Thursday, February 25, 2010

REQUEST NUMBER: 10-2090

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-2090

Per Agreement Number:126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples

according to the schedule indicated:

SHIP DATE: 2/25/2010

TURNAROUND/REPORT DUE: 3/27/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
	EPA:353.2	1	RE15-10-8407	W	2/22/2010	

Thursday, February 25, 2010 REQUEST NUMBER: 10-2090

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
	SW-846:6020	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
		1	RE15-10-8407	W	2/22/2010	
	SW-846:6850	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
		1	RE15-10-8407	W	2/22/2010	
	SW-846:7470A	1	RE15-10-8407	W	2/22/2010	

Thursday, February 25, 2010

REQUEST NUMBER: 10-2090

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
	SW-846:9012A	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
		1	RE15-10-8407	W	2/22/2010	
	SW-846:9045C	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	

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Thursday, February 25, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2090

LOS ALAMOS
NATIONAL LABORATORY

REQUEST NUMBER: 10-2090

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/27/2010

TURNAROUND REQ'D: 30

General Engineering Laboratories, Inc.,
Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8407	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8407	1	POLY	NO3NO2	Sulfuric Acid (Hydrogen Sulfate)	W
RE15-10-8407	1	POLY	SW-846:6850	Ice	W
RE15-10-8407	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8404	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8396	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8396	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8393	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8393	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8395	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8395	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8398	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8398	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8394	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8394	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8399	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8399	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8397	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8397	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8404	1	POLY	METALS+U-GEL	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
[signature]		2/25/10	1400				
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: 2508 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-009(h) - Threemile Canyon

SAMPLE ID: RE15-10-8393 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/22/2010	MEDIA:	QBT3	ok
TIME COLLECTED (HH:MM)		0902	SUB-MEDIA:	TUFF 1	1
PRS ID:	15-009(h)	ok	SAMPLE TECH CODE:	NA	ok
LOCATION ID:	15-610858		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	0.6	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	5.1 R	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / (NO) / NA		

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

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

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

SAMPLE DESC: Gray weathered Tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 9h-5 2nd depth

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha 4 35 dpm
Beta/Gamma 4 2530 dpm

PID ~~Ambient~~ 72m 2/22/10 ppm

COLLECTED BY (PRINT) TLMcFarland

REVIEWED BY (PRINT) Darrell Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	2/22/10 1327	(Printed Name) Sherri Sherwood	2/22/10 1327
(Signature) Tracy McFarland		(Signature) Sherri Sherwood	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508 EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(h) - Threemile Canyon

SAMPLE ID: RE15-10-8394 WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/22/2010	MEDIA:	QBT3	Alth
TIME COLLECTED (HH:MM)		955	SUB-MEDIA:	TUFF I	NA
PRS ID:	15-009(h)	ok	SAMPLE TECH CODE:	NA	ok
LOCATION ID:	15-610859	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	4.8	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	6.0	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S		EXCAVATED: YES / NO / NA		

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

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

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

SAMPLE DESC: Brown sandy silt and gray weathered tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 9h-7 Landfill

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 23 dpm
Beta/Gamma = 225 dpm

PID ~~Ambient~~ = ppm 17m 2/22/10

COLLECTED BY (PRINT) TLMcFarland

REVIEWED BY (PRINT) Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	2/22/10 1927	(Printed Name) Sherri Sherwood	2/22/10 1327
(Signature)		(Signature) Sherri Sherwood	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508 EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(h) - Threemile Canyon

SAMPLE ID: RE15-10-8395 WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/22/2010	MEDIA:	QBT3	ok
TIME COLLECTED (HH:MM)		1032	SUB-MEDIA:	TUFF I	↓
PRS ID:	15-009(h)	ok	SAMPLE TECH CODE:	NA	ok
LOCATION ID:	15-610859	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	6.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	7.1	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S	R	EXCAVATED: YES / (NO) / NA		

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

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

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

SAMPLE DESC: Whitish gray tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 9h-7 Roadfield

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 6 dpm
Beta/Gamma = 230 dpm

PID ~~Ambient Reading~~ = ppm TJM 2/22/10

COLLECTED BY (PRINT) TJM Farkas REVIEWED BY (PRINT) Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TJM Farkas	2/22/10 1327	(Printed Name) Sherri Sherwood	2/22/10 1327
(Signature) Tracy Farkas		(Signature) Sherri Sherwood	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508 EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(h) - Threemile Canyon

SAMPLE ID: RE15-10-8396 WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/22/2010	MEDIA:	QBT3	TLM 2/22/10 Ashy Fill
TIME COLLECTED (HH:MM)		1059	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-009(h)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610860		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	4.8	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	7.0	SCREEN/PORT DESC:		NA
FIELD MATRIX:	S	S	EXCAVATED: YES / NO / NA		

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

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

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISOPU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+NO3+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown silt and cobbles

SAMPLE COMMENTS: FD: RE15-10-8404

NA

LOCATION DESC: 9h-8, leachfield

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 41 dpm
Beta/Gamma = 227 dpm

PID ~~Ambient~~ = ppm 73m 2/22/10

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

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	2/22/10 1327	(Printed Name) Sherri Sherwood	2/22/10 1327
(Signature)		(Signature) Sherri Sherwood	
	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-009(h) - Threemile Canyon

SAMPLE ID: RE15-10-8397 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/22/2010	MEDIA:	QBT3	FILL
TIME COLLECTED (HH:MM)		1121	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-009(h)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610860	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	7.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	7.3	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	S	EXCAVATED: YES / NO / NA		

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

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

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

SAMPLE DESC:

Brown sandy silt with cobbles

SAMPLE COMMENTS:

NA

LOCATION DESC:

9h-8 leachfield

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 35 dpm
Beta/Gamma ≤ 1966 dpm

PID ~~Ambient Reading~~ = ppm 72m 2/22/10

COLLECTED BY (PRINT) TL McFarland

REVIEWED BY (PRINT) Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TL McFarland	2/22/10	(Printed Name) [signature]	2/22/10
(Signature) [signature]	1327	(Signature)	1327
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-009(h) - Threemile Canyon

SAMPLE ID: RE15-10-8398 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/22/2010	MEDIA:	ORT3	FILL
TIME COLLECTED (HH:MM)		1136	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-009(h)	ok	SAMPLE TECH CODE:	NA	ok
LOCATION ID:	15-610861	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	4.8	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	6.1	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	S	EXCAVATED: YES / (NO) / NA		

TJM 2/22/10

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

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

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

SAMPLE DESC: Brown silt and sand

SAMPLE COMMENTS: NA

LOCATION DESC: 9h-6, leachfield location moved 2 ft W of stake

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 47 dpm
Beta/Gamma = 2190 dpm

PID ~~Ambient Reading~~ = ppm 72m 2/22/10

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

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	2/22/10 1327	(Printed Name) Sherri Sherwood	2/22/10 1327
(Signature)		(Signature) Sherri Sherwood	
	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-009(h) - Threemile Canyon

SAMPLE ID: RE15-10-8404 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/22/2010	MEDIA:	QBT3	FILL
TIME COLLECTED (HH:MM)		1059	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-009(h)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	UNK	15-610860	FIELD QC TYPE:	FD	↓
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	↓
TOP DEPTH:	0	4.8	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	0	7.0	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	S	EXCAVATED: YES / NO / NA		

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

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

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

SAMPLE DESC: QC Sample of RE15-10-8396

Brown silt and cobbles

SAMPLE COMMENTS:

NA

LOCATION DESC: 9h-8 leachfield

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 41 dpm
Beta/Gamma = 22.7 dpm

PID ~~Ambient Reading~~ = ppm

TJM 2/22/10

COLLECTED BY (PRINT) TLMCFarland

REVIEWED BY (PRINT) Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMCFarland	2/22/10	(Printed Name) [signature]	2/22/10
(Signature) [signature]	1327	(Signature)	1327
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-009(h) - Threemile Canyon

SAMPLE ID: RE15-10-8399 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/22/2010	MEDIA:	QBT3	FILL
TIME COLLECTED (HH:MM)		1215	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-009(h)	ok	SAMPLE TECH CODE:	NA	ok
LOCATION ID:	15-610861		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	6.1	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	7.0	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	S	EXCAVATED: YES / (NO) / NA		

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

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

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

SAMPLE DESC: Brown silt with gray tuff

FR: RE15-10-8407

SAMPLE COMMENTS: NA

LOCATION DESC: 9n-6 leachfield

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 35 dpm
Beta/Gamma = 2390 dpm

PID ~~Ambient Reading~~ = ppm TLM 2/22/10

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

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLM cFarlane	2/22/10 1327	(Printed Name)	2/22/10 1327
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

Los Alamos National Laboratory

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-009(h) - Threemile Canyon

SAMPLE ID: RE15-10-8407 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/22/2010	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1255	SUB-MEDIA:	OTHER	
PRS ID:	15-009(h)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	15-61886	FIELD QC TYPE:	ER	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:		NA
FIELD MATRIX:	W		EXCAVATED: YES / (NO) / NA		

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

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

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

SAMPLE DESC: QC Sample of RE15-10-8399

SAMPLE COMMENTS: Rinsate

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS:

tzm 2/22/10

Alpha = ~~____~~ dpm

Beta/~~Gamma~~ = ____ dpm

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

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	2/22/10 1327	(Printed Name)	2/22/10 1327
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

Rad Screening Data Release Form

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

RE15-10-8393
8394
8395
8396
8397
8398
8399
8404

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

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

RE15-10-8407

Reason:

Print Last Name McFarland Signature [signature] Date 2/22/10

DATA VALIDATION COVER SHEET

5121-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-2090 VALIDATION DATE: 4/26/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check

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

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

1. The water MS/MSD was performed on a sample from another LANL RN and the raw data for the parent sample were not present in the data package. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 04/30/10

VALIDATOR'S SIGNATURE: L Thal DATE: 4/26/10

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST

5121-2

LC/MS/MS Perchlorate Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The Internal Standard (IS) relativer retention time has shifted by more than 0.98 to 1.02 seconds.	R, PERC0	J, PERC0
☐	☒	☐	2. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC0b	R, PERC0b
☐	☐	☒	3. The IS are count is <25% of the expected value.	UJ, PERC1a	J, PERC1a
☐	☐	☒	4. The IS area count is <70% but >25% of the average of that obtained from the calibration standards.	UJ, PERC1b	J, PERC1b
☐	☐	☒	5. The IS area count is >130% of the average of that obtained from the calibration standards.	UJ, PERC1c	J, PERC1c
☐	☐	☒	6. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PREC1d	R, PERC1d
☐	☒	☐	7. The sample result is ≤ 5X the concentration of the related analyte in the method blank.	U, PERC4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J+, PERC4a
☐	☒	☐	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, PERC4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC4e	R, PERC4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, PERC7	J, PERC7
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.99.	UJ, R, PERC7a	J, PERC7a

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST

5121-2

LC/MS/MS Perchlorate Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

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

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
5121-2 LC/MS/MS Perchlorate Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

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

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: 959046

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE15-10-8407

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090

GEL Sample ID: 248108001

Date Filtered: 05-MAR-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	09-MAR-10 08:15	per0308110a
	Perchlorate Isotope Ratio						1	09-MAR-10 08:15	per0308110a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	09-MAR-10 08:15	per0308110a
	Perchlorate-O(18)			0.443	ug/L		1	09-MAR-10 08:15	per0308110a

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

*Concentration =

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

LT 4/26/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8404

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110001

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 90.6

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.552	2.21	0.700	ug/kg	J	1	15-MAR-10 02:45	per0314083a
	Perchlorate Isotope Ratio			3.02			1	15-MAR-10 02:45	per0314083a
14797-73-0	Perchlorate-101	.552	2.21	0.715	ug/kg	J	1	15-MAR-10 02:45	per0314083a
	Perchlorate-O(18)			5.22	ug/kg		1	15-MAR-10 02:45	per0314083a

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

*Concentration =

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

LT 4/26/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8396

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110002

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 91.3

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.548	2.19	0.681	ug/kg	J	1	15-MAR-10 03:09	per0314086a
	Perchlorate Isotope Ratio			3.07			1	15-MAR-10 03:09	per0314086a
14797-73-0	Perchlorate-101	.548	2.19	0.686	ug/kg	J	1	15-MAR-10 03:09	per0314086a
	Perchlorate-O(18)			4.75	ug/kg		1	15-MAR-10 03:09	per0314086a

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

*Concentration =

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

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8393

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110003

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 80

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.626	2.5	0.626	ug/kg	U	1	15-MAR-10 03:42	per0314090a
	Perchlorate Isotope Ratio						1	15-MAR-10 03:42	per0314090a
14797-73-0	Perchlorate-101	.626	2.5	0.626	ug/kg	U	1	15-MAR-10 03:42	per0314090a
	Perchlorate-O(18)			5.13	ug/kg		1	15-MAR-10 03:42	per0314090a

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

*Concentration =

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

LT 4/26/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8395

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110004

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 95.6

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.523	2.09	0.907	ug/kg	J	1	15-MAR-10 03:50	per0314091a
	Perchlorate Isotope Ratio			2.94			1	15-MAR-10 03:50	per0314091a
14797-73-0	Perchlorate-101	.523	2.09	0.953	ug/kg	J	1	15-MAR-10 03:50	per0314091a
	Perchlorate-O(18)			4.40	ug/kg		1	15-MAR-10 03:50	per0314091a

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

*Concentration =

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

LT 4/26/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8398

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110005

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.574	2.29	0.737	ug/kg	J	1	15-MAR-10 03:58	per0314092a
	Perchlorate Isotope Ratio			3.08			1	15-MAR-10 03:58	per0314092a
14797-73-0	Perchlorate-101	.574	2.29	0.739	ug/kg	J	1	15-MAR-10 03:58	per0314092a
	Perchlorate-O(18)			4.60	ug/kg		1	15-MAR-10 03:58	per0314092a

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

*Concentration =

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

LT 4/26/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8394

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110006

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	1.50	ug/kg	J	1	15-MAR-10 04:06	per0314093a
	Perchlorate Isotope Ratio			3.05			1	15-MAR-10 04:06	per0314093a
14797-73-0	Perchlorate-101	.558	2.23	1.52	ug/kg	J	1	15-MAR-10 04:06	per0314093a
	Perchlorate-O(18)			4.98	ug/kg		1	15-MAR-10 04:06	per0314093a

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

*Concentration =

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

LT 4/26/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8399

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110007

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 88

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.566	2.26	1.23	ug/kg	J	1	15-MAR-10 04:14	per0314094a
	Perchlorate Isotope Ratio			3.07			1	15-MAR-10 04:14	per0314094a
14797-73-0	Perchlorate-101	.566	2.26	1.24	ug/kg	J	1	15-MAR-10 04:14	per0314094a
	Perchlorate-O(18)			4.56	ug/kg		1	15-MAR-10 04:14	per0314094a

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

*Concentration =

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

LT 4/26/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8397

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110008

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 93.9

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.533	2.13	0.631	ug/kg	J	1	15-MAR-10 04:22	per0314095a
	Perchlorate Isotope Ratio			2.85			1	15-MAR-10 04:22	per0314095a
14797-73-0	Perchlorate-101	.533	2.13	0.684	ug/kg	J	1	15-MAR-10 04:22	per0314095a
	Perchlorate-O(18)			4.03	ug/kg		1	15-MAR-10 04:22	per0314095a

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

LT 4/26/10

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DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-2090 VALIDATION DATE: 4/26/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

☐ OTHER (DESCRIBE):

Section II. Completeness Check

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

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

1. In the water MB, Pb and Tl were detected. The associated sample results were detects ≤5X the MB concentrations and, thus were qualified U,I4. In the soil MB, Al, Ba, Fe and Mn were detected. The associated sample results were detects >50X the MB concentrations and, thus, were not qualified based on professional judgment.
2. In the water ICB or CCB, Se and Tl were detected. The associated Tl sample result was a detect ≤5X the greatest blank concentration and, thus was qualified U,I4b. The associated Se sample result was an ND and, thus, was not qualified.
3. In the FR blank, sample -8407 associated with all soil samples, K was detected. The associated sample results were detects >5X the FR blank concentration and, thus, were not qualified.
4. The soil LCS %R for Sb was < the laboratory's LAL but ≥10%. The associated sample results were NDs and, thus, were qualified UJ,I12a.
5. The soil MS %Rs for K, Al, Ca, Mg and Fe were > the laboratory's UALs. The associated K sample results were detects and, thus, were qualified J+,I6b. The associated parent sample results for Al, Ca, Mg and Fe were detects >4X the spike amounts and, thus, no sample results were qualified based on professional judgment. The soil MS %Rs for Sb, Mn and Se were < the laboratory's LALs but ≥10%. The associated Sb and Se sample results were NDs and, thus, were qualified UJ,I6a. The associated parent sample result for Mn was a detect >4X the spike amount and, thus, no sample results were qualified based on professional judgment.
6. It should be noted that the soil matrix QC for Hg and the water matrix QC for all target analytes were performed on samples from other LANL RNs. No sample data were qualified as a result.

