U	ND		5920	ug/kg		121	(26%-158%)		03/02/10 16:54
QC1202053268	247770008	MSD									
Cyanide, Total	5040	U	ND		5500	ug/kg	2.79	109	(0%-30%)		03/02/10 16:51
QC1202053269	247770009	MSD									
Cyanide, Total	4710	U	ND		4900	ug/kg	18.9	104	(0%-30%)		03/02/10 16:55
Ion Chromatography											
Batch	957881										
QC1202054066	247546004	DUP									
Nitrate-N			1.28		1.26	mg/kg	1.53 ^	(+/-1.22)	GXM3	03/10/10	14:02
QC1202054067	247822006	DUP									
Nitrate-N			9.71		9.76	mg/kg	0.512	(0%-20%)	MAR1	03/11/10	19:33
QC1202054072	LCS										
Nitrate-N	50.0				51.8	mg/kg		104	(90%-110%)	GXM3	03/10/10 13:04
QC1202054065	MB										
Nitrate-N				U	1.00	mg/kg					03/10/10 12:35
QC1202054068	247546004	MS									
Nitrate-N	61.1		1.28		61.7	mg/kg		98.9	(90%-110%)		03/10/10 14:31
QC1202054069	247822006	MS									
Nitrate-N	56.7		9.71		63.5	mg/kg		94.9	(90%-110%)	MAR1	03/11/10 20:01
QC1202054070	247546004	MSD									
Nitrate-N	61.1		1.28		62.6	mg/kg	1.39	100	(0%-20%)	GXM3	03/10/10 15:00
QC1202054071	247822006	MSD									
Nitrate-N	56.7		9.71		63.4	mg/kg	0.100	94.8	(0%-20%)	MAR1	03/11/10 20:30

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QC Summary

Workorder: 247794

Page 2 of 3

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
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Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based 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
- UJ 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

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QC Summary

Workorder: 247794

Page 3 of 3

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
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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: 17-MAR-2010 09:03

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1983-1

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	02-MAR-2010 08:53:45	OM_3-2-2010_08-43-10	144	150	96	(90%-110%)	Yes
CCV	02-MAR-2010 16:31:55	OM_3-2-2010_14-50-22	105	100	105	(90%-110%)	Yes
CCV	02-MAR-2010 16:44:28	OM_3-2-2010_14-50-22	104	100	104	(90%-110%)	Yes
CCV	02-MAR-2010 16:57:04	OM_3-2-2010_14-50-22	105	100	105	(90%-110%)	Yes
CCV	02-MAR-2010 17:09:44	OM_3-2-2010_14-50-22	106	100	106	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	02-MAR-2010 08:55:35	OM_3-2-2010_08-43-10	-1.14	10	Yes
CCB	02-MAR-2010 16:33:45	OM_3-2-2010_14-50-22	-2.09	10	Yes
CCB	02-MAR-2010 16:46:19	OM_3-2-2010_14-50-22	-1.95	10	Yes
CCB	02-MAR-2010 16:58:55	OM_3-2-2010_14-50-22	-2.55	10	Yes
CCB	02-MAR-2010 17:11:35	OM_3-2-2010_14-50-22	-1.98	10	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 17-MAR-2010 09:03

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1983-1

Ion Chromatography

Method: EPA 300.0

Concentration Units:mg/L

Instrument: Dionex ICS-3000 Ion Chromatograph

Parmname: Nitrate-N

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	10-MAR-2010 11:37:00	100310	5.1832	5	104	(90%-110%)	Yes
CCV	10-MAR-2010 17:24:00	100310	7.8416	7.5	105	(90%-110%)	Yes
CCV	10-MAR-2010 23:11:00	100310	5.1719	5	103	(90%-110%)	Yes
ICV	11-MAR-2010 18:06:00	100311	4.5323	5	90.6	(90%-110%)	Yes
CCV	11-MAR-2010 20:59:00	100311	4.5121	5	90.2	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	10-MAR-2010 12:06:00	100310	0	0.1	Yes
CCB	10-MAR-2010 17:53:00	100310	0	0.1	Yes
CCB	10-MAR-2010 23:40:00	100310	0	0.1	Yes
ICB	11-MAR-2010 18:35:00	100311	0	0.1	Yes
CCB	11-MAR-2010 21:28:00	100311	0	0.1	Yes

Cyanide, Total

Prep Logbook

Cyanide Sample Distillation

Batch ID: 957568.0	Verified by:					
Analyst: Alan Stanley		Type	Sample Id	Description	Serial Number	Spike Amount Spike Units
Method: SW846 9010B Prep		LCS	1202053270	Total Cyanide Solid LCS	URF1200957-01	.25 g
Lab SOP: GL-GC-E-067 REV# 13		MS	1202053266	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025 mL
Instrument: Sartorius Balance B-007		MS	1202053267	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025 mL
		MSD	1202053268	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025 mL
		MSD	1202053269	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025 mL
Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202053263 MB	02-MAR-2010 15:28:00	Soil	0.5	25	50	>12
1202053270 LCS	02-MAR-2010 15:28:00	Soil	0.25	25	100	>12
247770008	02-MAR-2010 15:28:00	Soil	0.5	25	50	>12
1202053264 DUP (247770008)	02-MAR-2010 15:28:00	Soil	0.5	25	50	>12
1202053266 MS (247770008)	02-MAR-2010 15:28:00	Soil	0.51	25	49.01961	>12
1202053268 MSD (247770008)	02-MAR-2010 15:28:00	Soil	0.51	25	49.01961	>12
247770009	02-MAR-2010 15:28:00	Soil	0.53	25	47.16981	>12
1202053265 DUP (247770009)	02-MAR-2010 15:28:00	Soil	0.55	25	45.45455	>12
1202053267 MS (247770009)	02-MAR-2010 15:28:00	Soil	0.52	25	48.07692	>12
1202053269 MSD (247770009)	02-MAR-2010 15:28:00	Soil	0.54	25	46.2963	>12
247770010	02-MAR-2010 15:28:00	Soil	0.54	25	46.2963	>12
247770011	02-MAR-2010 15:28:00	Soil	0.58	25	43.10345	>12
247784002	02-MAR-2010 15:28:00	Soil	0.51	25	49.01961	>12
247790002	02-MAR-2010 15:28:00	Soil	0.56	25	44.64286	>12
247790003	02-MAR-2010 15:28:00	Soil	0.57	25	43.85965	>12
247794001	02-MAR-2010 15:28:00	Soil	0.52	25	48.07692	>12
247794002	02-MAR-2010 15:28:00	Soil	0.51	25	49.01961	>12
247794003	02-MAR-2010 15:28:00	Soil	0.56	25	44.64286	>12
247794004	02-MAR-2010 15:28:00	Soil	0.55	25	45.45455	>12
247794005	02-MAR-2010 15:28:00	Soil	0.57	25	43.85965	>12
247806001	02-MAR-2010 15:28:00	Soil	0.51	25	49.01961	>12

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

Prep Logbook

Batch ID: 957568.0
Analyst: Alan Stanley
Method: SW846 9010B Prep
Lab SOP: GL-GC-E-067 REV# 13
Instrument: Sartorius Balance B-007

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202053270	Total Cyanide Solid LCS	URF1200957-01	.25	g
MS	1202053266	Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL
MS	1202053267	MS, ICV Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL
MSD	1202053268	MS, ICV Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL
MSD	1202053269	MS, ICV Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL

Sample ID **Run Date** **Matrix** **Initial Weight (g)** **Final Volume (mL)** **Prep Factor (mL/g)** **pH Check 1**

247806002	02-MAR-2010 15:28:00	Soil	0.53	25	47.16981	>12
247806003	02-MAR-2010 15:28:00	Soil	0.52	25	48.07692	>12
247806004	02-MAR-2010 15:28:00	Soil	0.53	25	47.16981	>12
247806005	02-MAR-2010 15:28:00	Soil	0.51	25	49.01961	>12
247806006	02-MAR-2010 15:28:00	Soil	0.5	25	50	>12
247855002	02-MAR-2010 15:28:00	Soil	0.5	25	50	>12
247902001	02-MAR-2010 15:28:00	Misc Solid	0.53	25	47.16981	>12

Comments:

Reagent/Solvent Lot ID	Description	Amount
1250189-C	50% H2SO4 CN Prep	2.5 mL
1270661-C	Bismuth Nitrate Solution	1.25 mL
1270663-C	0.8N H3NO3S	1.25 mL
1270669-C	51% MgCl2 Soln	1 mL
1273851-C	0.25N Sodium Hydroxide Solution	25 mL
WCN100302-07	150 ppb CN Distilled ICV Standard	.0375 mL

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	3/2/2010 8:46:36	OM_3-2-2010_08-43-10
150 ppb		1	axc2	3/2/2010 8:47:27	OM_3-2-2010_08-43-10
100 ppb		1	axc2	3/2/2010 8:48:20	OM_3-2-2010_08-43-10
50 ppb		1	axc2	3/2/2010 8:49:13	OM_3-2-2010_08-43-10
10 ppb		1	axc2	3/2/2010 8:50:06	OM_3-2-2010_08-43-10
CRDL 5.0 ppb		1	axc2	3/2/2010 8:51:00	OM_3-2-2010_08-43-10
ICAL-00		1	axc2	3/2/2010 8:51:54	OM_3-2-2010_08-43-10
ICV		1	axc2	3/2/2010 8:53:45	OM_3-2-2010_08-43-10
ICB		1	axc2	3/2/2010 8:55:35	OM_3-2-2010_08-43-10
CRDL		1	axc2	3/2/2010 8:57:25	OM_3-2-2010_08-43-10
1202053271	957571	1	axc2	3/2/2010 8:59:13	OM_3-2-2010_08-43-10
1202053278*	957571	25	axc2	3/2/2010 9:00:05	OM_3-2-2010_08-43-10
247806007	957571	1	axc2	3/2/2010 9:00:59	OM_3-2-2010_08-43-10
1202053272	957571	1	axc2	3/2/2010 9:01:53	OM_3-2-2010_08-43-10
1202053274	957571	1	axc2	3/2/2010 9:02:46	OM_3-2-2010_08-43-10
1202053276	957571	1	axc2	3/2/2010 9:03:40	OM_3-2-2010_08-43-10
247806008	957571	1	axc2	3/2/2010 9:04:33	OM_3-2-2010_08-43-10
1202053273	957571	1	axc2	3/2/2010 9:05:26	OM_3-2-2010_08-43-10
1202053275	957571	1	axc2	3/2/2010 9:06:19	OM_3-2-2010_08-43-10
1202053277	957571	1	axc2	3/2/2010 9:07:12	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010 9:08:05	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010 9:09:55	OM_3-2-2010_08-43-10
1202053278	957571	25	axc2	3/2/2010 9:11:42	OM_3-2-2010_08-43-10
247806009	957571	1	axc2	3/2/2010 9:12:35	OM_3-2-2010_08-43-10
247806010	957571	1	axc2	3/2/2010 9:13:28	OM_3-2-2010_08-43-10
247806011	957571	1	axc2	3/2/2010 9:14:20	OM_3-2-2010_08-43-10
247806012	957571	1	axc2	3/2/2010 9:15:13	OM_3-2-2010_08-43-10
247822001	957571	1	axc2	3/2/2010 9:16:04	OM_3-2-2010_08-43-10
247822002	957571	1	axc2	3/2/2010 9:16:57	OM_3-2-2010_08-43-10
247822003	957571	1	axc2	3/2/2010 9:17:49	OM_3-2-2010_08-43-10
247822004	957571	1	axc2	3/2/2010 9:18:43	OM_3-2-2010_08-43-10
247822005	957571	1	axc2	3/2/2010 9:19:37	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010 9:20:30	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010 9:22:20	OM_3-2-2010_08-43-10
247822006	957571	1	axc2	3/2/2010 9:24:10	OM_3-2-2010_08-43-10
247840001	957571	1	axc2	3/2/2010 9:25:03	OM_3-2-2010_08-43-10
247840002	957571	1	axc2	3/2/2010 9:25:56	OM_3-2-2010_08-43-10
247840003	957571	1	axc2	3/2/2010 9:26:50	OM_3-2-2010_08-43-10
247842001	957571	1	axc2	3/2/2010 9:27:43	OM_3-2-2010_08-43-10
247842002	957571	1	axc2	3/2/2010 9:28:37	OM_3-2-2010_08-43-10
247842003	957571	1	axc2	3/2/2010 9:29:29	OM_3-2-2010_08-43-10
247842004	957571	1	axc2	3/2/2010 9:30:22	OM_3-2-2010_08-43-10
247905001	957571	1	axc2	3/2/2010 9:31:14	OM_3-2-2010_08-43-10
1202053252	957563	1	axc2	3/2/2010 9:32:07	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010 9:32:59	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010 9:34:51	OM_3-2-2010_08-43-10
1202053254	957563	1	axc2	3/2/2010 9:36:38	OM_3-2-2010_08-43-10
247831001	957563	1	axc2	3/2/2010 9:37:31	OM_3-2-2010_08-43-10
1202053253	957563	1	axc2	3/2/2010 9:38:22	OM_3-2-2010_08-43-10
247840001	957563	1	axc2	3/2/2010 9:39:17	OM_3-2-2010_08-43-10
247840002	957563	1	axc2	3/2/2010 9:40:12	OM_3-2-2010_08-43-10
247840003	957563	1	axc2	3/2/2010 9:41:05	OM_3-2-2010_08-43-10
247842001	957563	1	axc2	3/2/2010 9:41:59	OM_3-2-2010_08-43-10
247842002	957563	1	axc2	3/2/2010 9:42:53	OM_3-2-2010_08-43-10
247842003	957563	1	axc2	3/2/2010 9:43:46	OM_3-2-2010_08-43-10
247842004	957563	1	axc2	3/2/2010 9:44:39	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010 9:45:32	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010 9:47:22	OM_3-2-2010_08-43-10

247902001	957563	1	axc2	3/2/2010	9:49:11	OM_3-2-2010_08-43-10
247905001	957563	1	axc2	3/2/2010	9:50:04	OM_3-2-2010_08-43-10
1202054733	958153	1	axc2	3/2/2010	9:50:57	OM_3-2-2010_08-43-10
1202054740	958153	25	axc2	3/2/2010	9:51:50	OM_3-2-2010_08-43-10
247838002	958153	1	axc2	3/2/2010	9:52:42	OM_3-2-2010_08-43-10
248037001	958153	1	axc2	3/2/2010	9:53:36	OM_3-2-2010_08-43-10
1202054734	958153	1	axc2	3/2/2010	9:54:28	OM_3-2-2010_08-43-10
1202054736	958153	1	axc2	3/2/2010	9:55:20	OM_3-2-2010_08-43-10
1202054738	958153	1	axc2	3/2/2010	9:56:14	OM_3-2-2010_08-43-10
248037002	958153	1	axc2	3/2/2010	9:57:09	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010	9:58:00	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010	9:59:51	OM_3-2-2010_08-43-10
1202054735	958153	1	axc2	3/2/2010	10:01:42	OM_3-2-2010_08-43-10
1202054737	958153	1	axc2	3/2/2010	10:02:36	OM_3-2-2010_08-43-10
1202054739	958153	1	axc2	3/2/2010	10:03:30	OM_3-2-2010_08-43-10
248037003	958153	1	axc2	3/2/2010	10:04:24	OM_3-2-2010_08-43-10
248037004	958153	1	axc2	3/2/2010	10:05:18	OM_3-2-2010_08-43-10
248037005	958153	1	axc2	3/2/2010	10:06:10	OM_3-2-2010_08-43-10
248037006	958153	1	axc2	3/2/2010	10:07:03	OM_3-2-2010_08-43-10
248037007	958153	1	axc2	3/2/2010	10:07:56	OM_3-2-2010_08-43-10
248037008	958153	1	axc2	3/2/2010	10:08:50	OM_3-2-2010_08-43-10
248037009	958153	1	axc2	3/2/2010	10:09:42	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010	10:10:35	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010	10:12:25	OM_3-2-2010_08-43-10
248037010*	958153	1	axc2	3/2/2010	10:14:13	OM_3-2-2010_08-43-10
248037011*	958153	1	axc2	3/2/2010	10:15:06	OM_3-2-2010_08-43-10
248037012*	958153	1	axc2	3/2/2010	10:15:59	OM_3-2-2010_08-43-10
248037013*	958153	1	axc2	3/2/2010	10:16:53	OM_3-2-2010_08-43-10
248037014*	958153	1	axc2	3/2/2010	10:17:48	OM_3-2-2010_08-43-10
248037015*	958153	1	axc2	3/2/2010	10:18:42	OM_3-2-2010_08-43-10
248037016*	958153	1	axc2	3/2/2010	10:19:36	OM_3-2-2010_08-43-10
248037017*	958153	1	axc2	3/2/2010	10:20:31	OM_3-2-2010_08-43-10
248037018*	958153	1	axc2	3/2/2010	10:21:26	OM_3-2-2010_08-43-10
248037019*	958153	1	axc2	3/2/2010	10:22:19	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010	10:23:11	OM_3-2-2010_08-43-10

Original Run Filename: OM_3-2-2010_08-43-10.OMN created 3/2/2010 08:43:10
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_3-2-2010_08-43-10.OMN last modified 3/2/2010 10:24:17
 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)				
WCN100302-01	1	S1	200	9.17	3/2/2010@08:46:36			200 ppb
WCN100302-02	1	S2	150	7.02	3/2/2010@08:47:27			150 ppb
WCN100302-03	1	S3	100	4.67	3/2/2010@08:48:20			100 ppb
WCN100302-04	1	S4	50.0	2.38	3/2/2010@08:49:13			50 ppb
WCN100302-05	1	S5	10.0	0.547	3/2/2010@08:50:06			10 ppb
WCN100302-06	1	S6	5.00	0.398	3/2/2010@08:51:00			CRDL 5.0 ppb
WCN100302-08	1	S7	0.00	0.0805	3/2/2010@08:51:54			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99991 > 0.99500					
Message			Pass					
Action			Continue					
WCN100302-07	1	S8	144	6.68	3/2/2010@08:53:45			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-3.9 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-3.9 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100302-08	1	S7	-1.14	0.0645	3/2/2010@08:55:35			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.14 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.14 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100302-06	1	S6	4.39	0.316	3/2/2010@08:57:25			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			4.39 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			4.39 > 2.50					
Message			Pass					
Action			None					
1202053271|957571|MB	1	29	-1.73	0.0380	3/2/2010@08:59:13			
1202053278|LCS	1	30	491	22.5	3/2/2010@09:00:05		25.00	
247806007	1	31	-1.20	0.0620	3/2/2010@09:00:59			
1202053272|DUP	1	32	0.127	0.122	3/2/2010@09:01:53			
1202053274|MS	1	33	89.2	4.18	3/2/2010@09:02:46			
1202053276|MSD	1	34	73.9	3.48	3/2/2010@09:03:40			
247806008	1	35	2.38	0.225	3/2/2010@09:04:33			
1202053273|DUP	1	36	2.16	0.215	3/2/2010@09:05:26			
1202053275|MS	1	37	51.3	2.45	3/2/2010@09:06:19			
1202053277|MSD	1	38	45.8	2.20	3/2/2010@09:07:12			
WCN100302-03	1	S3	106	4.92	3/2/2010@09:08:05			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.6 < 10.0					

		Message	CCV Passed			
		Action	Continue			
DQM Test: < - Percent Relative Difference						
		Result:	5.6 < 10.0			
		Message	CCV Passed			
		Action	Continue			
WCN100302-08	1	S7	-1.95	0.0279	3/2/2010@09:09:55	CCB
		Known Conc:	0.00			
DQM Test: > + Concentration Limit						
		Result:	-1.95 < 5.00			
		Message	CCB Passed			
		Action	Continue			
DQM Test: < - Concentration Limit						
		Result:	-1.95 > -5.00			
		Message	CCB Passed			
		Action	Continue			
1202053278|LCS	1	30	19.6	1.01	3/2/2010@09:11:42	25.00
247806009	1	39	-1.05	0.0686	3/2/2010@09:12:35	
247806010	1	40	-0.889	0.0760	3/2/2010@09:13:28	
247806011	1	41	-1.37	0.0543	3/2/2010@09:14:20	
247806012	1	42	-2.58	-8.78e-4	3/2/2010@09:15:13	
247822001	1	43	-1.79	0.0348	3/2/2010@09:16:04	
247822002	1	44	-2.00	0.0255	3/2/2010@09:16:57	
247822003	1	45	-1.52	0.0472	3/2/2010@09:17:49	
247822004	1	46	-2.00	0.0252	3/2/2010@09:18:43	
247822005	1	47	-2.01	0.0252	3/2/2010@09:19:37	
WCN100302-03	1	S3	106	4.92	3/2/2010@09:20:30	CCV
		Known Conc:	100			
DQM Test: > + Percent Relative Difference						
		Result:	5.6 < 10.0			
		Message	CCV Passed			
		Action	Continue			
DQM Test: < - Percent Relative Difference						
		Result:	5.6 < 10.0			
		Message	CCV Passed			
		Action	Continue			
WCN100302-08	1	S7	-2.66	-0.00455	3/2/2010@09:22:20	CCB
		Known Conc:	0.00			
DQM Test: > + Concentration Limit						
		Result:	-2.66 < 5.00			
		Message	CCB Passed			
		Action	Continue			
DQM Test: < - Concentration Limit						
		Result:	-2.66 > -5.00			
		Message	CCB Passed			
		Action	Continue			
247822006	1	48	-0.812	0.0795	3/2/2010@09:24:10	
247840001	1	49	-0.505	0.0935	3/2/2010@09:25:03	
247840002	1	50	-1.81	0.0341	3/2/2010@09:25:56	
247840003	1	51	-0.808	0.0797	3/2/2010@09:26:50	
247842001	1	52	-0.181	0.108	3/2/2010@09:27:43	
247842002	1	53	3.80	0.289	3/2/2010@09:28:37	
247842003	1	54	-0.365	0.0999	3/2/2010@09:29:29	
247842004	1	55	0.0716	0.120	3/2/2010@09:30:22	
247905001	1	56	1.52e+3	69.3	3/2/2010@09:31:14	
1202053252|957563|MB	1	57	0.312	0.131	3/2/2010@09:32:07	
WCN100302-03	1	S3	107	5.00	3/2/2010@09:32:59	CCV
		Known Conc:	100			
DQM Test: > + Percent Relative Difference						
		Result:	7.2 < 10.0			
		Message	CCV Passed			
		Action	Continue			
DQM Test: < - Percent Relative Difference						
		Result:	7.2 < 10.0			
		Message	CCV Passed			
		Action	Continue			
WCN100302-08	1	S7	-2.71	-0.00706	3/2/2010@09:34:51	CCB
		Known Conc:	0.00			

DQM Test: > + Concentration Limit						
Result:		-2.71 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-2.71 > -5.00				
Message		CCB Passed				
Action		Continue				
1202053254||LCS	1	58	-1.30	0.0574	3/2/2010@09:36:38	
247831001	1	59	21.5	1.10	3/2/2010@09:37:31	
1202053253||DUP	1	60	18.0	0.935	3/2/2010@09:38:22	
247840001	1	61	18.8	0.974	3/2/2010@09:39:17	
247840002	1	62	-0.323	0.102	3/2/2010@09:40:12	
247840003	1	63	18.0	0.935	3/2/2010@09:41:05	
247842001	1	64	20.6	1.06	3/2/2010@09:41:59	
247842002	1	65	19.2	0.992	3/2/2010@09:42:53	
247842003	1	66	14.2	0.761	3/2/2010@09:43:46	
247842004	1	67	20.6	1.05	3/2/2010@09:44:39	
WCN100302-03	1	S3	107	4.99	3/2/2010@09:45:32	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:		7.1 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		7.1 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100302-08	1	S7	-2.56	-1.26e-4	3/2/2010@09:47:22	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-2.56 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-2.56 > -5.00				
Message		CCB Passed				
Action		Continue				
247902001	1	68	1.41e+3	64.1	3/2/2010@09:49:11	
247905001	1	69	1.23e+3	56.2	3/2/2010@09:50:04	
1202054733|958153|MB	1	70	-0.200	0.107	3/2/2010@09:50:57	
1202054740||LCS	1	71	17.4	0.907	3/2/2010@09:51:50	25.00
247838002	1	72	-0.972	0.0723	3/2/2010@09:52:42	
248037001	1	73	-1.62	0.0428	3/2/2010@09:53:36	
1202054734||DUP	1	74	-1.80	0.0346	3/2/2010@09:54:28	
1202054736||MS	1	75	107	4.98	3/2/2010@09:55:20	
1202054738||MSD	1	76	104	4.83	3/2/2010@09:56:14	
248037002	1	77	-0.939	0.0738	3/2/2010@09:57:09	
WCN100302-03	1	S3	107	5.00	3/2/2010@09:58:00	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:		7.2 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		7.2 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100302-08	1	S7	-2.55	3.95e-4	3/2/2010@09:59:51	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-2.55 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-2.55 > -5.00				
Message		CCB Passed				
Action		Continue				

1202054735	DUP	1	78	-1.07	0.0678	3/2/2010@10:01:42	
1202054737	MS	1	79	98.6	4.61	3/2/2010@10:02:36	
1202054739	MSD	1	80	96.1	4.49	3/2/2010@10:03:30	
248037003		1	81	0.707	0.149	3/2/2010@10:04:24	
248037004		1	82	1.09	0.166	3/2/2010@10:05:18	
248037005		1	83	0.359	0.133	3/2/2010@10:06:10	
248037006		1	84	0.328	0.131	3/2/2010@10:07:03	
248037007		1	85	0.0201	0.117	3/2/2010@10:07:56	
248037008		1	86	-2.66	-0.00454	3/2/2010@10:08:50	
248037009		1	87	-2.26	0.0136	3/2/2010@10:09:42	
WCN100302-03		1	S3	108	5.03	3/2/2010@10:10:35	CCV
Known Conc:				100			
DQM Test: > + Percent Relative Difference							
Result:				7.8 < 10.0			
Message				CCV Passed			
Action				Continue			
DQM Test: < - Percent Relative Difference							
Result:				7.8 < 10.0			
Message				CCV Passed			
Action				Continue			
WCN100302-08		1	S7	-2.63	-0.00301	3/2/2010@10:12:25	CCB
Known Conc:				0.00			
DQM Test: > + Concentration Limit							
Result:				-2.63 < 5.00			
Message				CCB Passed			
Action				Continue			
DQM Test: < - Concentration Limit							
Result:				-2.63 > -5.00			
Message				CCB Passed			
Action				Continue			
248037010		1	88	0.394	0.134	3/2/2010@10:14:13	
248037011		1	89	0.366	0.133	3/2/2010@10:15:06	
248037012		1	90	-2.34	0.00976	3/2/2010@10:15:59	
248037013		1	91	-1.30	0.0573	3/2/2010@10:16:53	
248037014		1	92	1.83	0.200	3/2/2010@10:17:48	
248037015		1	93	0.0806	0.120	3/2/2010@10:18:42	
248037016		1	94	-1.39	0.0532	3/2/2010@10:19:36	
248037017		1	95	0.328	0.131	3/2/2010@10:20:31	
248037018		1	96	-1.63	0.0424	3/2/2010@10:21:26	
248037019		1	97	-0.215	0.107	3/2/2010@10:22:19	
WCN100302-03		1	S3	118	5.48	3/2/2010@10:23:11	CCV
Known Conc:				100			
DQM Test: > + Percent Relative Difference							
Result:				17.8 > 10.0			
Message				CCV Failed			
Action				Stop Run			
DQM Test: < - Percent Relative Difference							
Result:				17.8 > 10.0			
Message				CCV Passed			
Action				Continue			

Analyte Properties Table for OM_3-2-2010_08-43-10.OMN

Property	Channel 1
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

[illegible]

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.17	0.613	0.6	3/2/2010	08:47:39
2	150	1	7.02	0.465	-1.1	3/2/2010	08:48:31
3	100	1	4.67	0.309	0.1	3/2/2010	08:49:23
4	50.0	1	2.38	0.162	0.5	3/2/2010	08:50:16
5	10.0	1	0.547	0.0492	4.4	3/2/2010	08:51:09
6	5.00	1	0.398	0.0229	-15.5	3/2/2010	08:52:03
7	0.00	1	0.0805	0.00272		3/2/2010	08:52:57

Peak Area(V.s)

9.17

0.00

TCYANIDE concentration, ug/L

200

Area = 0.0455 * Conc + 0.117
 Conc = 22.0 * Area - 2.56
 Correlation Coefficient (r) = 0.99991

No Weighting

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	3/2/2010 14:51:53	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 14:53:44	OM_3-2-2010_14-50-22
247539011	956938	1	axc2	3/2/2010 14:55:33	OM_3-2-2010_14-50-22
247546001	956938	1	axc2	3/2/2010 14:56:26	OM_3-2-2010_14-50-22
247546002	956938	1	axc2	3/2/2010 14:57:19	OM_3-2-2010_14-50-22
247546003	956938	1	axc2	3/2/2010 14:58:12	OM_3-2-2010_14-50-22
247546004	956938	1	axc2	3/2/2010 14:59:05	OM_3-2-2010_14-50-22
247550001	956938	1	axc2	3/2/2010 14:59:57	OM_3-2-2010_14-50-22
247770001	956938	1	axc2	3/2/2010 15:00:49	OM_3-2-2010_14-50-22
247770002	956938	1	axc2	3/2/2010 15:01:42	OM_3-2-2010_14-50-22
247831001	956938	1	axc2	3/2/2010 15:02:33	OM_3-2-2010_14-50-22
1202049763*	955994	1	axc2	3/2/2010 15:03:26	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010 15:04:18	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 15:06:08	OM_3-2-2010_14-50-22
1202049763	955994	1	axc2	3/2/2010 15:07:57	OM_3-2-2010_14-50-22
1202049770	955994	25	axc2	3/2/2010 15:08:48	OM_3-2-2010_14-50-22
247321007	955994	1	axc2	3/2/2010 15:09:43	OM_3-2-2010_14-50-22
1202049764	955994	1	axc2	3/2/2010 15:10:37	OM_3-2-2010_14-50-22
1202049766	955994	1	axc2	3/2/2010 15:11:30	OM_3-2-2010_14-50-22
1202049768	955994	1	axc2	3/2/2010 15:12:23	OM_3-2-2010_14-50-22
247325001	955994	1	axc2	3/2/2010 15:13:17	OM_3-2-2010_14-50-22
1202049765	955994	1	axc2	3/2/2010 15:14:10	OM_3-2-2010_14-50-22
1202049767	955994	1	axc2	3/2/2010 15:15:03	OM_3-2-2010_14-50-22
1202049769	955994	1	axc2	3/2/2010 15:15:56	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010 15:16:48	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 15:18:39	OM_3-2-2010_14-50-22
247456001	955994	1	axc2	3/2/2010 15:20:27	OM_3-2-2010_14-50-22
247456002	955994	1	axc2	3/2/2010 15:21:20	OM_3-2-2010_14-50-22
247456003	955994	1	axc2	3/2/2010 15:22:12	OM_3-2-2010_14-50-22
247456004	955994	1	axc2	3/2/2010 15:23:05	OM_3-2-2010_14-50-22
247456005	955994	1	axc2	3/2/2010 15:23:57	OM_3-2-2010_14-50-22
247456006	955994	1	axc2	3/2/2010 15:24:49	OM_3-2-2010_14-50-22
247463001	955994	1	axc2	3/2/2010 15:25:41	OM_3-2-2010_14-50-22
247463002	955994	1	axc2	3/2/2010 15:26:35	OM_3-2-2010_14-50-22
247463003	955994	1	axc2	3/2/2010 15:27:29	OM_3-2-2010_14-50-22
247463004	955994	1	axc2	3/2/2010 15:28:23	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010 15:29:15	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 15:31:06	OM_3-2-2010_14-50-22
247463005	955994	1	axc2	3/2/2010 15:32:56	OM_3-2-2010_14-50-22
247463006	955994	1	axc2	3/2/2010 15:33:49	OM_3-2-2010_14-50-22
247469001	955994	1	axc2	3/2/2010 15:34:42	OM_3-2-2010_14-50-22
247469002	955994	1	axc2	3/2/2010 15:35:36	OM_3-2-2010_14-50-22
247469003*	955994	1	axc2	3/2/2010 15:36:28	OM_3-2-2010_14-50-22
247539001	955994	1	axc2	3/2/2010 15:37:21	OM_3-2-2010_14-50-22
247539002	955994	1	axc2	3/2/2010 15:38:14	OM_3-2-2010_14-50-22
247539003	955994	1	axc2	3/2/2010 15:39:07	OM_3-2-2010_14-50-22
1202051809	956940	1	axc2	3/2/2010 15:39:59	OM_3-2-2010_14-50-22
1202051813	956940	1	axc2	3/2/2010 15:40:51	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010 15:41:44	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 15:43:34	OM_3-2-2010_14-50-22
247771001	956940	1	axc2	3/2/2010 15:45:22	OM_3-2-2010_14-50-22
1202053279	956940	1	axc2	3/2/2010 15:46:14	OM_3-2-2010_14-50-22
1202053280	956940	1	axc2	3/2/2010 15:47:08	OM_3-2-2010_14-50-22
1202053281	956940	1	axc2	3/2/2010 15:48:02	OM_3-2-2010_14-50-22
247780001	956940	1	axc2	3/2/2010 15:48:57	OM_3-2-2010_14-50-22
247793001	956940	1	axc2	3/2/2010 15:49:50	OM_3-2-2010_14-50-22
247807001	956940	1	axc2	3/2/2010 15:50:43	OM_3-2-2010_14-50-22
247807002	956940	1	axc2	3/2/2010 15:51:37	OM_3-2-2010_14-50-22