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST.1943

Reviewed by: Mary Donivan Level: I Date: 04/30/10

VALIDATOR'S SIGNATURE: [signature] DATE: 4/26/10

Form 5118-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Records Use only

Metals Analytical Data Validation Checklist

Los Alamos NATIONAL LABORATORY

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

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 Metals Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

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

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 Metals Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

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

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

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

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2090 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248108001 **BASIS:** As Received **DATE COLLECTED** 22-FEB-10

CLIENT ID: RE15-10-8407 **LEVEL:** Low **DATE RECEIVED** 26-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	03/29/10 20:36	032910C-1	959109
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	PRB	04/13/10 13:46	100413-3	959112
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	03/29/10 20:36	032910C-1	959109
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	03/29/10 20:36	032910C-1	959109
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BCD1	04/12/10 04:15	100411-2	959112
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BCD1	04/12/10 04:15	100411-2	959112
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	03/29/10 20:36	032910C-1	959109
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	03/29/10 20:36	032910C-1	959109
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	03/29/10 20:36	032910C-1	959109
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	03/29/10 20:36	032910C-1	959109
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	03/29/10 20:36	032910C-1	959109
7439-92-1	Lead U,I4	0.851	ug/L	J	0.5	2	2	1	MS	BCD1	04/12/10 04:15	100411-2	959112
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	03/29/10 20:36	032910C-1	959109
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BCD1	04/12/10 04:15	100411-2	959112
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	03/02/10 11:56	030210W3-6	958951
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	03/29/10 20:36	032910C-1	959109
7440-09-7	Potassium	66.3	ug/L	J	50	150	150	1	P	HSC	03/29/10 20:36	032910C-1	959109
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	03/29/10 20:36	032910C-1	959109
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	03/29/10 20:36	032910C-1	959109
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	03/29/10 20:36	032910C-1	959109
7440-28-0	Thallium U,I4	0.626	ug/L	J	0.3	1	1	1	MS	BCD1	04/12/10 04:15	100411-2	959112
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	04/13/10 16:20	100413-5	959112
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	03/29/10 20:36	032910C-1	959109
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	03/29/10 20:36	032910C-1	959109

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958951	958949	SW846 7470A Prep	20	mL	20	mL	03/01/10	TXB3
959109	959108	SW846 3005A	50	mL	50	mL	03/04/10	FGA
959112	959110	SW846 3005A	50	mL	50	mL	03/04/10	FGA

LT 4/26/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2090-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248110001 **BASIS:** Dry Weight **DATE COLLECTED** 22-FEB-10

CLIENT ID: RE15-10-8404 **LEVEL:** Low **DATE RECEIVED** 26-FEB-10

MATRIX: SOIL **%SOLIDS:** 90.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11200000	ug/Kg		7040	20700	20700	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-36-0	Antimony UJ,l12a	1040	ug/Kg	UN	342	1040	1040	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-38-2	Arsenic	1.74	mg/kg		0.207	1.03	1.03	2	MS	RMJ	03/24/10 16:55	100323-2	959116
7440-39-3	Barium	167000	ug/Kg		104	518	518	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-41-7	Beryllium	1.02	mg/kg		0.0207	0.103	0.103	2	MS	RMJ	03/24/10 16:55	100323-2	959116
7440-43-9	Cadmium	518	ug/Kg	U	104	518	518	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-70-2	Calcium	3220000	ug/Kg		8290	25900	25900	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-47-3	Chromium	9850	ug/Kg		155	518	518	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-48-4	Cobalt	5200	ug/Kg		155	518	518	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-50-8	Copper	6500	ug/Kg		311	1040	1040	1	P	HSC	03/29/10 22:50	032910C-1	959114
7439-89-6	Iron	14500000	ug/Kg		8290	25900	25900	1	P	HSC	03/29/10 22:50	032910C-1	959114
7439-92-1	Lead	9820	ug/Kg		259	1040	1040	1	P	HSC	03/29/10 22:50	032910C-1	959114
7439-95-4	Magnesium	2240000	ug/Kg		8810	31100	31100	1	P	HSC	03/29/10 22:50	032910C-1	959114
7439-96-5	Manganese	300000	ug/Kg	*	207	1040	1040	1	P	HSC	03/29/10 22:50	032910C-1	959114
7439-97-6	Mercury	16.3	ug/kg		4.4	12.9	12.9	1	AV	JXL1	03/10/10 12:03	031010S1-4	958757
7440-02-0	Nickel	7.48	mg/kg		0.103	0.414	0.414	2	MS	RMJ	03/24/10 16:55	100323-2	959116
7440-09-7	Potassium J+,l6b	1790000	ug/Kg	N	6630	25900	25900	1	P	HSC	03/29/10 22:50	032910C-1	959114
7782-49-2	Selenium UJ,l6a	1.03	mg/kg	UN	0.517	1.03	1.03	2	MS	RMJ	03/24/10 16:55	100323-2	959116
7440-22-4	Silver	518	ug/Kg	U	104	518	518	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-23-5	Sodium	546000	ug/Kg		7250	25900	25900	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-28-0	Thallium	0.185	mg/kg	J	0.062	0.207	0.207	2	MS	RMJ	03/24/10 16:55	100323-2	959116
7440-61-1	Uranium	4.07	mg/kg		0.0136	0.0414	0.0414	2	MS	RMJ	03/26/10 00:44	100325-3	959116
7440-62-2	Vanadium	21500	ug/Kg		104	518	518	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-66-6	Zinc	29900	ug/Kg		342	1040	1040	1	P	HSC	03/29/10 22:50	032910C-1	959114

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958757	958755	SW846 7471A Prep	0.512	g	30	mL	03/10/10	LXH2
959114	959113	SW846 3050B	0.533	g	50	mL	03/09/10	AXG2
959116	959115	SW846 3050B	0.534	g	50	mL	03/03/10	BXA1

LT 4/26/10

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10–2090–1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248110002 **BASIS:** Dry Weight **DATE COLLECTED** 22–FEB–10

CLIENT ID: RE15–10–8396 **LEVEL:** Low **DATE RECEIVED** 26–FEB–10

MATRIX: SOIL **%SOLIDS:** 91.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429–90–5	Aluminum	11000000	ug/Kg		6990	20500	20500	1	P	HSC	03/29/10 23:04	032910C–1	959114
7440–36–0	Antimony UJ,I12a	1030	ug/Kg	UN	339	1030	1030	1	P	HSC	03/29/10 23:04	032910C–1	959114
7440–38–2	Arsenic	1.82	mg/kg		0.218	1.09	1.09	2	MS	RMJ	03/24/10 17:15	100323–2	959116
7440–39–3	Barium	164000	ug/Kg		103	514	514	1	P	HSC	03/29/10 23:04	032910C–1	959114
7440–41–7	Beryllium	1.03	mg/kg		0.0218	0.109	0.109	2	MS	RMJ	03/24/10 17:15	100323–2	959116
7440–43–9	Cadmium	514	ug/Kg	U	103	514	514	1	P	HSC	03/29/10 23:04	032910C–1	959114
7440–70–2	Calcium	3100000	ug/Kg		8220	25700	25700	1	P	HSC	03/29/10 23:04	032910C–1	959114
7440–47–3	Chromium	9990	ug/Kg		154	514	514	1	P	HSC	03/29/10 23:04	032910C–1	959114
7440–48–4	Cobalt	4890	ug/Kg		154	514	514	1	P	HSC	03/29/10 23:04	032910C–1	959114
7440–50–8	Copper	6260	ug/Kg		308	1030	1030	1	P	HSC	03/29/10 23:04	032910C–1	959114
7439–89–6	Iron	13200000	ug/Kg		8220	25700	25700	1	P	HSC	03/29/10 23:04	032910C–1	959114
7439–92–1	Lead	9210	ug/Kg		257	1030	1030	1	P	HSC	03/29/10 23:04	032910C–1	959114
7439–95–4	Magnesium	1980000	ug/Kg		8730	30800	30800	1	P	HSC	03/29/10 23:04	032910C–1	959114
7439–96–5	Manganese	310000	ug/Kg	*	205	1030	1030	1	P	HSC	03/29/10 23:04	032910C–1	959114
7439–97–6	Mercury	13.2	ug/kg		3.77	11.1	11.1	1	AV	JXL1	03/10/10 12:04	031010S1–4	958757
7440–02–0	Nickel	7.79	mg/kg		0.109	0.435	0.435	2	MS	RMJ	03/24/10 17:15	100323–2	959116
7440–09–7	Potassium J+,I6b	1590000	ug/Kg	N	6580	25700	25700	1	P	HSC	03/29/10 23:04	032910C–1	959114
7782–49–2	Selenium UJ,I6a	1.09	mg/kg	UN	0.544	1.09	1.09	2	MS	RMJ	03/24/10 17:15	100323–2	959116
7440–22–4	Silver	514	ug/Kg	U	103	514	514	1	P	HSC	03/29/10 23:04	032910C–1	959114
7440–23–5	Sodium	523000	ug/Kg		7190	25700	25700	1	P	HSC	03/29/10 23:04	032910C–1	959114
7440–28–0	Thallium	0.220	mg/kg		0.0653	0.218	0.218	2	MS	RMJ	03/24/10 17:15	100323–2	959116
7440–61–1	Uranium	3.91	mg/kg		0.0144	0.0435	0.0435	2	MS	RMJ	03/26/10 00:59	100325–3	959116
7440–62–2	Vanadium	19800	ug/Kg		103	514	514	1	P	HSC	03/29/10 23:04	032910C–1	959114
7440–66–6	Zinc	27900	ug/Kg		339	1030	1030	1	P	HSC	03/29/10 23:04	032910C–1	959114

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958757	958755	SW846 7471A Prep	0.593	g	30	mL	03/10/10	LXH2
959114	959113	SW846 3050B	0.533	g	50	mL	03/09/10	AXG2
959116	959115	SW846 3050B	0.503	g	50	mL	03/03/10	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2090-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248110003 **BASIS:** Dry Weight **DATE COLLECTED** 22-FEB-10

CLIENT ID: RE15-10-8393 **LEVEL:** Low **DATE RECEIVED** 26-FEB-10

MATRIX: SOIL **%SOLIDS:** 80

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5620000	ug/Kg		7520	22100	22100	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-36-0	Antimony UJ,I12a	1110	ug/Kg	UN	365	1110	1110	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-38-2	Arsenic	1.18	mg/kg	J	0.245	1.23	1.23	2	MS	RMJ	03/24/10 17:19	100323-2	959116
7440-39-3	Barium	70900	ug/Kg		111	553	553	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-41-7	Beryllium	0.590	mg/kg		0.0245	0.123	0.123	2	MS	RMJ	03/24/10 17:19	100323-2	959116
7440-43-9	Cadmium	553	ug/Kg	U	111	553	553	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-70-2	Calcium	1900000	ug/Kg		8850	27700	27700	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-47-3	Chromium	36100	ug/Kg		166	553	553	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-48-4	Cobalt	2550	ug/Kg		166	553	553	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-50-8	Copper	3400	ug/Kg		332	1110	1110	1	P	HSC	03/29/10 23:06	032910C-1	959114
7439-89-6	Iron	12900000	ug/Kg		8850	27700	27700	1	P	HSC	03/29/10 23:06	032910C-1	959114
7439-92-1	Lead	3350	ug/Kg		277	1110	1110	1	P	HSC	03/29/10 23:06	032910C-1	959114
7439-95-4	Magnesium	1120000	ug/Kg		9400	33200	33200	1	P	HSC	03/29/10 23:06	032910C-1	959114
7439-96-5	Manganese	254000	ug/Kg	*	221	1110	1110	1	P	HSC	03/29/10 23:06	032910C-1	959114
7439-97-6	Mercury	14.5	ug/kg		4.9	14.4	14.4	1	AV	JXL1	03/10/10 13:10	031010S1-4	958757
7440-02-0	Nickel	7.31	mg/kg		0.123	0.49	0.49	2	MS	RMJ	03/24/10 17:19	100323-2	959116
7440-09-7	Potassium J+,I6b	880000	ug/Kg	N	7080	27700	27700	1	P	HSC	03/29/10 23:06	032910C-1	959114
7782-49-2	Selenium UJ,I6a	1.23	mg/kg	UN	0.613	1.23	1.23	2	MS	RMJ	03/24/10 17:19	100323-2	959116
7440-22-4	Silver	553	ug/Kg	U	111	553	553	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-23-5	Sodium	409000	ug/Kg		7740	27700	27700	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-28-0	Thallium	0.10	mg/kg	J	0.0735	0.245	0.245	2	MS	RMJ	03/24/10 17:19	100323-2	959116
7440-61-1	Uranium	0.847	mg/kg		0.0162	0.049	0.049	2	MS	RMJ	03/26/10 01:08	100325-3	959116
7440-62-2	Vanadium	9590	ug/Kg		111	553	553	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-66-6	Zinc	31300	ug/Kg		365	1110	1110	1	P	HSC	03/29/10 23:06	032910C-1	959114

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958757	958755	SW846 7471A Prep	0.521	g	30	mL	03/10/10	LXH2
959114	959113	SW846 3050B	0.566	g	50	mL	03/09/10	AXG2
959116	959115	SW846 3050B	0.511	g	50	mL	03/03/10	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2090-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248110004 **BASIS:** Dry Weight **DATE COLLECTED** 22-FEB-10

CLIENT ID: RE15-10-8395 **LEVEL:** Low **DATE RECEIVED** 26-FEB-10

MATRIX: SOIL **%SOLIDS:** 95.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3400000	ug/Kg		6750	19800	19800	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-36-0	Antimony UJ,I12a	992	ug/Kg	UN	328	992	992	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-38-2	Arsenic	0.661	mg/kg	J	0.184	0.919	0.919	2	MS	RMJ	03/24/10 17:23	100323-2	959116
7440-39-3	Barium	39100	ug/Kg		99.2	496	496	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-41-7	Beryllium	0.538	mg/kg		0.0184	0.0919	0.0919	2	MS	RMJ	03/24/10 17:23	100323-2	959116
7440-43-9	Cadmium	496	ug/Kg	U	99.2	496	496	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-70-2	Calcium	1040000	ug/Kg		7940	24800	24800	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-47-3	Chromium	18600	ug/Kg		149	496	496	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-48-4	Cobalt	1850	ug/Kg		149	496	496	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-50-8	Copper	2510	ug/Kg		298	992	992	1	P	HSC	03/29/10 23:08	032910C-1	959114
7439-89-6	Iron	12000000	ug/Kg		7940	24800	24800	1	P	HSC	03/29/10 23:08	032910C-1	959114
7439-92-1	Lead	2640	ug/Kg		248	992	992	1	P	HSC	03/29/10 23:08	032910C-1	959114
7439-95-4	Magnesium	1320000	ug/Kg		8440	29800	29800	1	P	HSC	03/29/10 23:08	032910C-1	959114
7439-96-5	Manganese	250000	ug/Kg	*	198	992	992	1	P	HSC	03/29/10 23:08	032910C-1	959114
7439-97-6	Mercury	11.9	ug/kg	U	4.05	11.9	11.9	1	AV	JXL1	03/10/10 13:12	031010S1-4	958757
7440-02-0	Nickel	4.65	mg/kg		0.0919	0.368	0.368	2	MS	RMJ	03/24/10 17:23	100323-2	959116
7440-09-7	Potassium J+,I6b	1200000	ug/Kg	N	6350	24800	24800	1	P	HSC	03/29/10 23:08	032910C-1	959114
7782-49-2	Selenium UJ,I6a	0.919	mg/kg	UN	0.46	0.919	0.919	2	MS	RMJ	03/24/10 17:23	100323-2	959116
7440-22-4	Silver	496	ug/Kg	U	99.2	496	496	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-23-5	Sodium	1020000	ug/Kg		6950	24800	24800	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-28-0	Thallium	0.0693	mg/kg	J	0.0552	0.184	0.184	2	MS	RMJ	03/24/10 17:23	100323-2	959116
7440-61-1	Uranium	0.507	mg/kg		0.0121	0.0368	0.0368	2	MS	RMJ	03/26/10 01:11	100325-3	959116
7440-62-2	Vanadium	7350	ug/Kg		99.2	496	496	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-66-6	Zinc	39400	ug/Kg		328	992	992	1	P	HSC	03/29/10 23:08	032910C-1	959114

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958757	958755	SW846 7471A Prep	0.527	g	30	mL	03/10/10	LXH2
959114	959113	SW846 3050B	0.527	g	50	mL	03/09/10	AXG2
959116	959115	SW846 3050B	0.569	g	50	mL	03/03/10	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2090-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248110005 **BASIS:** Dry Weight **DATE COLLECTED** 22-FEB-10