247807003	956940	1	axc2	3/2/2010	15:52:31	OM_3-2-2010_14-50-22
247807004	956940	1	axc2	3/2/2010	15:53:24	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	15:54:17	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	15:56:06	OM_3-2-2010_14-50-22
247817002	956940	1	axc2	3/2/2010	15:57:55	OM_3-2-2010_14-50-22
1202051810	956940	1	axc2	3/2/2010	15:58:48	OM_3-2-2010_14-50-22
1202051811	956940	1	axc2	3/2/2010	15:59:41	OM_3-2-2010_14-50-22
1202051812	956940	1	axc2	3/2/2010	16:00:34	OM_3-2-2010_14-50-22
247819001	956940	1	axc2	3/2/2010	16:01:26	OM_3-2-2010_14-50-22
247858001	956940	1	axc2	3/2/2010	16:02:19	OM_3-2-2010_14-50-22
247858002	956940	1	axc2	3/2/2010	16:03:11	OM_3-2-2010_14-50-22
247858003	956940	1	axc2	3/2/2010	16:04:05	OM_3-2-2010_14-50-22
247858004	956940	1	axc2	3/2/2010	16:05:00	OM_3-2-2010_14-50-22
247858005	956940	1	axc2	3/2/2010	16:05:54	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:06:46	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:08:37	OM_3-2-2010_14-50-22
247858006	956940	1	axc2	3/2/2010	16:10:27	OM_3-2-2010_14-50-22
1202053255	957567	1	axc2	3/2/2010	16:11:21	OM_3-2-2010_14-50-22
1202053262	957567	25	axc2	3/2/2010	16:12:15	OM_3-2-2010_14-50-22
247770003	957567	1	axc2	3/2/2010	16:13:08	OM_3-2-2010_14-50-22
247770004	957567	1	axc2	3/2/2010	16:14:01	OM_3-2-2010_14-50-22
247770005	957567	1	axc2	3/2/2010	16:14:54	OM_3-2-2010_14-50-22
247770006	957567	1	axc2	3/2/2010	16:15:47	OM_3-2-2010_14-50-22
247770007	957567	1	axc2	3/2/2010	16:16:41	OM_3-2-2010_14-50-22
247781001	957567	1	axc2	3/2/2010	16:17:34	OM_3-2-2010_14-50-22
1202053256	957567	1	axc2	3/2/2010	16:18:26	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:19:18	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:21:08	OM_3-2-2010_14-50-22
1202053258	957567	1	axc2	3/2/2010	16:22:57	OM_3-2-2010_14-50-22
1202053260	957567	1	axc2	3/2/2010	16:23:49	OM_3-2-2010_14-50-22
247781002	957567	1	axc2	3/2/2010	16:24:44	OM_3-2-2010_14-50-22
1202053257	957567	1	axc2	3/2/2010	16:25:38	OM_3-2-2010_14-50-22
1202053259	957567	1	axc2	3/2/2010	16:26:32	OM_3-2-2010_14-50-22
1202053261	957567	1	axc2	3/2/2010	16:27:27	OM_3-2-2010_14-50-22
247781003	957567	1	axc2	3/2/2010	16:28:21	OM_3-2-2010_14-50-22
247781004	957567	1	axc2	3/2/2010	16:29:15	OM_3-2-2010_14-50-22
247781005	957567	1	axc2	3/2/2010	16:30:09	OM_3-2-2010_14-50-22
247781006	957567	1	axc2	3/2/2010	16:31:03	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:31:55	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:33:45	OM_3-2-2010_14-50-22
247781007	957567	1	axc2	3/2/2010	16:35:34	OM_3-2-2010_14-50-22
247781008	957567	1	axc2	3/2/2010	16:36:28	OM_3-2-2010_14-50-22
247781009	957567	1	axc2	3/2/2010	16:37:21	OM_3-2-2010_14-50-22
247781010	957567	1	axc2	3/2/2010	16:38:14	OM_3-2-2010_14-50-22
247781011	957567	1	axc2	3/2/2010	16:39:07	OM_3-2-2010_14-50-22
247781012	957567	1	axc2	3/2/2010	16:40:00	OM_3-2-2010_14-50-22
247781013	957567	1	axc2	3/2/2010	16:40:52	OM_3-2-2010_14-50-22
247781014	957567	1	axc2	3/2/2010	16:41:47	OM_3-2-2010_14-50-22
247781015	957567	1	axc2	3/2/2010	16:42:42	OM_3-2-2010_14-50-22
1202053263	957569	1	axc2	3/2/2010	16:43:36	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:44:28	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:46:19	OM_3-2-2010_14-50-22
1202053270	957569	25	axc2	3/2/2010	16:48:09	OM_3-2-2010_14-50-22
247770008	957569	1	axc2	3/2/2010	16:49:03	OM_3-2-2010_14-50-22
1202053264	957569	1	axc2	3/2/2010	16:49:57	OM_3-2-2010_14-50-22
1202053266	957569	1	axc2	3/2/2010	16:50:51	OM_3-2-2010_14-50-22
1202053268	957569	1	axc2	3/2/2010	16:51:45	OM_3-2-2010_14-50-22
247770009	957569	1	axc2	3/2/2010	16:52:39	OM_3-2-2010_14-50-22
1202053265	957569	1	axc2	3/2/2010	16:53:32	OM_3-2-2010_14-50-22
1202053267	957569	1	axc2	3/2/2010	16:54:26	OM_3-2-2010_14-50-22

1202053269	957569	1	axc2	3/2/2010	16:55:19	OM_3-2-2010_14-50-22
247770010	957569	1	axc2	3/2/2010	16:56:12	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:57:04	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:58:55	OM_3-2-2010_14-50-22
247770011	957569	1	axc2	3/2/2010	17:00:44	OM_3-2-2010_14-50-22
247784002	957569	1	axc2	3/2/2010	17:01:37	OM_3-2-2010_14-50-22
247790002	957569	1	axc2	3/2/2010	17:02:32	OM_3-2-2010_14-50-22
247790003	957569	1	axc2	3/2/2010	17:03:26	OM_3-2-2010_14-50-22
247794001	957569	1	axc2	3/2/2010	17:04:21	OM_3-2-2010_14-50-22
247794002	957569	1	axc2	3/2/2010	17:05:15	OM_3-2-2010_14-50-22
247794003	957569	1	axc2	3/2/2010	17:06:10	OM_3-2-2010_14-50-22
247794004	957569	1	axc2	3/2/2010	17:07:04	OM_3-2-2010_14-50-22
247794005	957569	1	axc2	3/2/2010	17:07:58	OM_3-2-2010_14-50-22
247806001	957569	1	axc2	3/2/2010	17:08:52	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	17:09:44	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	17:11:35	OM_3-2-2010_14-50-22
247806002	957569	1	axc2	3/2/2010	17:13:25	OM_3-2-2010_14-50-22
247806003	957569	1	axc2	3/2/2010	17:14:18	OM_3-2-2010_14-50-22
247806004	957569	1	axc2	3/2/2010	17:15:12	OM_3-2-2010_14-50-22
247806005*	957569	1	axc2	3/2/2010	17:16:06	OM_3-2-2010_14-50-22
247806006	957569	1	axc2	3/2/2010	17:16:59	OM_3-2-2010_14-50-22
247855002	957569	1	axc2	3/2/2010	17:17:52	OM_3-2-2010_14-50-22
247902001	957569	1	axc2	3/2/2010	17:18:45	OM_3-2-2010_14-50-22
247806005*	957569	1	axc2	3/2/2010	17:19:38	OM_3-2-2010_14-50-22
247858001	956940	2	axc2	3/2/2010	17:20:31	OM_3-2-2010_14-50-22
247858002	956940	2	axc2	3/2/2010	17:21:23	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	17:22:15	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	17:24:05	OM_3-2-2010_14-50-22
247469003	955994	1	axc2	3/2/2010	17:25:55	OM_3-2-2010_14-50-22
247902001	957569	50	axc2	3/2/2010	17:26:48	OM_3-2-2010_14-50-22
247806005	957569	1	axc2	3/2/2010	17:27:41	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	17:28:34	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	17:30:24	OM_3-2-2010_14-50-22

Original Run Filename: OM_3-2-2010_14-50-22.OMN created 3/2/2010 14:50:22
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_3-2-2010_14-50-22.OMN last modified 3/2/2010 17:31:29
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1		Detection Time	ADF	MDF	Description
			TCYANIDE	Area (Vs)				
WCN100302-03	1	S3	107	4.98	3/2/2010@14:51:53			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.9 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.9 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100302-08	1	S7	-1.63	0.0424	3/2/2010@14:53:44			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.63 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.63 > -5.00					
Message			CCB Passed					
Action			Continue					
247539011|956938|	1	16	-0.875	0.0767	3/2/2010@14:55:33			
247546001	1	21	-2.72	-0.00747	3/2/2010@14:56:26			
247546002	1	22	-1.55	0.0460	3/2/2010@14:57:19			
247546003	1	23	-2.56	0.00	3/2/2010@14:58:12			
247546004	1	24	-2.51	0.00213	3/2/2010@14:59:05			
247550001	1	25	-1.50	0.0482	3/2/2010@14:59:57			
247770001	1	26	-2.55	3.43e-4	3/2/2010@15:00:49			
247770002	1	27	-2.56	-1.49e-4	3/2/2010@15:01:42			
247831001	1	28	-0.925	0.0744	3/2/2010@15:02:33			
1202049763|955994|MB	1	29	6.09	0.394	3/2/2010@15:03:26			
WCN100302-03	1	S3	107	4.97	3/2/2010@15:04:18			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.7 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.7 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100302-08	1	S7	-2.56	-1.64e-4	3/2/2010@15:06:08			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.56 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.56 > -5.00					
Message			CCB Passed					
Action			Continue					
1202049763|955994|MB	1	29	-1.20	0.0618	3/2/2010@15:07:57			
1202049770|LCS	1	30	26.0	1.30	3/2/2010@15:08:48		25.00	
247321007	1	31	-0.848	0.0779	3/2/2010@15:09:43			
1202049764|DUP	1	32	-1.10	0.0663	3/2/2010@15:10:37			
1202049766|MS	1	33	38.7	1.88	3/2/2010@15:11:30			
1202049768|MSD	1	34	55.0	2.62	3/2/2010@15:12:23			

247325001	1	35	2.97	0.252	3/2/2010@15:13:17		
1202049765||DUP	1	36	-1.44	0.0511	3/2/2010@15:14:10		
1202049767||MS	1	37	105	4.89	3/2/2010@15:15:03		
1202049769||MSD	1	38	100	4.68	3/2/2010@15:15:56		
WCN100302-03	1	S3	106	4.94	3/2/2010@15:16:48		CCV
Known Conc: 100							
DQM Test: > + Percent Relative Difference							
Result: 5.9 < 10.0							
Message CCV Passed							
Action Continue							
DQM Test: < - Percent Relative Difference							
Result: 5.9 < 10.0							
Message CCV Passed							
Action Continue							
WCN100302-08	1	S7	-1.63	0.0424	3/2/2010@15:18:39		CCB
Known Conc: 0.00							
DQM Test: > + Concentration Limit							
Result: -1.63 < 5.00							
Message CCB Passed							
Action Continue							
DQM Test: < - Concentration Limit							
Result: -1.63 > -5.00							
Message CCB Passed							
Action Continue							
247456001	1	39	-1.60	0.0434	3/2/2010@15:20:27		
247456002	1	40	5.61	0.372	3/2/2010@15:21:20		
247456003	1	41	-0.655	0.0867	3/2/2010@15:22:12		
247456004	1	42	0.189	0.125	3/2/2010@15:23:05		
247456005	1	43	-1.49	0.0487	3/2/2010@15:23:57		
247456006	1	44	-2.76	-0.00917	3/2/2010@15:24:49		
247463001	1	45	3.46	0.274	3/2/2010@15:25:41		
247463002	1	46	-1.67	0.0403	3/2/2010@15:26:35		
247463003	1	47	-1.52	0.0473	3/2/2010@15:27:29		
247463004	1	48	-1.35	0.0551	3/2/2010@15:28:23		
WCN100302-03	1	S3	107	4.97	3/2/2010@15:29:15		CCV
Known Conc: 100							
DQM Test: > + Percent Relative Difference							
Result: 6.6 < 10.0							
Message CCV Passed							
Action Continue							
DQM Test: < - Percent Relative Difference							
Result: 6.6 < 10.0							
Message CCV Passed							
Action Continue							
WCN100302-08	1	S7	-2.57	-4.02e-4	3/2/2010@15:31:06		CCB
Known Conc: 0.00							
DQM Test: > + Concentration Limit							
Result: -2.57 < 5.00							
Message CCB Passed							
Action Continue							
DQM Test: < - Concentration Limit							
Result: -2.57 > -5.00							
Message CCB Passed							
Action Continue							
247463005	1	49	-1.35	0.0551	3/2/2010@15:32:56		
247463006	1	50	-2.56	0.00	3/2/2010@15:33:49		
247469001	1	51	-3.03	-0.0213	3/2/2010@15:34:42		
247469002	1	52	-1.91	0.0295	3/2/2010@15:35:36		
247469003	1	53	12.1	0.667	3/2/2010@15:36:28		
247539001	1	54	2.67	0.238	3/2/2010@15:37:21		
247539002	1	55	-1.81	0.0340	3/2/2010@15:38:14		
247539003	1	56	-1.67	0.0406	3/2/2010@15:39:07		
1202051809|956940|MB	1	57	-1.40	0.0526	3/2/2010@15:39:59		
1202051813|LCS	1	58	54.8	2.61	3/2/2010@15:40:51		
WCN100302-03	1	S3	107	5.00	3/2/2010@15:41:44		CCV
Known Conc: 100							
DQM Test: > + Percent Relative Difference							
Result: 7.3 < 10.0							

Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			7.3 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100302-08	1	S7	-0.884	0.0763	3/2/2010@15:43:34			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-0.884 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.884 > -5.00					
Message			CCB Passed					
Action			Continue					
247771001	1	59	-1.58	0.0446	3/2/2010@15:45:22			
1202053279||DUP	1	60	-2.56	-2.17e-4	3/2/2010@15:46:14			
1202053280||MS	1	61	117	5.44	3/2/2010@15:47:08			
1202053281||MSD	1	62	115	5.35	3/2/2010@15:48:02			
247780001	1	63	-2.82	-0.0117	3/2/2010@15:48:57			
247793001	1	64	-2.05	0.0233	3/2/2010@15:49:50			
247807001	1	65	-2.55	3.61e-4	3/2/2010@15:50:43			
247807002	1	66	-2.09	0.0216	3/2/2010@15:51:37			
247807003	1	67	-2.55	3.04e-4	3/2/2010@15:52:31			
247807004	1	68	-2.56	-1.55e-4	3/2/2010@15:53:24			
WCN100302-03	1	S3	106	4.96	3/2/2010@15:54:17			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.3 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.3 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100302-08	1	S7	-2.36	0.00888	3/2/2010@15:56:06			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.36 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.36 > -5.00					
Message			CCB Passed					
Action			Continue					
247817002	1	69	-1.44	0.0509	3/2/2010@15:57:55			
1202051810||DUP	1	70	-2.52	0.00194	3/2/2010@15:58:48			
1202051811||MS	1	71	114	5.31	3/2/2010@15:59:41			
1202051812||MSD	1	72	105	4.92	3/2/2010@16:00:34			
247819001	1	73	31.6	1.55	3/2/2010@16:01:26			
247858001	1	74	209	9.63	3/2/2010@16:02:19			
247858002	1	75	209	9.62	3/2/2010@16:03:11			
247858003	1	76	18.8	0.973	3/2/2010@16:04:05			
247858004	1	77	80.7	3.79	3/2/2010@16:05:00			
247858005	1	78	45.1	2.17	3/2/2010@16:05:54			
WCN100302-03	1	S3	107	5.00	3/2/2010@16:06:46			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			7.2 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			7.2 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100302-08	1	S7	-1.91	0.0295	3/2/2010@16:08:37			CCB
Known Conc:			0.00					

DQM Test: > + Concentration Limit									
Result:		-1.91 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-1.91 > -5.00							
Message		CCB Passed							
Action		Continue							
247858006	1	79	-0.616	0.0885	3/2/2010@16:10:27				
1202053255	957567	MB	1	80	-2.57	-3.76e-4	3/2/2010@16:11:21		
1202053262	LCS	1	81	15.5	0.824	3/2/2010@16:12:15			25.00
247770003	1	82	-2.10	0.0209	3/2/2010@16:13:08				
247770004	1	83	-2.01	0.0248	3/2/2010@16:14:01				
247770005	1	84	-2.68	-0.00534	3/2/2010@16:14:54				
247770006	1	85	-2.55	2.76e-4	3/2/2010@16:15:47				
247770007	1	86	-2.45	0.00519	3/2/2010@16:16:41				
247781001	1	87	-0.808	0.0797	3/2/2010@16:17:34				
1202053256	DUP	1	88	-0.969	0.0724	3/2/2010@16:18:26			
WCN100302-03	1	S3	107	5.00	3/2/2010@16:19:18			CCV	
Known Conc:			100						
DQM Test: > + Percent Relative Difference									
Result:		7.2 < 10.0							
Message		CCV Passed							
Action		Continue							
DQM Test: < - Percent Relative Difference									
Result:		7.2 < 10.0							
Message		CCV Passed							
Action		Continue							
WCN100302-08	1	S7	-2.72	-0.00736	3/2/2010@16:21:08			CCB	
Known Conc:			0.00						
DQM Test: > + Concentration Limit									
Result:		-2.72 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-2.72 > -5.00							
Message		CCB Passed							
Action		Continue							
1202053258	MS	1	89	97.5	4.56	3/2/2010@16:22:57			
1202053260	MSD	1	90	105	4.92	3/2/2010@16:23:49			
247781002	1	91	-2.75	-0.00887	3/2/2010@16:24:44				
1202053257	DUP	1	92	-2.62	-0.00284	3/2/2010@16:25:38			
1202053259	MS	1	93	110	5.13	3/2/2010@16:26:32			
1202053261	MSD	1	94	104	4.86	3/2/2010@16:27:27			
247781003	1	95	-1.94	0.0281	3/2/2010@16:28:21				
247781004	1	96	-2.57	-3.51e-4	3/2/2010@16:29:15				
247781005	1	97	4.38	0.316	3/2/2010@16:30:09				
247781006	1	98	-2.66	-0.00478	3/2/2010@16:31:03				
WCN100302-03	1	S3	105	4.91	3/2/2010@16:31:55			CCV	
Known Conc:			100						
DQM Test: > + Percent Relative Difference									
Result:		5.2 < 10.0							
Message		CCV Passed							
Action		Continue							
DQM Test: < - Percent Relative Difference									
Result:		5.2 < 10.0							
Message		CCV Passed							
Action		Continue							
WCN100302-08	1	S7	-2.09	0.0214	3/2/2010@16:33:45			CCB	
Known Conc:			0.00						
DQM Test: > + Concentration Limit									
Result:		-2.09 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-2.09 > -5.00							
Message		CCB Passed							
Action		Continue							

247781007	1	99	-2.56	1.11e-4	3/2/2010@16:35:34		
247781008	1	100	-2.55	3.30e-4	3/2/2010@16:36:28		
247781009	1	101	-2.12	0.0202	3/2/2010@16:37:21		
247781010	1	102	0.184	0.125	3/2/2010@16:38:14		
247781011	1	103	-0.587	0.0898	3/2/2010@16:39:07		
247781012	1	104	11.5	0.639	3/2/2010@16:40:00		
247781013	1	105	-2.62	-0.00267	3/2/2010@16:40:52		
247781014	1	106	2.25	0.219	3/2/2010@16:41:47		
247781015	1	107	-1.14	0.0648	3/2/2010@16:42:42		
1202053263|957569|MB	1	108	-2.86	-0.0138	3/2/2010@16:43:36		
WCN100302-03	1	S3	104	4.87	3/2/2010@16:44:28		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			4.4 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			4.4 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100302-08	1	S7	-1.95	0.0280	3/2/2010@16:46:19		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.95 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.95 > -5.00				
Message			CCB Passed				
Action			Continue				
1202053270|LCS	1	109	28.4	1.41	3/2/2010@16:48:09	25.00	
247770008	1	110	-1.72	0.0381	3/2/2010@16:49:03		
1202053264|DUP	1	111	-1.87	0.0315	3/2/2010@16:49:57		
1202053266|MS	1	112	106	4.96	3/2/2010@16:50:51		
1202053268|MSD	1	113	109	5.07	3/2/2010@16:51:45		
247770009	1	114	-2.46	0.00432	3/2/2010@16:52:39		
1202053265|DUP	1	115	-2.01	0.0249	3/2/2010@16:53:32		
1202053267|MS	1	116	121	5.63	3/2/2010@16:54:26		
1202053269|MSD	1	117	104	4.87	3/2/2010@16:55:19		
247770010	1	118	-1.54	0.0462	3/2/2010@16:56:12		
WCN100302-03	1	S3	105	4.90	3/2/2010@16:57:04		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			5.1 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			5.1 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100302-08	1	S7	-2.55	3.56e-4	3/2/2010@16:58:55		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-2.55 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-2.55 > -5.00				
Message			CCB Passed				
Action			Continue				
247770011	1	119	-2.56	-1.49e-4	3/2/2010@17:00:44		
247784002	1	120	-1.29	0.0576	3/2/2010@17:01:37		
247790002	1	121	-2.12	0.0200	3/2/2010@17:02:32		
247790003	1	122	-2.56	0.00	3/2/2010@17:03:26		
247794001	1	123	-2.56	-1.49e-4	3/2/2010@17:04:21		
247794002	1	124	-2.55	3.61e-4	3/2/2010@17:05:15		
247794003	1	125	-2.72	-0.00709	3/2/2010@17:06:10		
247794004	1	126	-2.78	-0.00991	3/2/2010@17:07:04		

247794005	1	127	-1.86	0.0318	3/2/2010@17:07:58		
Calibration:			Table/Fig. 1				
247806001	1	128	-1.31	0.0567	3/2/2010@17:08:52		
WCN100302-03	1	S3	106	4.93	3/2/2010@17:09:44		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			5.7 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			5.7 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100302-08	1	S7	-1.98	0.0263	3/2/2010@17:11:35		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				
247806002	1	129	-2.57	-6.55e-4	3/2/2010@17:13:25		
247806003	1	130	-1.47	0.0495	3/2/2010@17:14:18		
247806004	1	131	-1.86	0.0317	3/2/2010@17:15:12		
247806005	1	132	8.20	0.490	3/2/2010@17:16:06		
247806006	1	133	-0.684	0.0854	3/2/2010@17:16:59		
247855002	1	134	-2.09	0.0216	3/2/2010@17:17:52		
247902001	1	135	1.78e+3	81.4	3/2/2010@17:18:45		
247806005	1	132	6.30	0.403	3/2/2010@17:19:38		
247858001|956940|	1	74	125	5.79	3/2/2010@17:20:31	2.00	
247858002	1	75	103	4.82	3/2/2010@17:21:23	2.00	
WCN100302-03	1	S3	106	4.94	3/2/2010@17:22:15		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			5.8 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			5.8 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100302-08	1	S7	-2.56	-1.85e-4	3/2/2010@17:24:05		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-2.56 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-2.56 > -5.00				
Message			CCB Passed				
Action			Continue				
247469003|955994|	1	53	-1.40	0.0528	3/2/2010@17:25:55		
247902001|957569|	1	135	66.2	3.13	3/2/2010@17:26:48	50.00	
247806005	1	132	-1.46	0.0501	3/2/2010@17:27:41		
WCN100302-03	1	S3	106	4.94	3/2/2010@17:28:34		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			6.0 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			6.0 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100302-08	1	S7	-0.316	0.102	3/2/2010@17:30:24		CCB
Known Conc:			0.00				

DQM Test: > + Concentration Limit				
Result:	-0.316 < 5.00			
Message	CCB Passed			
Action	Continue			
DQM Test: < - Concentration Limit				
Result:	-0.316 > -5.00			
Message	CCB Passed			
Action	Continue			

Analyte Properties Table for OM_3-2-2010_14-50-22.OMN

Property	Channel 1 TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

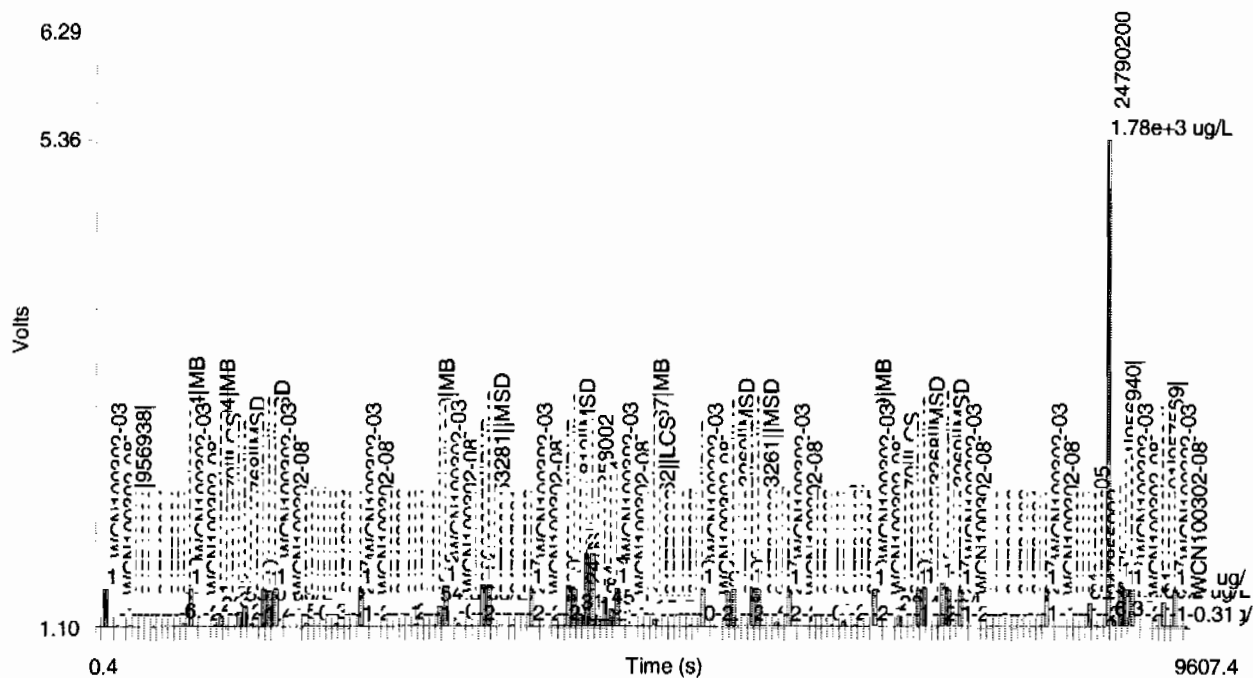
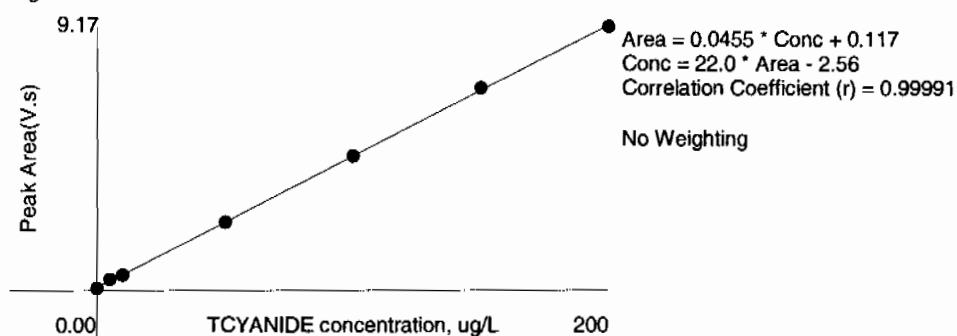


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.17	0.613	0.6	3/2/2010	08:47:39
2	150	1	7.02	0.465	-1.1	3/2/2010	08:48:31
3	100	1	4.67	0.309	0.1	3/2/2010	08:49:23
4	50.0	1	2.38	0.162	0.5	3/2/2010	08:50:16
5	10.0	1	0.547	0.0492	4.4	3/2/2010	08:51:09
6	5.00	1	0.398	0.0229	-15.5	3/2/2010	08:52:03
7	0.00	1	0.0805	0.00272		3/2/2010	08:52:57

Figure 1: TCYANIDE



Ion Chromatography

Prep Logbook

Ion Chromatography (IC)

Batch ID: 957878.0	Verified by:	Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
Analyst: Mary Sherwood		LCS	1202054072	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
Method: EPA 300.0 PREP		MS	1202054068	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
Lab SOP: GL-GC-E-086 REV# 17		MS	1202054069	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
Instrument: Sartorius Balance B-001		MSD	1202054070	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
		MSD	1202054071	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202054065 MB	10-MAR-2010 10:30:00	Soil	4	40	10	
1202054072 LCS	10-MAR-2010 10:30:00	Soil	4	40	10	
247546004	10-MAR-2010 10:30:00	Soil	4	40	10	
1202054066 DUP (247546004)	10-MAR-2010 10:30:00	Soil	4	40	10	
1202054068 MS (247546004)	10-MAR-2010 10:30:00	Soil	4	40	10	
1202054070 MSD (247546004)	10-MAR-2010 10:30:00	Soil	4	40	10	
247551001	10-MAR-2010 10:30:00	Soil	4	40	10	
247551002	10-MAR-2010 10:30:00	Soil	4	40	10	
247790002	10-MAR-2010 10:30:00	Soil	4	40	10	
247790003	10-MAR-2010 10:30:00	Soil	4	40	10	
247794001	10-MAR-2010 10:30:00	Soil	4	40	10	
247794002	10-MAR-2010 10:30:00	Soil	4	40	10	
247794003	10-MAR-2010 10:30:00	Soil	4	40	10	
247794004	10-MAR-2010 10:30:00	Soil	4	40	10	
247794005	10-MAR-2010 10:30:00	Soil	4	40	10	
247822001	10-MAR-2010 10:30:00	Soil	4	40	10	
247822002	10-MAR-2010 10:30:00	Soil	4	40	10	
247822003	10-MAR-2010 10:30:00	Soil	4	40	10	
247822004	10-MAR-2010 10:30:00	Soil	4	40	10	
247822005	10-MAR-2010 10:30:00	Soil	4	40	10	
247822006	10-MAR-2010 10:30:00	Soil	4	40	10	
1202054067 DUP (247822006)	10-MAR-2010 10:30:00	Soil	4	40	10	
1202054069 MS (247822006)	10-MAR-2010 10:30:00	Soil	4	40	10	

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

Prep Logbook

Batch ID: 957878.0
Analyst: Mary Sherwood
Method: EPA 300.0 PREP
Lab SOP: GL-GC-E-086 REV# 17
Instrument: Sartorius Balance B-001

Verified by:

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202054072	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MS	1202054068	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MS	1202054069	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MSD	1202054070	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MSD	1202054071	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL

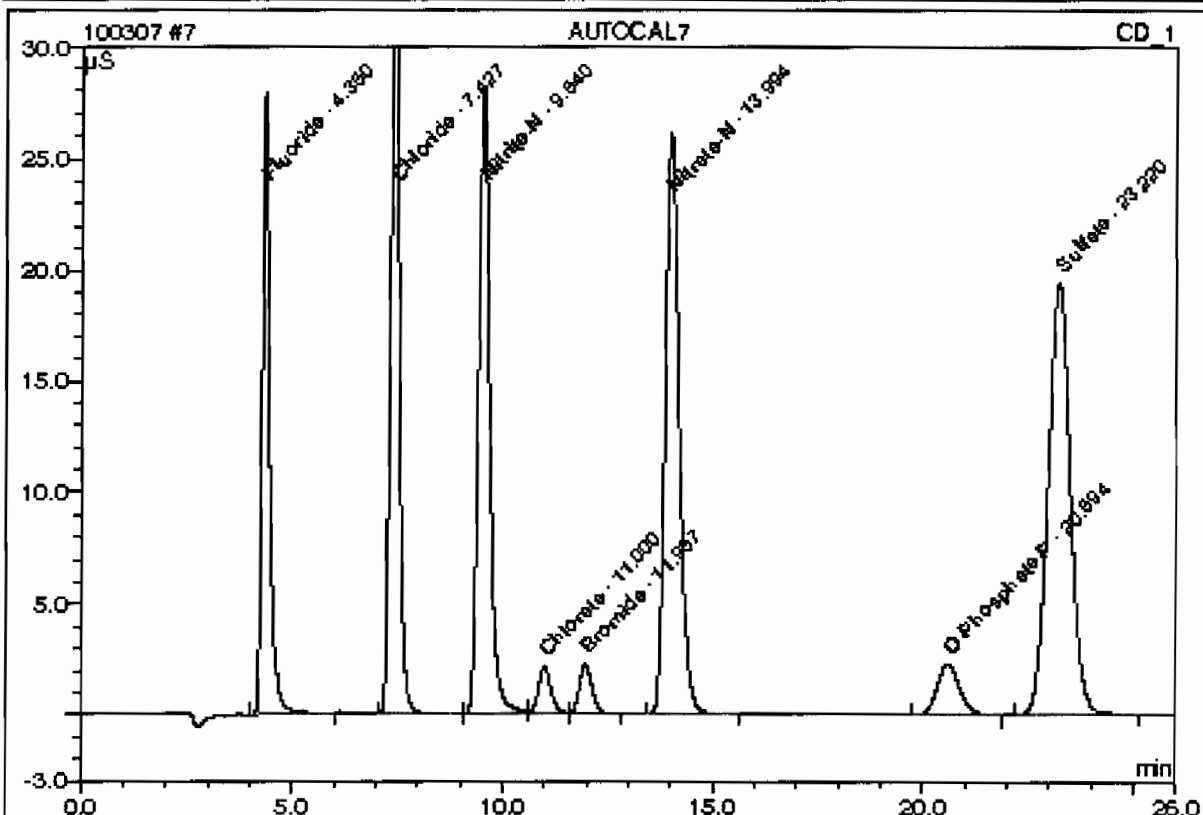
Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202054071 MSD (247822006)	10-MAR-2010 10:30:00	Soil	4	40	10	
Reagent/Solvent Lot ID	Description	Amount	Comments:			

This is runlog for Sequence 100308.seq for IC6

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
ICAL-07	02/26/10 14:11		1	100308	MAR1
ICAL-06	02/26/10 14:40		1	100308	MAR1
ICAL-05	02/26/10 15:09		1	100308	MAR1
ICAL-04	02/26/10 15:38		1	100308	MAR1
ICAL-03	02/26/10 16:07		1	100308	MAR1
ICAL-02	02/26/10 16:36		1	100308	MAR1
ICAL-01	02/26/10 17:04		1	100308	MAR1