CLIENT ID: RE15-10-8398 **LEVEL:** Low **DATE RECEIVED** 26-FEB-10

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11500000	ug/Kg		7320	21500	21500	1	P	HSC	03/29/10 23:11	032910C-1	959114
7440-36-0	Antimony UJ,I12a	1080	ug/Kg	UN	355	1080	1080	1	P	HSC	03/29/10 23:11	032910C-1	959114
7440-38-2	Arsenic	1.86	mg/kg		0.221	1.11	1.11	2	MS	RMJ	03/24/10 17:35	100323-2	959116
7440-39-3	Barium	148000	ug/Kg		108	538	538	1	P	HSC	03/29/10 23:11	032910C-1	959114
7440-41-7	Beryllium	1	mg/kg		0.0221	0.111	0.111	2	MS	RMJ	03/24/10 17:35	100323-2	959116
7440-43-9	Cadmium	538	ug/Kg	U	108	538	538	1	P	HSC	03/29/10 23:11	032910C-1	959114
7440-70-2	Calcium	3190000	ug/Kg		8610	26900	26900	1	P	HSC	03/29/10 23:11	032910C-1	959114
7440-47-3	Chromium	12700	ug/Kg		161	538	538	1	P	HSC	03/29/10 23:11	032910C-1	959114
7440-48-4	Cobalt	5750	ug/Kg		161	538	538	1	P	HSC	03/29/10 23:11	032910C-1	959114
7440-50-8	Copper	6650	ug/Kg		323	1080	1080	1	P	HSC	03/29/10 23:11	032910C-1	959114
7439-89-6	Iron	16200000	ug/Kg		8610	26900	26900	1	P	HSC	03/29/10 23:11	032910C-1	959114
7439-92-1	Lead	9240	ug/Kg		269	1080	1080	1	P	HSC	03/29/10 23:11	032910C-1	959114
7439-95-4	Magnesium	2170000	ug/Kg		9150	32300	32300	1	P	HSC	03/29/10 23:11	032910C-1	959114
7439-96-5	Manganese	283000	ug/Kg	*	215	1080	1080	1	P	HSC	03/29/10 23:11	032910C-1	959114
7439-97-6	Mercury	8.2	ug/kg	J	4.2	12.4	12.4	1	AV	JXL1	03/10/10 13:14	031010S1-4	958757
7440-02-0	Nickel	7.67	mg/kg		0.111	0.442	0.442	2	MS	RMJ	03/24/10 17:35	100323-2	959116
7440-09-7	Potassium J+,I6b	1780000	ug/Kg	N	6890	26900	26900	1	P	HSC	03/29/10 23:11	032910C-1	959114
7782-49-2	Selenium UJ,I6a	1.11	mg/kg	UN	0.553	1.11	1.11	2	MS	RMJ	03/24/10 17:35	100323-2	959116
7440-22-4	Silver	121	ug/Kg	J	108	538	538	1	P	HSC	03/29/10 23:11	032910C-1	959114
7440-23-5	Sodium	293000	ug/Kg		7530	26900	26900	1	P	HSC	03/29/10 23:11	032910C-1	959114
7440-28-0	Thallium	0.206	mg/kg	J	0.0663	0.221	0.221	2	MS	RMJ	03/24/10 17:35	100323-2	959116
7440-61-1	Uranium	4.06	mg/kg		0.0146	0.0442	0.0442	2	MS	RMJ	03/26/10 01:15	100325-3	959116
7440-62-2	Vanadium	21000	ug/Kg		108	538	538	1	P	HSC	03/29/10 23:11	032910C-1	959114
7440-66-6	Zinc	28600	ug/Kg		355	1080	1080	1	P	HSC	03/29/10 23:11	032910C-1	959114

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958757	958755	SW846 7471A Prep	0.557	g	30	mL	03/10/10	LXH2
959114	959113	SW846 3050B	0.533	g	50	mL	03/09/10	AXG2
959116	959115	SW846 3050B	0.519	g	50	mL	03/03/10	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2090-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248110006 **BASIS:** Dry Weight **DATE COLLECTED** 22-FEB-10

CLIENT ID: RE15-10-8394 **LEVEL:** Low **DATE RECEIVED** 26-FEB-10

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6720000	ug/Kg		7420	21800	21800	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-36-0	Antimony UJ,I12a	1090	ug/Kg	UN	360	1090	1090	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-38-2	Arsenic	1.34	mg/kg		0.215	1.08	1.08	2	MS	RMJ	03/24/10 17:39	100323-2	959116
7440-39-3	Barium	110000	ug/Kg		109	546	546	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-41-7	Beryllium	0.824	mg/kg		0.0215	0.108	0.108	2	MS	RMJ	03/24/10 17:39	100323-2	959116
7440-43-9	Cadmium	546	ug/Kg	U	109	546	546	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-70-2	Calcium	1440000	ug/Kg		8730	27300	27300	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-47-3	Chromium	14600	ug/Kg		164	546	546	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-48-4	Cobalt	2920	ug/Kg		164	546	546	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-50-8	Copper	4810	ug/Kg		327	1090	1090	1	P	HSC	03/29/10 23:13	032910C-1	959114
7439-89-6	Iron	13400000	ug/Kg		8730	27300	27300	1	P	HSC	03/29/10 23:13	032910C-1	959114
7439-92-1	Lead	4440	ug/Kg		273	1090	1090	1	P	HSC	03/29/10 23:13	032910C-1	959114
7439-95-4	Magnesium	1310000	ug/Kg		9280	32700	32700	1	P	HSC	03/29/10 23:13	032910C-1	959114
7439-96-5	Manganese	195000	ug/Kg	*	218	1090	1090	1	P	HSC	03/29/10 23:13	032910C-1	959114
7439-97-6	Mercury	14.7	ug/kg		4.47	13.1	13.1	1	AV	JXL1	03/10/10 13:16	031010S1-4	958757
7440-02-0	Nickel	6.02	mg/kg		0.108	0.431	0.431	2	MS	RMJ	03/24/10 17:39	100323-2	959116
7440-09-7	Potassium J+,I6b	1050000	ug/Kg	N	6980	27300	27300	1	P	HSC	03/29/10 23:13	032910C-1	959114
7782-49-2	Selenium UJ,I6a	1.08	mg/kg	UN	0.538	1.08	1.08	2	MS	RMJ	03/24/10 17:39	100323-2	959116
7440-22-4	Silver	546	ug/Kg	U	109	546	546	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-23-5	Sodium	808000	ug/Kg		7640	27300	27300	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-28-0	Thallium	0.107	mg/kg	J	0.0646	0.215	0.215	2	MS	RMJ	03/24/10 17:39	100323-2	959116
7440-61-1	Uranium	1.12	mg/kg		0.0142	0.0431	0.0431	2	MS	RMJ	03/26/10 01:18	100325-3	959116
7440-62-2	Vanadium	11500	ug/Kg		109	546	546	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-66-6	Zinc	30200	ug/Kg		360	1090	1090	1	P	HSC	03/29/10 23:13	032910C-1	959114

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958757	958755	SW846 7471A Prep	0.509	g	30	mL	03/10/10	LXH2
959114	959113	SW846 3050B	0.511	g	50	mL	03/09/10	AXG2
959116	959115	SW846 3050B	0.518	g	50	mL	03/03/10	BXA1

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2090-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248110007 **BASIS:** Dry Weight **DATE COLLECTED** 22-FEB-10

CLIENT ID: RE15-10-8399 **LEVEL:** Low **DATE RECEIVED** 26-FEB-10

MATRIX: SOIL **%SOLIDS:** 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11000000	ug/Kg		7470	22000	22000	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-36-0	Antimony UJ,I12a	1100	ug/Kg	UN	363	1100	1100	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-38-2	Arsenic	1.36	mg/kg		0.224	1.12	1.12	2	MS	RMJ	03/24/10 17:43	100323-2	959116
7440-39-3	Barium	110000	ug/Kg		110	550	550	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-41-7	Beryllium	0.748	mg/kg		0.0224	0.112	0.112	2	MS	RMJ	03/24/10 17:43	100323-2	959116
7440-43-9	Cadmium	550	ug/Kg	U	110	550	550	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-70-2	Calcium	3130000	ug/Kg		8790	27500	27500	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-47-3	Chromium	23000	ug/Kg		165	550	550	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-48-4	Cobalt	3780	ug/Kg		165	550	550	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-50-8	Copper	5760	ug/Kg		330	1100	1100	1	P	HSC	03/29/10 23:15	032910C-1	959114
7439-89-6	Iron	15100000	ug/Kg		8790	27500	27500	1	P	HSC	03/29/10 23:15	032910C-1	959114
7439-92-1	Lead	7030	ug/Kg		275	1100	1100	1	P	HSC	03/29/10 23:15	032910C-1	959114
7439-95-4	Magnesium	1970000	ug/Kg		9340	33000	33000	1	P	HSC	03/29/10 23:15	032910C-1	959114
7439-96-5	Manganese	240000	ug/Kg	*	220	1100	1100	1	P	HSC	03/29/10 23:15	032910C-1	959114
7439-97-6	Mercury	12.7	ug/kg		4.14	12.2	12.2	1	AV	JXL1	03/10/10 13:18	031010S1-4	958757
7440-02-0	Nickel	6.98	mg/kg		0.112	0.448	0.448	2	MS	RMJ	03/24/10 17:43	100323-2	959116
7440-09-7	Potassium J+,I6b	1510000	ug/Kg	N	7030	27500	27500	1	P	HSC	03/29/10 23:15	032910C-1	959114
7782-49-2	Selenium UJ,I6a	1.12	mg/kg	UN	0.56	1.12	1.12	2	MS	RMJ	03/24/10 17:43	100323-2	959116
7440-22-4	Silver	550	ug/Kg	U	110	550	550	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-23-5	Sodium	404000	ug/Kg		7690	27500	27500	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-28-0	Thallium	0.187	mg/kg	J	0.0673	0.224	0.224	2	MS	RMJ	03/24/10 17:43	100323-2	959116
7440-61-1	Uranium	1.79	mg/kg		0.0148	0.0448	0.0448	2	MS	RMJ	03/26/10 01:21	100325-3	959116
7440-62-2	Vanadium	15600	ug/Kg		110	550	550	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-66-6	Zinc	34100	ug/Kg		363	1100	1100	1	P	HSC	03/29/10 23:15	032910C-1	959114

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958757	958755	SW846 7471A Prep	0.558	g	30	mL	03/10/10	LXH2
959114	959113	SW846 3050B	0.515	g	50	mL	03/09/10	AXG2
959116	959115	SW846 3050B	0.505	g	50	mL	03/03/10	BXA1

LT 4/26/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2090-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248110008 **BASIS:** Dry Weight **DATE COLLECTED** 22-FEB-10

CLIENT ID: RE15-10-8397 **LEVEL:** Low **DATE RECEIVED** 26-FEB-10

MATRIX: SOIL **%SOLIDS:** 93.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9050000	ug/Kg		6760	19900	19900	1	P	HSC	03/29/10 23:17	032910C-1	959114
7440-36-0	Antimony UJ,I12a	994	ug/Kg	UN	328	994	994	1	P	HSC	03/29/10 23:17	032910C-1	959114
7440-38-2	Arsenic	2	mg/kg		0.202	1.01	1.01	2	MS	RMJ	03/24/10 17:47	100323-2	959116
7440-39-3	Barium	121000	ug/Kg		99.4	497	497	1	P	HSC	03/29/10 23:17	032910C-1	959114
7440-41-7	Beryllium	1.08	mg/kg		0.0202	0.101	0.101	2	MS	RMJ	03/24/10 17:47	100323-2	959116
7440-43-9	Cadmium	497	ug/Kg	U	99.4	497	497	1	P	HSC	03/29/10 23:17	032910C-1	959114
7440-70-2	Calcium	45400000	ug/Kg		7950	24800	24800	1	P	HSC	03/29/10 23:17	032910C-1	959114
7440-47-3	Chromium	12100	ug/Kg		149	497	497	1	P	HSC	03/29/10 23:17	032910C-1	959114
7440-48-4	Cobalt	3610	ug/Kg		149	497	497	1	P	HSC	03/29/10 23:17	032910C-1	959114
7440-50-8	Copper	6230	ug/Kg		298	994	994	1	P	HSC	03/29/10 23:17	032910C-1	959114
7439-89-6	Iron	12700000	ug/Kg		7950	24800	24800	1	P	HSC	03/29/10 23:17	032910C-1	959114
7439-92-1	Lead	7150	ug/Kg		248	994	994	1	P	HSC	03/29/10 23:17	032910C-1	959114
7439-95-4	Magnesium	2020000	ug/Kg		8450	29800	29800	1	P	HSC	03/29/10 23:17	032910C-1	959114
7439-96-5	Manganese	278000	ug/Kg	*	199	994	994	1	P	HSC	03/29/10 23:17	032910C-1	959114
7439-97-6	Mercury	14.1	ug/kg		4.2	12.4	12.4	1	AV	JXL1	03/10/10 13:20	031010S1-4	958757
7440-02-0	Nickel	9.68	mg/kg		0.101	0.404	0.404	2	MS	RMJ	03/24/10 17:47	100323-2	959116
7440-09-7	Potassium J+,I6b	1410000	ug/Kg	N	6360	24800	24800	1	P	HSC	03/29/10 23:17	032910C-1	959114
7782-49-2	Selenium UJ,I6a	1.01	mg/kg	UN	0.505	1.01	1.01	2	MS	RMJ	03/24/10 17:47	100323-2	959116
7440-22-4	Silver	497	ug/Kg	U	99.4	497	497	1	P	HSC	03/29/10 23:17	032910C-1	959114
7440-23-5	Sodium	456000	ug/Kg		6960	24800	24800	1	P	HSC	03/29/10 23:17	032910C-1	959114
7440-28-0	Thallium	0.189	mg/kg	J	0.0606	0.202	0.202	2	MS	RMJ	03/24/10 17:47	100323-2	959116
7440-61-1	Uranium	5.28	mg/kg		0.0133	0.0404	0.0404	2	MS	RMJ	03/26/10 01:24	100325-3	959116
7440-62-2	Vanadium	17700	ug/Kg		99.4	497	497	1	P	HSC	03/29/10 23:17	032910C-1	959114
7440-66-6	Zinc	27400	ug/Kg		328	994	994	1	P	HSC	03/29/10 23:17	032910C-1	959114

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958757	958755	SW846 7471A Prep	0.517	g	30	mL	03/10/10	LXH2
959114	959113	SW846 3050B	0.536	g	50	mL	03/09/10	AXG2
959116	959115	SW846 3050B	0.527	g	50	mL	03/03/10	BXA1

LT 4/26/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-2090 VALIDATION DATE: 4/26/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

☐ OTHER (DESCRIBE):

Section II. Completeness Check

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

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

1. Nitrate/nitrite was detected in the water MB. The associated sample result was an ND and, thus, was not qualified.
2. The soil MS %R for nitrate was < the laboratory's LAL but ≥10%. The associated results for samples RE15-10-8404, -8396 and -8397 were detects and, thus, were qualified J-,I6a. The remaining associated sample results were NDs and, thus, were qualified UJ,I6a.
3. The soil and water matrix QC for total cyanide were performed on samples from other LANL RNs. No sample data were qualified as a result.
4. The lab did not receive the nitrate/nitrite container for sample -8407. An aliquot was taken from the perchlorate container and preserved prior to analysis. No sample data were qualified as a result.