7 AUTOCAL7

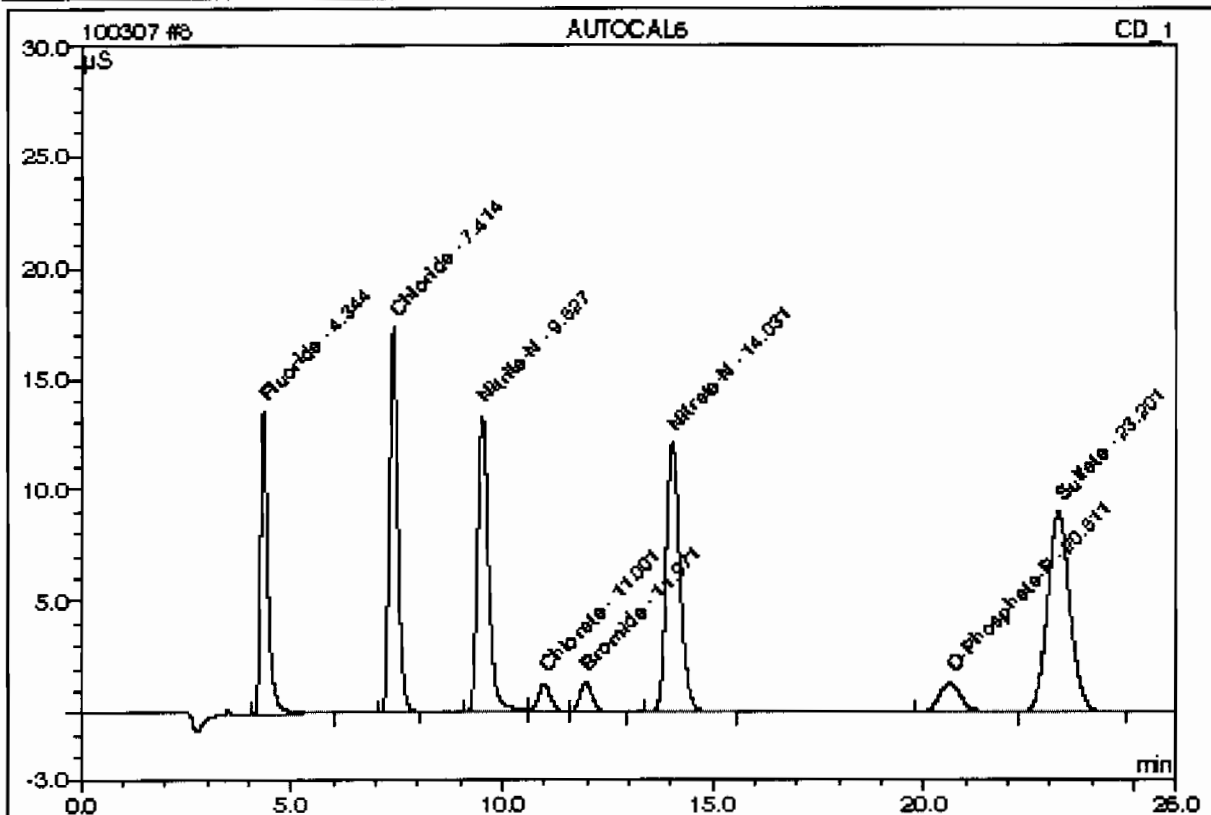
Sample Name:	AUTOCAL7	Injection Volume:	1.0
Vial Number:	3	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 14:11	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.35	Fluoride	10.0000	10.0855		5.77442	12.08
2	7.43	Chloride	20.0000	20.3596		8.66452	18.13
3	9.54	Nitrite-N	10.0000	10.0634		8.38569	17.54
4	11.00	Chlorate	5.0000	5.0096		0.72891	1.52
5	11.97	Bromide	5.0000	4.9733		0.76589	1.60
6	13.99	Nitrate-N	10.0000	10.1518		10.17864	21.30
7	20.59	O-Phosphate-P	5.0000	5.0713		1.40399	2.94
8	23.22	Sulfate	40.0000	40.4933		11.89615	24.89
Total:				106.2078	0.000	47.798	100.00

8 AUTOCAL6

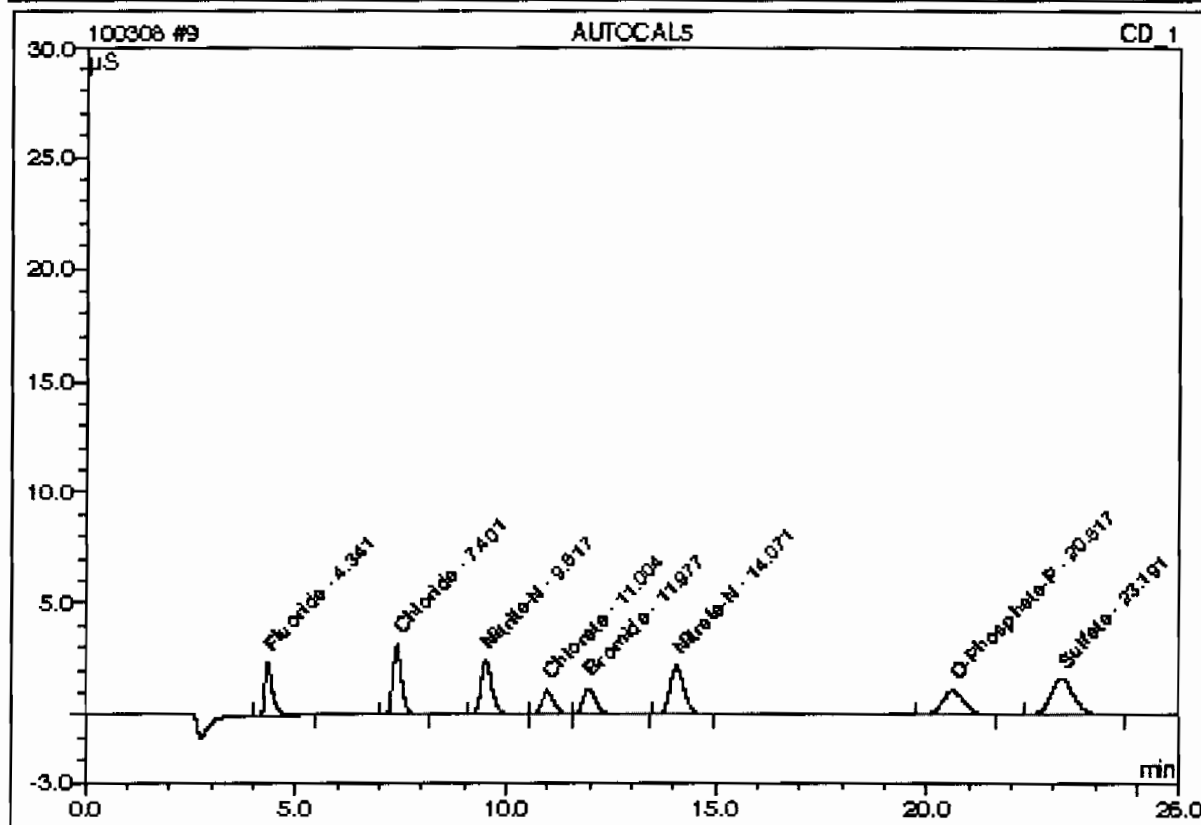
Sample Name:	AUTOCAL6	Injection Volume:	1.0
Vial Number:	4	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 14:40	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GLGCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel. Area %
1	4.34	Fluoride	5.0000	4.8384		2.75186	12.16
2	7.41	Chloride	10.0000	9.2955		3.91334	17.29
3	9.53	Nitrite-N	5.0000	4.8861		4.04396	17.86
4	11.00	Chlorate	3.0000	3.0997		0.44848	1.98
5	11.97	Bromide	3.0000	2.9841		0.45913	2.03
6	14.03	Nitrate-N	5.0000	4.7080		4.67150	20.63
7	20.61	O-Phosphate-P	3.0000	2.9561		0.60102	3.54
8	23.20	Sulfate	20.0000	19.0431		5.55000	24.51
Total:				51.8110	0.000	22.639	100.00

9 AUTOCAL5

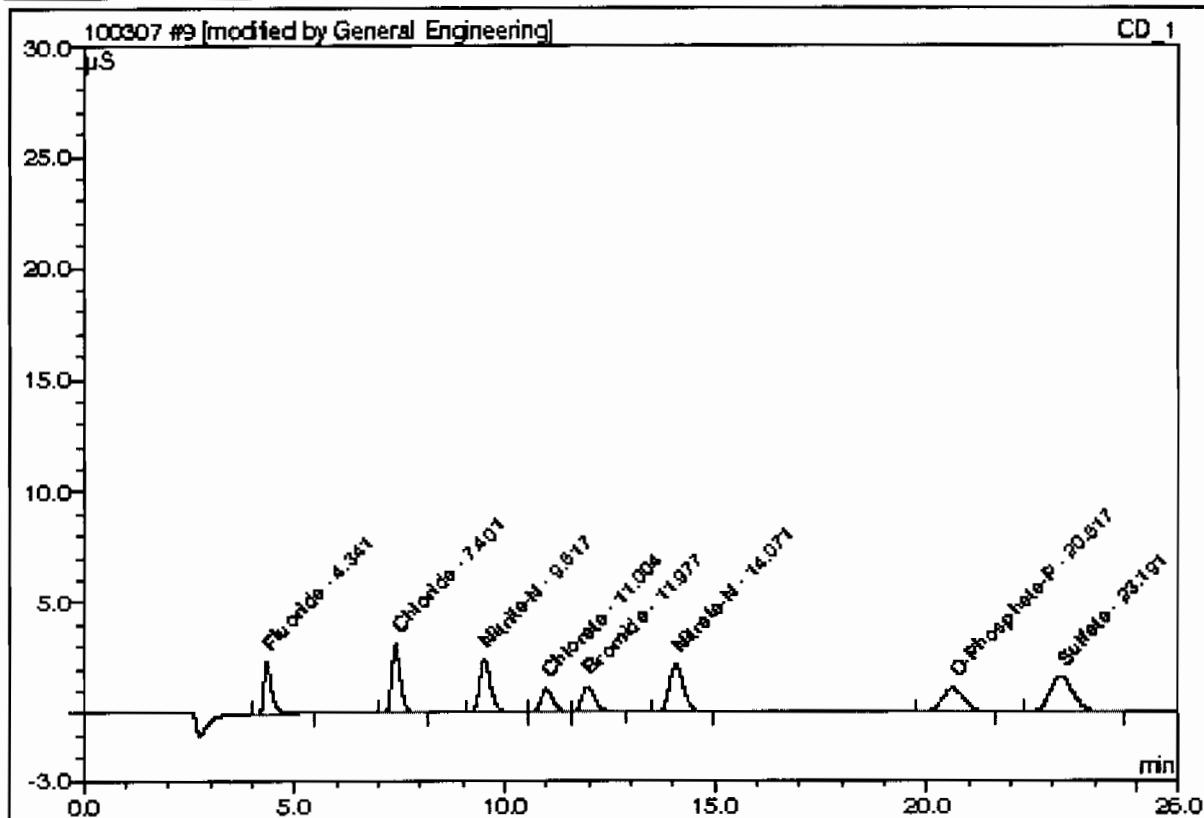
Sample Name:	AUTOCAL5	Injection Volume:	1.0
Vial Number:	5	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 15:09	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.34	Fluoride	1.0000	0.9456		0.50946	9.66
2	7.40	Chloride	2.0000	1.8831		0.73030	13.85
3	9.52	Nitrate-N	1.0000	0.9352		0.73136	13.87
4	11.00	Chlorate	2.5000	2.4073		0.34799	6.60
5	11.98	Bromide	2.5000	2.6793		0.41530	7.88
6	14.07	Nitrate-N	1.0000	0.9238		0.84323	15.99
7	20.62	O-Phosphate-P	2.5000	2.4571		0.65802	12.48
8	23.19	Sulfate	4.0000	3.7265		1.03648	19.66
Total:				15.9578	0.000	5.272	100.00

9 AUTOCAL5

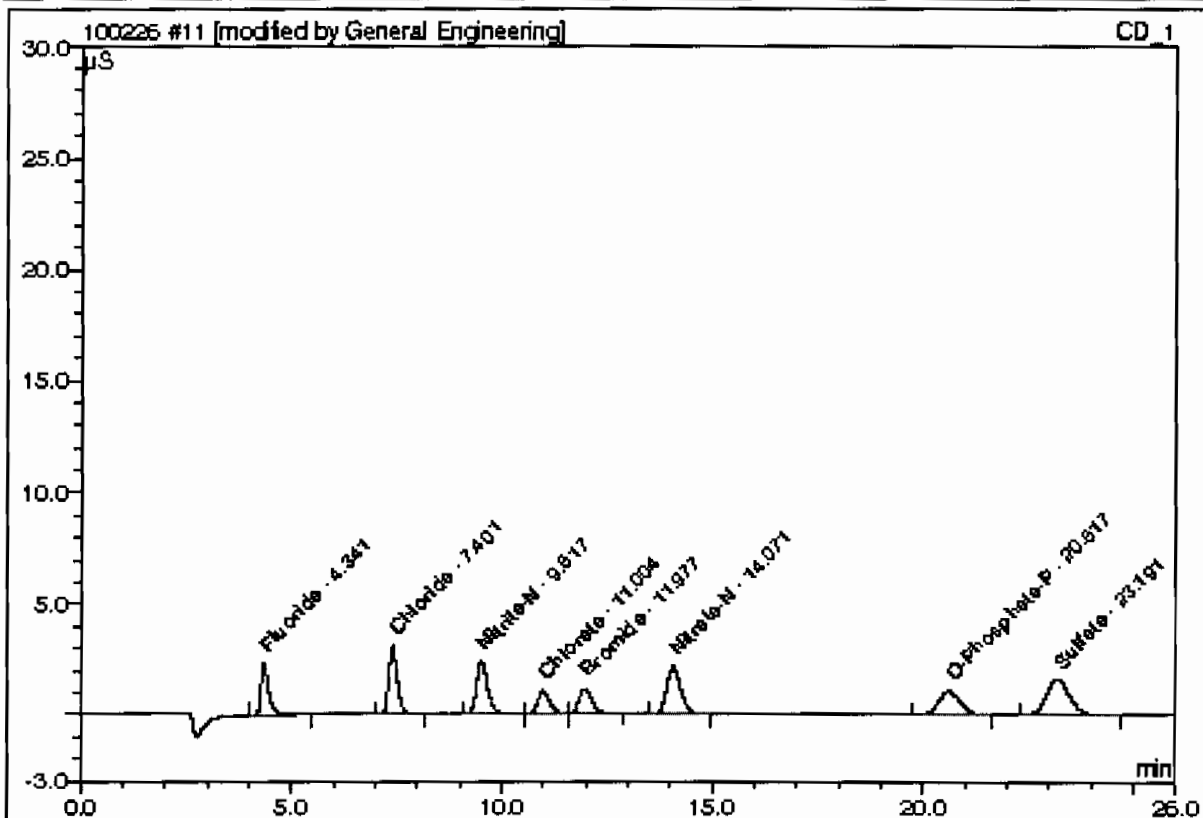
Sample Name:	AUTOCAL5	Injection Volume:	1.0
Vial Number:	5	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 15:09	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.34	Fluoride	1.0000	0.9456		0.50946	9.72
2	7.40	Chloride	2.0000	1.8831		0.73030	13.93
3	9.52	Nitrate-N	1.0000	0.9315		0.72762	13.88
4	11.00	Chlorate	2.5000	2.3673		0.34093	6.50
5	11.98	Bromide	2.5000	2.5838		0.39739	7.58
6	14.07	Nitrate-N	1.0000	0.9238		0.84323	16.08
7	20.62	O-Phosphate-P	2.5000	2.4544		0.65802	12.55
8	23.19	Sulfate	4.0000	3.7873		1.03648	19.77
Total:				15.8767	0.000	5.243	100.00

11 AUTOCAL5

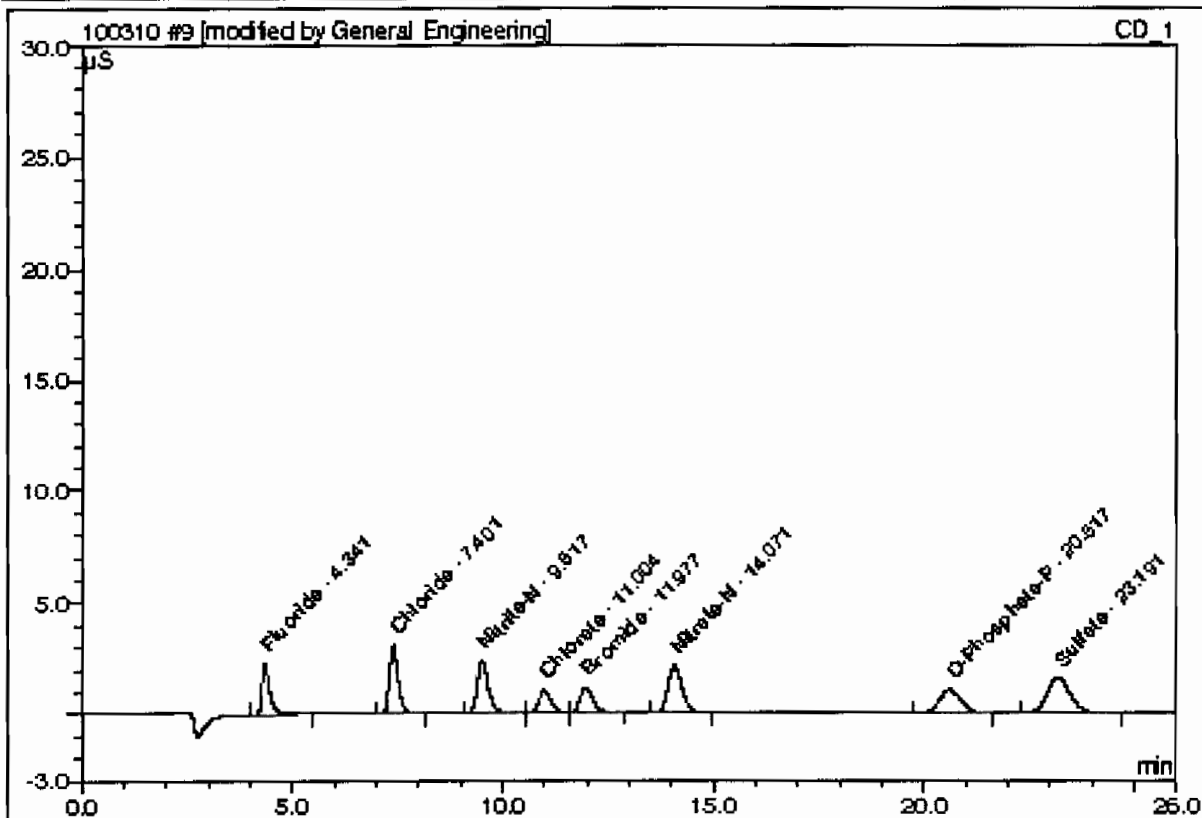
Sample Name:	AUTOCAL5	Injection Volume:	1.0
Vial Number:	5	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 15:09	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.34	Fluoride	1.0000	0.9456		0.50946	9.72
2	7.40	Chloride	2.0000	1.8831		0.73030	13.93
3	9.52	Nitrite-N	1.0000	0.9315		0.72762	13.88
4	11.00	Chlorate	2.5000	2.3673		0.34093	6.50
5	11.98	Bromide	2.5000	2.5838		0.39739	7.58
6	14.07	Nitrate-N	1.0000	0.9238		0.84323	16.08
7	20.62	O-Phosphate-P	2.5000	2.4544		0.65802	12.55
8	23.19	Sulfate	4.0000	3.7873		1.03648	19.77
Total:				15.8767	0.000	5.243	100.00

9 AUTOCAL5

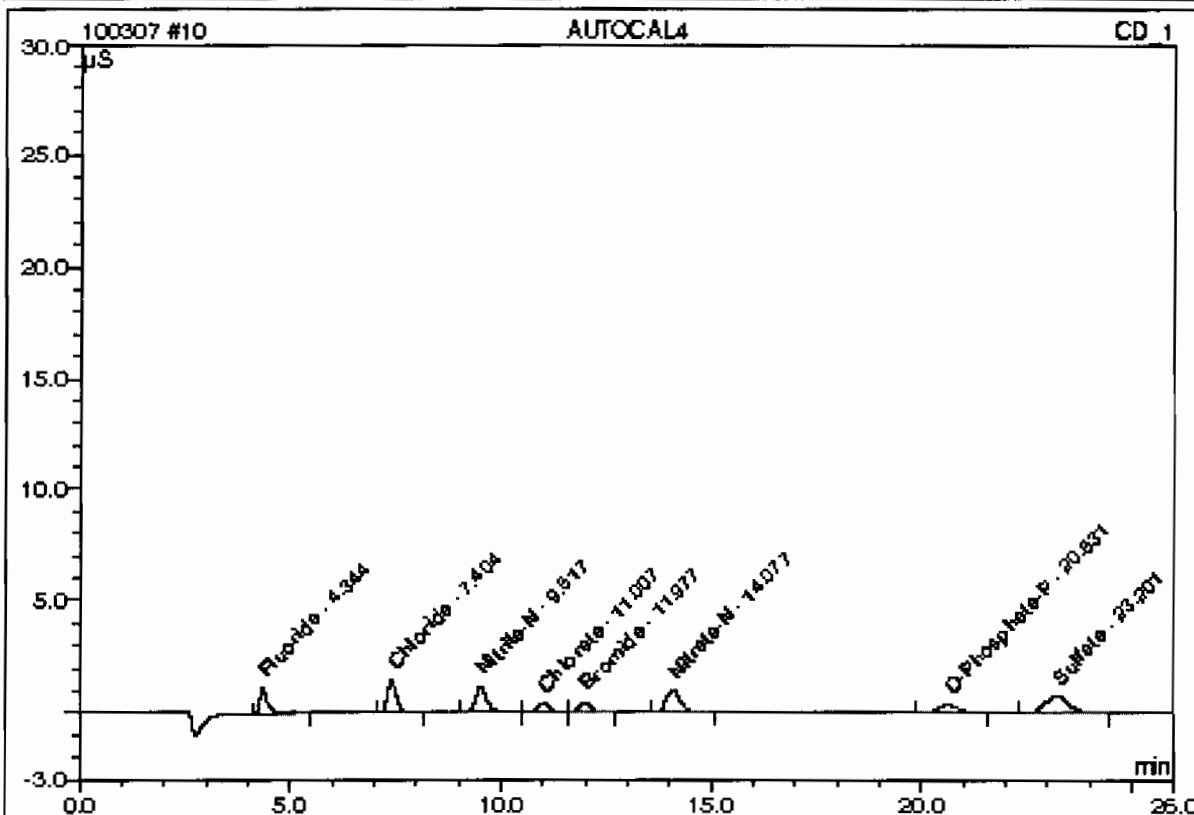
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Vial Number:	5	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 15:09	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.34	Fluoride	1.0000	0.9456		0.50946	9.72
2	7.40	Chloride	2.0000	1.8831		0.73030	13.93
3	9.52	Nitrite-N	1.0000	0.9315		0.72762	13.88
4	11.00	Chlorate	2.5000	2.3673		0.34093	6.50
5	11.98	Bromide	2.5000	2.5838		0.39739	7.58
6	14.07	Nitrate-N	1.0000	0.9238		0.84323	16.08
7	20.62	O-Phosphate-P	2.5000	2.4544		0.65802	12.55
8	23.19	Sulfate	4.0000	3.7873		1.03648	19.77
Total:				15.8767	0.000	5.243	100.00

10 AUTOCAL4

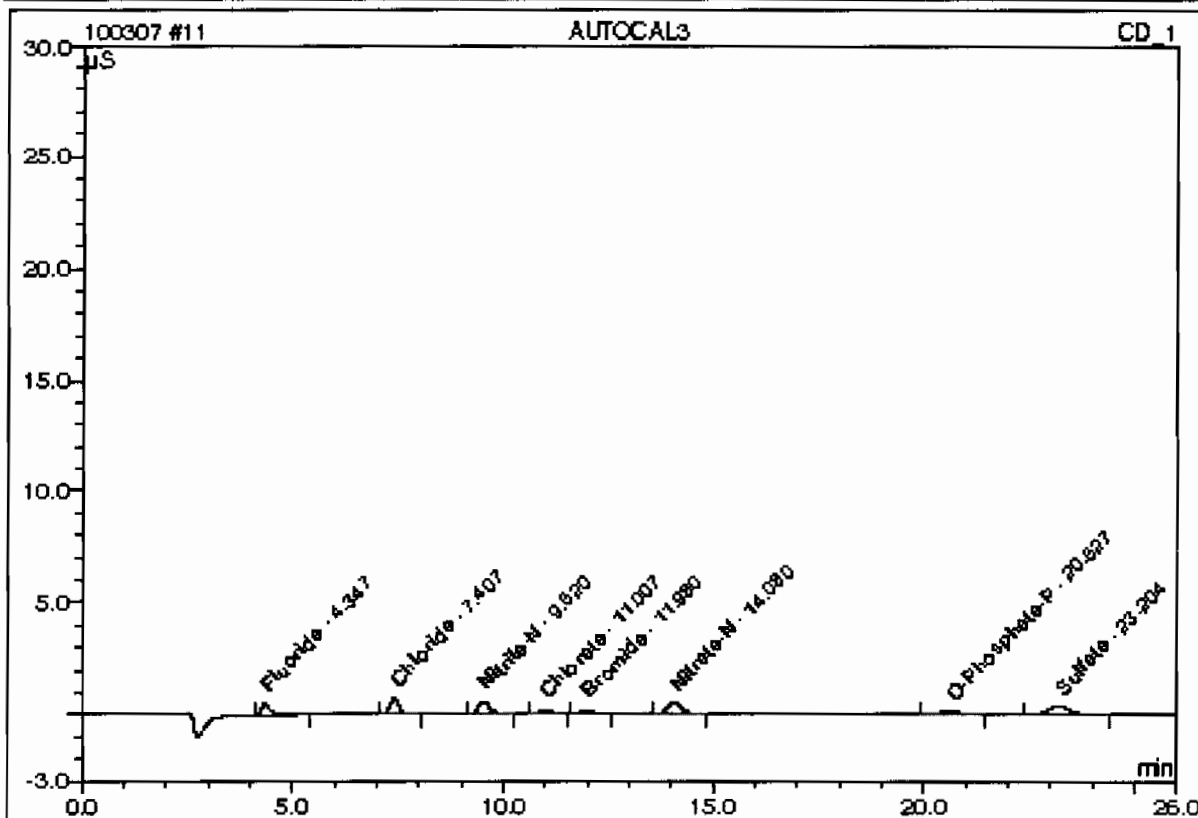
Sample Name:	AUTOCAL4	Injection Volume:	1.0
Vial Number:	6	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 15:38	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.34	Fluoride	0.5000	0.4893		0.24663	10.36
2	7.40	Chloride	1.0000	0.9971		0.34985	14.69
3	9.52	Nitrite-N	0.5000	0.4896		0.35700	14.99
4	11.01	Chlorate	1.0000	0.9843		0.13787	5.79
5	11.98	Bromide	1.0000	0.9852		0.15086	6.34
6	14.08	Nitrate-N	0.5000	0.4953		0.40975	17.21
7	20.63	O-Phosphate-P	1.0000	0.9197		0.22053	9.26
8	23.20	Sulfate	2.0000	2.0029		0.50858	21.36
Total:				7.3634	0.000	2.381	100.00

11 AUTOCAL3

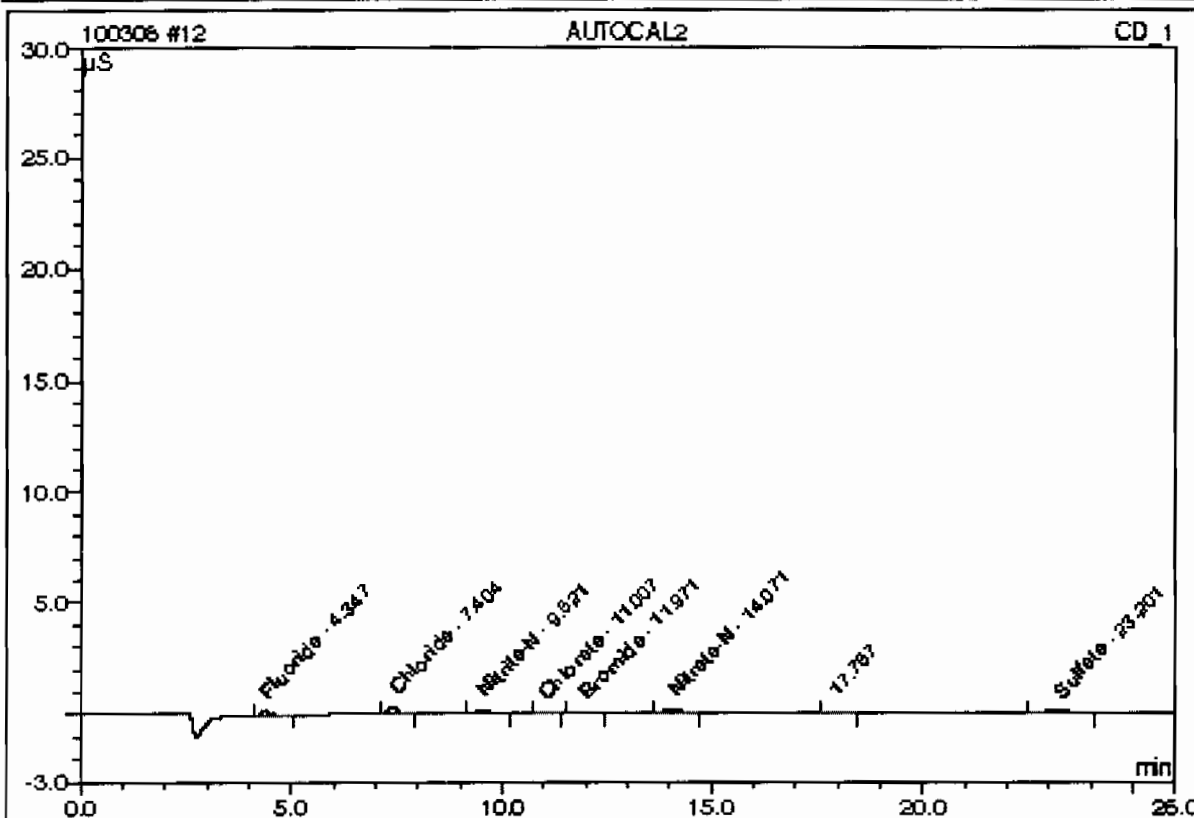
Sample Name:	AUTOCAL3	Injection Volume:	1.0
Vial Number:	7	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 16:07	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.35	Fluoride	0.2500	0.2826		0.12755	10.86
2	7.41	Chloride	0.5000	0.6142		0.18541	15.79
3	9.52	Nitrite-N	0.2500	0.2703		0.17315	14.75
4	11.01	Chlorate	0.5000	0.5048		0.06743	5.74
5	11.98	Bromide	0.5000	0.4768		0.07246	6.17
6	14.08	Nitrate-N	0.2500	0.2969		0.20912	17.81
7	20.63	O-Phosphate-P	0.5000	0.4301		0.08097	6.90
8	23.20	Sulfate	1.0000	1.1562		0.25806	21.98
Total:				4.0318	0.000	1.174	100.00

12 AUTOCAL2

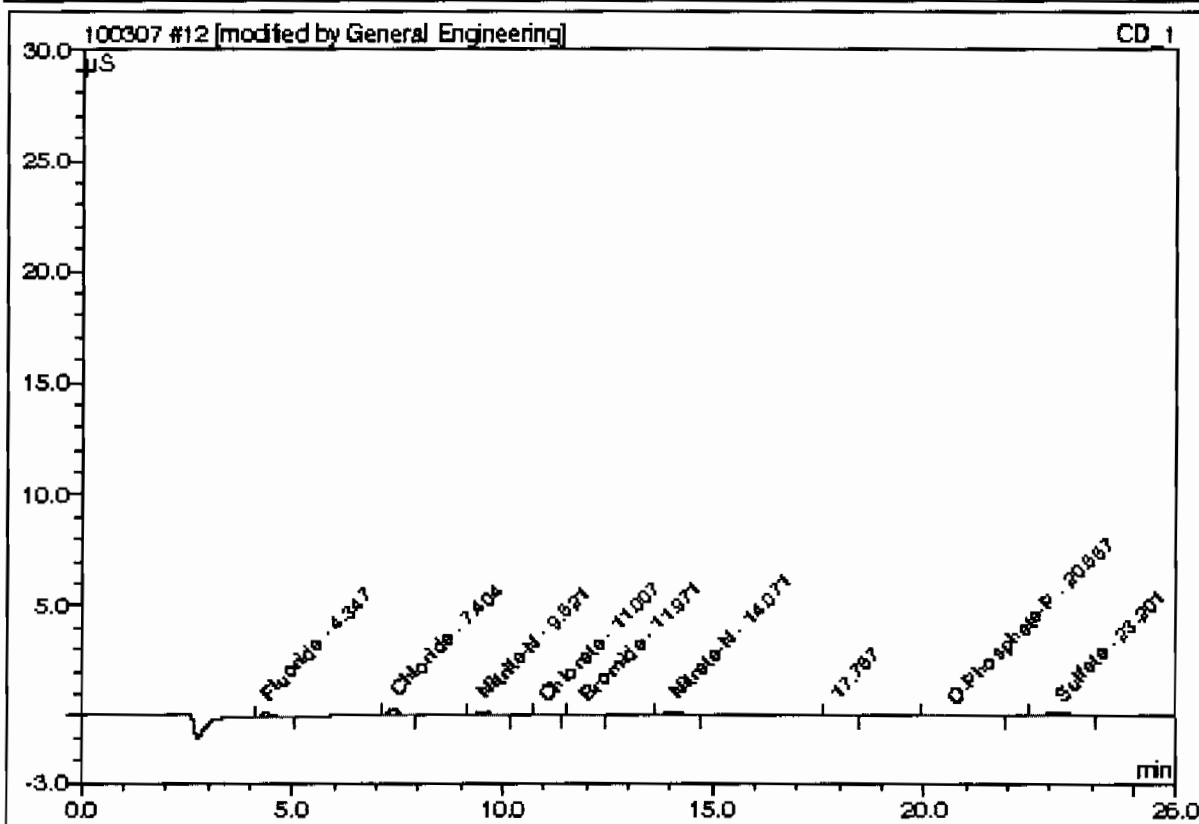
Sample Name:	AUTOCAL2	Injection Volume:	1.0
Vial Number:	8	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 16:36	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.35	Fluoride	0.1000	0.1475		0.04972	10.74
2	7.40	Chloride	0.2000	0.3681		0.07973	17.22
3	9.52	Nitrite-N	0.1000	0.1444		0.06824	14.74
4	11.01	Chlorate	0.2000	0.1849		0.02108	4.55
5	11.97	Bromide	0.2000	0.1801		0.02821	6.10
6	14.07	Nitrate-N	0.1000	0.1840		0.09485	20.49
n.a.	n.a.	O-Phosphate-P	0.2000	n.a.	n.a.	n.a.	n.a.
8	23.20	Sulfate	0.4000	0.5652		0.10336	22.33
Total:				1.7742	0.000	0.445	96.18

12 AUTOCAL2

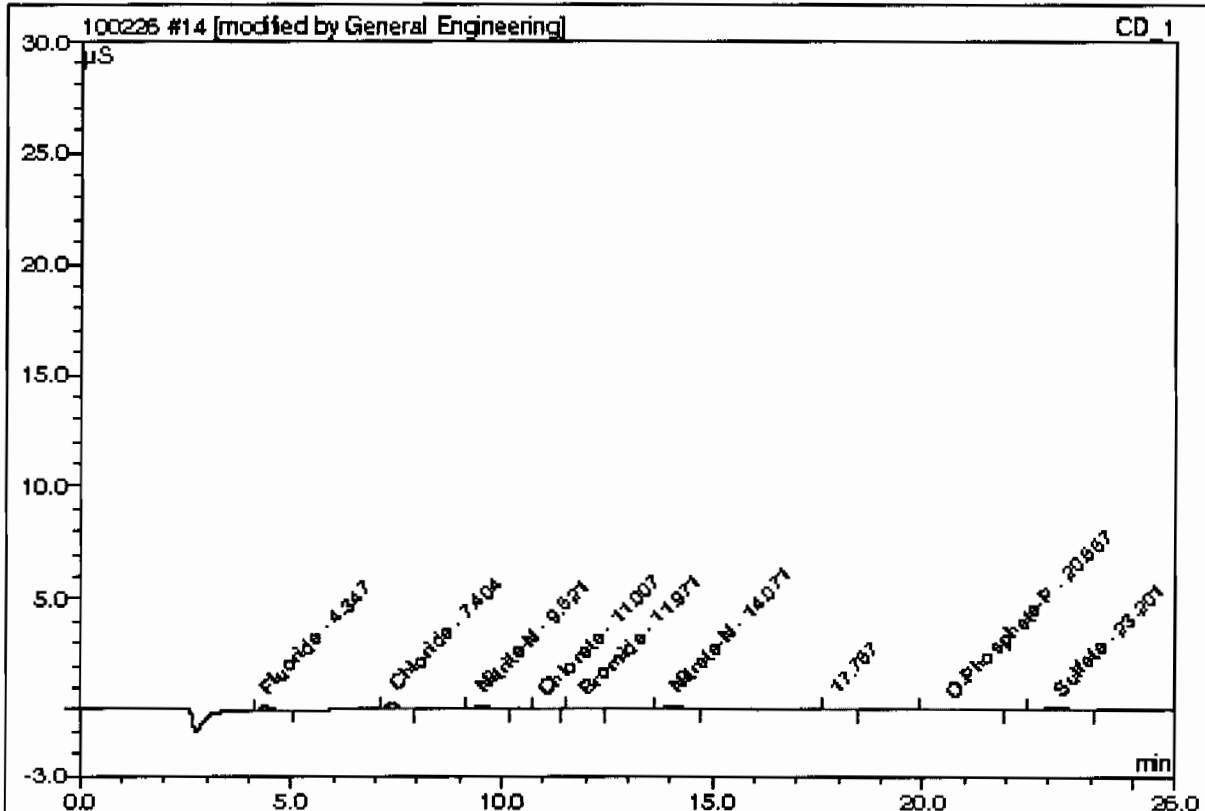
Sample Name:	AUTOCAL2	Injection Volume:	1.0
Vial Number:	8	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 16:38	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;0056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel. Area %
1	4.35	Fluoride	0.1000	0.1475		0.04972	10.28
2	7.40	Chloride	0.2000	0.3681		0.07973	16.45
3	9.52	Nitrite-N	0.1000	0.1452		0.06824	14.08
4	11.01	Chlorate	0.2000	0.1890		0.02108	4.35
5	11.97	Bromide	0.2000	0.1899		0.02821	5.82
6	14.07	Nitrate-N	0.1000	0.1840		0.09485	19.57
8	20.66	O-Phosphate-P	0.2000	0.2223		0.02173	4.48
9	23.20	Sulfate	0.4000	0.6333		0.10336	21.33
Total:				2.0793	0.000	0.467	96.35

14 AUTOCAL2

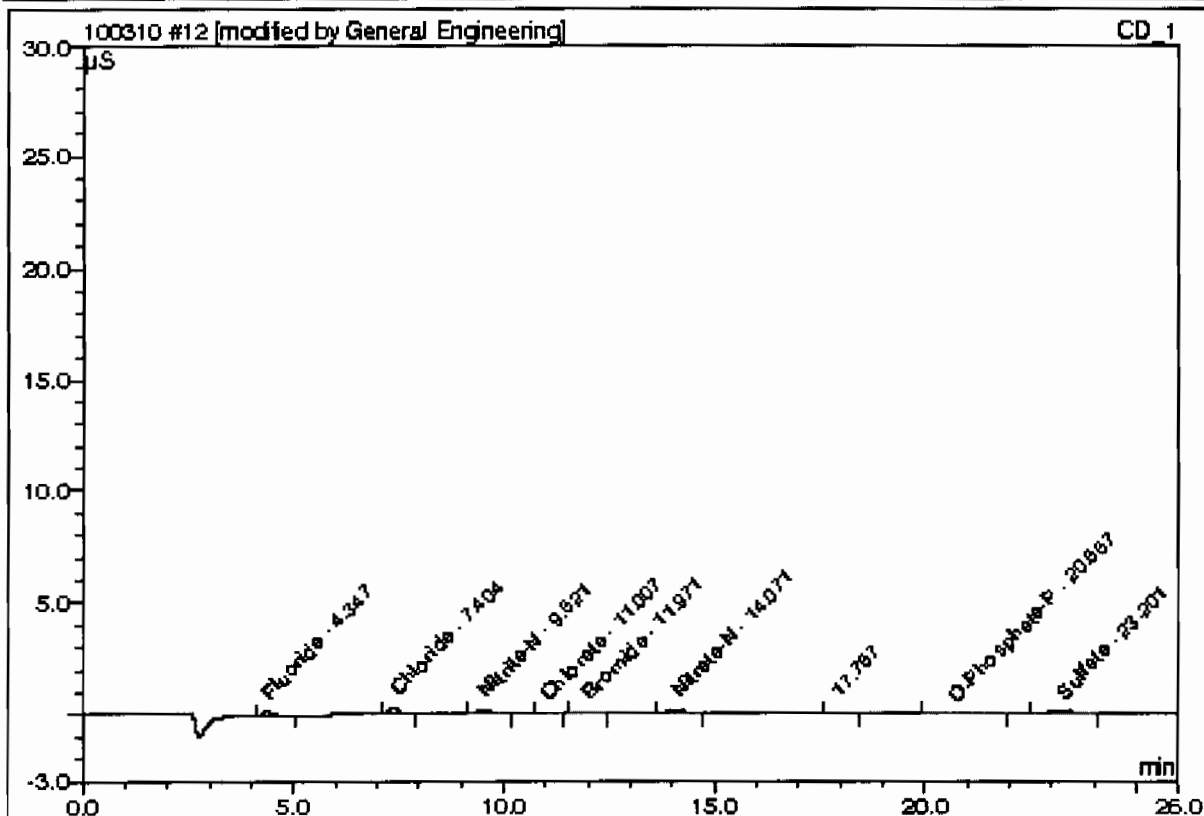
Sample Name:	AUTOCAL2	Injection Volume:	1.0
Vial Number:	8	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 16:36	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.35	Fluoride	0.1000	0.1475		0.04972	10.26
2	7.40	Chloride	0.2000	0.3681		0.07973	16.45
3	9.52	Nitrite-N	0.1000	0.1452		0.06824	14.08
4	11.01	Chlorate	0.2000	0.1890		0.02108	4.35
5	11.97	Bromide	0.2000	0.1899		0.02821	5.82
6	14.07	Nitrate-N	0.1000	0.1840		0.09485	19.57
8	20.66	O-Phosphate-P	0.2000	0.2223		0.02173	4.48
9	23.20	Sulfate	0.4000	0.6333		0.10336	21.33
Total:				2.0793	0.000	0.467	96.35

12 AUTOCAL2

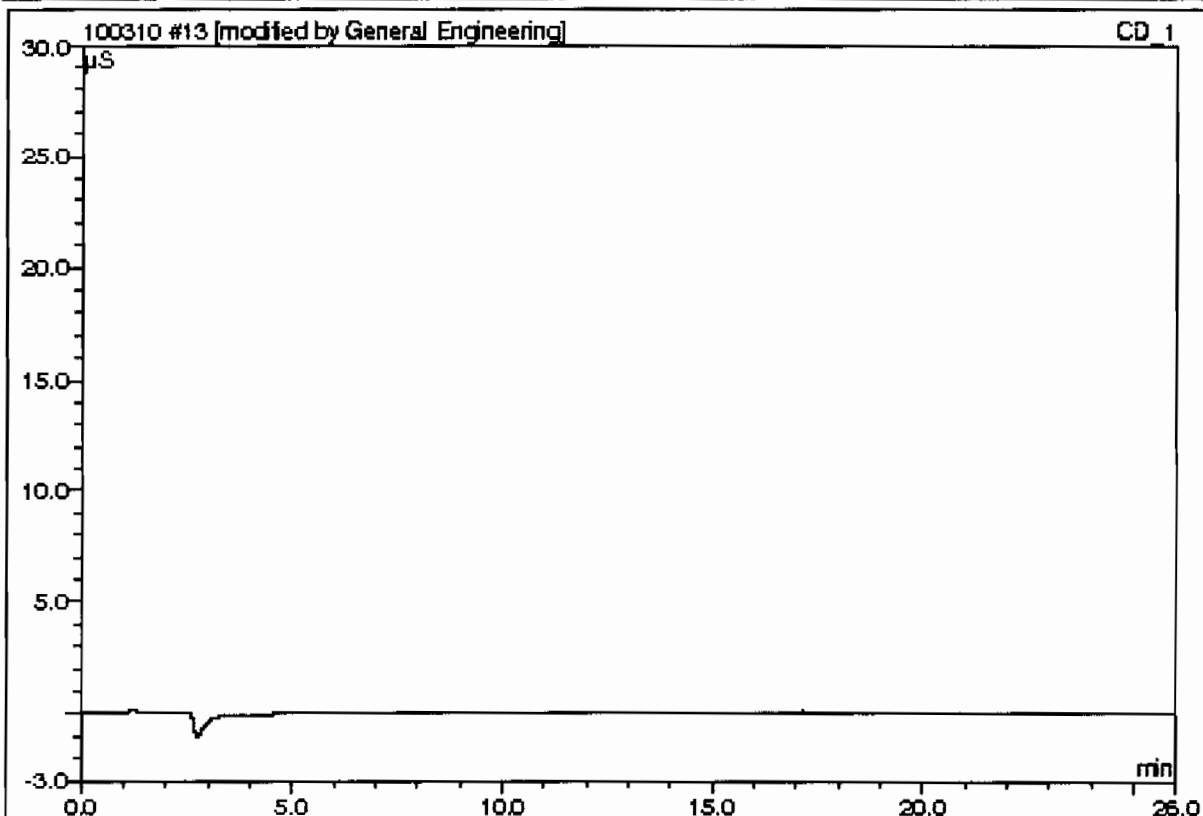
Sample Name:	AUTOCAL2	Injection Volume:	1.0
Vial Number:	8	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 16:36	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.35	Fluoride	0.1000	0.1475		0.04972	10.26
2	7.40	Chloride	0.2000	0.3681		0.07973	16.45
3	9.52	Nitrite-N	0.1000	0.1452		0.06824	14.08
4	11.01	Chlorate	0.2000	0.1890		0.02108	4.35
5	11.97	Bromide	0.2000	0.1899		0.02821	5.82
6	14.07	Nitrate-N	0.1000	0.1840		0.09485	19.57
8	20.66	O-Phosphate-P	0.2000	0.2223		0.02173	4.48
9	23.20	Sulfate	0.4000	0.6333		0.10336	21.33
Total:				2.0793	0.000	0.467	96.35

13 AUTOCAL1

Sample Name:	AUTOCAL1	Injection Volume:	1.0
Vial Number:	9	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 17:04	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	0.0000	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

13 AUTOCAL1

Sample Name: AUTOCAL1

Vial Number: 9

Sample Type: standard

Control Program: AS23

Quantif. Method: 100225an

Recording Time: 2/26/2010 17:04

Run Time (min): 26.00

Injection Volume: 1.0

Channel: CD_1

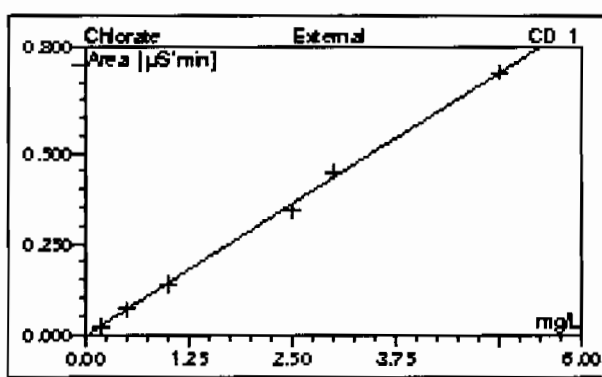
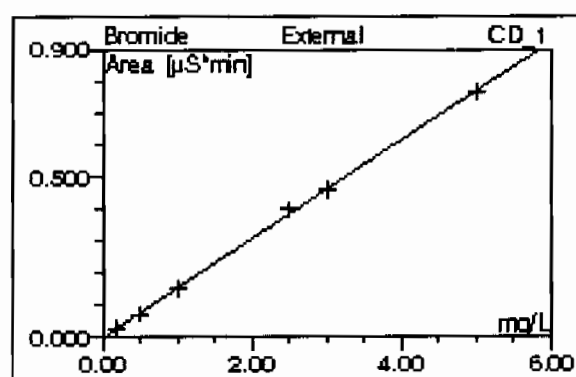
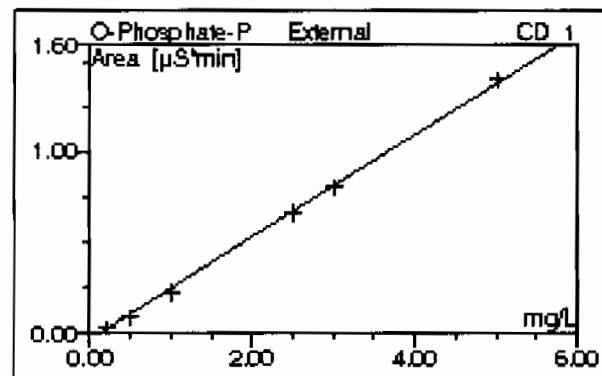
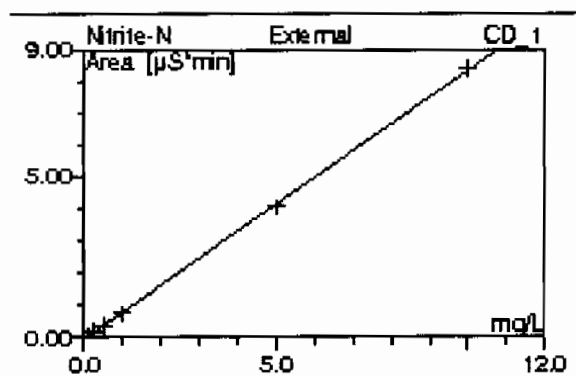
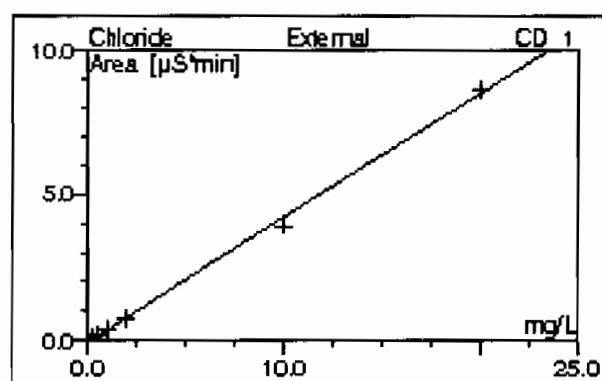
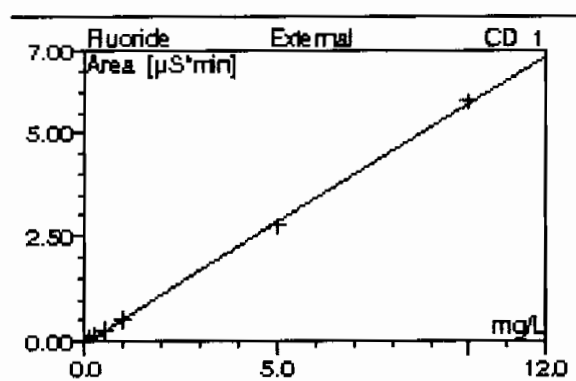
Dilution Factor: 1.0000

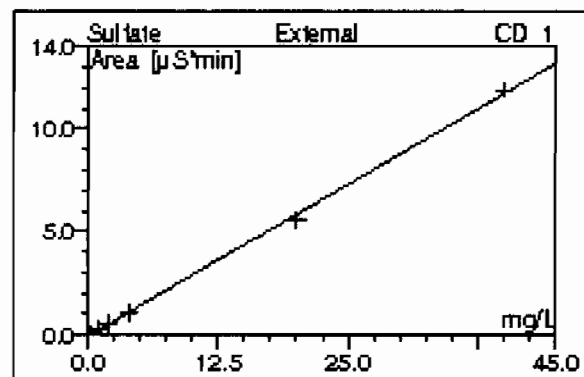
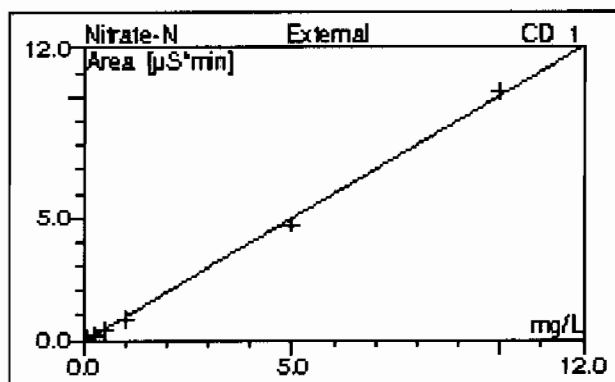
Sample Weight: 1.0000

Sample Amount: 1.0000

Analyst: MAR1

Column: AS23-002712; GL GCED86; 300; 9056

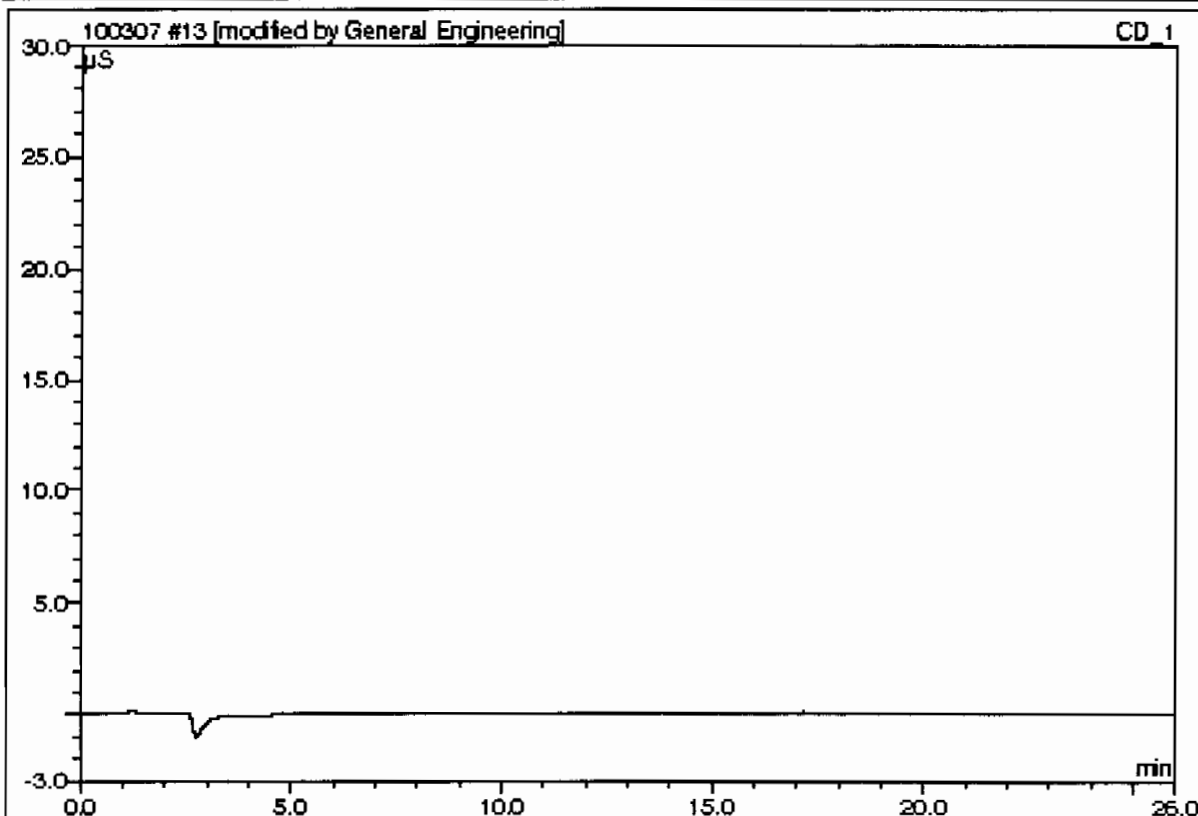




No. CD_1	Ret.Time CD_1 min	Peak Name CD_1	Cal.Type CD_1	Coeff.Det. CD_1 %	Offset CD_1	Slope CD_1	Curve CD_1
n.a.	n.a.	Fluoride	OLO#	99.9498	-0.0352	0.5780	0.0000
n.a.	n.a.	Chloride	OLO#	99.7865	-0.0783	0.4294	0.0000
n.a.	n.a.	Nitrite-N	OLO#	99.9694	-0.0536	0.8386	0.0000
n.a.	n.a.	Chlorate	OLO#	99.8345	-0.0067	0.1468	0.0000
n.a.	n.a.	Bromide	OLO#	99.9472	-0.0011	0.1542	0.0000
n.a.	n.a.	Nitrate-N	OLO#	99.8450	-0.0913	1.0116	0.0000
n.a.	n.a.	O-Phosphate-P	OLO#	99.8794	-0.0416	0.2851	0.0000
n.a.	n.a.	Sulfate	OLO#	99.8991	-0.0840	0.2959	0.0000
Average:				99.8889	-0.0490	0.4672	0.0000

13 AUTOCAL1

Sample Name:	AUTOCAL1	Injection Volume:	1.0
Vial Number:	9	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 17:04	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GLGCED86;300;9056



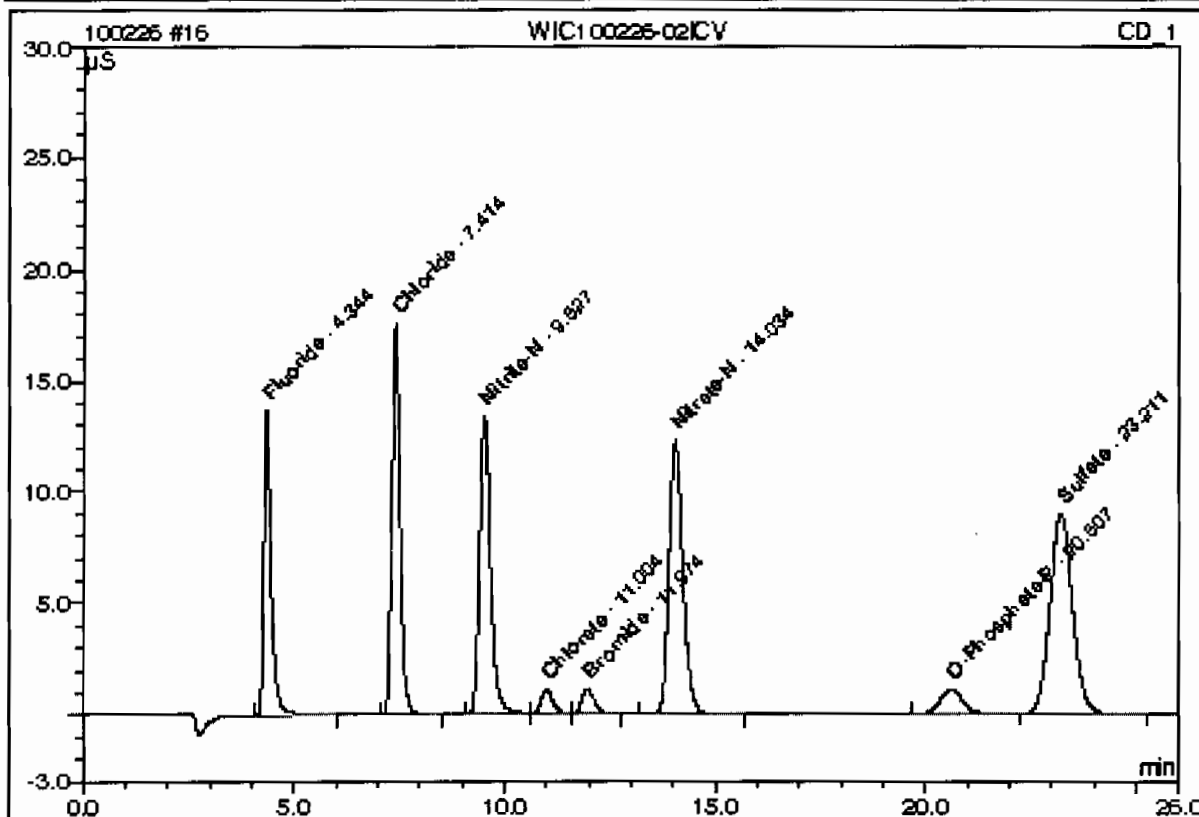
No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	0.0000	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

This is runlog for Sequence 100226.seq for IC6

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	02/26/10 13:14		1	100226	MAR1
BLK	02/26/10 13:42		1	100226	MAR1
ICAL-07	02/26/10 14:11		1	100226	MAR1
ICAL-06	02/26/10 14:40		1	100226	MAR1
ICAL-05	02/26/10 15:09		1	100226	MAR1
ICAL-04	02/26/10 15:38		1	100226	MAR1
ICAL-03	02/26/10 16:07		1	100226	MAR1
ICAL-02	02/26/10 16:36		1	100226	MAR1
ICAL-01	02/26/10 17:04		1	100226	MAR1
ICV	02/26/10 17:33		1	100226	MAR1
ICB	02/26/10 18:02		1	100226	MAR1
1202055176	02/26/10 18:31	958323	1	100226	MAR1
1202055181	02/26/10 18:59	958323	1	100226	MAR1
248133001	02/26/10 19:28	958323	1	100226	MAR1
1202055177	02/26/10 19:57	958323	1	100226	MAR1
1202055179	02/26/10 20:26	958323	1	100226	MAR1
248133002	02/26/10 20:55	958323	1	100226	MAR1
248133003	02/26/10 21:24	958323	1	100226	MAR1
248133005	02/26/10 21:53	958323	1	100226	MAR1
248133006	02/26/10 22:22	958323	1	100226	MAR1
248133007	02/26/10 22:50	958323	1	100226	MAR1
CVH	02/26/10 23:19		1	100226	MAR1
CCB	02/26/10 23:48		1	100226	MAR1

16 WIC100226-02ICV

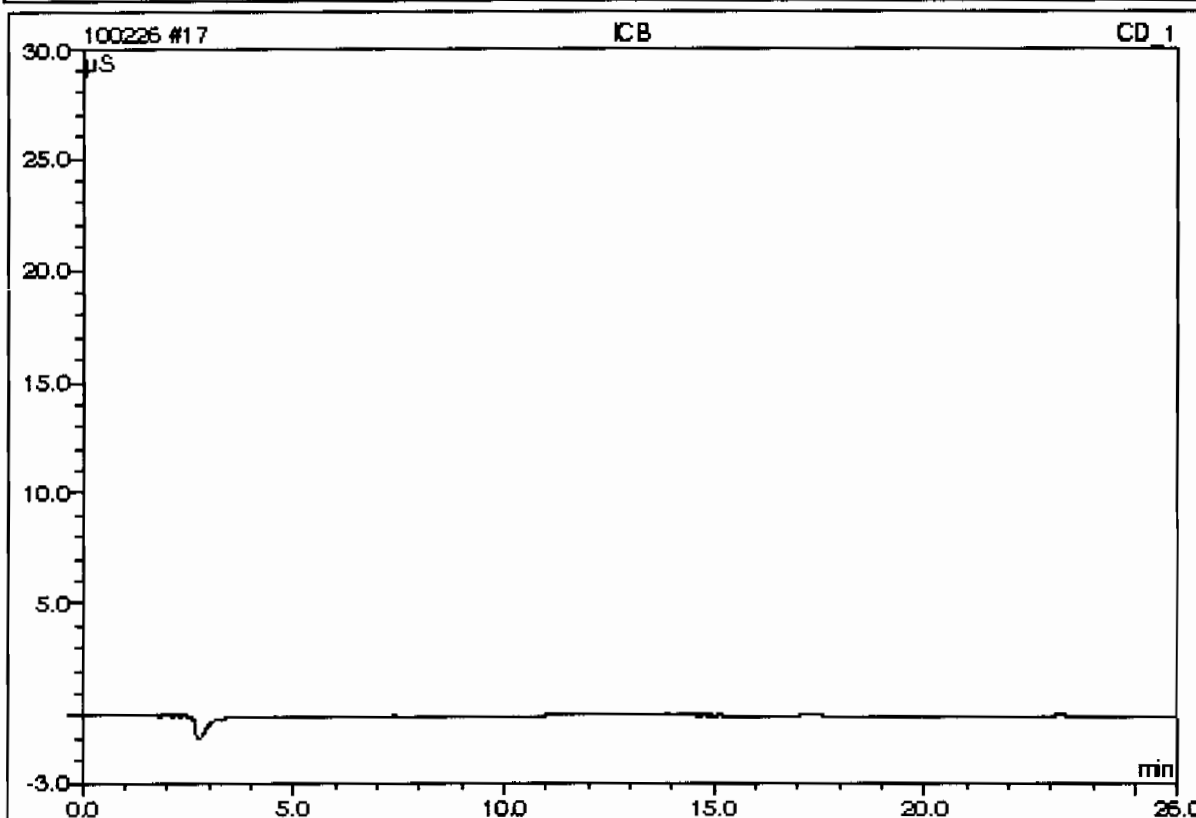
Sample Name:	WIC100226-02ICV	Injection Volume:	1.0
Vial Number:	10	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 17:33	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel.Area %
1	4.34	Fluoride	n.a.	4.8533		2.76044	12.27
2	7.41	Chloride	n.a.	9.4181		3.96602	17.63
3	9.53	Nitrite-N	n.a.	4.8245		3.99229	17.75
4	11.00	Chlorate	n.a.	2.4815		0.35771	1.59
5	11.97	Bromide	n.a.	2.4889		0.38276	1.70
6	14.03	Nitrate-N	n.a.	4.7766		4.74087	21.07
7	20.81	O-Phosphate-P	n.a.	2.7182		0.73321	3.26
8	23.21	Sulfate	n.a.	19.0842		5.56215	24.73
Total:				50.6453	0.000	22.495	100.00

17 ICB

Sample Name:	ICB	Injection Volume:	1.0
Vial Number:	11	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	2/26/2010 18:02	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



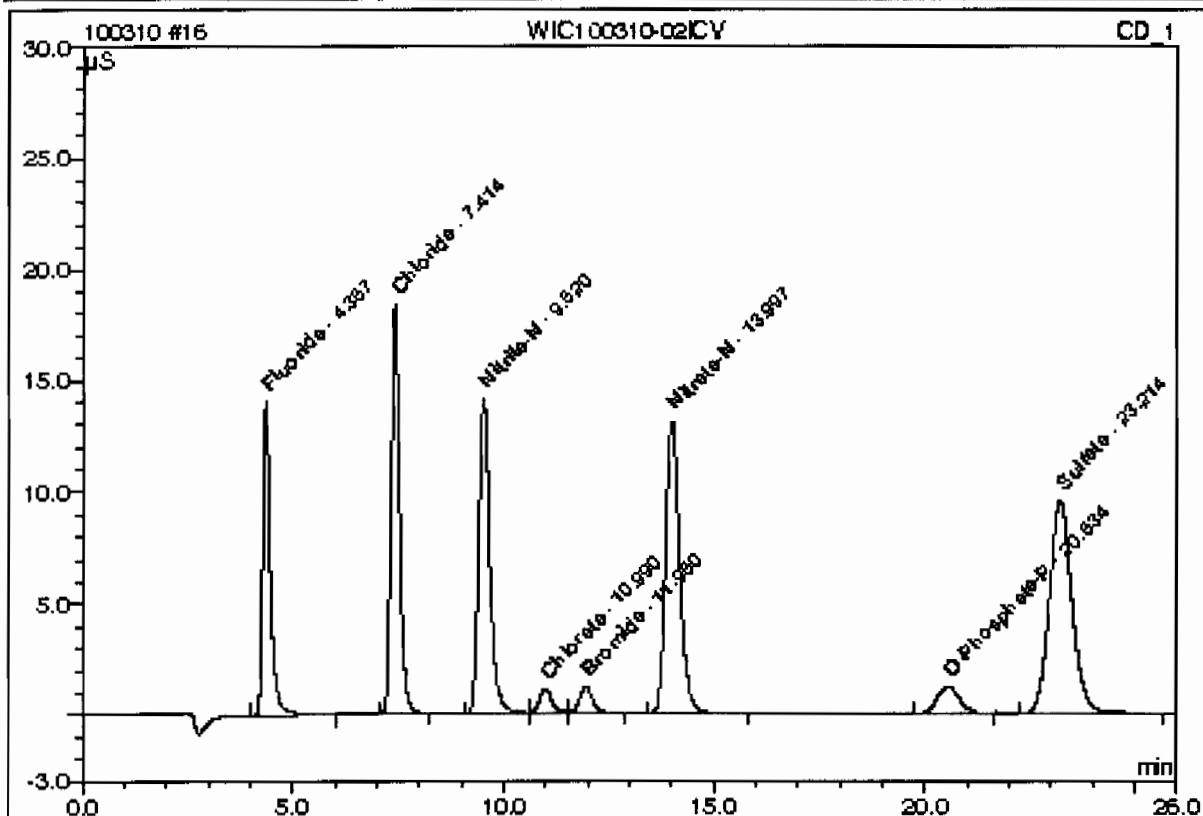
No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area uS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