Reviewed by: Mary Donivan Level: I Date: 04/30/10

VALIDATOR'S SIGNATURE: L Thal DATE: 4/26/10

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

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

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

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

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

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

GEL LABORATORIES LLC
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: 10-2090

Client Sample ID:	RE15-10-8407	Project:	LANL01004
Sample ID:	248108001	Client ID:	LANL010
Matrix:	W		
Collect Date:	22-FEB-10 12:00		
Receive Date:	26-FEB-10		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 03/08/10	1511	959217	1
Nutrient Analysis										
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"										
Nitrogen, Nitrate/Nitrite	U	ND	0.100	0.500	mg/L	10	AXH3 03/03/10	1239	959199	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/08/10	1241	959216

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	
2	EPA 353.2	

LT 4/26/10

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

Report Date: March 24, 2010
Client SDG: 10-2090-1

Client Sample ID: RE15-10-8404
Sample ID: 248110001
Matrix: R
Collect Date: 22-FEB-10 12:00
Receive Date: 26-FEB-10
Collector: Client
Moisture: 9.44%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result		DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 19.3C	H	8.61		0.010	0.100	SU	1	LXA1 03/02/10	1250	959805	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	U	ND		72.2	265	ug/kg	1	AXC2 03/08/10	1544	959204	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N		1.62	J-,I6a	0.331	1.10	mg/kg	1	MAR1 03/20/10	1110	962078	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	03/19/10	1315	962077
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/08/10	1243	959203

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

Report Date: March 24, 2010
Client SDG: 10-2090-1

Client Sample ID:	RE15-10-8396	Project:	LANL01004
Sample ID:	248110002	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-FEB-10 12:00		
Receive Date:	26-FEB-10		
Collector:	Client		
Moisture:	8.69%		

Parameter	Qualifier	Result		DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 19.4C	H	8.41		0.010	0.100	SU	1	LXA1 03/02/10	1250	959805	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	U	ND		74.5	274	ug/kg	1	AXC2 03/08/10	1545	959204	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N		1.57	J-,I6a	0.329	1.10	mg/kg	1	MAR1 03/20/10	1258	962078	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	03/19/10	1315	962077
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/08/10	1243	959203

The following Analytical Methods were performed

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

LT 4/26/10

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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 24, 2010
Client SDG: 10-2090-1

Client Sample ID:	RE15-10-8393	Project:	LANL01004
Sample ID:	248110003	Client ID:	LANL010
Matrix:	R		
Collect Date:	22-FEB-10 12:00		
Receive Date:	26-FEB-10		
Collector:	Client		
Moisture:	20.1%		

Parameter	Qualifier	Result		DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 19.3C	H	8.80		0.010	0.100	SU	1	LXA1 03/02/10	1250	959805	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	U	ND		83.5	307	ug/kg	1	AXC2 03/08/10	1546	959204	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	UJ,I6a	0.376	1.25	mg/kg	1	MAR1 03/20/10	1325	962078	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	03/19/10	1315	962077
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/08/10	1243	959203

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

Report Date: March 24, 2010
Client SDG: 10-2090-1

Client Sample ID: RE15-10-8395
Sample ID: 248110004
Matrix: R
Collect Date: 22-FEB-10 12:00
Receive Date: 26-FEB-10
Collector: Client
Moisture: 4.41%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result		DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 19.4C	H	9.09		0.010	0.100	SU	1	LXA1 03/02/10	1250	959805	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	U	ND		69.7	256	ug/kg	1	AXC2 03/08/10	1546	959204	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	UJ,I6a	0.314	1.05	mg/kg	1	MAR1 03/20/10	1352	962078	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	03/19/10	1315	962077
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/08/10	1243	959203

The following Analytical Methods were performed

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

LT 4/26/10

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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 24, 2010
Client SDG: 10-2090-1

Client Sample ID: RE15-10-8398
Sample ID: 248110005
Matrix: R
Collect Date: 22-FEB-10 12:00
Receive Date: 26-FEB-10
Collector: Client
Moisture: 12.8%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result		DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 19.3C	H	8.32		0.010	0.100	SU	1	LXA1 03/02/10	1250	959805	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	U	ND		73.6	271	ug/kg	1	AXC2 03/08/10	1547	959204	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	UJ,I6a	0.344	1.15	mg/kg	1	MAR1 03/20/10	1419	962078	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	03/19/10	1315	962077
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/08/10	1243	959203

The following Analytical Methods were performed

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

LT 4/26/10

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 24, 2010

Client SDG: 10-2090-1

Client Sample ID: RE15-10-8394
Sample ID: 248110006
Matrix: R
Collect Date: 22-FEB-10 12:00
Receive Date: 26-FEB-10
Collector: Client
Moisture: 10.3%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result		DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 19.2C	H	8.91		0.010	0.100	SU	1	LXA1 03/02/10	1250	959805	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	U	ND		74.4	273	ug/kg	1	AXC2 03/08/10	1548	959204	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	UJ,I6a	0.335	1.12	mg/kg	1	MAR1 03/21/10	1319	962078	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	03/19/10	1315	962077
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/08/10	1243	959203

The following Analytical Methods were performed

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

LT 4/26/10

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 24, 2010
Client SDG: 10-2090-1

Client Sample ID: RE15-10-8399
Sample ID: 248110007
Matrix: R
Collect Date: 22-FEB-10 12:00
Receive Date: 26-FEB-10
Collector: Client
Moisture: 11.7%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result		DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 19.2C	H	8.59		0.010	0.100	SU	1	LXA1 03/02/10	1250	959805	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	U	ND		68.7	253	ug/kg	1	AXC2 03/08/10	1549	959204	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	UJ,I6a	0.340	1.13	mg/kg	1	MAR1 03/21/10	1346	962078	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	03/19/10	1315	962077
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/08/10	1243	959203

The following Analytical Methods were performed

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

LT 4/26/10

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 24, 2010
Client SDG: 10-2090-1

Client Sample ID: RE15-10-8397
Sample ID: 248110008
Matrix: R
Collect Date: 22-FEB-10 12:00
Receive Date: 26-FEB-10
Collector: Client
Moisture: 6.13%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result		DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 19.1C	H	8.67		0.010	0.100	SU	1	LXA1 03/02/10	1250	959805	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	U	ND		71.0	261	ug/kg	1	AXC2 03/08/10	1550	959204	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N		1.93	J-,I6a	0.320	1.07	mg/kg	1	MAR103/21/10	1413	962078	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	03/19/10	1315	962077
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/08/10	1243	959203

The following Analytical Methods were performed

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

LT 4/26/10

Thursday, February 25, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2090

REQUEST NUMBER: 10-2090

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc.,
Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 3/27/2010

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 248108', 248110'.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8407	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8407	1	POLY	NO3NO2	Sulfuric Acid (Hydrogen Sulfate)	W
RE15-10-8407	1	POLY	SW-846:6850	Ice	W
RE15-10-8407	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8404	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8396	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8396	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8393	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8393	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8395	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8395	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8398	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8398	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8394	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8394	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8399	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8399	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8397	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8397	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8404	1	POLY	METALS+U-GEL	Ice	R

Relinquished By:		**Date**	**Time**	**Received By:**		**Date**	**Time**
[signature]		2/25/10	1400	Greg Tyler	[signature]	2-26-10	0845
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Received for DISPOSAL By:		**Date**	**Time**	**Remarks:**			
Printed Name	Signature						

Thursday, February 25, 2010

REQUEST NUMBER: 10-2090

LOS ALAMOS
NATIONAL LABORATORY

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

These Samples are on:
LANL Request Number:10-2090
Per Agreement Number:126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/25/2010
TURNAROUND/REPORT DUE: 3/27/2010
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
	EPA:353.2	1	RE15-10-8407	W	2/22/2010	

Thursday, February 25, 2010

REQUEST NUMBER: 10-2090

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
	SW-846:6020	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
		1	RE15-10-8407	W	2/22/2010	
	SW-846:8850	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
		1	RE15-10-8407	W	2/22/2010	
	SW-846:7470A	1	RE15-10-8407	W	2/22/2010	
	[illegible]	1	[illegible]	R	[illegible]	

Thursday, February 25, 2010

REQUEST NUMBER: 10-2090

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
	SW-846:9012A	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
		1	RE15-10-8407	W	2/22/2010	
	SW-846:9045C	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	

Final Page of REQUEST NUMBER 10-2090

GEL Laboratories LLC

a member of **The GEL Group** INC

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

www.gel.com

March 05, 2010

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

Re: LANL ER Project
Work Orders: 248108 248110
SDG: 10-2090

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 26, 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

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-2090
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 248108 and 248110
SDG: 10-2090

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Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 248108 and 248110
SDG # : 10-2090

March 05, 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 26, 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 Proccdure. The lab did not receive the NO3NO2 container for sample RE15-10-8407. Los Alamos was notified. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
248108001	RE15-10-8407
248110001	RE15-10-8404
248110002	RE15-10-8396
248110003	RE15-10-8393
248110004	RE15-10-8395
248110005	RE15-10-8398
248110006	RE15-10-8394
248110007	RE15-10-8399
248110008	RE15-10-8397

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

Valerie Davis
Project Manager

List of current GEL Certifications as of 05 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

Thursday, February 25, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2090

REQUEST NUMBER: 10-2090

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc.,
Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 3/27/2010

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 248108', 248110'.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8407	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8407	1	POLY	NO3NO2	Sulfuric Acid (Hydrogen Sulfate)	W
RE15-10-8407	1	POLY	SW-846:6850	Ice	W
RE15-10-8407	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8404	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8396	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8396	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8393	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8393	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8395	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8395	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8398	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8398	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8394	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8394	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8399	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8399	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8397	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8397	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8404	1	POLY	METALS+U-GEL	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
[signature]	[signature]	2/25/10	1400	Greg Tyler	[signature]	2-26-10	0845
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Received for DISPOSAL By:		**Date**	**Time**	**Remarks:**			
Printed Name	Signature						

Thursday, February 25, 2010

REQUEST NUMBER: 10-2090

LOS ALAMOS
NATIONAL LABORATORY

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

These Samples are on:
LANL Request Number:10-2090
Per Agreement Number:126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/25/2010
TURNAROUND/REPORT DUE: 3/27/2010
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
	EPA:353.2	1	RE15-10-8407	W	2/22/2010	

Thursday, February 25, 2010

REQUEST NUMBER: 10-2090

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
	SW-846:6020	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
		1	RE15-10-8407	W	2/22/2010	
	SW-846:6850	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
		1	RE15-10-8407	W	2/22/2010	
	SW-846:7470A	1	RE15-10-8407	W	2/22/2010	
		1		R		

Thursday, February 25, 2010

REQUEST NUMBER: 10-2090

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
	SW-846:9012A	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	
		1	RE15-10-8407	W	2/22/2010	
	SW-846:9045C	1	RE15-10-8393	R	2/22/2010	
		1	RE15-10-8394	R	2/22/2010	
		1	RE15-10-8395	R	2/22/2010	
		1	RE15-10-8396	R	2/22/2010	
		1	RE15-10-8397	R	2/22/2010	
		1	RE15-10-8398	R	2/22/2010	
		1	RE15-10-8399	R	2/22/2010	
		1	RE15-10-8404	R	2/22/2010	

Final Page of REQUEST NUMBER 10-2090

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL	**SDG/ARCOC/Work Order: 10-2090**
Received By: Greg Tyler	**Date Received: 2/26/10**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: **60cpm**
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags **blue ice** dry ice **none** other **1-3,6C** **11-14,17**
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?	X			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No time on Chain of Custody.**
11	Number of containers received match number indicated on COC?			X	Sample ID's affected: **RE15-10-8407** **The lab did not receive the (1) 250 Ml Poly for N03N02 as indicated on COC.**
12	COC form is properly signed in relinquished/received sections?	X			

Comments:

Fed Ex Tracking Numbers:

7209 7850 2341 1C	**7209 7850 2319 2C**	**7209 7850 2352 12C**
7209 7850 2320 1C	**7209 7850 2422 3C**	**7209 7850 2271 13C**
7209 7850 2396 2C	**7209 7850 2385 3C**	**7209 7850 2466 13C**
7209 7850 2374 2C	**7209 7850 2444 6C**	**7209 7850 2282 14C**
7209 7850 2330 2C	**7209 7850 2400 6C**	**7209 7850 2293 17C**
7209 7850 2455 2C	**7209 7850 2477 6C**	
7209 7850 2308 2C	**7209 7850 2433 6C**	
7209 7850 2411 2C	**7209 7850 2260 11C**	

PM (or PMA) review: Initials _____ Date 3/1/10

Subject: Sample Receipt for 2/26/10
From: Dionne Francis <Dionne.Francis@gel.com>
Date: Mon, 01 Mar 2010 10:54:43 -0500
To: "Keith R. Greene" <kgreene@lanl.gov>, Joylene Valdez <joylenev@lanl.gov>, Valerie Davis <vsd@gel.com>

Keith,

RN 10-2096: the Gross A/B containers will be preserved prior to analysis.

RN 10-2108: the Gross A/B, Metals, Rad and CN will be preserved prior to analysis.

RN 10-2101: the lab rec'd (1) 1L amber glass HEXP container for sample CAPA-10-12847 instead of (3) as indicated on the COC.

RN 10-2122: the lab did not receive a NO3NO2 container for sample RE36-10-7529.
RN 10-2090: the lab did not receive a NO3NO2 container for sample RE15-10-8407.
RN 10-2093: the lab did not receive a NO3NO2 container for sample RE36-10-8458.
An aliquot will be taken from the perchlorate container and preserved.

RN 10-2102: the lab rec'd (1) 40ml vial 8260B container for sample RE46-10-13207 instead of (2) as indicated on the COC.

RN 10-2107: the Ra226+228, Rad, Gross A/B, Metals and CN containers will be preserved prior to analysis.

RN 10-2110: the TKN+TOC container for sample CAPA-10-12823 will be preserved prior to analysis.

The lab did not receive any containers for RN#s 10-2097 and 10-2098.

The following containers rec'd without a COC:
WST51-10-13119 - LL-H3 1L poly
RE11-10-1654 - RADVANA+B+G 250ml poly

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) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 26FEB10
ACTWGT: 57.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A022DXL00

1 of 2
TRK# 0201 7209 7850 2341
MASTER

FRI - 26FEB A
PRIORITY OVERNIGH

XX CHSA

2940
SC-
CH

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 26FEB10
ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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

1 of 2
TRK# 0201 7209 7850 2320
MASTER

FRI - 26FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 26FEB10
ACTWGT: 58.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AARDW01EA1S00

2 of 2
MPS# 0263 7209 7850 2396
Mstr# 7209 7850 2385 0201

FRI - 26FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A0532VA00

TRK# 0201 7209 7850 2374

FRI - 26FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR1A05AGWMO

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TRK# 0201 7209 7850 2330

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FRI - 26 FEB A1
PRIORITY OVERNIGHT

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Emp# 133990 25FEB10 SAFA

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR1A015AGWMO

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1 of 2
TRK# 0201 7209 7850 2308

FRI - 26FEB A1
PRIORITY OVERNIGHT

MASTER

29407
SC-US
CHS

XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

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1 of 3
TRK# 0201 7209 7850 2455

FRI - 26FEB A1
PRIORITY OVERNIGHT

MASTER

29407
SC-US
CHS

XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 60.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

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2 of 2
MPS# 0263 7209 7850 2411
Mstr# 7209 7850 2400 0201

FRI - 26FEB A1
PRIORITY OVERNIGHT

29407
SC-US
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XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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

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2 of 2
MPS# 0263 7209 7850 2319
Mstr# 7209 7850 2308 0201

FRI - 26FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 62.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
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REF: 6B010AARDW01EA1S00

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1 of 2
FedEx TRK# 0201 7209 7850 2385

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FRI - 26 FEB A1
PRIORITY OVERNIGHT

29407

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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2040 SAVAGE RD

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 63.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

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FedEx TRK# 0201 7209 7850 2444

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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2040 SAVAGE RD

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REF: 6B010AMR3A05529E00

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TRK# 0201 7209 7850 2400

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PRIORITY OVERNIGHT

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

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2 of 2
MPS# 0263 7209 7850 2433
Mstr# 7209 7850 2422 0201

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PRIORITY OVERNIGHT

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CHS

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 45.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

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3 of 3
MPS# 0263 7209 7850 2477
Mstr# 7209 7850 2455 0201

FRI - 26FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
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CHS

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

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 63.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

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REF: 6B010AMR2A0515BYD0

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2 of 3
MPS# 0263 7209 7850 2260
Mstr# 7209 7850 2250 0201

FRI - 26FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
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CHS

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A022DXL00

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2 of 2
MPS# 0263 7209 7850 2352
Mstr# 7209 7850 2341 0201

FRI - 26FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR2A0515BYD0

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1 of 2
TRK# 0201 7209 7850 2282
MASTER

FRI - 26FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 60.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR2A0515BYD0

13°

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3 of 3
MPS# 0263 7209 7850 2271
Mstr# 7209 7850 2250 0201

FRI - 26FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 36.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

13°

FedEx Express

E

2 of 3
MPS# 0263 7209 7850 2466
Mstr# 7209 7850 2455 0201

FRI - 26FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505) 663-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 25FEB10
ACTWGT: 40.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 68010AMR2A0515BYDO

17

FedEx Express

2 of 2
MPS# 0263 7209 7850 2293
Mstr# 7209 7850 2282 0201

FRI - 26FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

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

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LC/MS/MS PERCHLORATE ANALYSIS

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Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-2090

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:	959047
Prep Batch Number:	959046

Sample Analysis

Sample ID	Client ID
248108001	RE15-10-8407
1202056719	Interference Check Sample (ICS)
1202056715	Method Blank (MB)
1202056716	Laboratory Control Sample (LCS)
1202056717	248162002(RE46-10-13209) Matrix Spike (MS)
1202056718	248162002(RE46-10-13209) Matrix Spike Duplicate (MSD)

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

Preparation/Analytical Method Verification

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

Calibration Information

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

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

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

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

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

Quality Control (QC) Information

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

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

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

QC Sample Designation
Client sample 248162002 (RE46-10-13209) from SDG 10-2103 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

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

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

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

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

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

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Technical Information

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

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

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

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

Miscellaneous Information

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

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

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

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

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

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

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System Configuration

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

Chromatographic Columns

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

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

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

Review Validation:

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

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

Reviewer: Herbert K Mauer **Date:** 07/16/10

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SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 959046

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE15-10-8407

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090

GEL Sample ID: 248108001

Date Filtered: 05-MAR-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	09-MAR-10 08:15	per0308110a
	Perchlorate Isotope Ratio						1	09-MAR-10 08:15	per0308110a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	09-MAR-10 08:15	per0308110a
	Perchlorate-O(18)			0.443	ug/L		1	09-MAR-10 08:15	per0308110a

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

*Concentration =

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

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QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–2090