This is runlog for Sequence 100310.seq for IC6

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	03/10/10 10:40		1	100310	MAR1
BLK	03/10/10 11:08		1	100310	MAR1
ICV	03/10/10 11:37		1	100310	MAR1
ICB	03/10/10 12:06		1	100310	MAR1
1202054065	03/10/10 12:35	957881	1	100310	GXM3
1202054072	03/10/10 13:04	957881	1	100310	GXM3
247546004	03/10/10 13:33	957881	1	100310	GXM3
1202054066	03/10/10 14:02	957881	1	100310	GXM3
1202054068	03/10/10 14:31	957881	1	100310	GXM3
1202054070	03/10/10 15:00	957881	1	100310	GXM3
247551001	03/10/10 15:29	957881	1	100310	MAR1
247551002	03/10/10 15:57	957881	1	100310	MAR1
247790002	03/10/10 16:26	957881	1	100310	MAR1
247790003	03/10/10 16:55	957881	1	100310	MAR1
CVH	03/10/10 17:24		1	100310	MAR1
CCB	03/10/10 17:53		1	100310	MAR1
247794001	03/10/10 18:22	957881	1	100310	MAR1
247794002	03/10/10 18:51	957881	1	100310	MAR1
247794003	03/10/10 19:20	957881	1	100310	MAR1
247794004	03/10/10 19:49	957881	1	100310	MAR1
247794005	03/10/10 20:18	957881	1	100310	MAR1
247822001	03/10/10 20:46	957881	1	100310	MAR1
247822002	03/10/10 21:15	957881	1	100310	MAR1
247822003	03/10/10 21:44	957881	1	100310	MAR1
247822004	03/10/10 22:13	957881	1	100310	MAR1
247822005	03/10/10 22:42	957881	1	100310	MAR1
CCV	03/10/10 23:11		1	100310	MAR1
CCB	03/10/10 23:40		1	100310	MAR1

16 WIC100310-02ICV

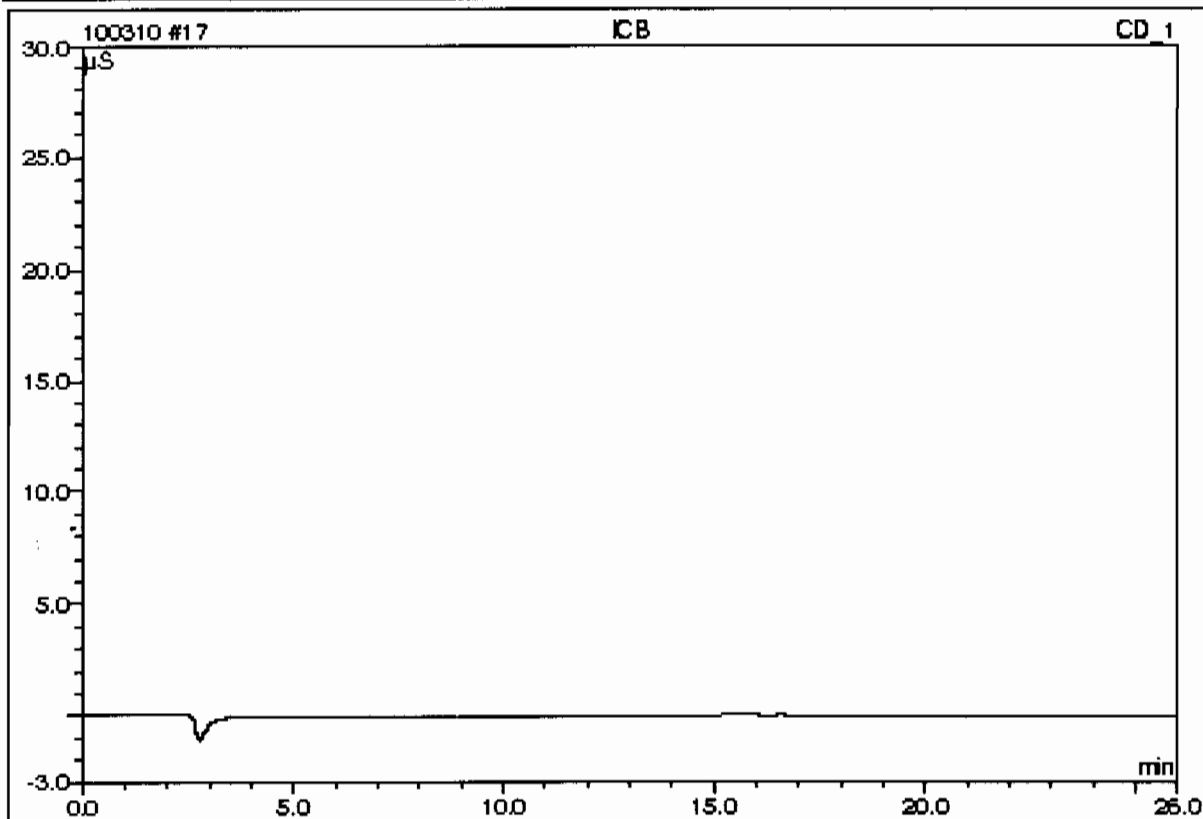
Sample Name:	WIC100310-02ICV	Injection Volume:	1.0
Vial Number:	3	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/10/2010 11:37	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GLGCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.36	Fluoride	n.a.	5.2152		2.96892	12.18
2	7.41	Chloride	n.a.	10.1363		4.27442	17.53
3	9.52	Nitrite-N	n.a.	5.1895		4.29844	17.63
4	10.99	Chlorate	n.a.	2.6073		0.37617	1.54
5	11.95	Bromide	n.a.	2.8530		0.43891	1.80
6	14.00	Nitrate-N	n.a.	5.1832		5.15223	21.13
7	20.53	O-Phosphate-P	n.a.	2.8401		0.76797	3.15
8	23.21	Sulfate	n.a.	20.9195		6.10515	25.04
Total:				54.9442	0.000	24.382	100.00

17 ICB

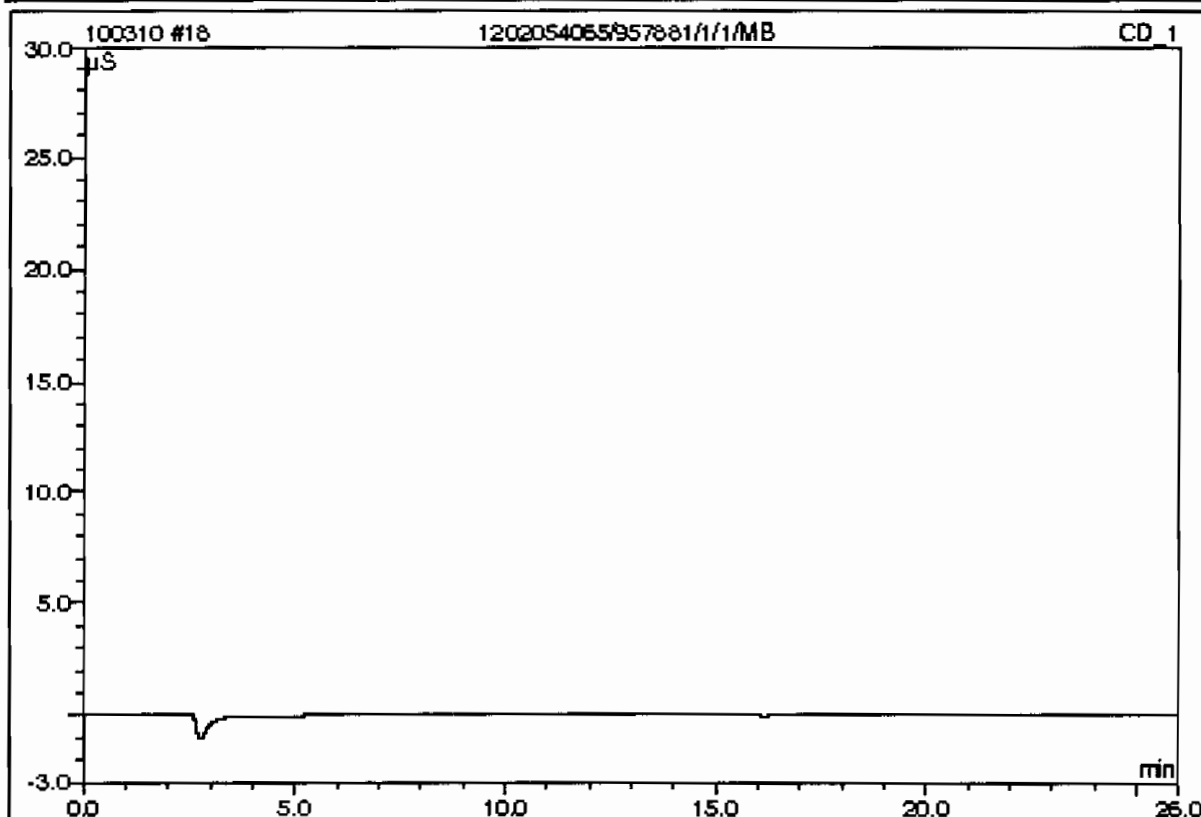
Sample Name:	ICB	Injection Volume:	1.0
Vial Number:	4	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/10/2010 12:06	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
Total:				0.0000	0.000	0.000	0.00

18 1202054065/957881/1/1/MB

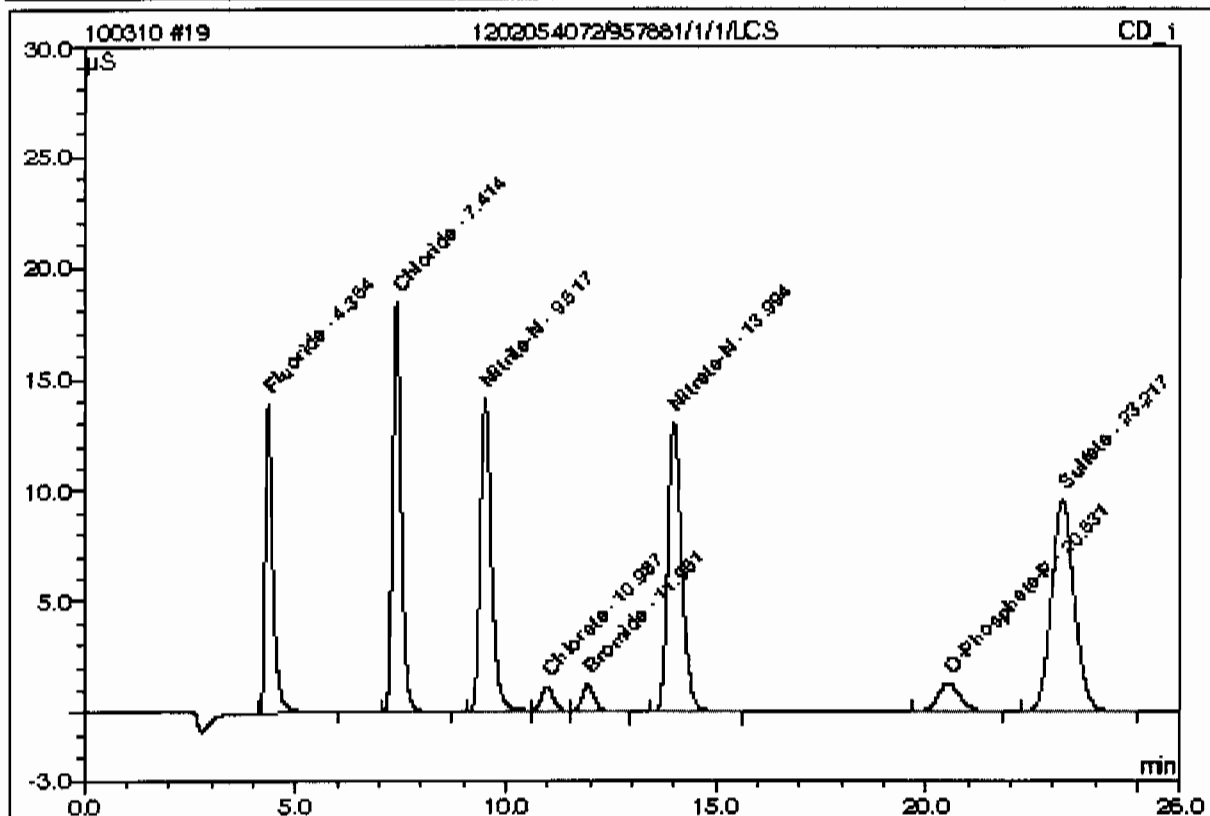
Sample Name:	1202054065/957881/1/1/MB	Injection Volume:	1.0
Vial Number:	5	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/10/2010 12:35	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

19 1202054072/957881/1/1/LCS

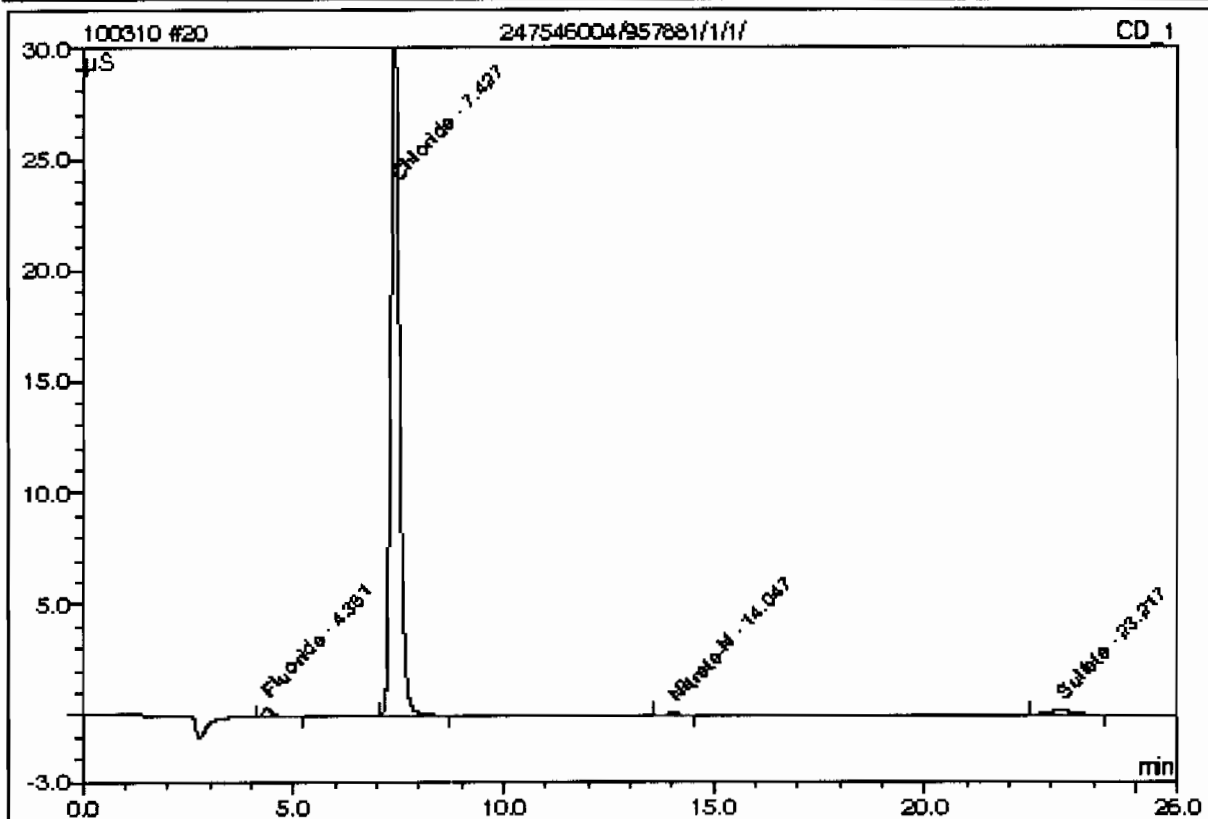
Sample Name:	1202054072/957881/1/1/LCS	Injection Volume:	1.0
Vial Number:	6	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/10/2010 13:04	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.35	Fluoride	n.a.	5.1956		2.95761	12.15
2	7.41	Chloride	n.a.	10.2070		4.30476	17.68
3	9.52	Nitrite-N	n.a.	5.2151		4.31991	17.74
4	10.99	Chlorate	n.a.	2.6718		0.38565	1.58
5	11.95	Bromide	n.a.	2.7158		0.41774	1.72
6	13.99	Nitrate-N	n.a.	5.1788		5.14778	21.14
7	20.53	O-Phosphate-P	n.a.	2.8617		0.77413	3.18
8	23.22	Sulfate	n.a.	20.6913		6.03764	24.80
Total:				54.7372	0.000	24.345	100.00

20 247546004/957881/1/1/

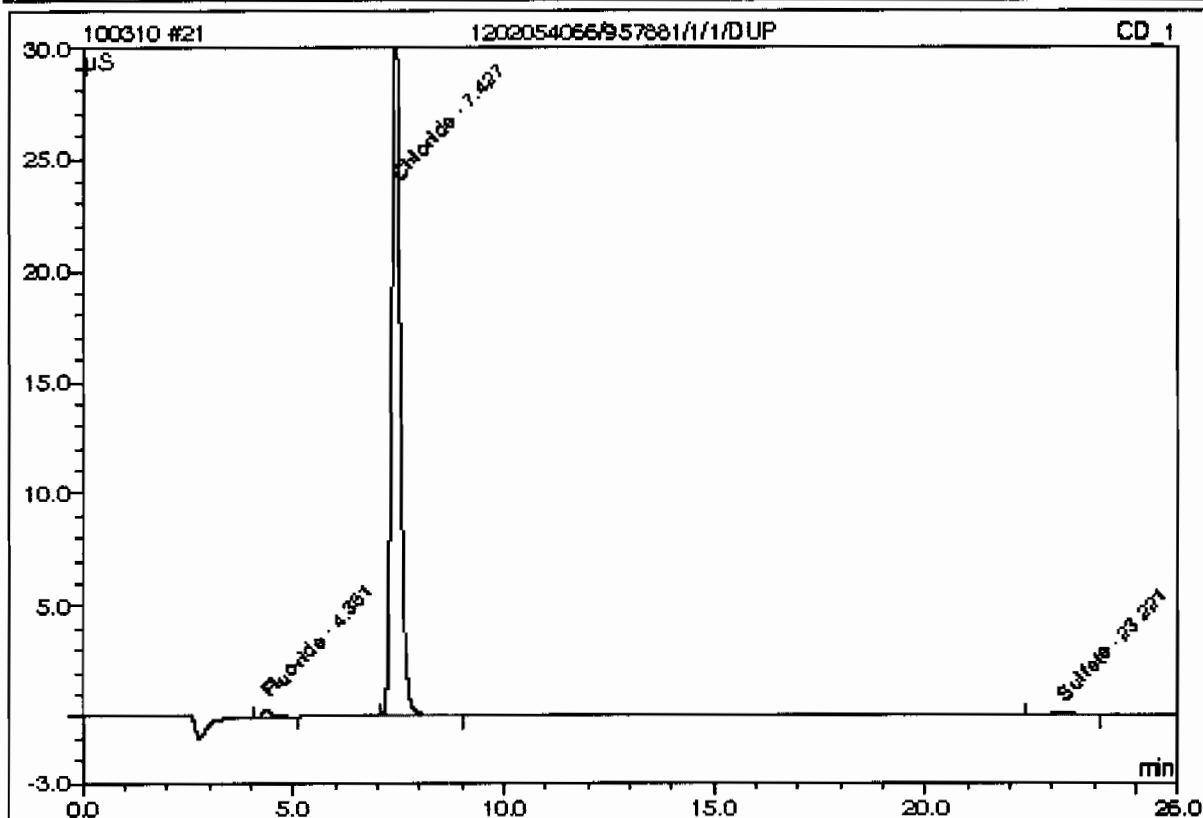
Sample Name:	247546004/957881/1/1/	Injection Volume:	1.0
Vial Number:	7	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/10/2010 13:33	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.36	Fluoride	n.a.	0.2159		0.08916	1.16
2	7.43	Chloride	n.a.	17.6481		7.50014	97.19
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
3	14.05	Nitrate-N	n.a.	0.1051		0.01505	0.19
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	23.22	Sulfate	n.a.	0.6646		0.11264	1.46
Total:				18.6337	0.000	7.717	100.00

21 1202054066/957881/1/1/DUP

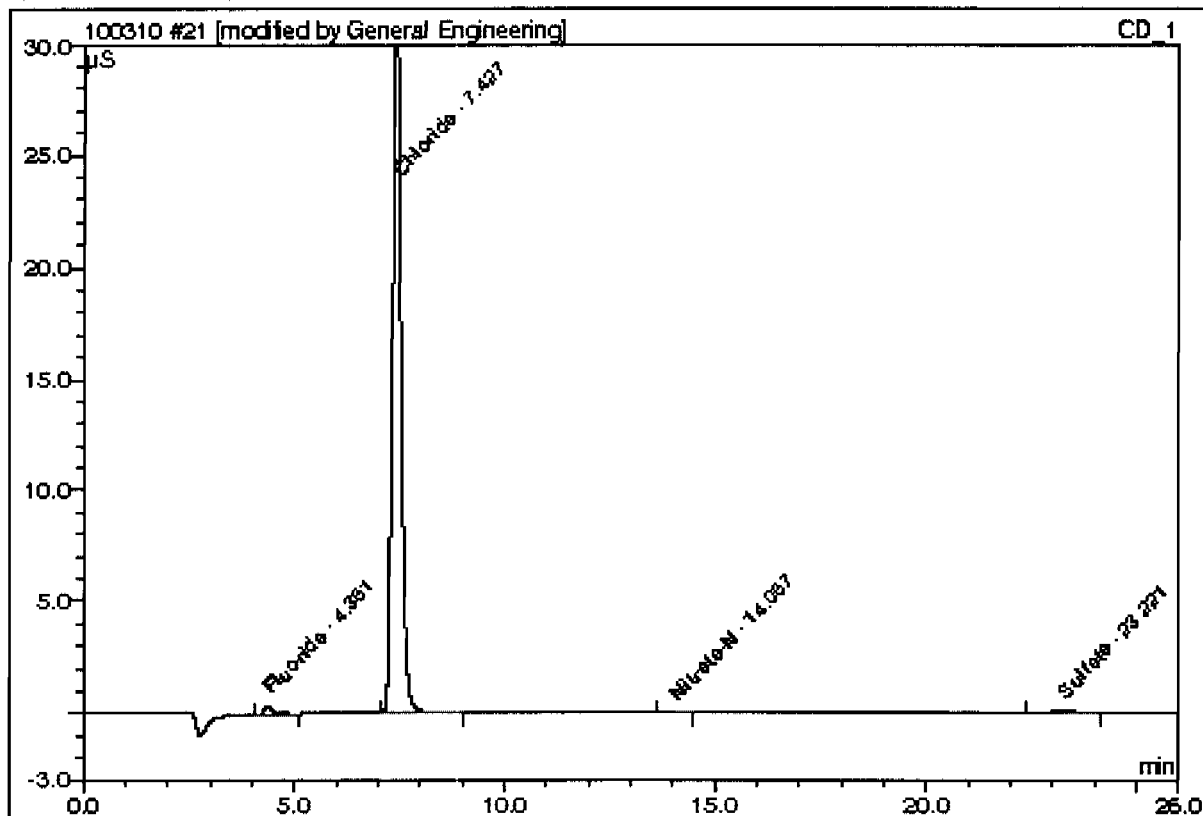
Sample Name:	1202054066/957881/1/1/DUP	Injection Volume:	1.0
Vial Number:	8	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/10/2010 14:02	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-001528; GLGCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.36	Fluoride	n.a.	0.2135		0.08773	1.12
2	7.43	Chloride	n.a.	17.9332		7.62259	97.47
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	23.22	Sulfate	n.a.	0.6567		0.11029	1.41
Total:				18.6034	0.000	7.821	100.00

21 1202054066/957881/1/1/DUP

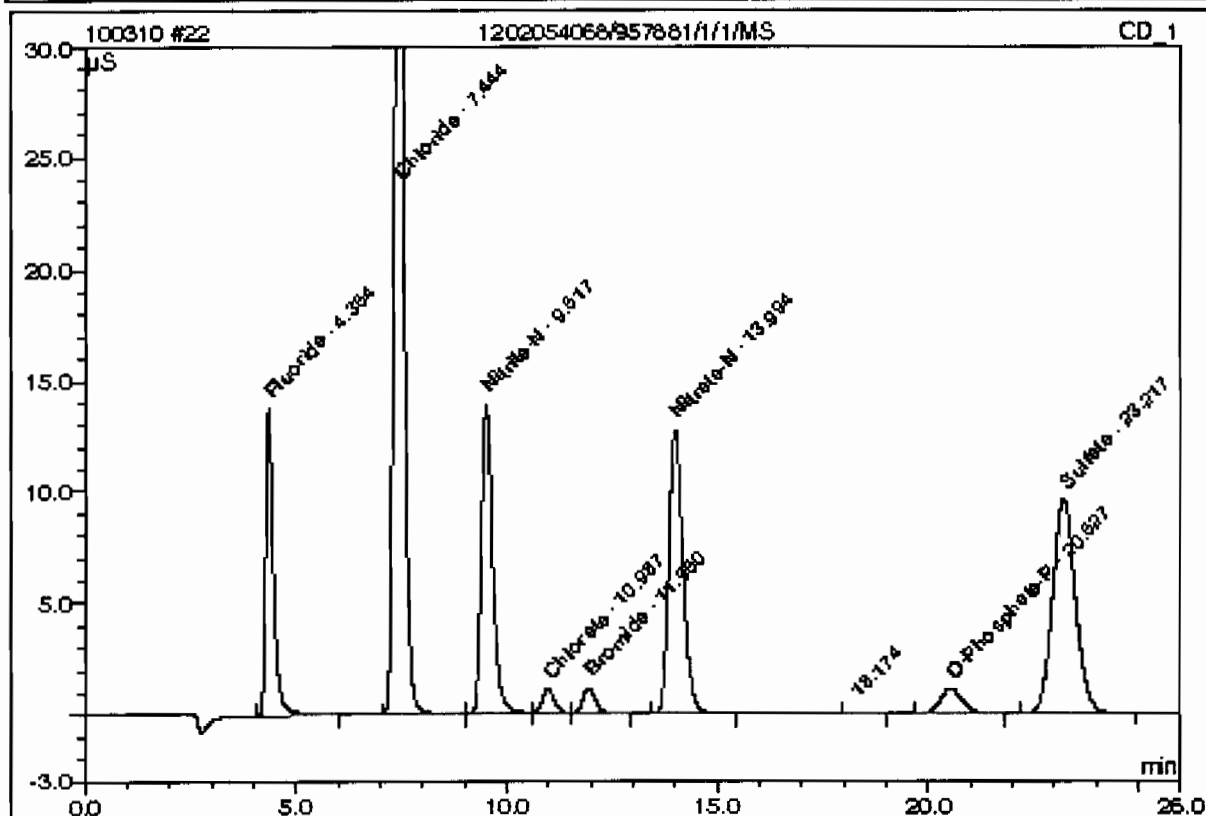
Sample Name:	1202054066/957881/1/1/DUP	Injection Volume:	1.0
Vial Number:	8	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/10/2010 14:02	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.36	Fluoride	n.a.	0.2135		0.08773	1.12
2	7.43	Chloride	n.a.	17.9332		7.62259	97.30
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
3	14.06	Nitrate-N	n.a.	0.1035		0.01341	0.17
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	23.22	Sulfate	n.a.	0.6567		0.11029	1.41
Total:				18.9069	0.000	7.834	100.00

22 1202054068/957881/1/1/MS

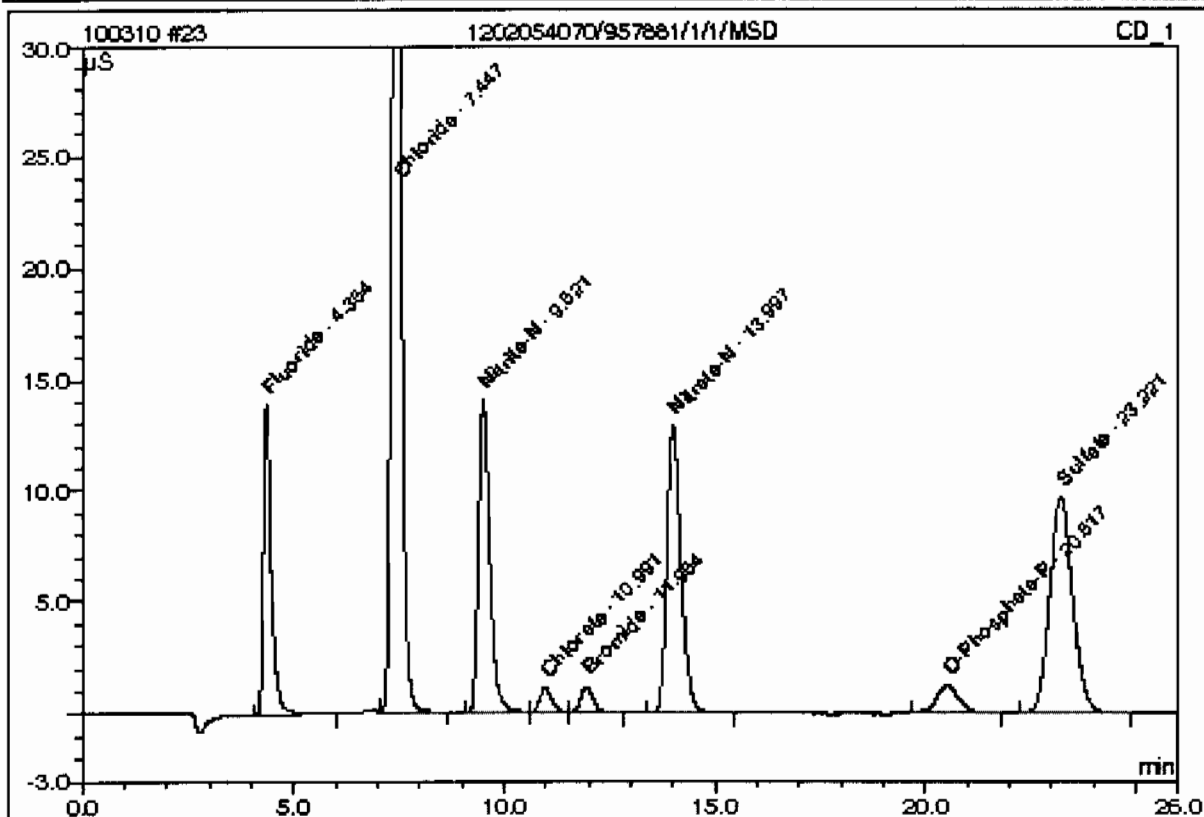
Sample Name:	1202054068/957881/1/1/MS	Injection Volume:	1.0
Vial Number:	9	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/10/2010 14:31	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.35	Fluoride	n.a.	5.2028		2.96177	9.06
2	7.44	Chloride	n.a.	30.1685		12.87667	39.38
3	9.52	Nitrite-N	n.a.	5.1519		4.26687	13.05
4	10.99	Chlorate	n.a.	2.6707		0.38548	1.18
5	11.95	Bromide	n.a.	2.6694		0.41060	1.26
6	13.99	Nitrate-N	n.a.	5.0508		5.01825	15.35
8	20.53	O-Phosphate-P	n.a.	2.6336		0.70910	2.17
9	23.22	Sulfate	n.a.	20.7415		6.05247	18.51
Total:				74.2891	0.000	32.681	99.95