Extract Batch Code: 959046

Date Filtered: 05–MAR–10

Matrix: WATER

Sample ID: 1202056716

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.187	ug/L	93.6		85 – 115
Perchlorate Isotope Ratio		3.13				–
Perchlorate–101	0.200	.197	ug/L	98.4		85 – 115
Perchlorate–O(18)		.45	ug/L			–

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

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Form 5a

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-2090

Extract Batch Code: 959046

Date Filtered: 05-MAR-10

Matrix: WATER

Sample ID: 1202056719

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.197	ug/L	98.5		70 – 130
Perchlorate Isotope Ratio		3.09				
Perchlorate-101	0.200	.21	ug/L	105		70 – 130
Perchlorate-O(18)		.463	ug/L			

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

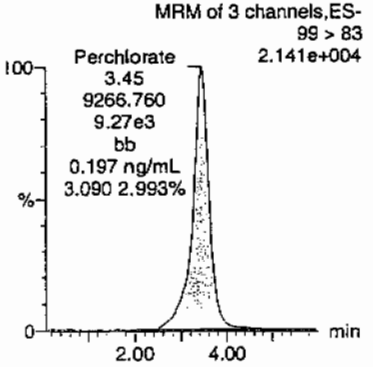
Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308109a
Date: 09-Mar-2010
Time: 08:06:14
ID: 1202056719
Vial: 3:1,C

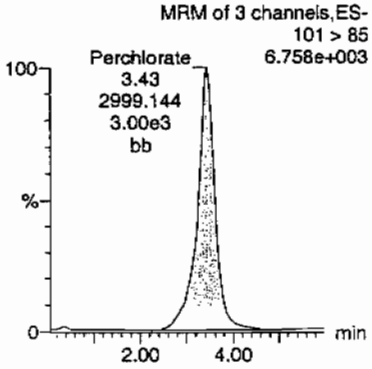
|LAN-|959047|LZQ|ICS|1|

03-09-10

Perchlorate



Perchlorate



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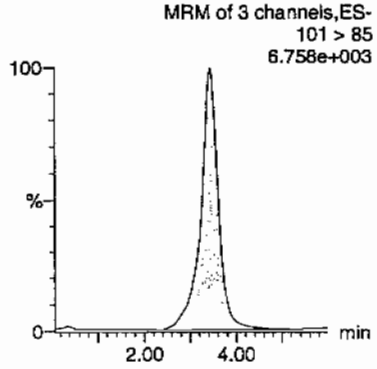
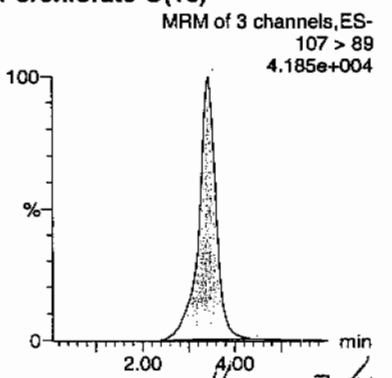


Perchlorate-O(18)



HMM 03/10/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202056719	Perchlorate	99 > 83	3.45	9266.760	9266.760	bb			0.1970	98.48	-1.52	1214.7...	3.09
202056719	Perchlorate-101	101 > 85	3.43	2999.144	2999.144	bb			0.2098	104.89	4.89	42.088	
202056719	Perchlorate-O(18)	107 > 89	3.43	18097.840	18097.840	bb			0.4635	92.69	-7.31	806.721	

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

Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10–2090

Extract Batch Code: 959046

Date Extracted: 05–MAR–10

GEL MS/PS ID: 1202056717

Client ID: RE46–10–13209

GEL MSD/PSD ID: 1202056718

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	0.00772	ug/L	0.190	91.1	.191	91.9	.803	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		3.14		3.05		0		–
Perchlorate–101	0.200	0.0102	ug/L	0.199	94.3	.207	98.3	3.87	30	75 – 125
Perchlorate–O(18)	0	0.435	ug/L	0.461		.46		.13		–

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

Comments:

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Form 4

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-2090

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	08-MAR-10	per0308001a	IPB001
Perchlorate-101	0.00	0	NA	08-MAR-10	per0308001a	IPB001
Perchlorate	0.00	0	NA	08-MAR-10	per0308002a	IPB001
Perchlorate-101	0.00	0	NA	08-MAR-10	per0308002a	IPB001

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

ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

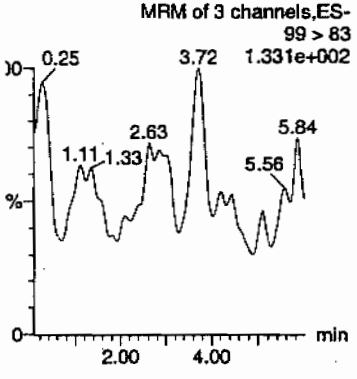
ıst Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
inted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

ethod: C:\MassLynx\Perchlorate.PRO\MethDB\per030810a.mdb 09 Mar 2010 12:48:33
alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030810a.cdb 09 Mar 2010 12:48:47

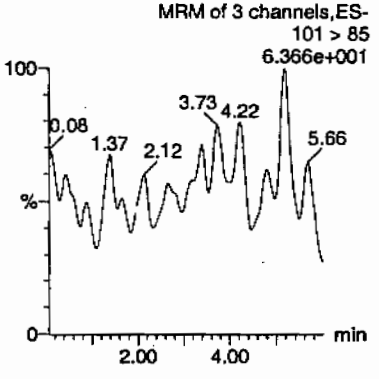
ame: per0308001a
ate: 08-Mar-2010
me: 15:44:43
: IPB001
al: 1:1,A

3/30-31-10

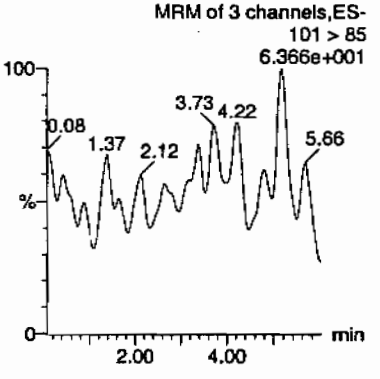
erchlorate



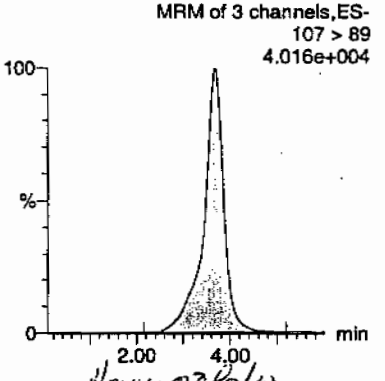
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hann 03/30/10

	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	3.68	20012.854	20012.854	bb			0.5125	102.50	2.50	855.555	

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

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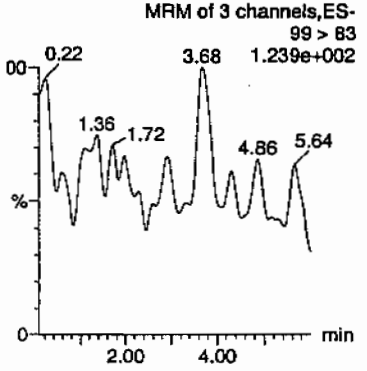
ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

ıst Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

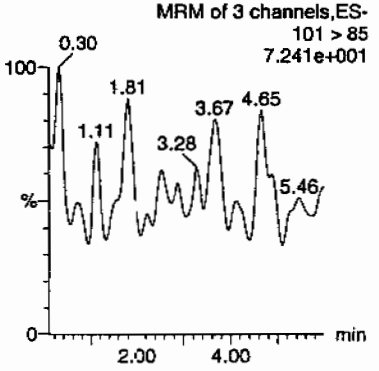
ame: per0308002a
ate: 08-Mar-2010
ime: 15:53:45
): IPB001
ial: 1:1,A

333
03-04-10

erchlorate



Perchlorate



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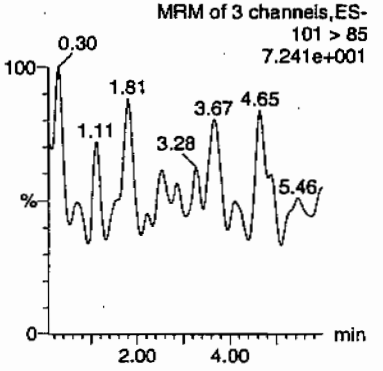
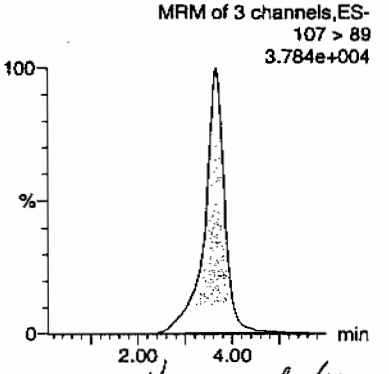


Perchlorate-O(18)



Anne 03/10/10

)	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	3.66	18783.678	18783.678	bb			0.4810	96.21	-3.79	1331.0...	

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Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–2090

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	08–MAR–10	per0308008a	IPB002
Perchlorate–101	0.00	0	NA	08–MAR–10	per0308008a	IPB002
Perchlorate	0.00	0	NA	08–MAR–10	per0308010a	IPB003
Perchlorate–101	0.00	0	NA	08–MAR–10	per0308010a	IPB003
Perchlorate	0.00	0	NA	08–MAR–10	per0308022a	IPB004
Perchlorate–101	0.00	0	NA	08–MAR–10	per0308022a	IPB004
Perchlorate	0.00	0	NA	08–MAR–10	per0308035a	IPB005
Perchlorate–101	0.00	0	NA	08–MAR–10	per0308035a	IPB005
Perchlorate	0.00	0	NA	08–MAR–10	per0308048a	IPB006
Perchlorate–101	0.00	0	NA	08–MAR–10	per0308048a	IPB006
Perchlorate	0.00	0	NA	08–MAR–10	per0308052a	IPB007
Perchlorate–101	0.00	0	NA	08–MAR–10	per0308052a	IPB007
Perchlorate	0.00	0	NA	09–MAR–10	per0308061a	IPB008

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Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-2090

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	09-MAR-10	per0308061a	IPB008
Perchlorate	0.00	0	NA	09-MAR-10	per0308074a	IPB009
Perchlorate-101	0.00	0	NA	09-MAR-10	per0308074a	IPB009
Perchlorate	0.00	0	NA	09-MAR-10	per0308087a	IPB010
Perchlorate-101	0.00	0	NA	09-MAR-10	per0308087a	IPB010
Perchlorate	0.00	0	NA	09-MAR-10	per0308100a	IPB011
Perchlorate-101	0.00	0	NA	09-MAR-10	per0308100a	IPB011
Perchlorate	0.00	0	NA	09-MAR-10	per0308106a	IPB012
Perchlorate-101	0.00	0	NA	09-MAR-10	per0308106a	IPB012
Perchlorate	0.00	0	NA	09-MAR-10	per0308113a	IPB013
Perchlorate-101	0.00	0	NA	09-MAR-10	per0308113a	IPB013

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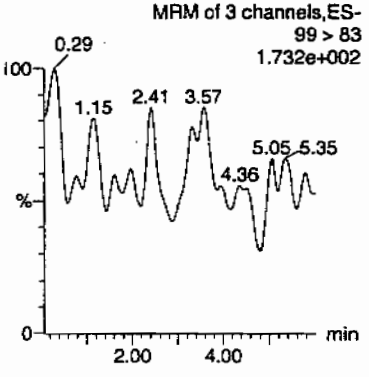
Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

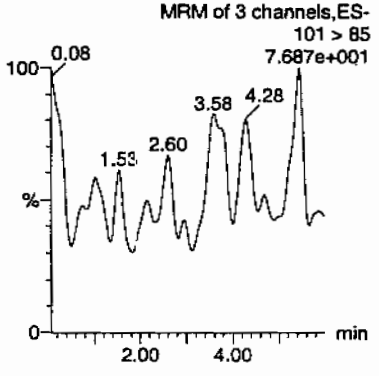
Name: per0308008a
Date: 08-Mar-2010
Time: 16:48:15
ID: IPB002
Vial: 1:1,A

03-09-10

Perchlorate



Perchlorate



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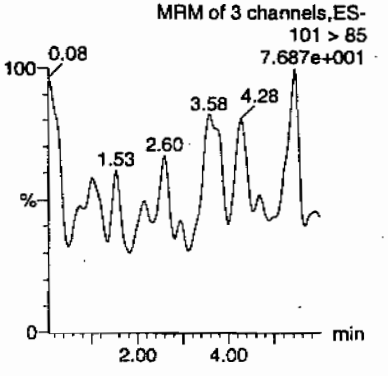
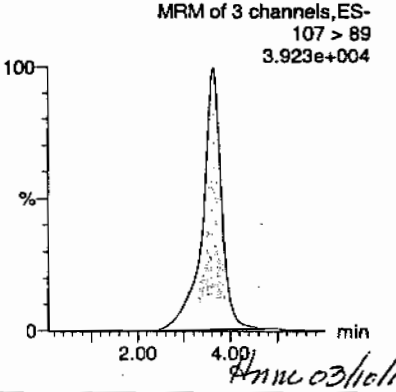


Perchlorate-O(18)



Hmc 03/10/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
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PB002	Perchlorate-101	101 > 85											
PB002	Perchlorate-O(18)	107 > 89	3.64	18817.344	18817.344	bb			0.4819	96.38	-3.62	1274.8...	

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The GEL Group, LLC Analyst: Charlers W. Wilson

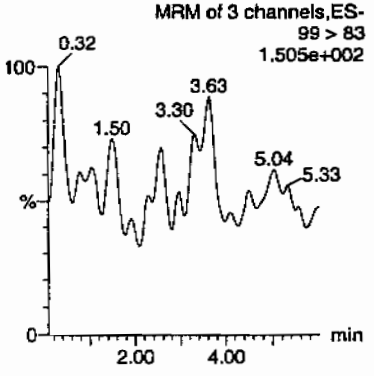
Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

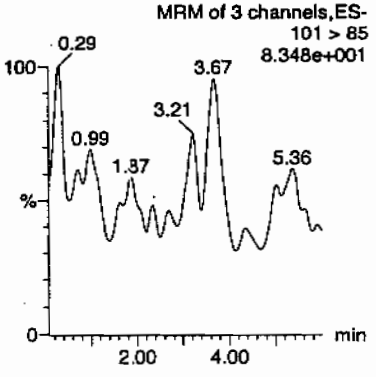
Name: per0308010a
Date: 08-Mar-2010
Time: 17:06:27
ID: IPB003
Vial: 1:1,A

333 03-09-10

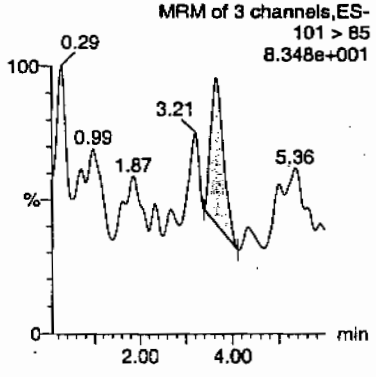
Perchlorate



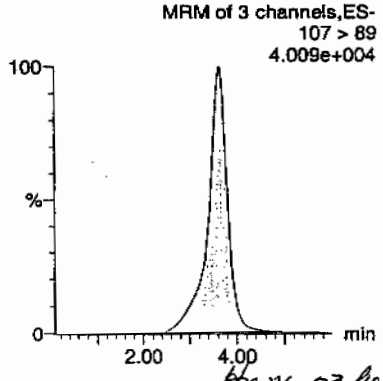
Perchlorate



Perchlorate-101



Perchlorate-O(18)



bmc 03/10/10

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	3.67	15.122	15.122	bb			0.0011			7.773	
IPB003	Perchlorate-O(18)	107 > 89	3.63	19271.525	19271.525	bb			0.4935	98.70	-1.30	2273.8...	