23 1202054070/957881/1/1/MSD

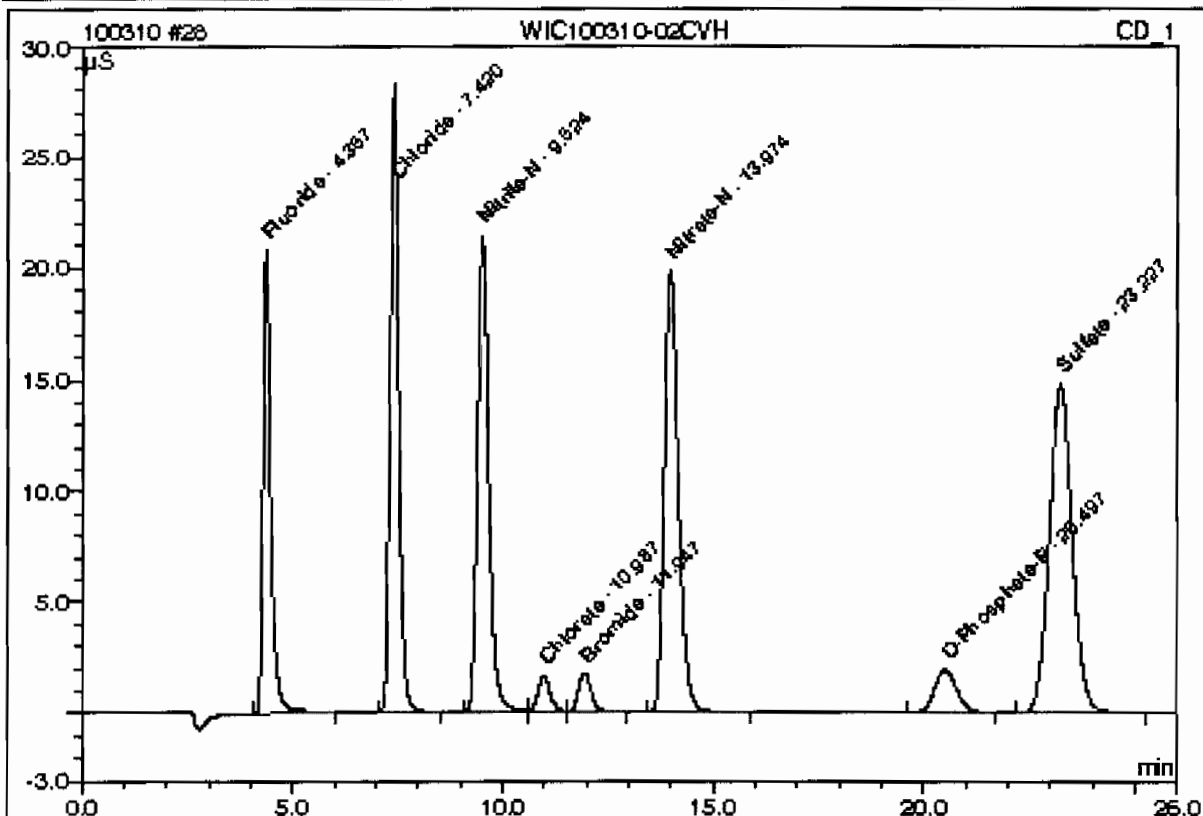
Sample Name:	1202054070/957881/1/1/MSD	Injection Volume:	1.0
Vial Number:	10	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/10/2010 15:00	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel. Area %
1	4.35	Fluoride	n.a.	5.2608		2.99521	9.05
2	7.45	Chloride	n.a.	30.5554		13.04285	39.41
3	9.52	Nitrite-N	n.a.	5.1947		4.30275	13.00
4	10.99	Chlorate	n.a.	2.6083		0.37632	1.14
5	11.95	Bromide	n.a.	2.6340		0.40514	1.22
6	14.00	Nitrate-N	n.a.	5.1217		5.09001	15.38
7	20.52	O-Phosphate-P	n.a.	2.8533		0.77173	2.33
8	23.22	Sulfate	n.a.	20.9331		6.10915	18.46
Total:				75.1614	0.000	33.093	100.00

28 WIC100310-02CVH

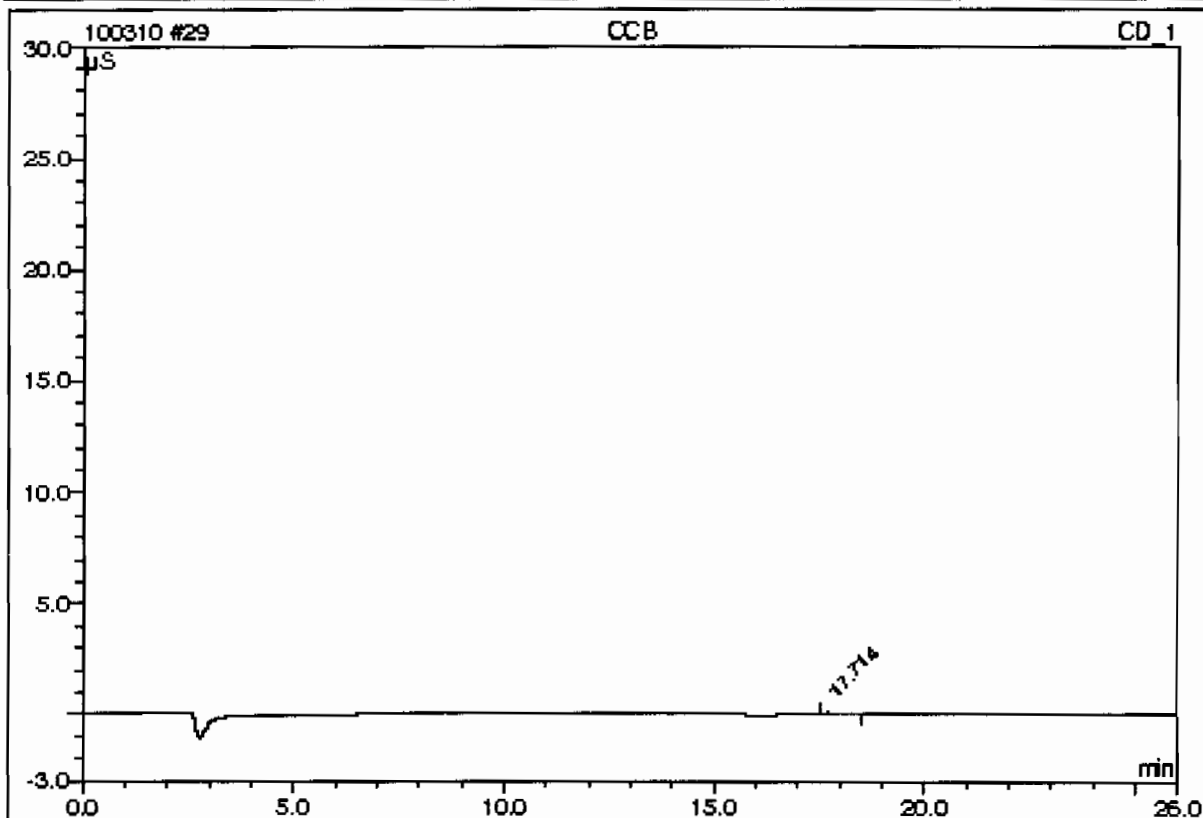
Sample Name:	WIC100310-02CVH	Injection Volume:	1.0
Vial Number:	15	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/10/2010 17:24	Analyst:	MAR1
Run Time (min):	28.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.36	Fluoride	n.a.	7.7556		4.43230	12.00
2	7.42	Chloride	n.a.	15.5459		6.59740	17.86
3	9.52	Nitrate-N	n.a.	7.8454		6.52566	17.66
4	10.99	Chlorate	n.a.	3.8324		0.55605	1.51
5	11.95	Bromide	n.a.	3.9159		0.60282	1.63
6	13.97	Nitrate-N	n.a.	7.8416		7.84154	21.23
7	20.50	O-Phosphate-P	n.a.	4.2024		1.15629	3.13
8	23.23	Sulfate	n.a.	31.4879		9.23186	24.99
Total:				82.4270	0.000	36.944	100.00

29 CCB

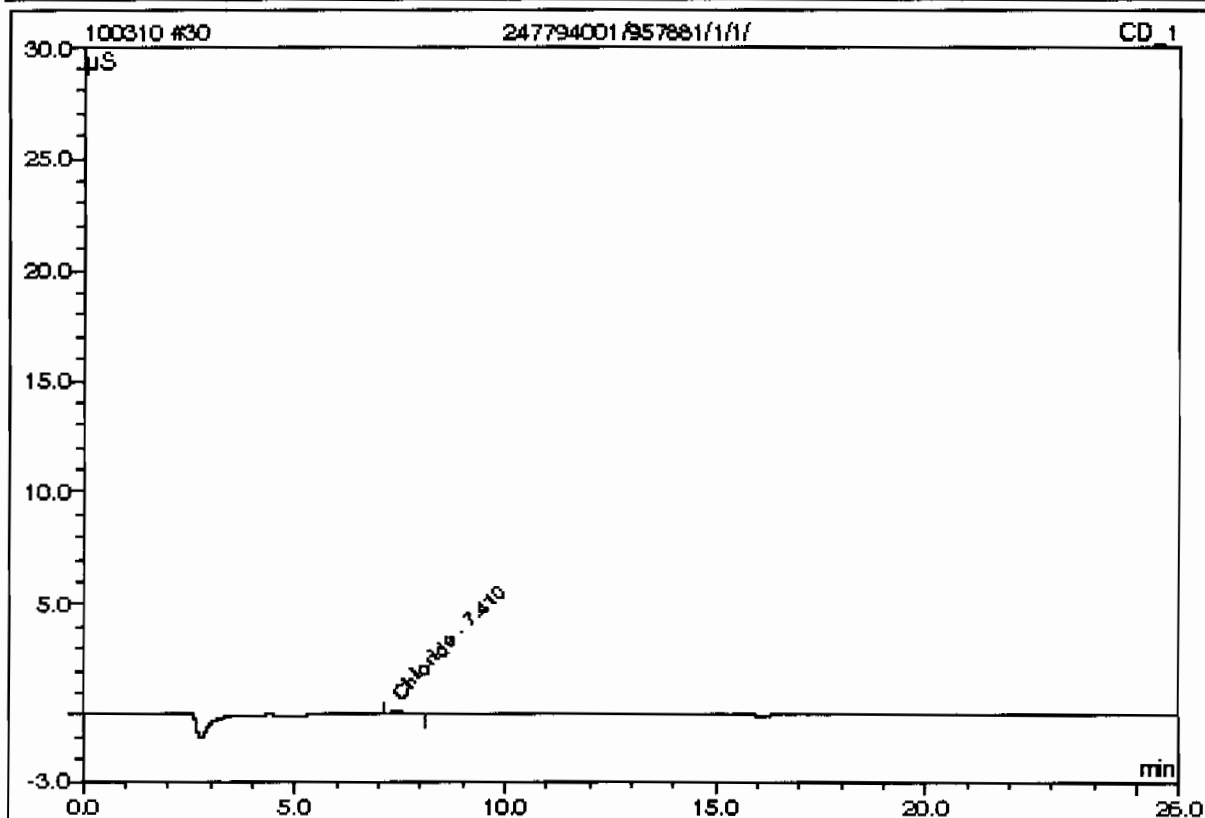
Sample Name:	CCB	Injection Volume:	1.0
Vial Number:	16	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/10/2010 17:53	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

30 247794001/957881/1/1/

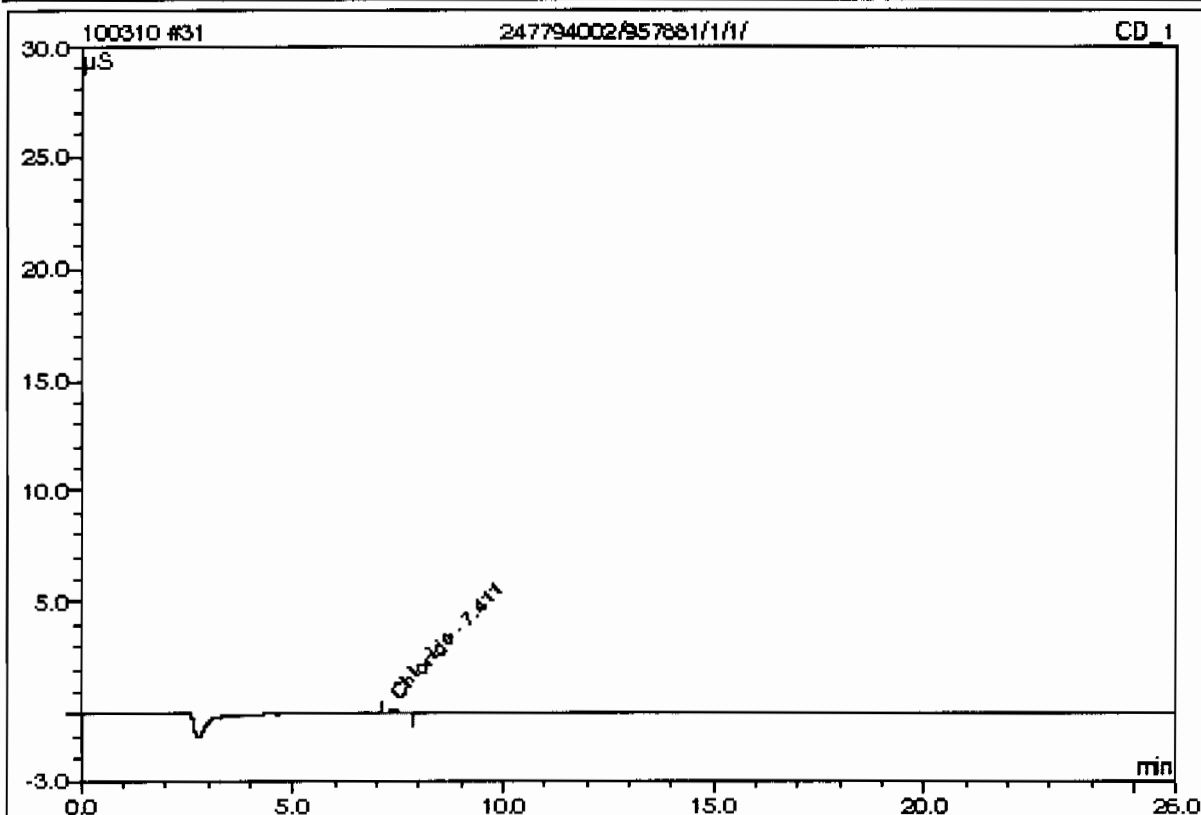
Sample Name:	247794001/957881/1/1/	Injection Volume:	1.0
Vial Number:	17	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/10/2010 18:22	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.41	Chloride	n.a.	0.3060		0.05305	100.00
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.3060	0.000	0.053	100.00

31 247794002/957881/1/1/

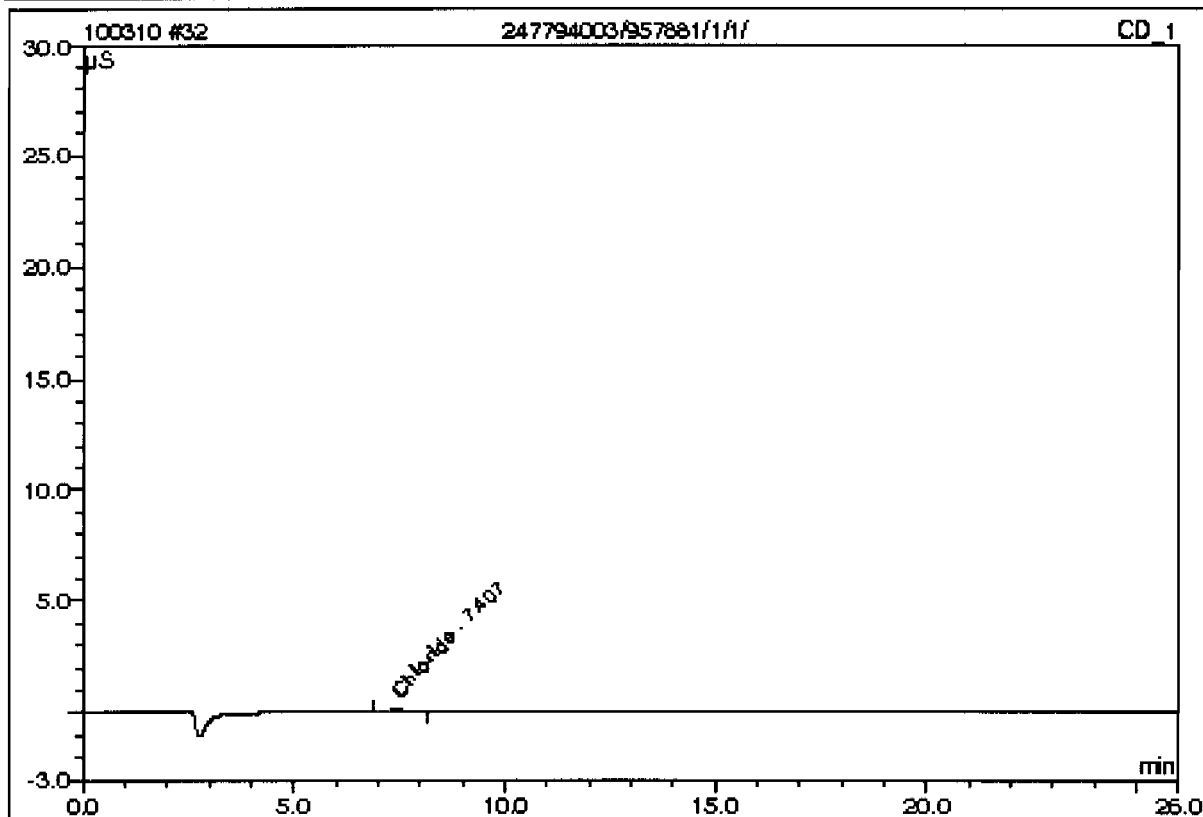
Sample Name:	247794002/957881/1/1/	Injection Volume:	1.0
Vial Number:	18	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/10/2010 18:51	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.41	Chloride	n.a.	0.2725		0.03868	100.00
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.2725	0.000	0.039	100.00

32 247794003/957881/1/1/

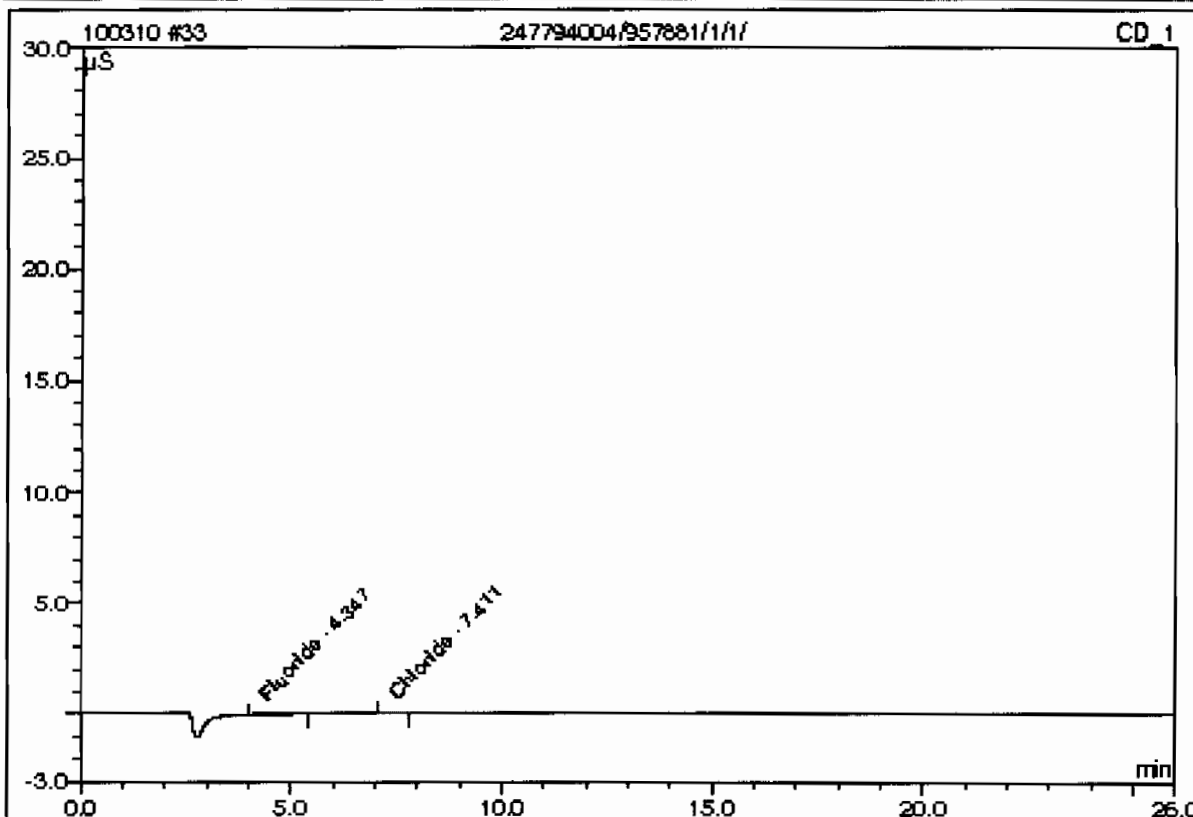
Sample Name:	247794003/957881/1/1/	Injection Volume:	1.0
Vial Number:	19	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/10/2010 19:20	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.41	Chloride	n.a.	0.3010		0.05090	100.00
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.3010	0.000	0.051	100.00

33 247794004/957881/1/1/

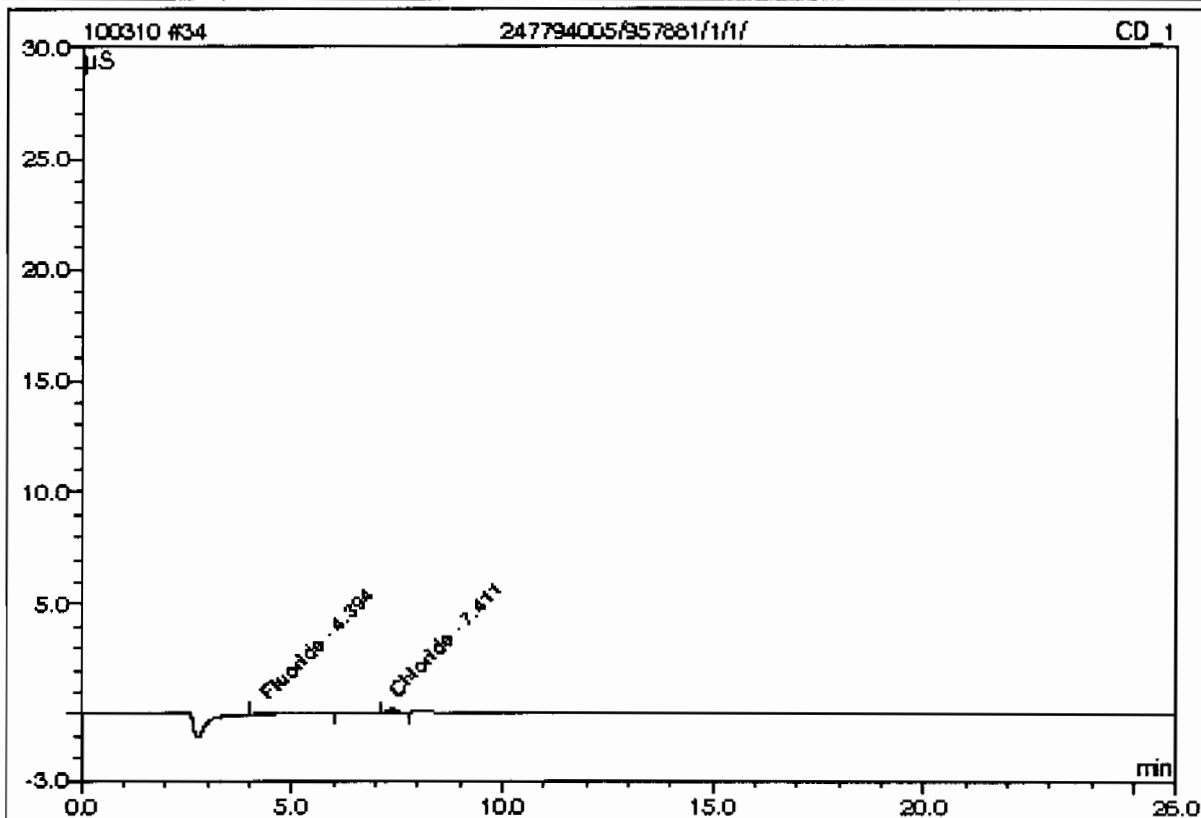
Sample Name:	247794004/957881/1/1/	Injection Volume:	1.0
Vial Number:	20	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/10/2010 19:49	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel. Area %
1	4.35	Fluoride	n.a.	0.1394		0.04505	70.33
2	7.41	Chloride	n.a.	0.2267		0.01900	29.67
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.3661	0.000	0.064	100.00

34 247794005/957881/1/1/

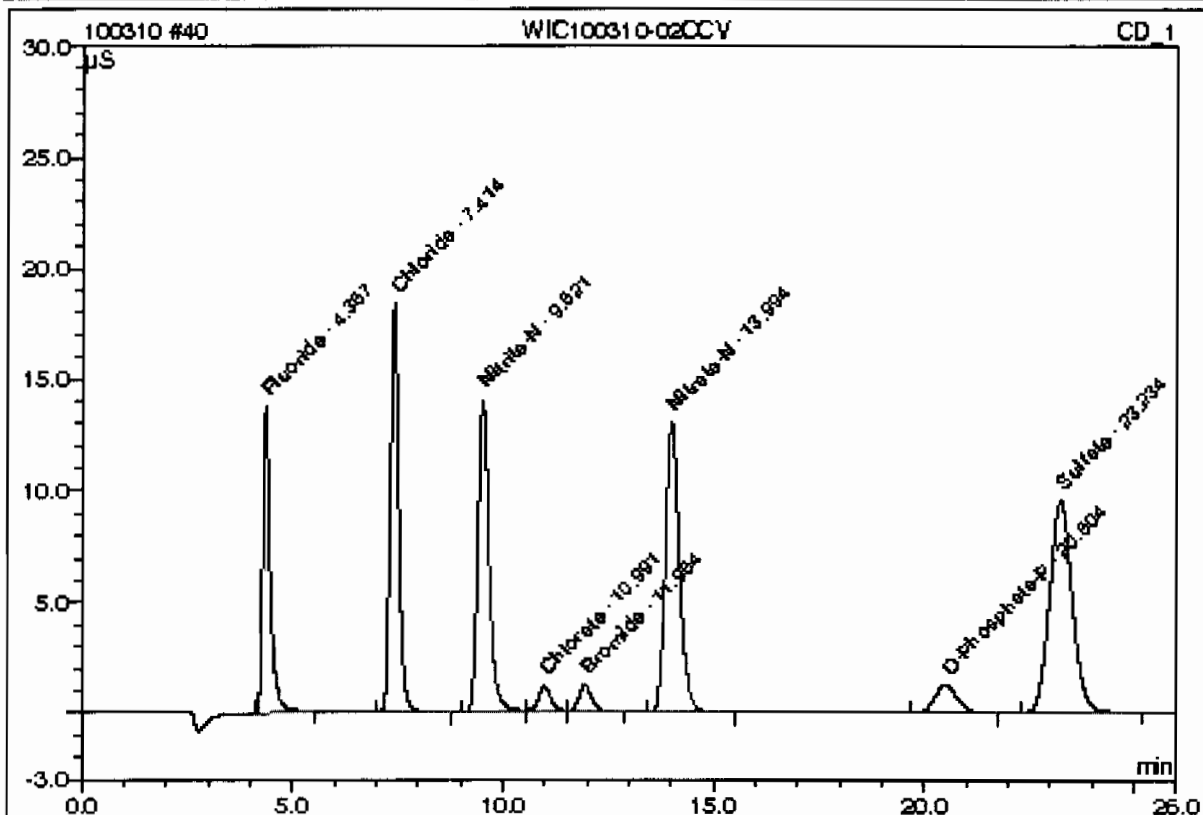
Sample Name:	247794005/957881/1/1/	Injection Volume:	1.0
Vial Number:	21	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/10/2010 20:18	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area $\mu\text{S} \cdot \text{min}$	Rel. Area %
1	4.39	Fluoride	n.a.	0.2620		0.11567	71.09
2	7.41	Chloride	n.a.	0.2919		0.04703	28.91
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.5539	0.000	0.163	100.00

40 WIC100310-02CCV

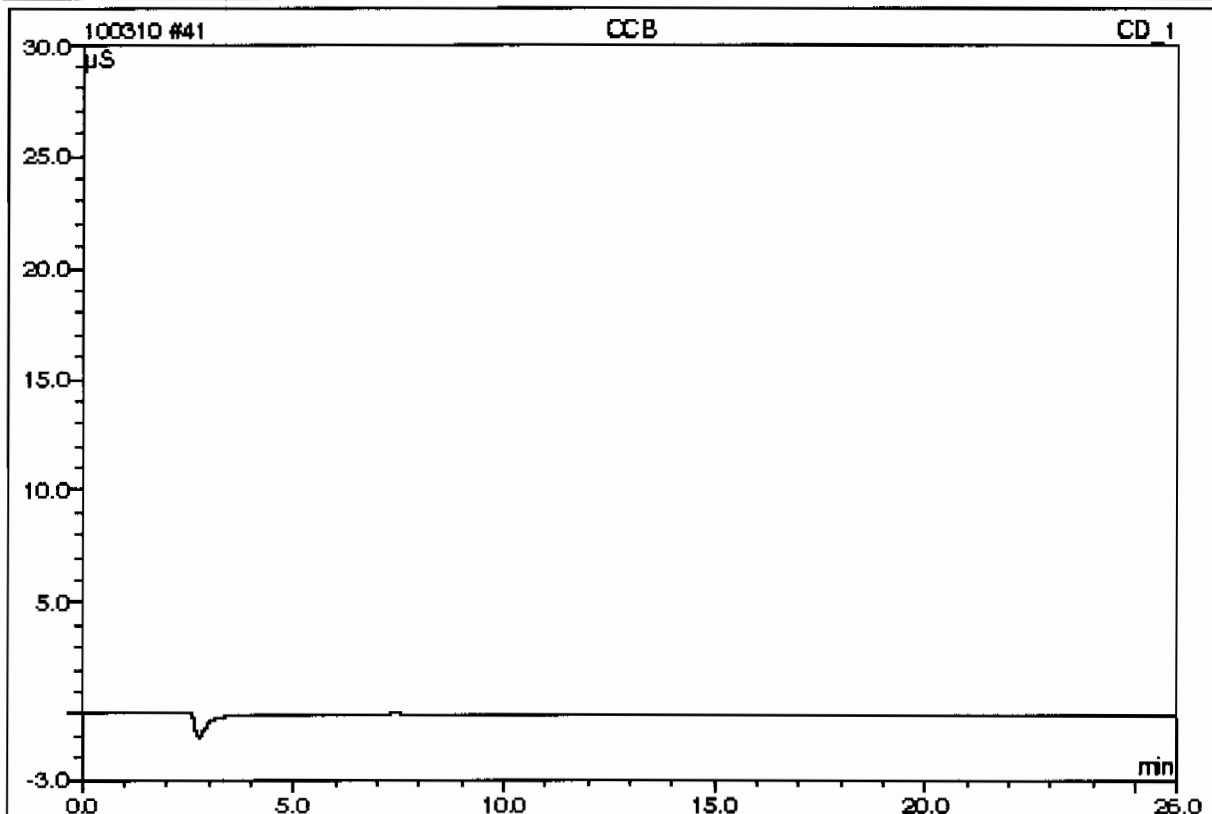
Sample Name:	WIC100310-02CCV	Injection Volume:	1.0
Vial Number:	27	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/10/2010 23:11	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area $\mu\text{S} \cdot \text{min}$	Rel. Area %
1	4.36	Fluoride	n.a.	5.1044		2.90513	11.93
2	7.41	Chloride	n.a.	10.2148		4.30814	17.69
3	9.52	Nitrite-N	n.a.	5.2053		4.31168	17.71
4	10.99	Chlorate	n.a.	2.9687		0.42924	1.76
5	11.95	Bromide	n.a.	2.8057		0.43161	1.77
6	13.99	Nitrate-N	n.a.	5.1719		5.14077	21.11
7	20.50	O-Phosphate-P	n.a.	2.9024		0.78571	3.23
8	23.23	Sulfate	n.a.	20.6809		6.03455	24.79
Total:				55.0541	0.000	24.347	100.00

41 CCB

Sample Name:	CCB	Injection Volume:	1.0
Vial Number:	28	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100225an	Sample Amount:	1.0000
Recording Time:	3/10/2010 23:40	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



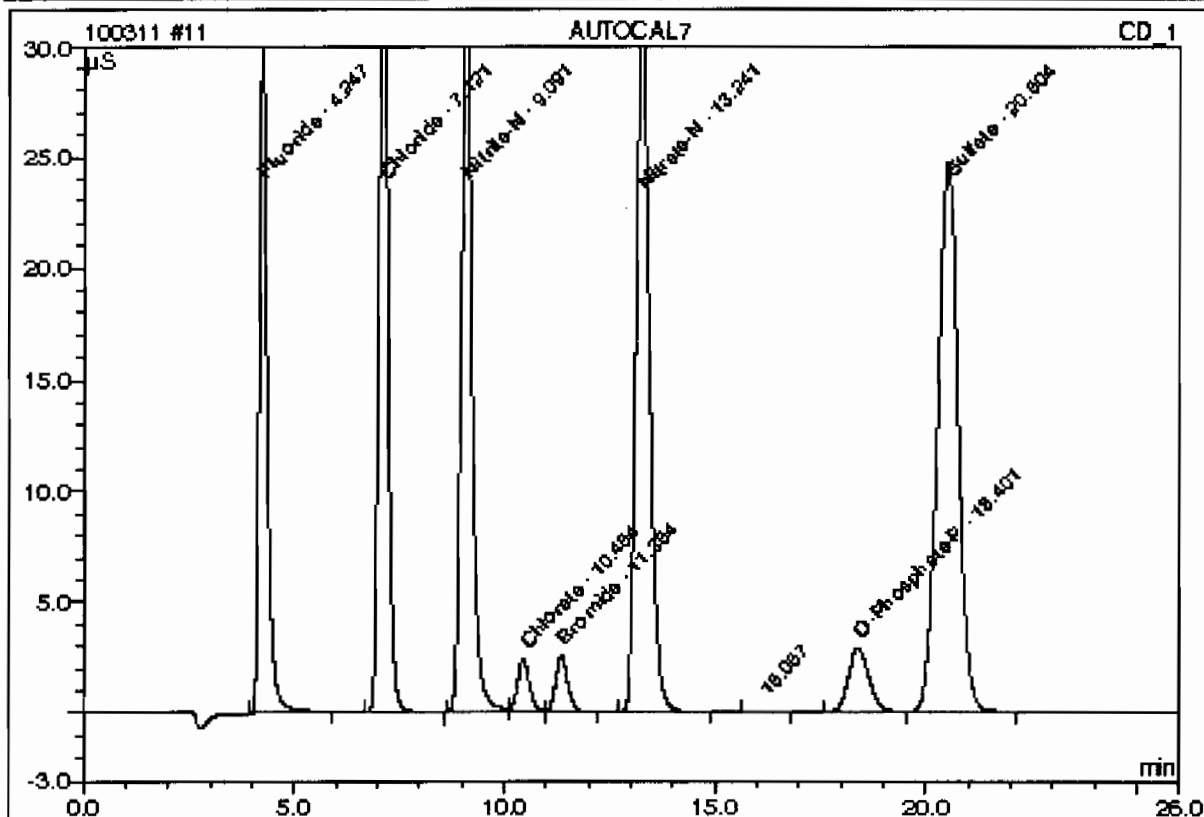
No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