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

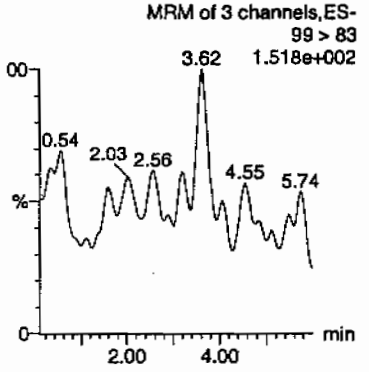
ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

ast Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

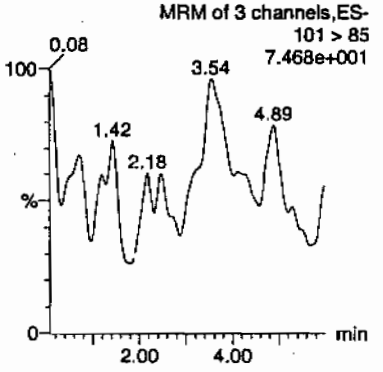
lame: per0308022a
ate: 08-Mar-2010
ime: 18:55:24
): IPB004
ial: 1:1,A

CWW 03-09-10

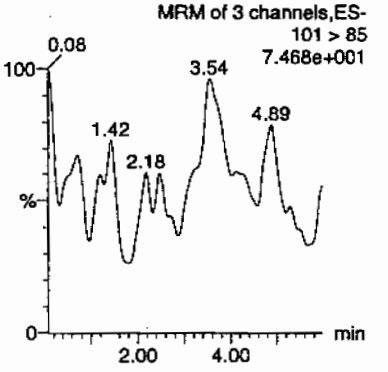
erchlorate



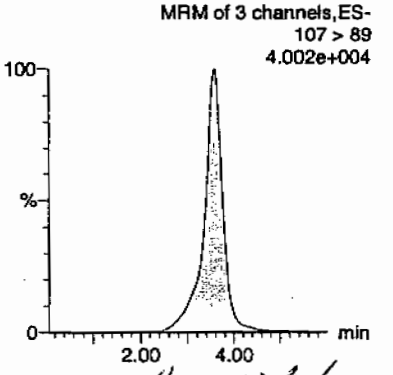
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmw 03/10/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB004	Perchlorate	99 > 83											0.00
PB004	Perchlorate-101	101 > 85											
PB004	Perchlorate-O(18)	107 > 89	3.58	19034.945	19034.945	bb			0.4875	97.49	-2.51	1930.8...	

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

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

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

)ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

ast Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
'rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

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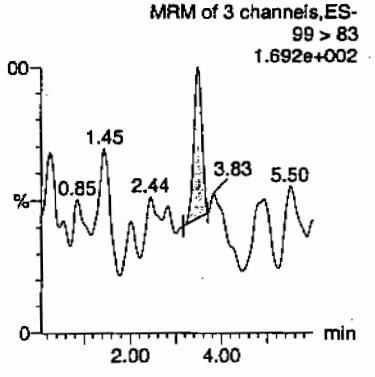
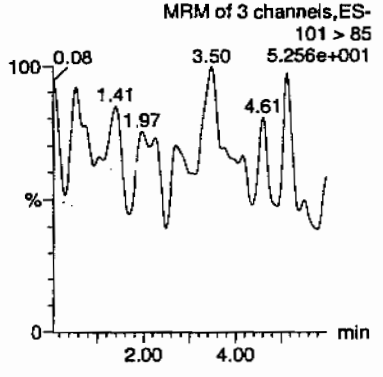
)ate: 08-Mar-2010
'ime: 20:53:11
): tPB005
'ial: 1:1,A

3309-10

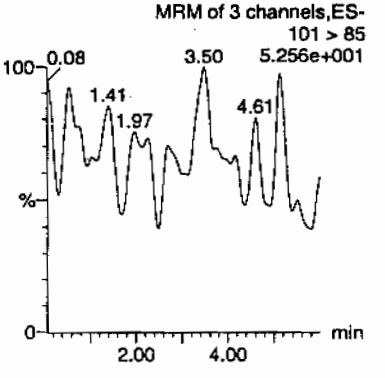
'erchlorate



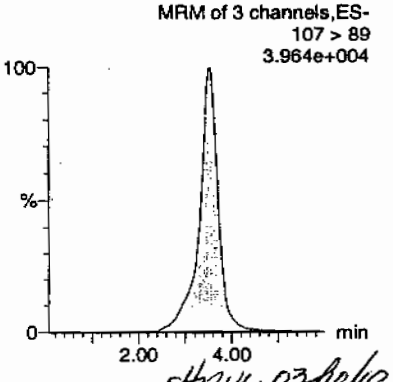
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HNK 03/10/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB005	Perchlorate	99 > 83	3.50	20.240	20.240	bb			0.0004			12.166	0.00
PB005	Perchlorate-101	101 > 85											
PB005	Perchlorate-O(18)	107 > 89	3.53	18853.305	18853.305	bb			0.4828	96.56 ✓	-3.44	2233.7...	

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

ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

ast Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

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ate: 08-Mar-2010
ime: 22:51:21
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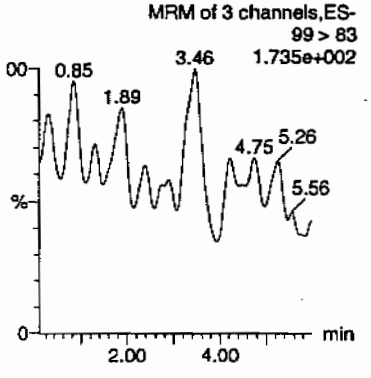
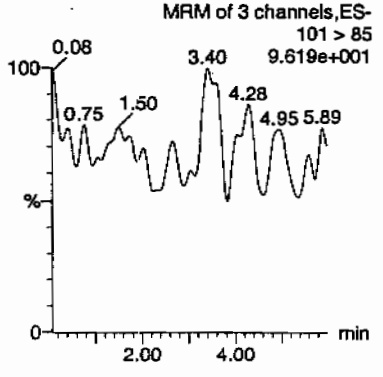
ial: 1:1,A

03-09-10

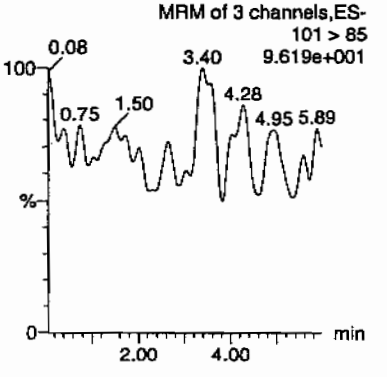
erchlorate



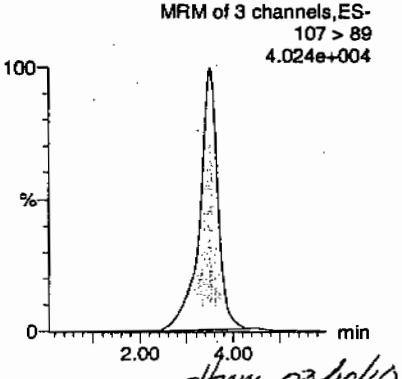
Perchlorate



Perchlorate-101



Perchlorate-O(18)



03/10/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'B006	Perchlorate	99 > 83											0.00
'B006	Perchlorate-101	101 > 85											
'B006	Perchlorate-O(18)	107 > 89	3.51	18258.602	18258.602	bb			0.4676	93.52	-6.48	1018.6...	

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Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

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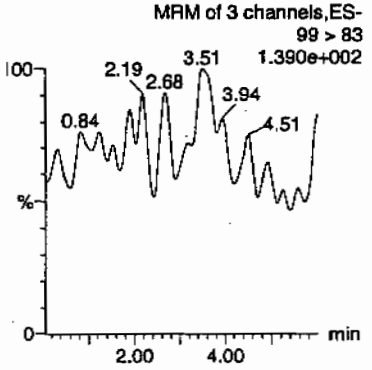
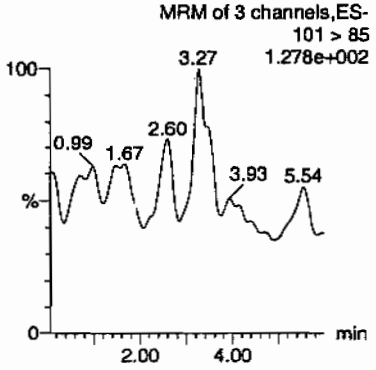
Date: 08-Mar-2010
Time: 23:27:41
ID: IPB007
Vial: 1:1,A

CW 03-04-10

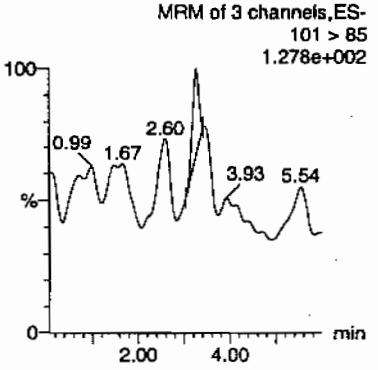
Perchlorate



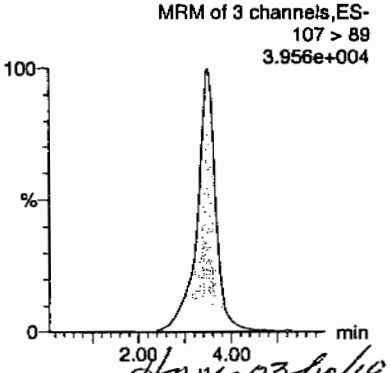
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hnm 03/16/10

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	3.27	7.250	7.250	bb			0.0005			11.574	
IPB007	Perchlorate-O(18)	107 > 89	3.50	18495.547	18495.547	bb			0.4736	94.73	-5.27	613.571	

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ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

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rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

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ime: 00:50:02
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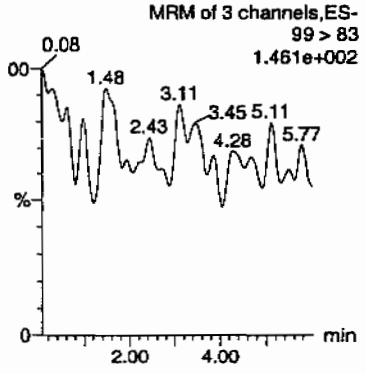
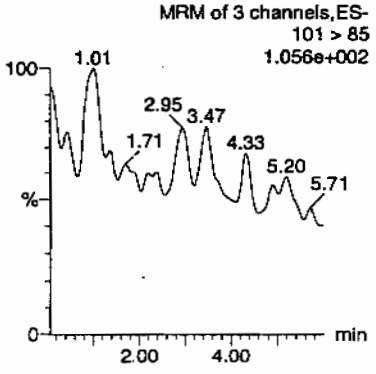
CWJ 03-09-10

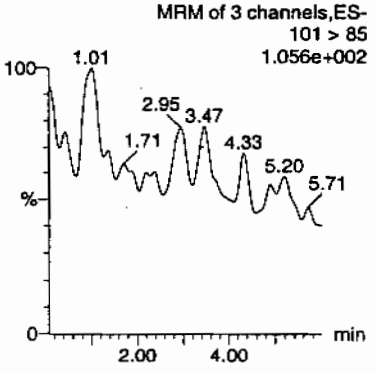
erchlorate



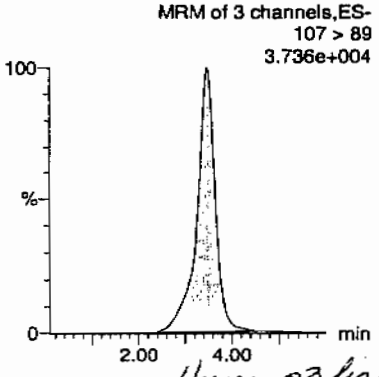
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMC 03/10/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'B008	Perchlorate	99 > 83											0.00
'B008	Perchlorate-101	101 > 85											
'B008	Perchlorate-O(18)	107 > 89	3.48	17193.295	17193.295	bb			0.4403	88.06	-11.94	1235.1...	

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ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

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rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

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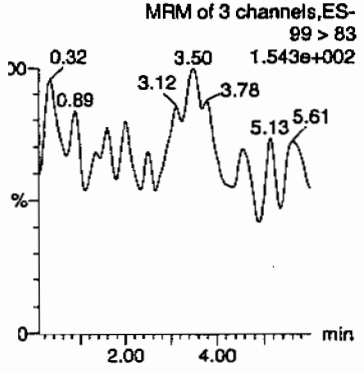
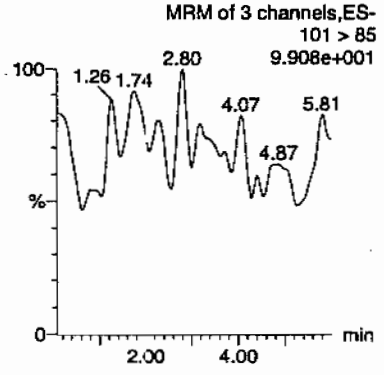
ate: 09-Mar-2010
me: 02:48:02
): IPB009
ial: 1:1,A

C39
03-04-10

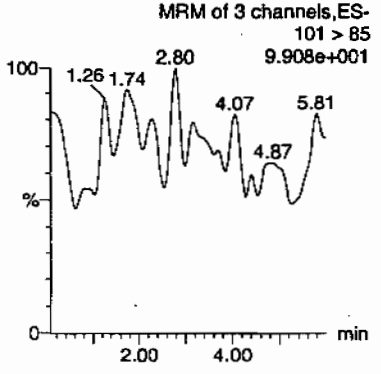
erchlorate



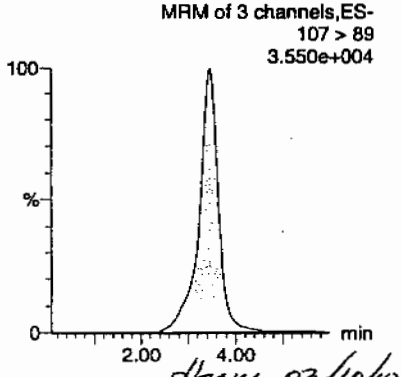
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/10/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB009	Perchlorate	99 > 83											0.00
PB009	Perchlorate-101	101 > 85											
PB009	Perchlorate-O(18)	107 > 89	3.47	16711.643	16711.643	bb			0.4260	85.59	-14.41	2348.6...	

iEL SOP GL-OA-E-067; Method 6850-Modified / MM = Manual Modification

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

ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

ast Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

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ime: 04:46:06
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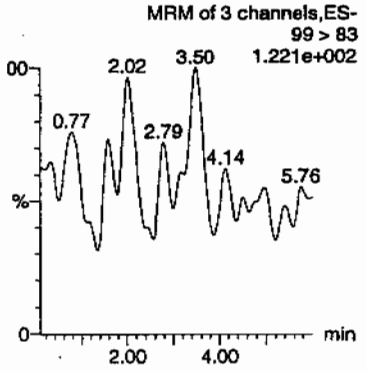
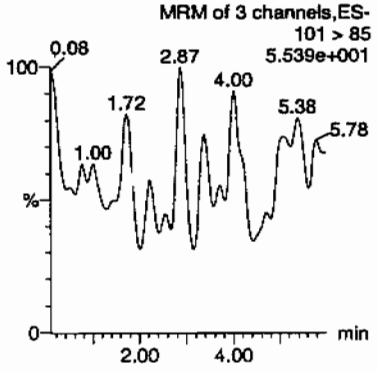
3/3 03-09-10

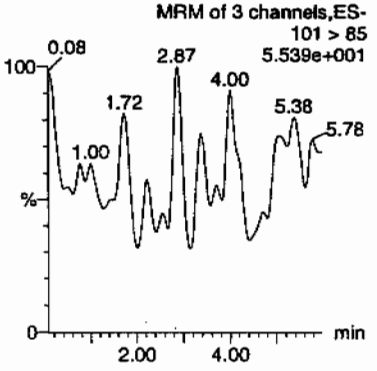
erchlorate



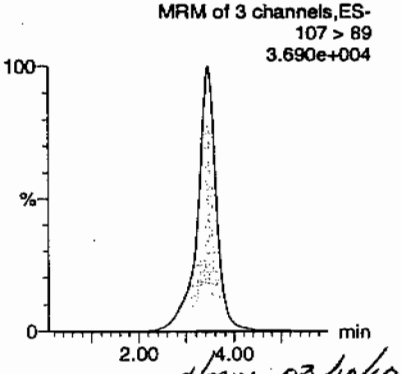
Perchlorate



Perchlorate-101



Perchlorate-O(18)



dmm 03/10/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB010	Perchlorate	99 > 83											0.00
PB010	Perchlorate-101	101 > 85											
PB010	Perchlorate-O(18)	107 > 89	3.46	16789.424	16789.424	bb			0.4300	85.99	-14.01	1743.0...	

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

ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

ast Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

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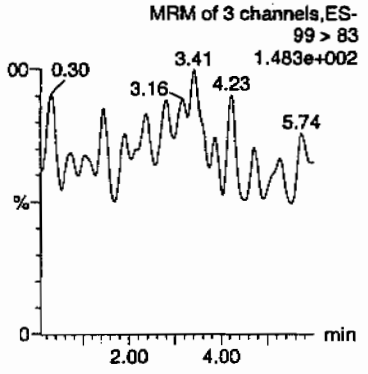
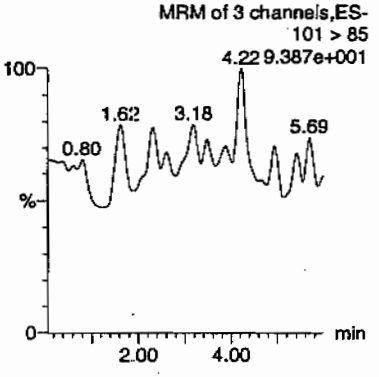
03-04-10

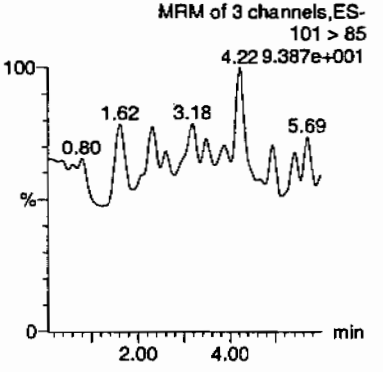
erchlorate



Perchlorate



Perchlorate-101



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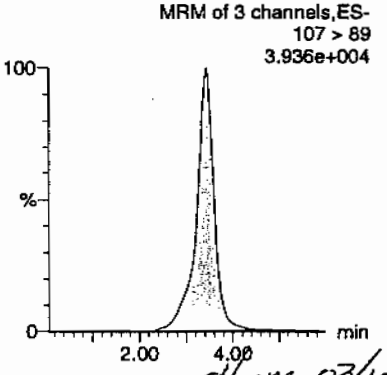

Hmm 03/10/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB011	Perchlorate	99 > 83											0.00
PB011	Perchlorate-101	101 > 85											
PB011	Perchlorate-O(18)	107 > 89	3.43	17743.518	17743.518	bb			0.4544	90.88	-9.12	3571.0...	

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ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

ıst Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
inted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

ame: per0308106a
ate: 09-Mar-2010
me: 07:38:40
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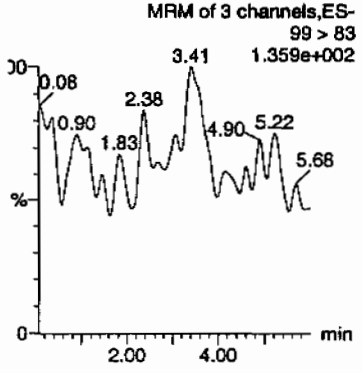
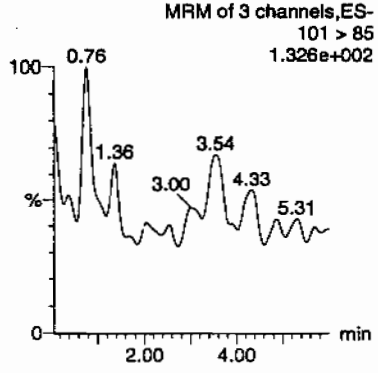
ial: 1:1,A

03-09-10

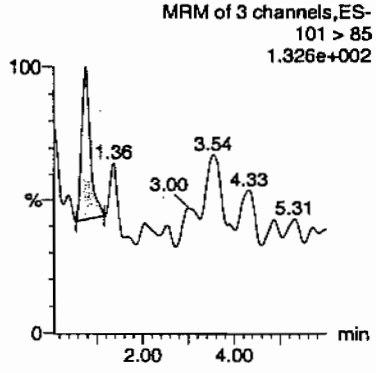
erchlorate



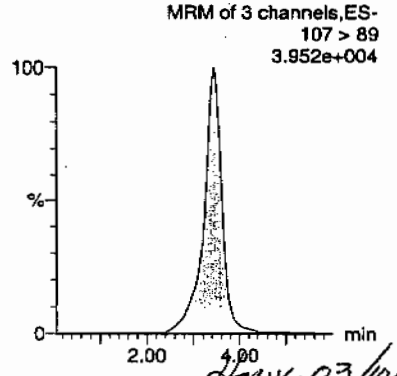
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMC 03/10/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'B012	Perchlorate	99 > 83											0.00
'B012	Perchlorate-101	101 > 85	0.76	16.818	16.818	bb			0.0012			11.451	
'B012	Perchlorate-O(18)	107 > 89	3.45	17985.385	17985.385	bb			0.4606	92.12	-7.88	1747.9...	

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

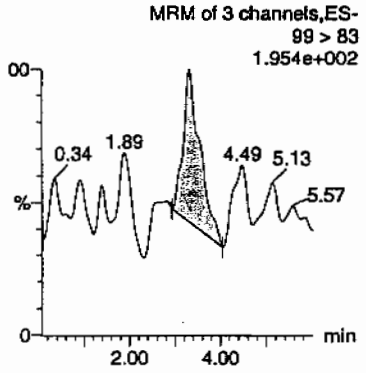
ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

ast Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

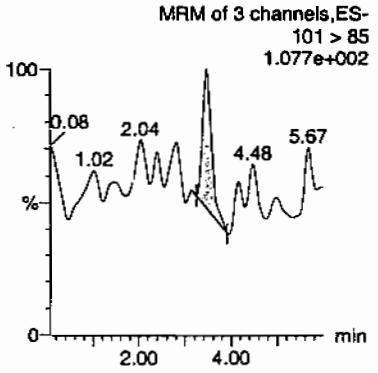
lame: per0308113a
ate: 09-Mar-2010
ime: 08:42:34
): IPB013
ial: 1:1,A

3-04-10

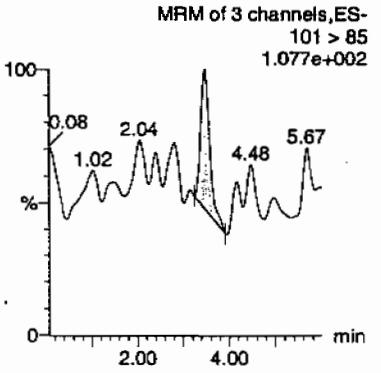
erchlorate



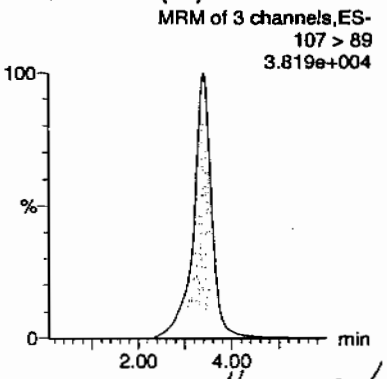
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmc 03/10/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB013	Perchlorate	99 > 83	3.31	49.128	49.128	bb			0.0010			15.157	3.73
PB013	Perchlorate-101	101 > 85	3.47	13.179	13.179	bb			0.0009			10.441	
PB013	Perchlorate-O(18)	107 > 89	3.41	17347.779	17347.779	bb			0.4443	88.85 ✓	-11.15	3743.1...	

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Nairb.ref

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

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

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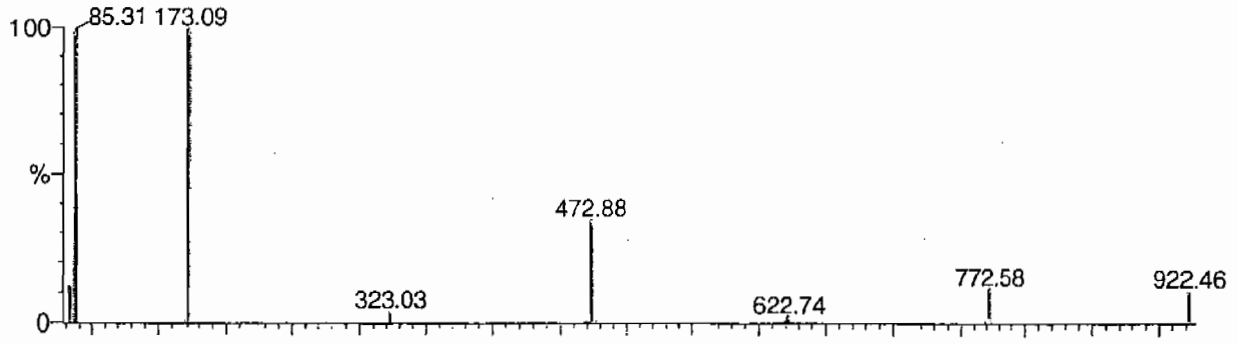
QUATTRO ULTIMA: nairb_01_08_08.ca1

Calibration Report - MS1 Static

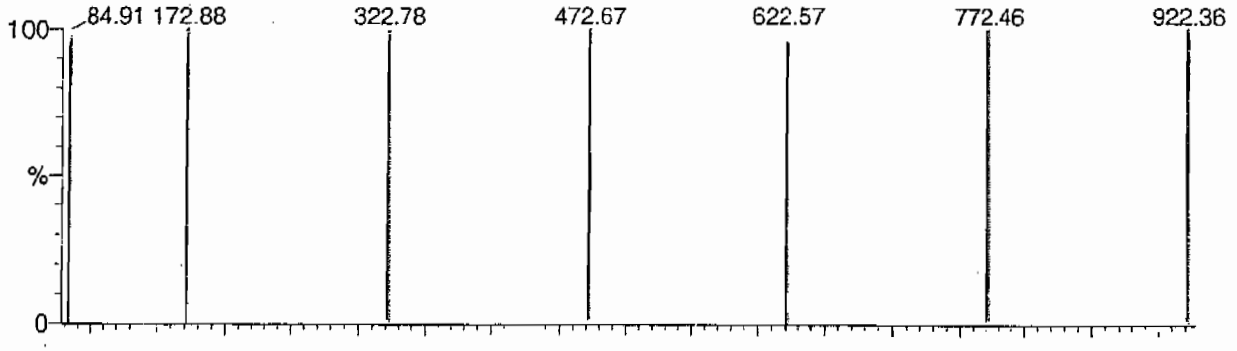
Printed: Tue Jan 08 12:19:12 2008

PEAKS HIGHLIGHTED BY CHRIS 01-09-08

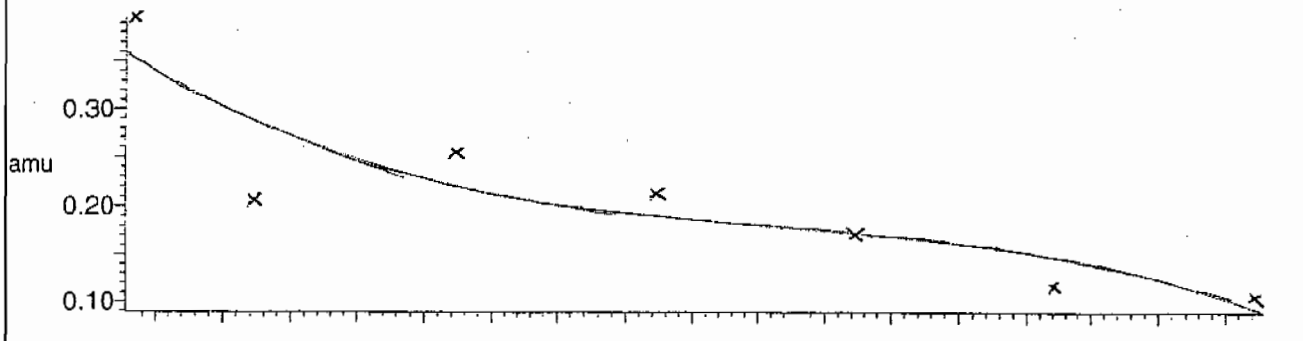
Data file: STATMS1 - Uncalibrated — 7 matches of 7 tested references



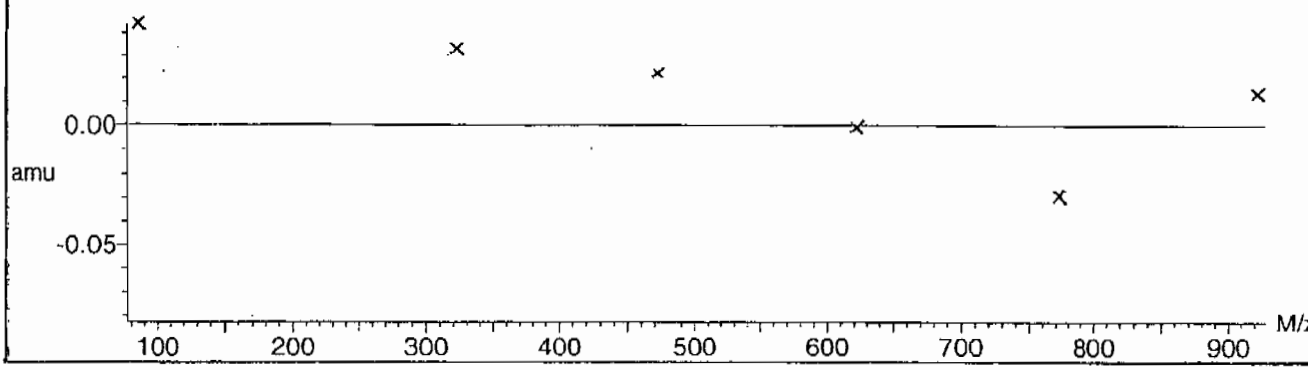
Reference file: Nairb



Mass difference (Raw - Ref mass)