This is runlog for Sequence 100311.seq for IC6

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	03/11/10 09:28		1	100311	MAR1
BLK	03/11/10 10:25		1	100311	MAR1
BLK	03/11/10 10:54		1	100311	MAR1
ICAL-07	03/11/10 11:23		1	100311	MAR1
ICAL-06	03/11/10 11:52		1	100311	MAR1
ICAL-05	03/11/10 12:21		1	100311	MAR1
ICAL-04	03/11/10 12:49		1	100311	MAR1
ICAL-03	03/11/10 13:18		1	100311	MAR1
ICAL-02	03/11/10 15:10		1	100311	MAR1
ICAL-01	03/11/10 17:37		1	100311	MAR1
ICV	03/11/10 18:06		1	100311	MAR1
ICB	03/11/10 18:35		1	100311	MAR1
247822006	03/11/10 19:04	957881	1	100311	MAR1
1202054067	03/11/10 19:33	957881	1	100311	MAR1
1202054069	03/11/10 20:01	957881	1	100311	MAR1
1202054071	03/11/10 20:30	957881	1	100311	MAR1
CCV	03/11/10 20:59		1	100311	MAR1
CCB	03/11/10 21:28		1	100311	MAR1
LOSALAMOS-1	03/11/10 21:57		1	100311	MAR1
LOSALAMOS-2	03/11/10 22:26		1	100311	MAR1
LOSALAMOS-3	03/11/10 22:55		1	100311	MAR1
LOSALAMOS-4	03/11/10 23:24		1	100311	MAR1
LOSALAMOS-5	03/11/10 23:53		1	100311	MAR1

11 AUTOCAL7

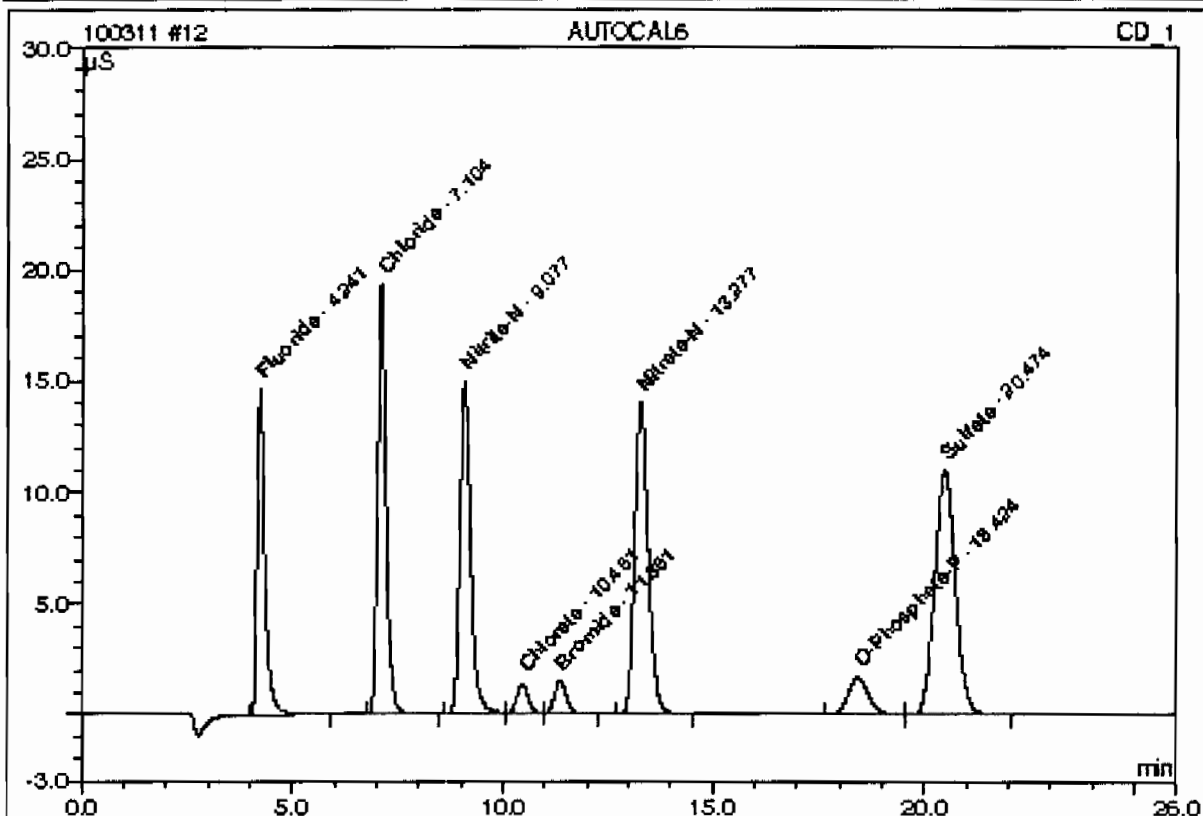
Sample Name:	AUTOCAL7	Injection Volume:	1.0
Vial Number:	5	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/11/2010 11:23	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.25	Fluoride	10.0000	10.0146		6.46105	11.84
2	7.12	Chloride	20.0000	20.0364		9.90618	18.15
3	9.09	Nitrite-N	10.0000	10.0156		9.47937	17.36
4	10.45	Chlorate	5.0000	5.0000		0.79276	1.45
5	11.35	Bromide	5.0000	5.1708		0.84275	1.54
6	13.24	Nitrate-N	10.0000	10.0000		11.71709	21.46
8	18.40	O-Phosphate-P	5.0000	5.0030		1.63876	3.00
9	20.50	Sulfate	40.0000	40.1381		13.73387	25.16
Total:				105.3786	0.000	54.572	99.97

12 AUTOCAL6

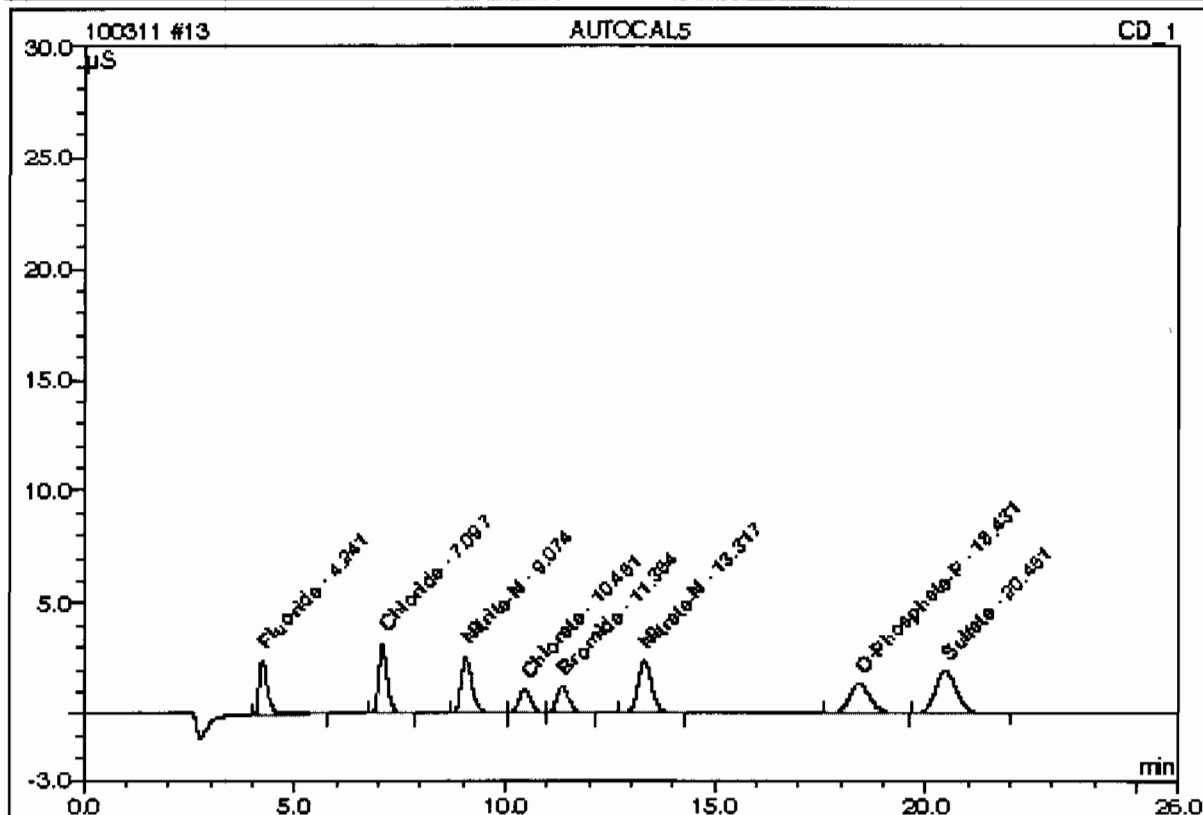
Sample Name:	AUTOCAL6	Injection Volume:	1.0
Vial Number:	6	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/11/2010 11:52	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.24	Fluoride	5.0000	4.7911		3.03900	12.01
2	7.10	Chloride	10.0000	9.1952		4.40744	17.41
3	9.08	Nitrate-N	5.0000	4.7841		4.44578	17.56
4	10.46	Chlorate	3.0000	2.9821		0.47134	1.86
5	11.36	Bromide	3.0000	3.0524		0.50958	2.01
6	13.28	Nitrate-N	5.0000	4.6474		5.23885	20.70
7	18.42	O-Phosphate-P	3.0000	2.9723		0.95993	3.79
8	20.47	Sulfate	20.0000	18.8589		6.24121	24.66
Total:				51.2835	0.000	25.313	100.00

13 AUTOCAL5

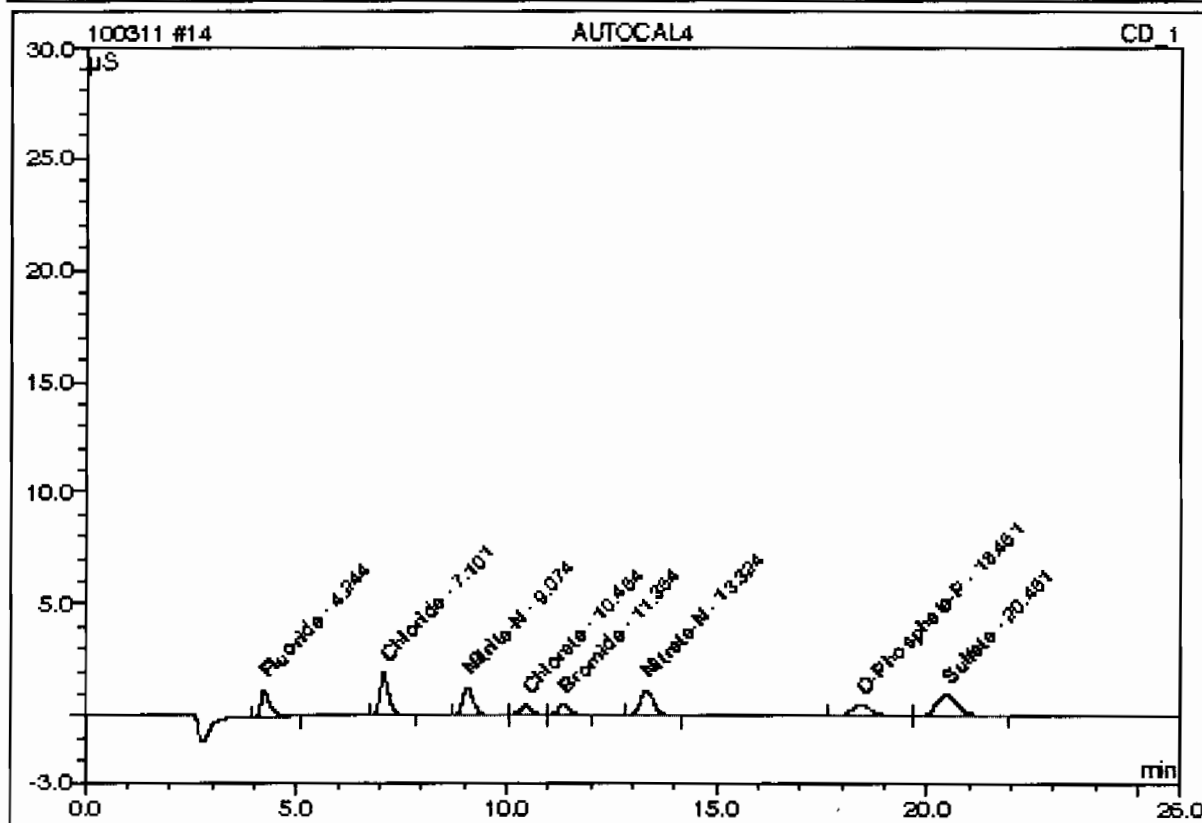
Sample Name:	AUTOCAL5	Injection Volume:	1.0
Vial Number:	7	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/11/2010 12:21	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel. Area %
1	4.24	Fluoride	1.0000	0.9360		0.55400	9.66
2	7.10	Chloride	2.0000	1.7966		0.76155	13.28
3	9.07	Nitrite-N	1.0000	0.9334		0.80029	13.96
4	10.46	Chlorate	2.5000	2.3962		0.37297	6.51
5	11.36	Bromide	2.5000	2.4819		0.41426	7.23
6	13.32	Nitrate-N	1.0000	0.9765		0.91953	16.04
7	18.43	O-Phosphate-P	2.5000	2.4518		0.78316	13.66
8	20.46	Sulfate	4.0000	3.8881		1.12776	19.67
Total:				15.8606	0.000	5.734	100.00

14 AUTOCAL4

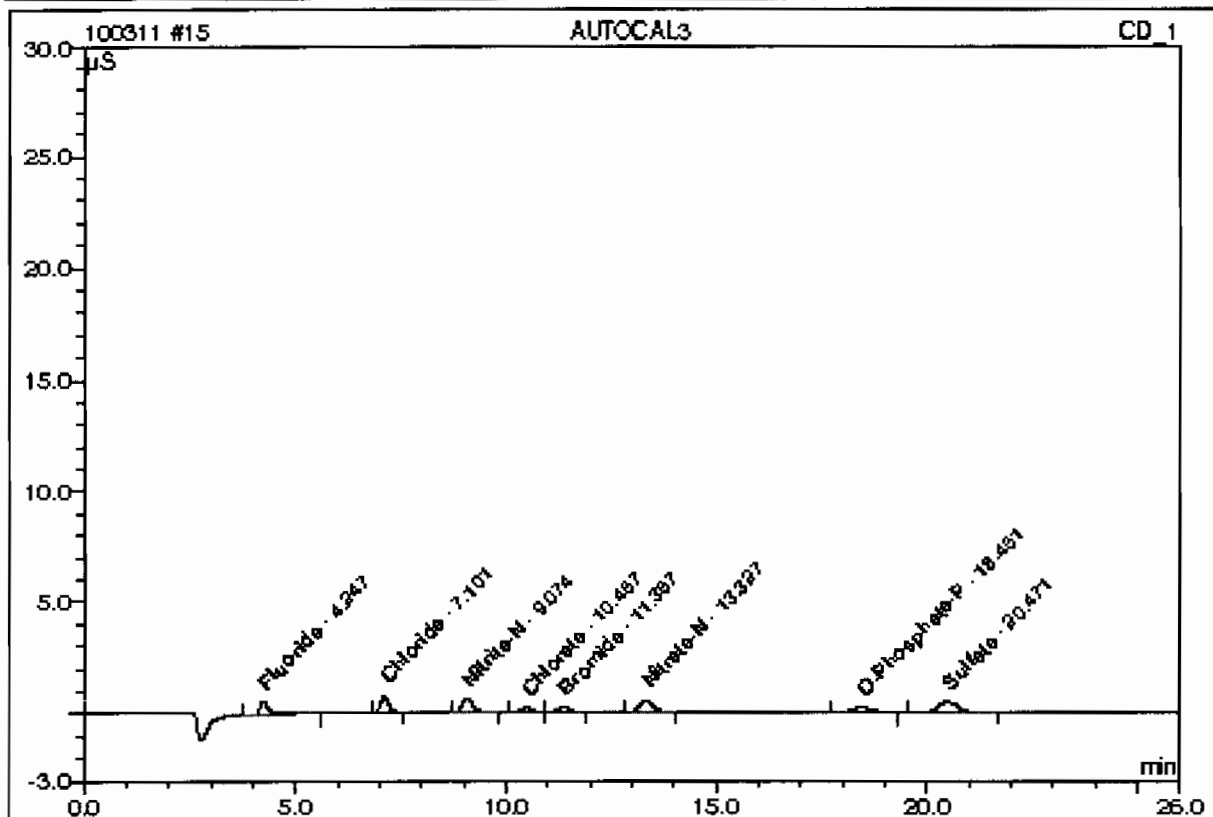
Sample Name:	AUTOCAL4	Injection Volume:	1.0
Vial Number:	8	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/11/2010 12:49	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.24	Fluoride	0.5000	0.5214		0.28453	10.32
2	7.10	Chloride	1.0000	1.1416		0.44169	16.02
3	9.07	Nitrite-N	0.5000	0.5056		0.39138	14.20
4	10.46	Chlorate	1.0000	1.0244		0.15709	5.70
5	11.36	Bromide	1.0000	0.9896		0.16148	5.66
6	13.32	Nitrate-N	0.5000	0.5447		0.43595	15.81
7	18.45	O-Phosphate-P	1.0000	1.0073		0.30542	11.08
8	20.46	Sulfate	2.0000	2.1856		0.57944	21.02
Total:				7.9202	0.000	2.757	100.00

15 AUTOCAL3

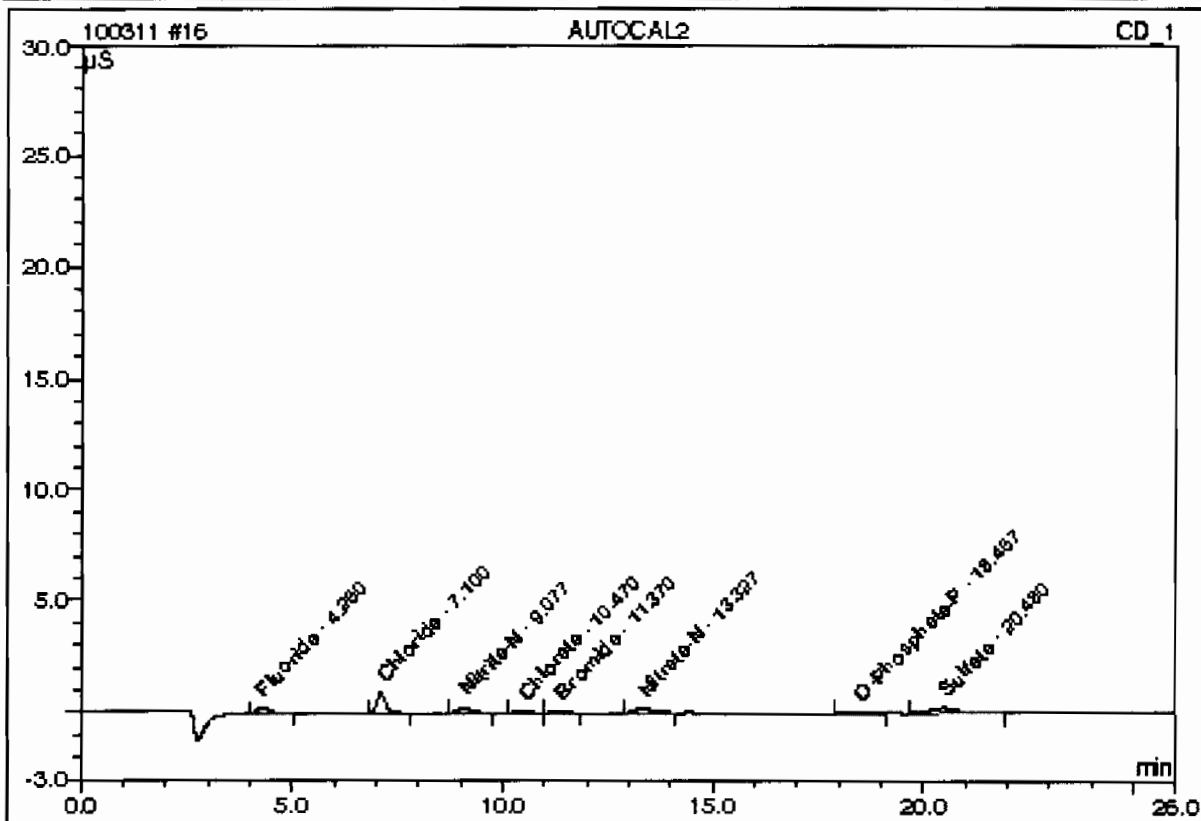
Sample Name:	AUTOCAL3	Injection Volume:	1.0
Vial Number:	9	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/11/2010 13:18	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.25	Fluoride	0.2500	0.3104		0.14910	11.33
2	7.10	Chloride	0.5000	0.6474		0.18906	14.37
3	9.07	Nitrite-N	0.2500	0.2998		0.19182	14.58
4	10.47	Chlorate	0.5000	0.4997		0.07407	5.63
5	11.37	Bromide	0.5000	0.5007		0.08111	6.16
6	13.33	Nitrate-N	0.2500	0.3268		0.20999	15.96
7	18.46	O-Phosphate-P	0.5000	0.4714		0.13346	10.14
8	20.47	Sulfate	1.0000	1.2891		0.28737	21.84
Total:				4.3452	0.000	1.316	100.00

16 AUTOCAL2

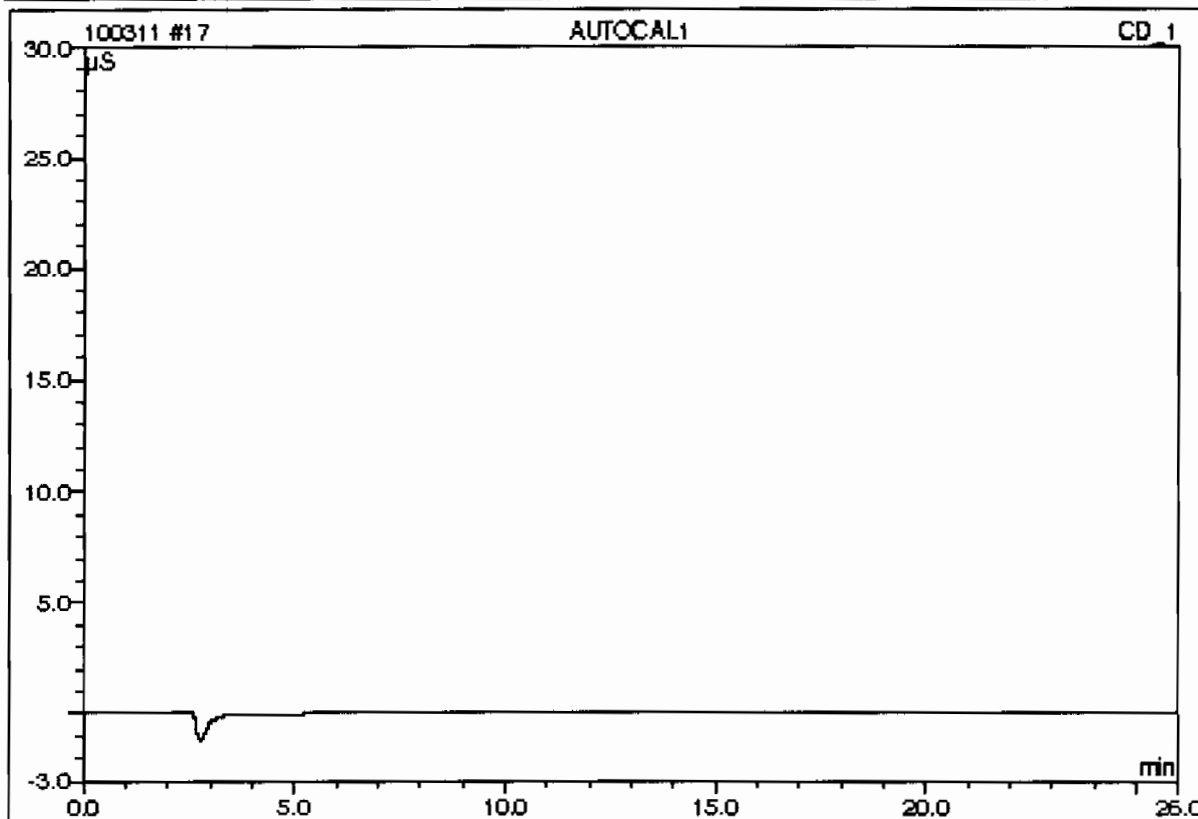
Sample Name:	AUTOCAL2	Injection Volume:	1.0
Vial Number:	10	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/11/2010 15:10	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.25	Fluoride	0.1000	0.1773		0.07602	10.36
2	7.10	Chloride	0.2000	0.6011		0.21547	29.37
3	9.08	Nitrite-N	0.1000	0.1634		0.07798	10.63
4	10.47	Chlorate	0.2000	0.2072		0.02820	3.84
5	11.37	Bromide	0.2000	0.2037		0.03107	4.23
6	13.33	Nitrate-N	0.1000	0.1962		0.08609	11.73
7	18.47	O-Phosphate-P	0.2000	0.1970		0.04275	5.83
8	20.48	Sulfate	0.4000	0.8498		0.17615	24.01
Total:				2.5956	0.000	0.734	100.00

17 AUTOCAL1

Sample Name:	AUTOCAL1	Injection Volume:	1.0
Vial Number:	11	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/11/2010 17:37	Analys:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC E086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	0.0000	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

17 AUTOCAL1

Sample Name: AUTOCAL1

Vial Number: 11

Sample Type: standard

Control Program: AS23

Quantif. Method: 100311an

Recording Time: 3/11/2010 17:37

Run Time (min): 26.00

Injection Volume: 1.0

Channel: CD_1

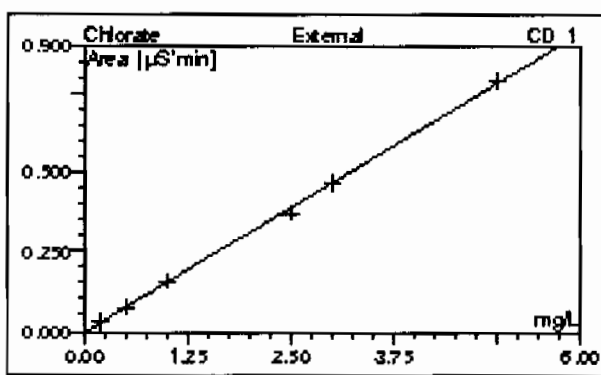
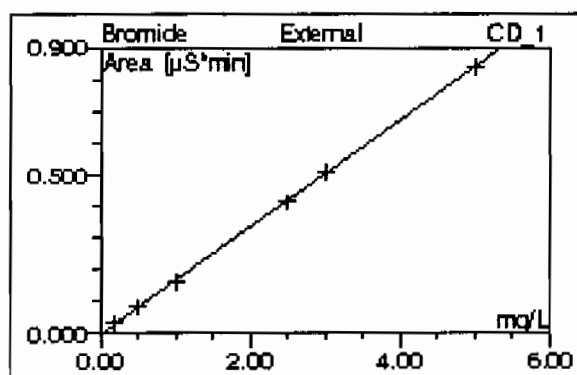
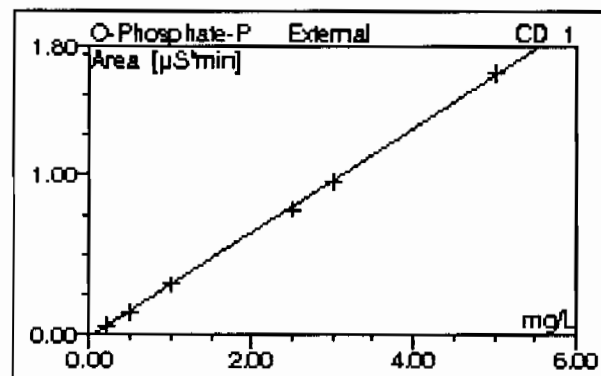
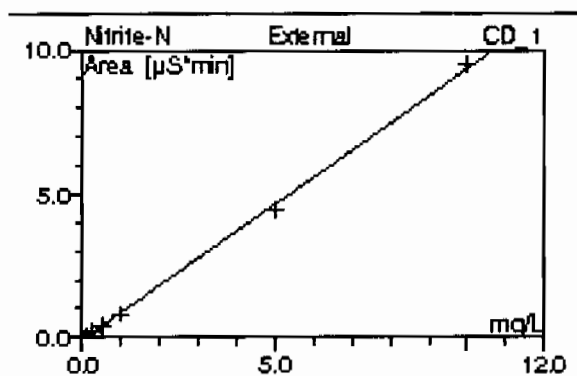
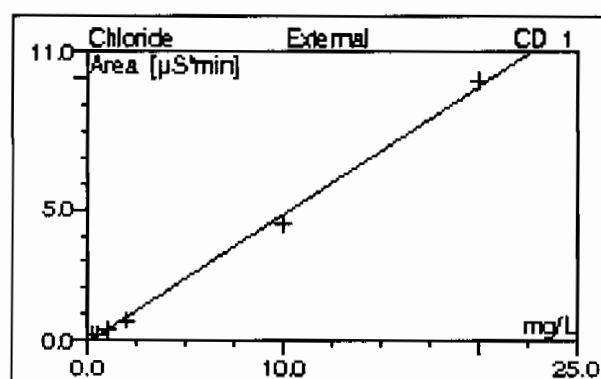
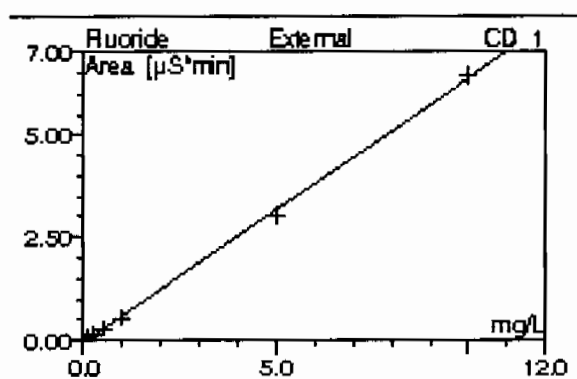
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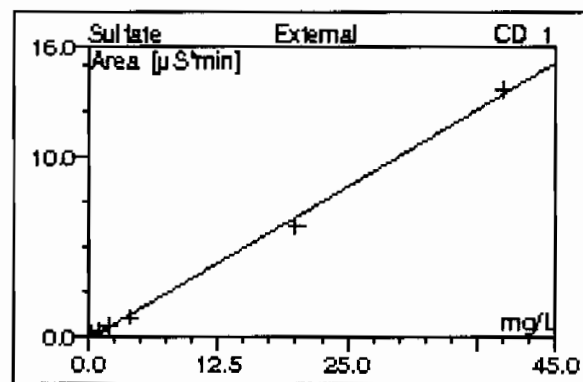
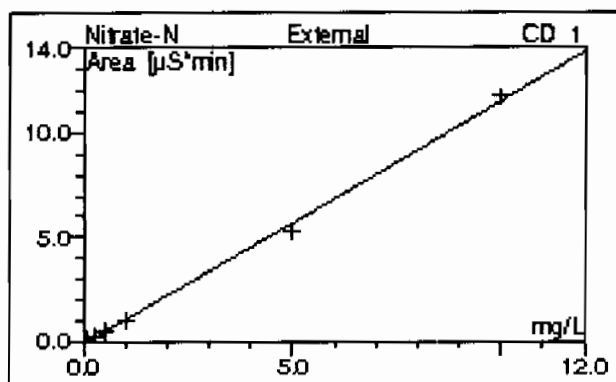
Sample Weight: 1.0000

Sample Amount: 1.0000

Analyst: MAR1

Column: AS23-002712; GL GCED86;300;9056

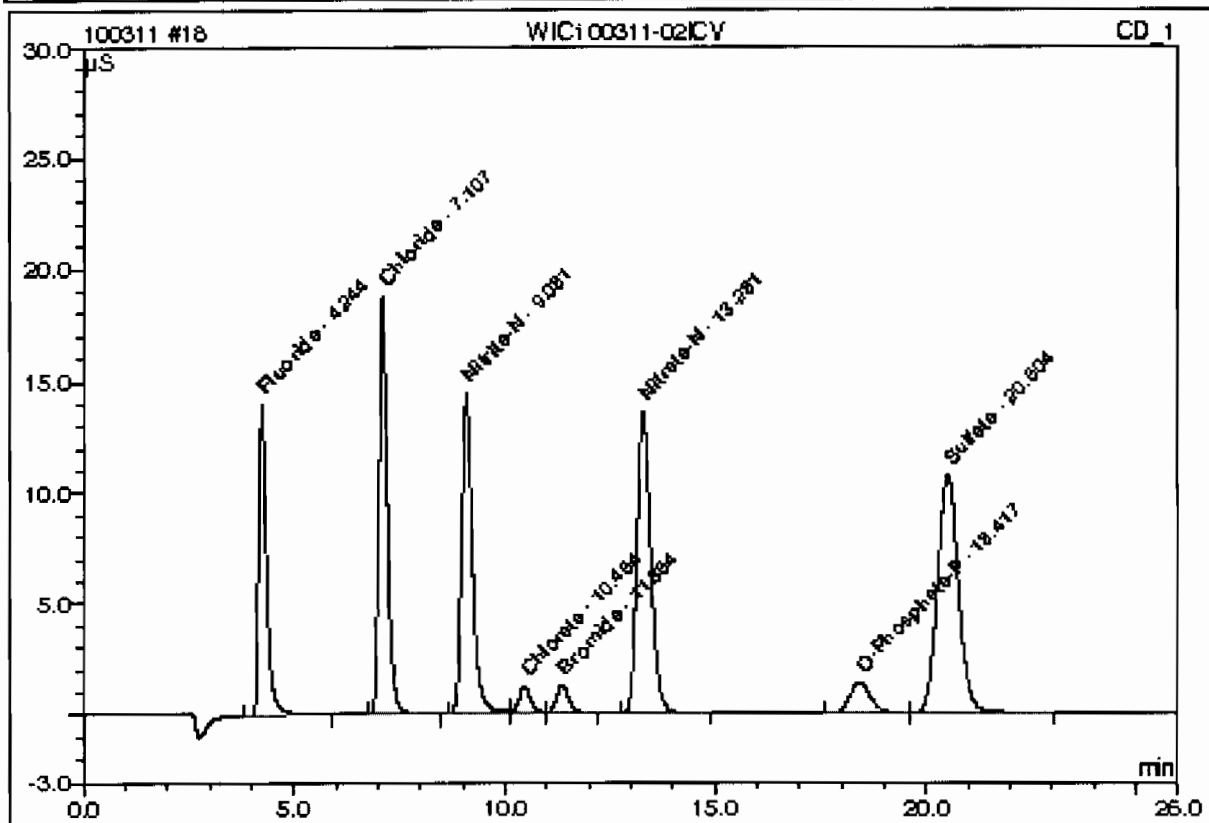




No. CD_1	Ret.Time CD_1 min	Peak Name CD_1	Cal.Type CD_1	Coeff.Det. CD_1 %	Offset CD_1	Slope CD_1	Curve CD_1
n.a.	n.a.	Fluoride	OLO#	99.9098	-0.0379	0.6427	0.0000
n.a.	n.a.	Chloride	OLO#	99.6532	-0.0783	0.4887	0.0000
n.a.	n.a.	Nitrite-N	OLO#	99.9132	-0.0764	0.9449	0.0000
n.a.	n.a.	Chlorate	OLO#	99.9105	-0.0045	0.1580	0.0000
n.a.	n.a.	Bromide	OLO#	99.9841	-0.0034	0.1692	0.0000
n.a.	n.a.	Nitrate-N	OLO#	99.7526	-0.1422	1.1634	0.0000
n.a.	n.a.	O-Phosphate-P	OLO#	99.9648	-0.0221	0.3294	0.0000
n.a.	n.a.	Sulfate	OLO#	99.7980	-0.1130	0.3403	0.0000
Average:				99.8605	-0.0597	0.5296	0.0000