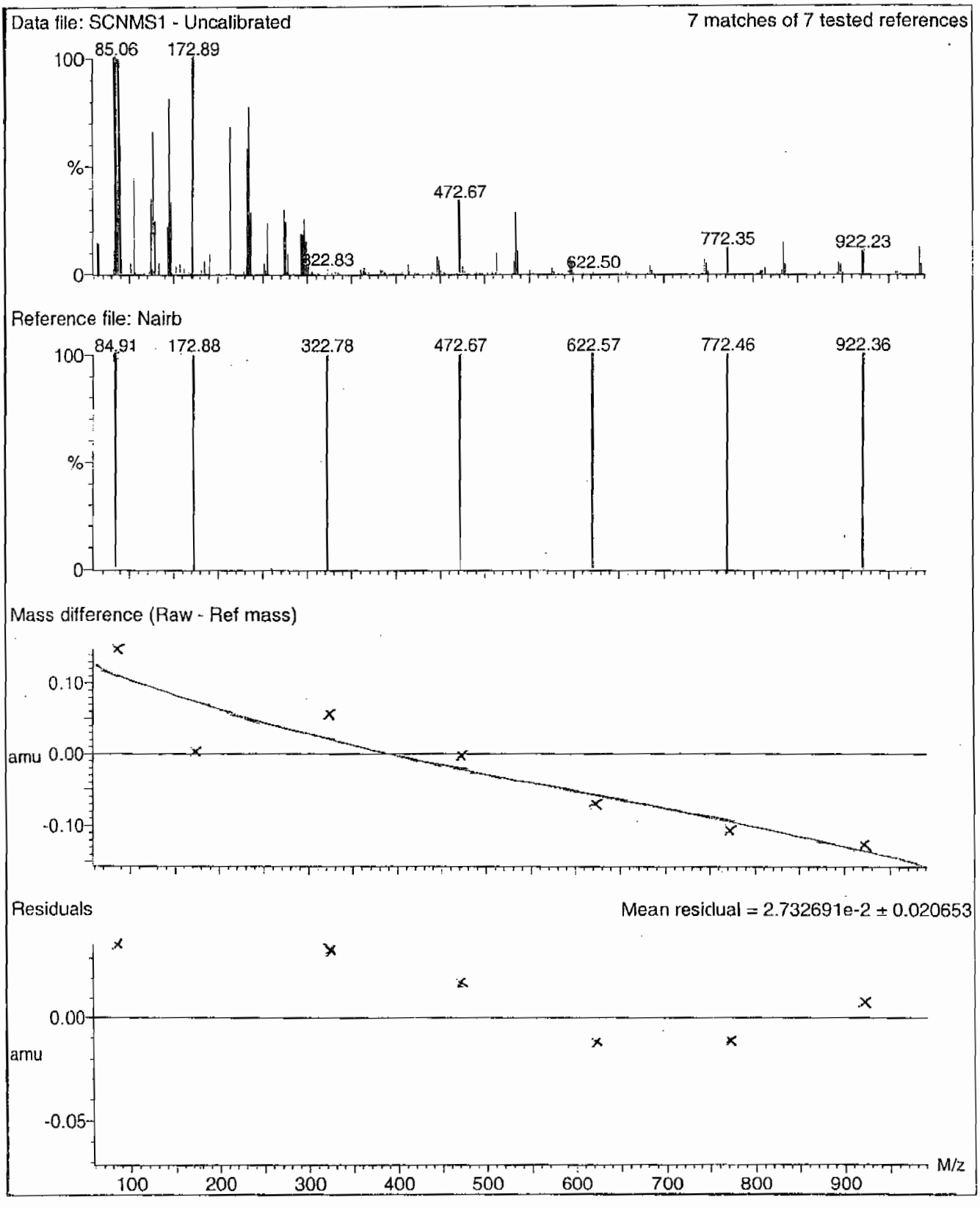


Residuals — Mean residual = 3.212012e-2 ± 0.024108



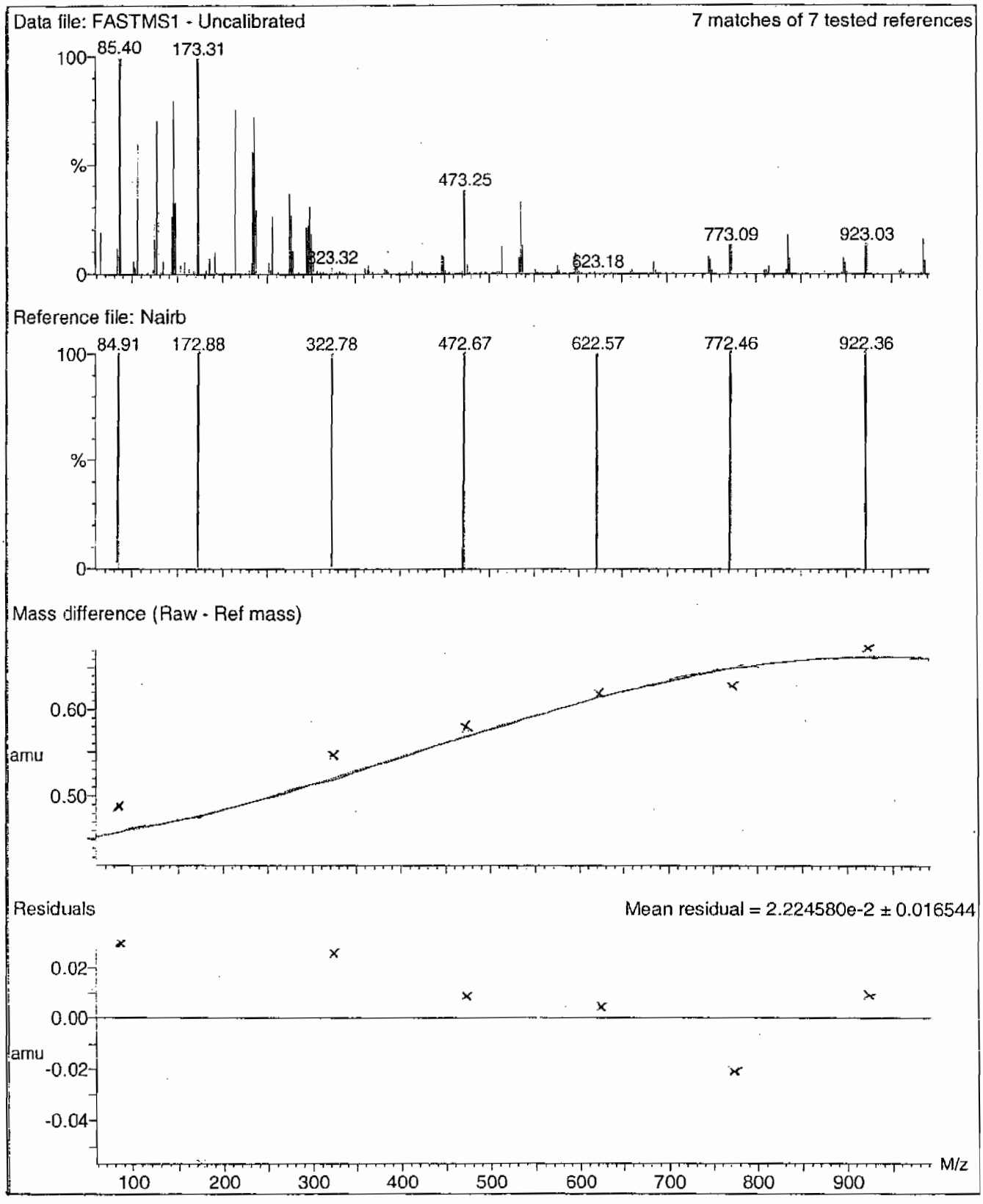
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Printed: Tue Jan 08 12:20:09 2008



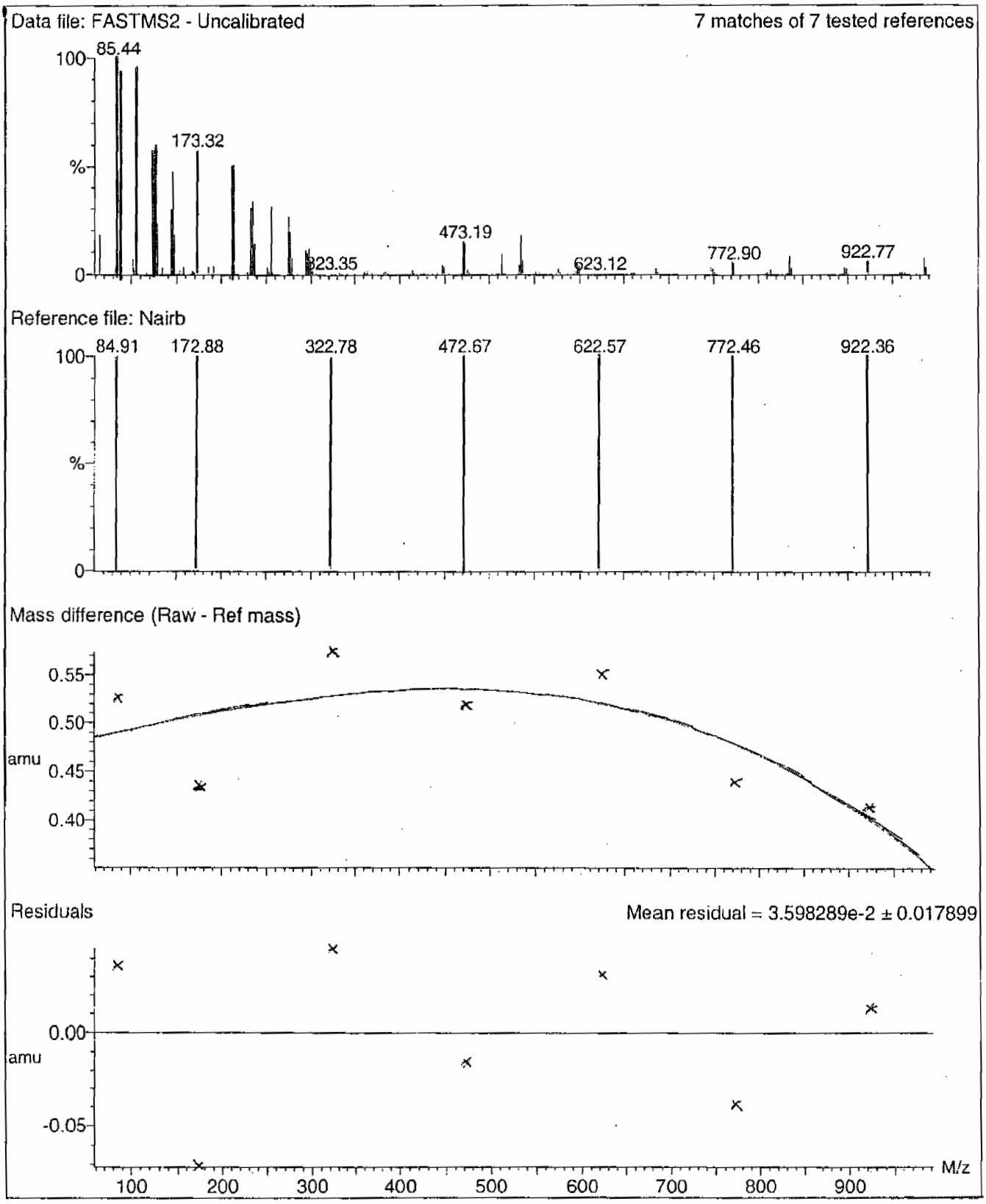
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Printed: Tue Jan 08 12:21:04 2008



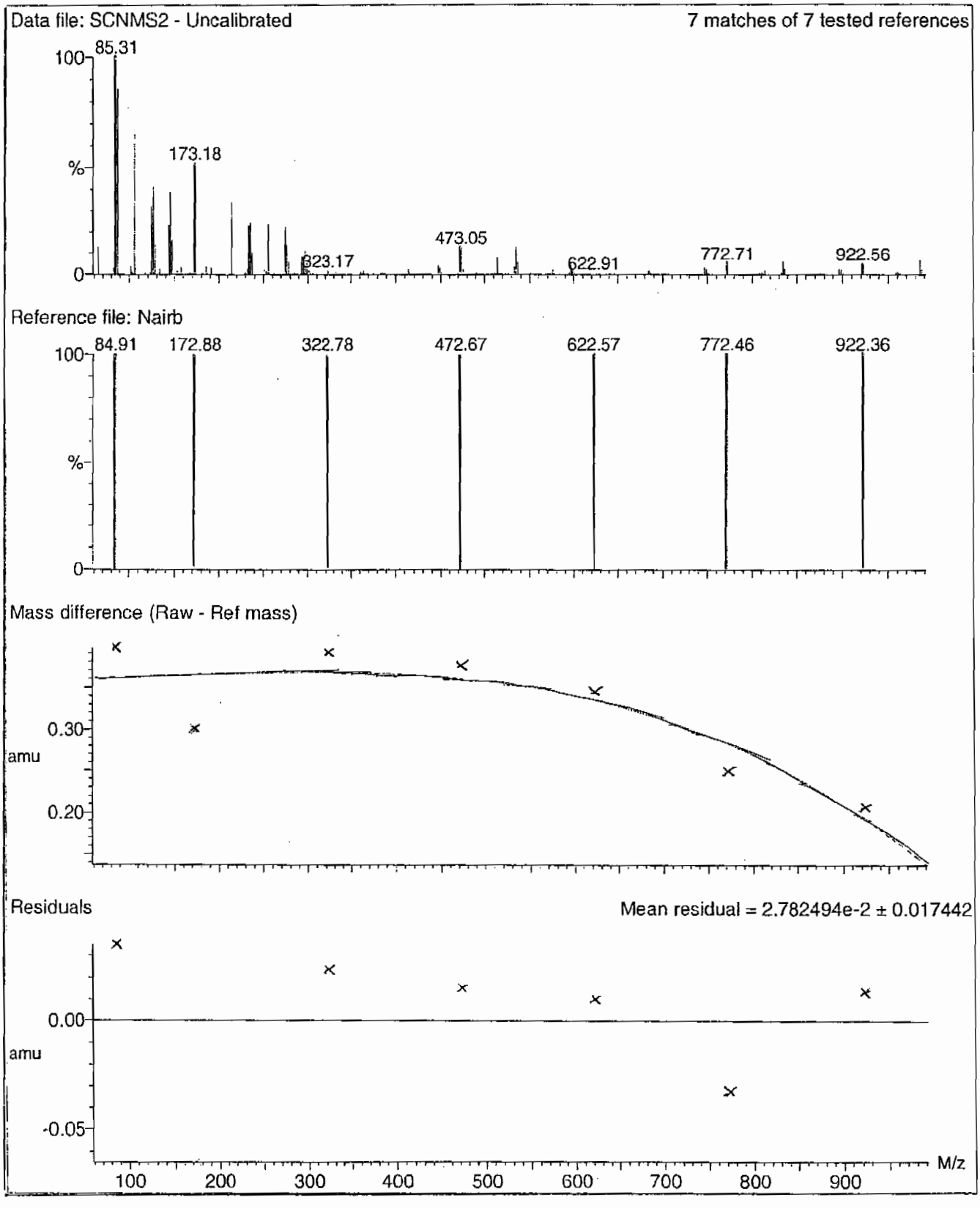
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Printed: Tue Jan 08 12:23:51 2008



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

Printed: Tue Jan 08 12:22:56 2008



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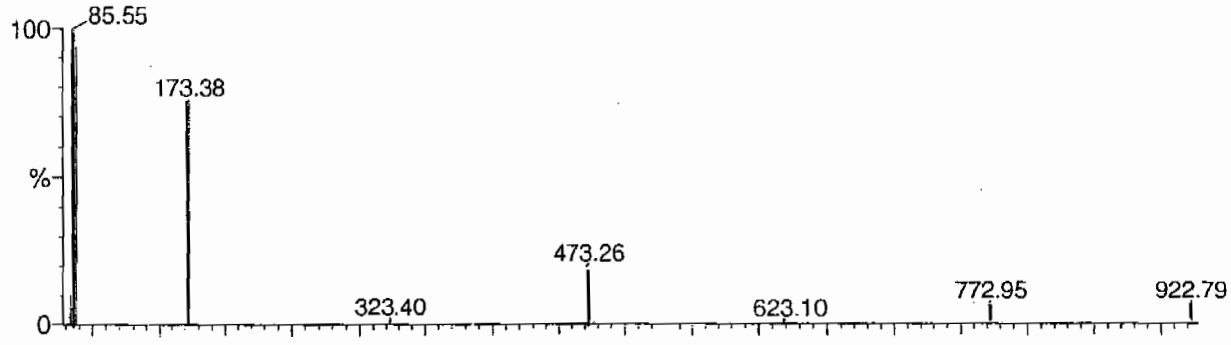
Calibration Report - MS2 Static

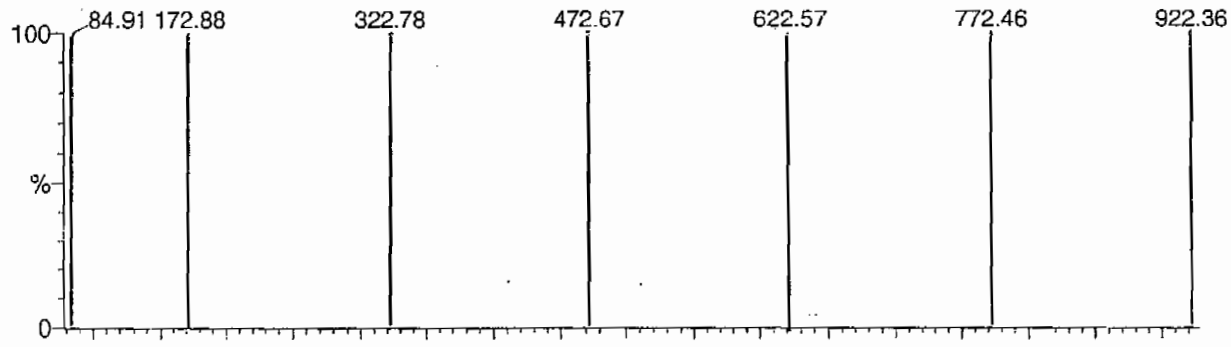
Printed: **Tue Jan 08 12:21:59 2008**

Data file: STATMS2 - Uncalibrated

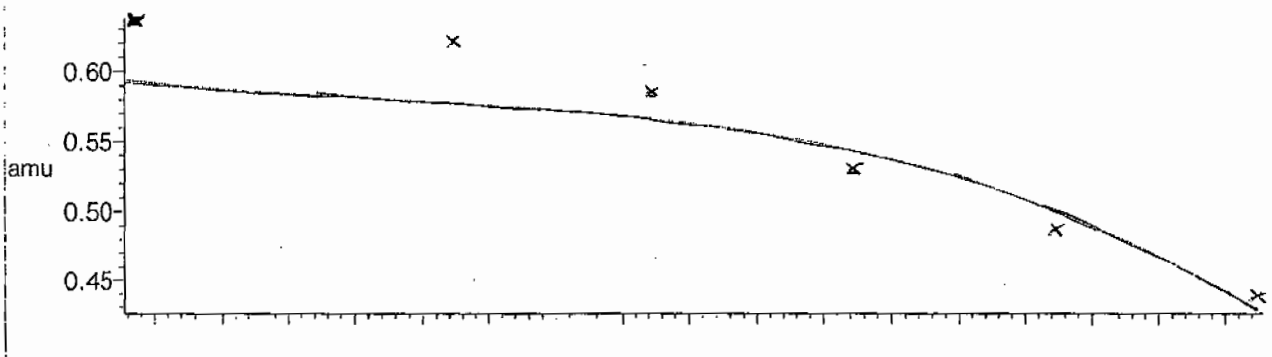
7 matches of 7 tested references



Reference file: Nairb

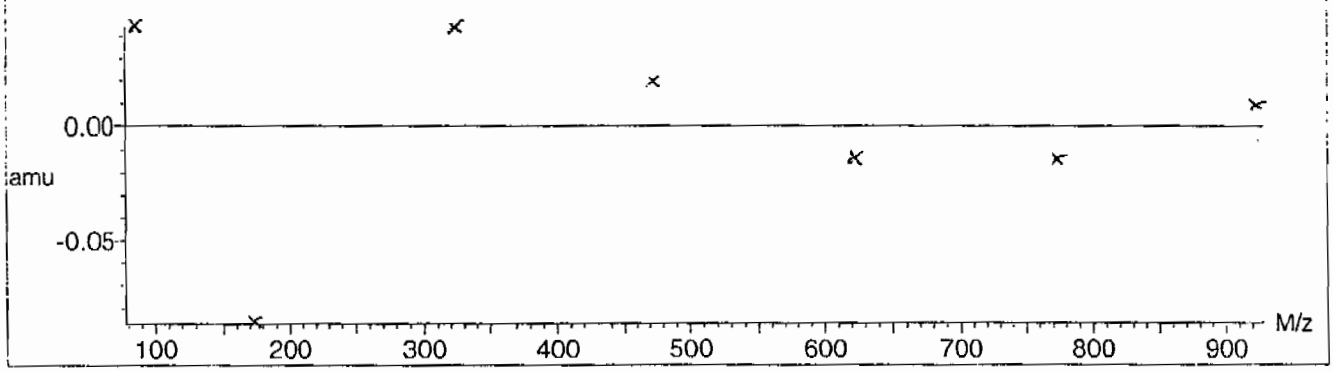


Mass difference (Raw - Ref mass)



Residuals

Mean residual = 3.295980e-2 ± 0.025603



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