18 WIC100311-02ICV

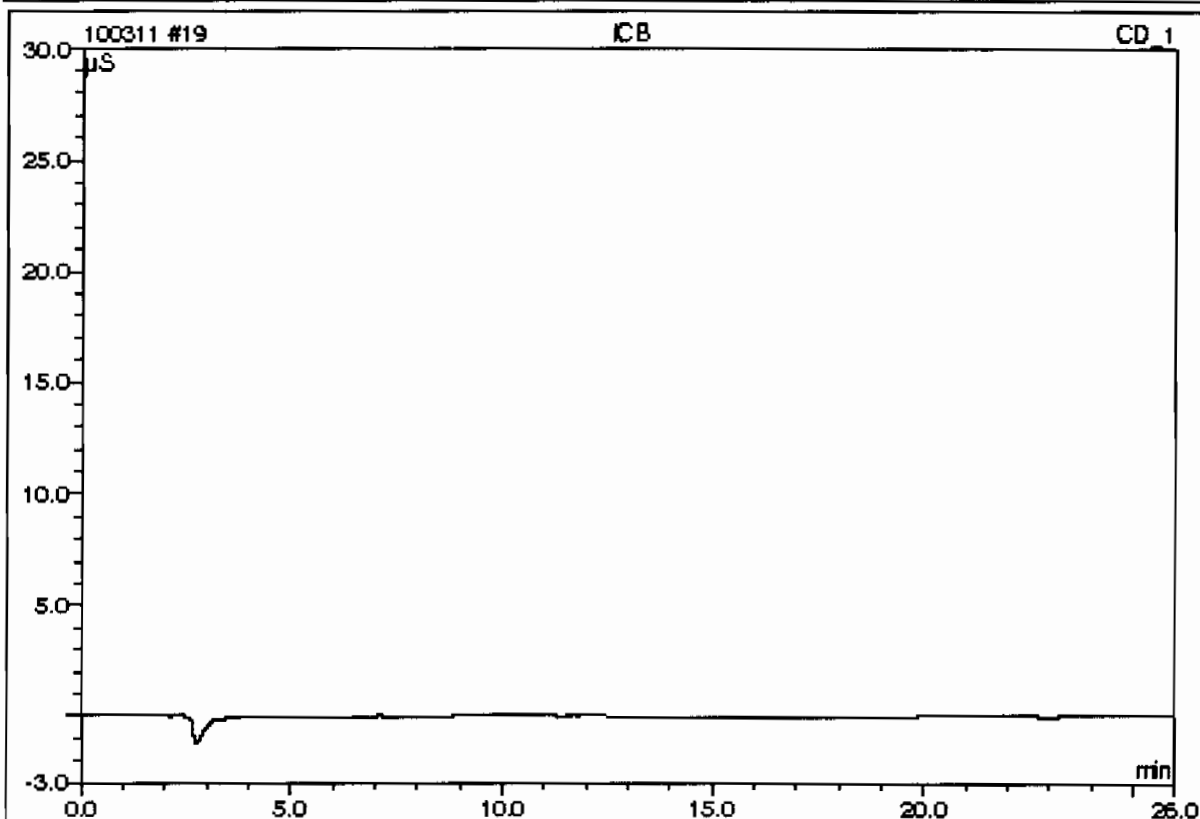
Sample Name:	WIC100311-02ICV	Injection Volume:	1.0
Vial Number:	12	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/11/2010 18:06	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area $\mu\text{S} \cdot \text{min}$	Rel.Area %
1	4.24	Fluoride	n.a.	4.6408		2.94463	12.05
2	7.11	Chloride	n.a.	8.9307		4.28622	17.54
3	9.08	Nitrate-N	n.a.	4.6443		4.31196	17.65
4	10.46	Chlorate	n.a.	2.5443		0.39759	1.63
5	11.36	Bromide	n.a.	2.4922		0.41825	1.71
6	13.28	Nitrate-N	n.a.	4.5323		5.13052	21.00
7	18.42	O-Phosphate-P	n.a.	2.4519		0.78547	3.21
8	20.60	Sulfate	n.a.	18.4235		6.15671	25.20
Total:				48.6601	0.000	24.431	100.00

19 ICB

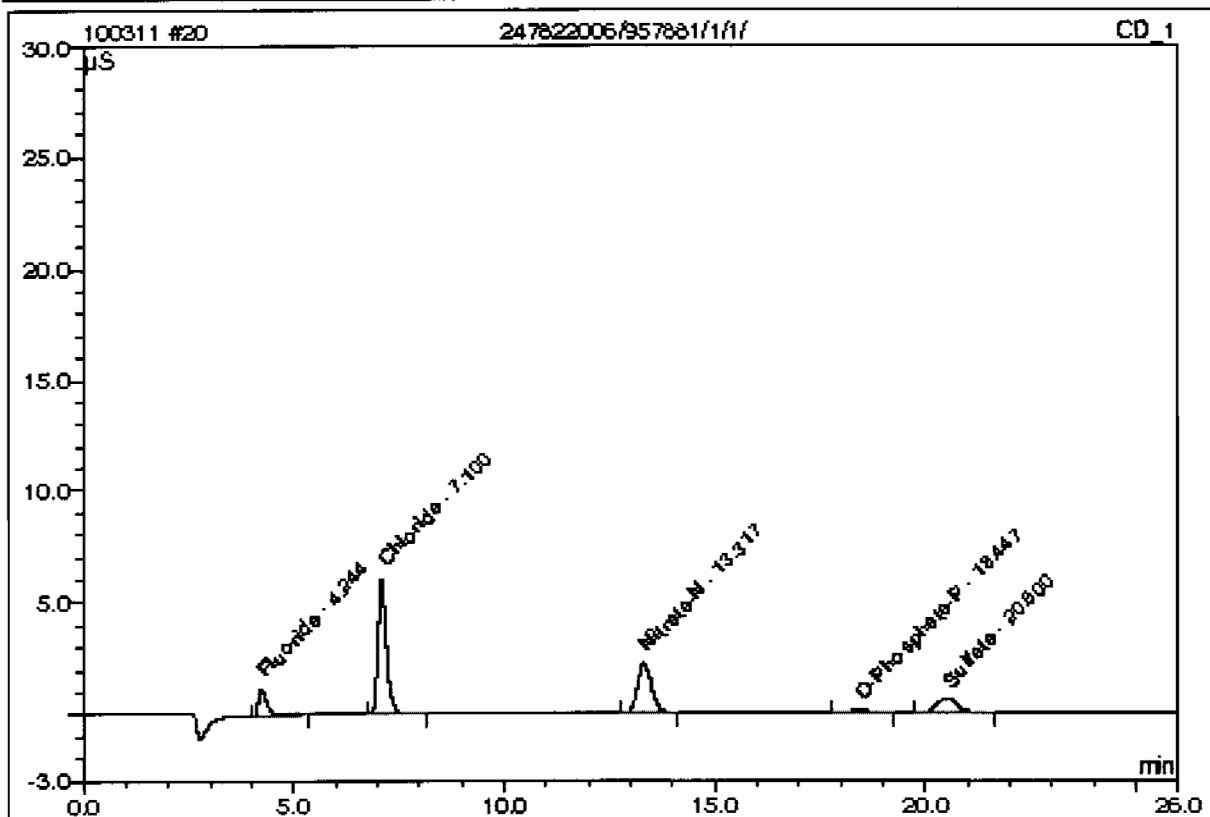
Sample Name:	ICB	Injection Volume:	1.0
Vial Number:	13	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/11/2010 18:35	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;0056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

20 247822006/957881/1/1/

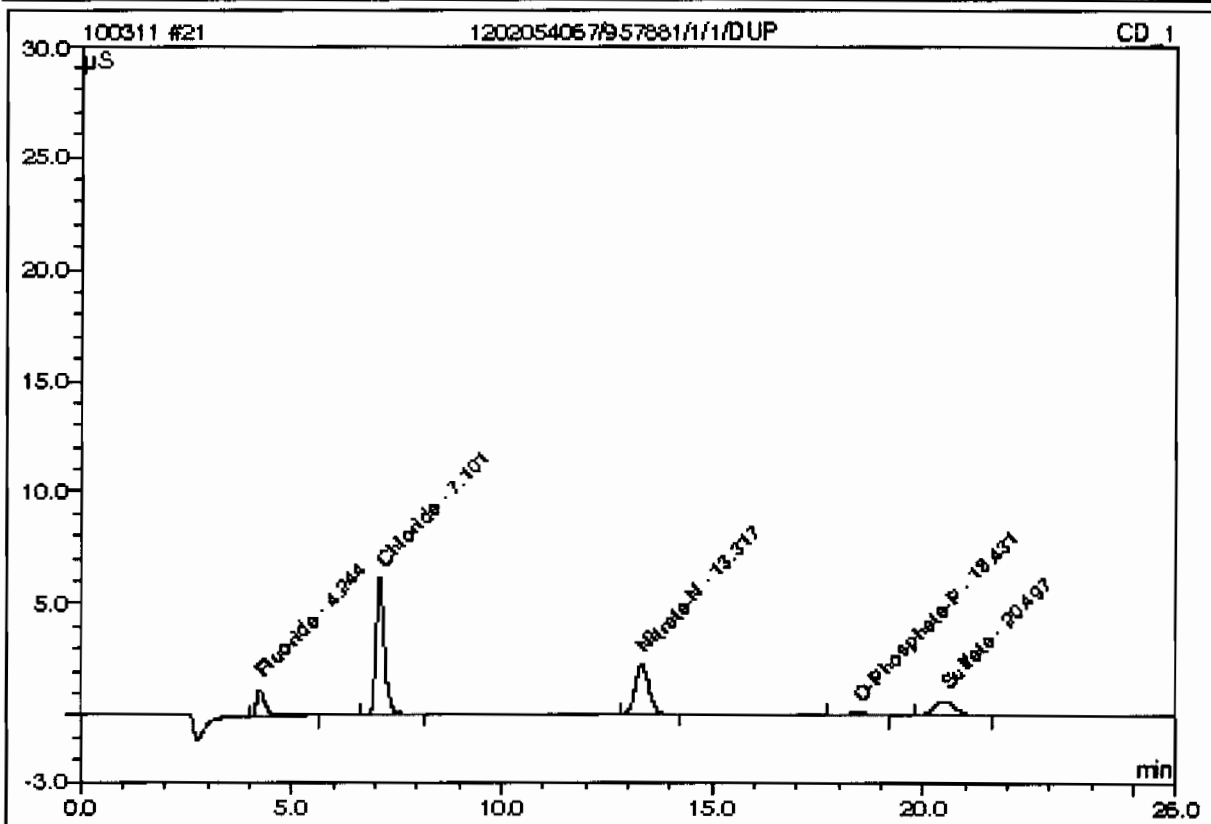
Sample Name:	247822006/957881/1/1/	Injection Volume:	1.0
Vial Number:	14	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/11/2010 19:04	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC E086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.24	Fluoride	n.a.	0.4933		0.27912	9.19
2	7.10	Chloride	n.a.	3.0819		1.42786	46.99
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
3	13.32	Nitrate-N	n.a.	0.8573		0.85521	28.14
4	18.45	O-Phosphate-P	n.a.	0.2944		0.07484	2.46
5	20.50	Sulfate	n.a.	1.5122		0.40159	13.22
Total:				6.2392	0.000	3.039	100.00

21 1202054067/957881/1/1/DUP

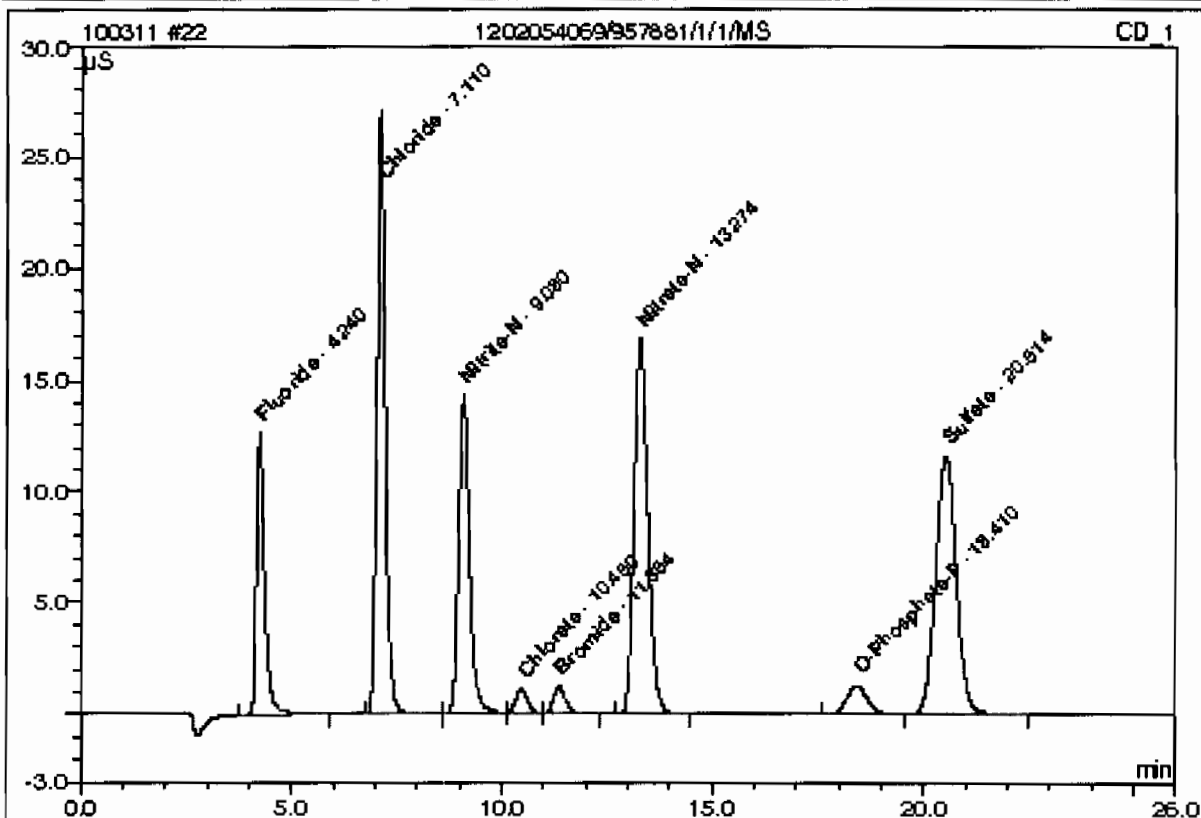
Sample Name:	1202054067/957881/1/1/DUP	Injection Volume:	1.0
Vial Number:	15	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/11/2010 19:33	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;8056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.24	Fluoride	n.a.	0.5075		0.28824	9.35
2	7.10	Chloride	n.a.	3.1402		1.45637	47.24
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
3	13.32	Nitrate-N	n.a.	0.8617		0.86029	27.90
4	18.43	O-Phosphate-P	n.a.	0.3018		0.07728	2.51
5	20.50	Sulfate	n.a.	1.5103		0.40093	13.00
Total:				6.3215	0.000	3.083	100.00

22 1202054069/957881/1/1/MS

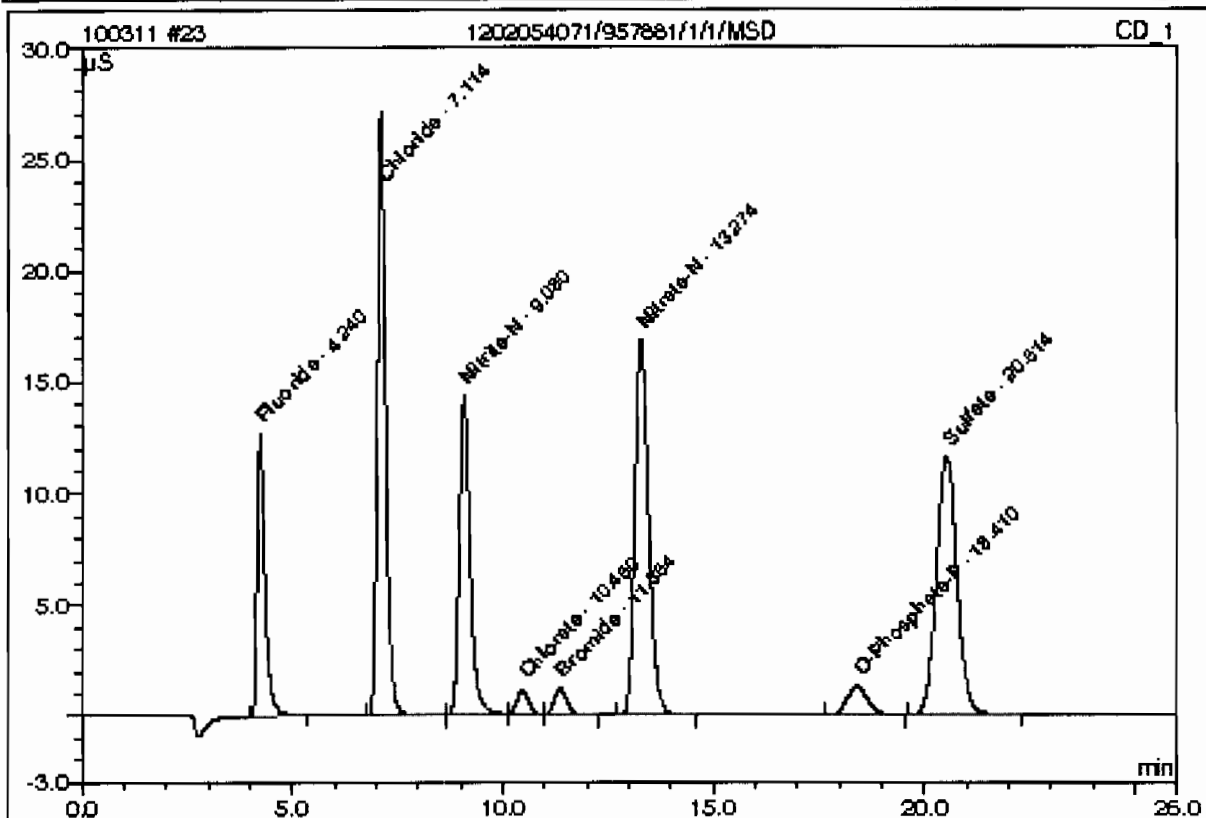
Sample Name:	1202054069/957881/1/1/MS	Injection Volume:	1.0
Vial Number:	16	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/11/2010 20:01	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel. Area %
1	4.24	Fluoride	n.a.	4.2573		2.69817	9.75
2	7.11	Chloride	n.a.	12.7716		6.16330	22.28
3	9.08	Nitrite-N	n.a.	4.6211		4.29010	15.51
4	10.46	Chlorate	n.a.	2.5038		0.39119	1.41
5	11.36	Bromide	n.a.	2.4729		0.41497	1.50
6	13.27	Nitrate-N	n.a.	5.6025		6.37558	23.05
7	18.41	O-Phosphate-P	n.a.	2.3099		0.73868	2.67
8	20.51	Sulfate	n.a.	19.6997		6.59102	23.83
Total:				54.2389	0.000	27.663	100.00

23 1202054071/957881/1/1/MSD

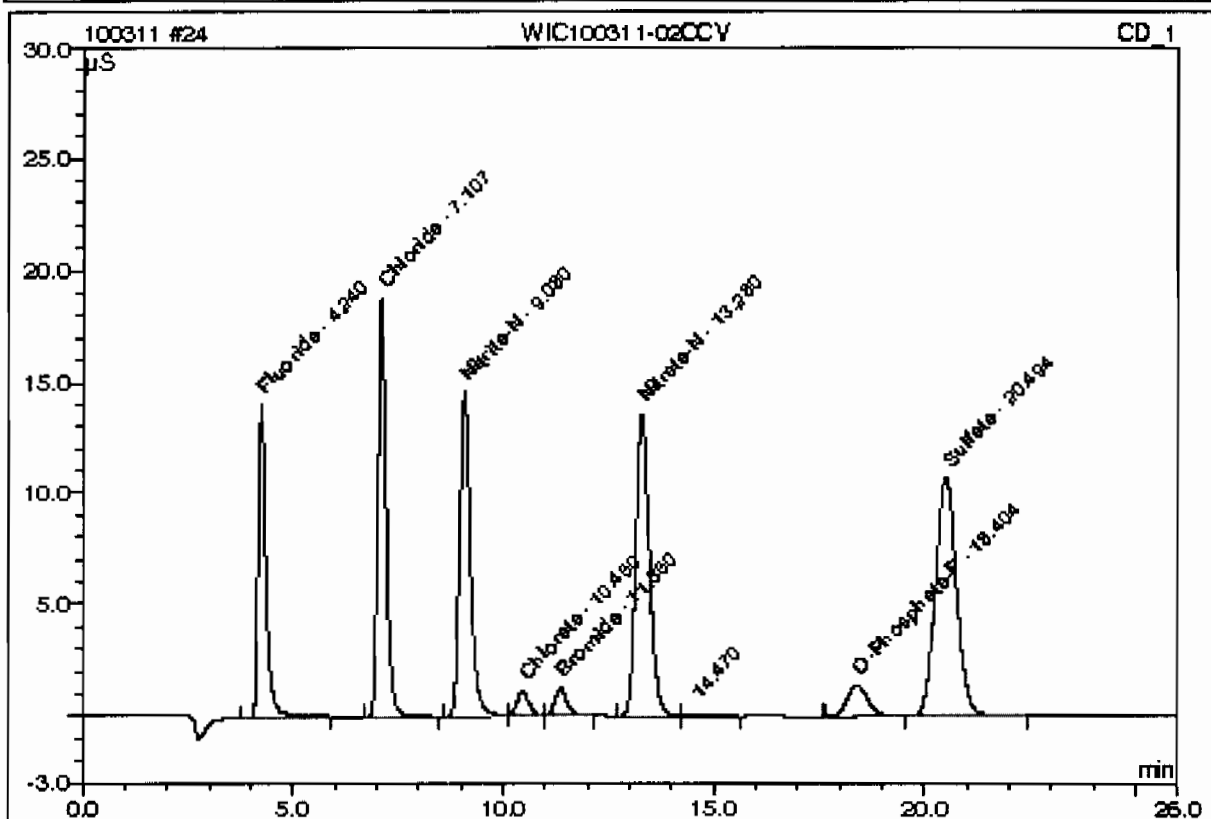
Sample Name:	1202054071/957881/1/1/MSD	Injection Volume:	1.0
Vial Number:	17	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/11/2010 20:30	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC E086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel. Area %
1	4.24	Fluoride	n.a.	4.1821		2.64984	9.60
2	7.11	Chloride	n.a.	12.7900		6.17230	22.36
3	9.08	Nitrite-N	n.a.	4.6346		4.30279	15.58
4	10.46	Chlorate	n.a.	2.4926		0.38941	1.41
5	11.36	Bromide	n.a.	2.4940		0.41854	1.52
6	13.27	Nitrate-N	n.a.	5.5969		6.36911	23.07
7	18.41	O-Phosphate-P	n.a.	2.3234		0.74313	2.69
8	20.51	Sulfate	n.a.	19.6201		6.56392	23.77
Total:				54.1336	0.000	27.609	100.00

24 WIC100311-02CCV

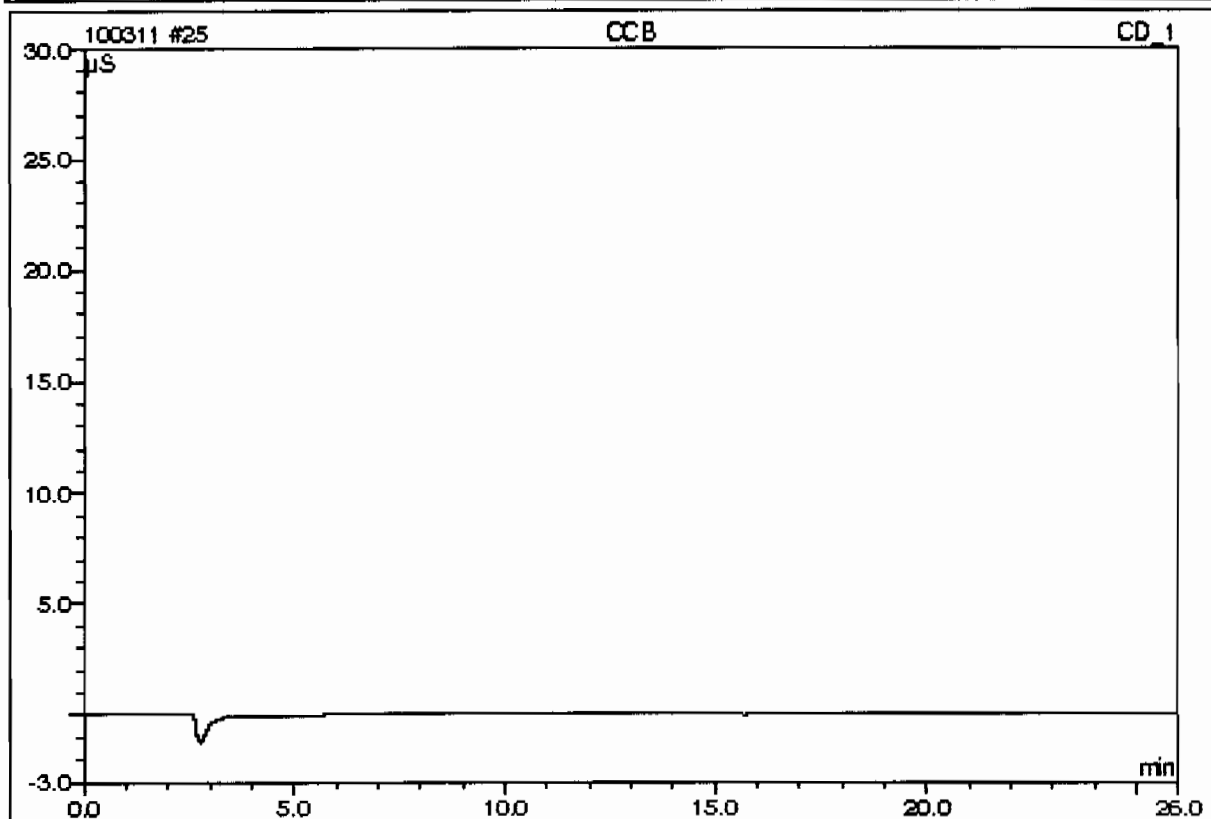
Sample Name:	WIC100311-02CCV	Injection Volume:	1.0
Vial Number:	18	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/11/2010 20:59	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.24	Fluoride	n.a.	4.6553		2.95394	12.08
2	7.11	Chloride	n.a.	8.9289		4.28532	17.52
3	9.08	Nitrite-N	n.a.	4.6698		4.33605	17.73
4	10.46	Chlorate	n.a.	2.4483		0.38242	1.56
5	11.36	Bromide	n.a.	2.4634		0.41336	1.69
6	13.28	Nitrate-N	n.a.	4.5121		5.10710	20.88
8	18.40	O-Phosphate-P	n.a.	2.5128		0.80552	3.29
9	20.49	Sulfate	n.a.	18.3164		6.12025	25.02
Total:				48.5069	0.000	24.404	99.77

25 CCB

Sample Name:	CCB	Injection Volume:	1.0
Vial Number:	19	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/11/2010 21:28	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

pH

pH / Corrosivity LogBook

Analyst: TXT1
 Batch: 956998
 Lab SOP: GL-GC-E-008 REV# 17
 Description: pH
 Method: SW846 9045C/9045D

Sample Id	Parent Sample Id	Matrix	Start Time	Stop Time	Run Date	Parname	Initial Wt(g)	Final Vol(mL)	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)
1202051944 LCS		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:02	pH	20	20	6.98	19.8°C	7	99.714	
1202051944 LCS		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:02	pH 2	20	20	6.98	19.8°C	7	99.714	
247784002		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:07	pH	20	20	8.39	19.8°C			
247784002		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:07	pH 2	20	20	8.4	19.8°C			
1202051942 DUP	247784002	Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:10	pH	20	20	8.43	19.9°C			.476
1202051942 DUP	247784002	Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:10	pH 2	20	20	8.43	19.9°C			.357
247790002		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:12	pH	20	20	8.89	19.8°C			
247790002		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:12	pH 2	20	20	8.88	19.9°C			
1202051943 DUP	247790002	Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:13	pH	20	20	8.91	19.8°C			.225
1202051943 DUP	247790002	Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:13	pH 2	20	20	8.91	19.8°C			.337
CCV			24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:15	pH	20	20	7	18.9°C	7	100	
CCV			24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:15	pH 2	20	20	7	19.0°C	7	100	
247790003		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:16	pH	20	20	8.96	19.6°C			
247790003		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:16	pH 2	20	20	8.96	19.6°C			
247794001		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:18	pH	20	20	7.59	19.8°C			
247794001		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:18	pH 2	20	20	7.58	19.8°C			
247794002		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:27	pH	20	20	7.96	19.4°C			
247794002		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:27	pH 2	20	20	7.95	19.5°C			
247794003		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:28	pH	20	20	7.41	19.5°C			
247794003		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:28	pH 2	20	20	7.39	19.5°C			
247794004		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:36	pH	20	20	7.71	19.4°C			
247794004		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:36	pH 2	20	20	7.69	19.4°C			

GEL Laboratories LLC

Page# _____

pH / Corrosivity LogBook

Analyst: TXT1
 Batch: 956998
 Lab SOP: GL-GC-E-008 REV# 17
 Description: pH
 Method: SW846 9045C/9045D

Type: CCV
 Sample Id: 240
 Serial Number: IMM091029-PH
 Description: PH 7 BUFFER FOR PH
 LCS
 1202051944
 IMM100209-01
 LCS BUFFER SOLUTION

Sample id	Parent Sample Id	Matrix	Start Time	Stop Time	Run Date	Parname	Initial W(g)	Final Vol(mL)	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)
CCV			24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:40	pH	20	20	6.99	17.9°C	7	99.857	
CCV			24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:40	pH 2	20	20	6.99	17.9°C	7	99.857	
247794005		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:41	pH	20	20	7.9	19.3°C			
247794005		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:41	pH 2	20	20	7.88	19.3°C			
247822001		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:46	pH	20	20	10.46	19.2°C			
247822001		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:46	pH 2	20	20	10.46	19.2°C			
247822002		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:47	pH	20	20	8.47	19.3°C			
247822002		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:47	pH 2	20	20	8.45	19.3°C			
247822003		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:50	pH	20	20	9.37	19.2°C			
247822003		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:50	pH 2	20	20	9.36	19.2°C			
247822004		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:51	pH	20	20	8.17	19.0°C			
247822004		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:51	pH 2	20	20	8.14	19.0°C			
CCV			24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:52	pH	20	20	7	17.8°C	7	100	
CCV			24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:52	pH 2	20	20	7	17.8°C	7	100	
247822005		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:54	pH	20	20	8.8	19.0°C			
247822005		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:54	pH 2	20	20	8.8	19.0°C			
247822006		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:55	pH	20	20	7.93	19.0°C			
247822006		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:55	pH 2	20	20	7.94	19.1°C			
247855002		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:57	pH	20	20	7.86	19.1°C			
247855002		Soil	24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:57	pH 2	20	20	7.84	19.1°C			
CCV			24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:59	pH	20	20	7	17.9°C	7	100	
CCV			24-FEB-2010 10:30:00	24-FEB-2010 10:35:00	24-FEB-10 15:59	pH 2	20	20	7	17.9°C	7	100	

pH / Corrosivity LogBook

Analyst: TXT1
Batch: 956998
Lab SOP: GL-GC-E-008 REV# 17
Description: pH
Method: SW846 9045C/9045D

Type: CCV
Sample Id: 240
Serial Number: IMM091029-PH
Description: PH 7 BUFFER FOR PH
LCS
1202051944
IMM100209-01
LCS BUFFER SOLUTION

Sample id	Parent Sample Id	Matrix	Start Time	Stop Time	Run Date	Parname	Initial Wt(g)	Final Vol(mL)	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)
Calibration Information:													
Run Date:	24-FEB-10 08:19												
Instrument:	PHX370												
Analyst:	LXA1												
	08:19	IMM100224-PH1	4.01	4	SU	20.7	100.25	Comments:					
	08:19	IMM100224-PH2	7.01	7	SU	20.7	100.14						
	08:19	UPH100224-PH3	10.04	10	SU	20.7	100.4						
	08:19	UPH100224-PH4	2.09	2	SU	20.7	104.5						
	08:19	UPH100224-PH5	12.01	12	SU	20.7	100.08						
	08:19	IMM100224-PH6	7.03	7	SU	20.7	100.43						

Comments: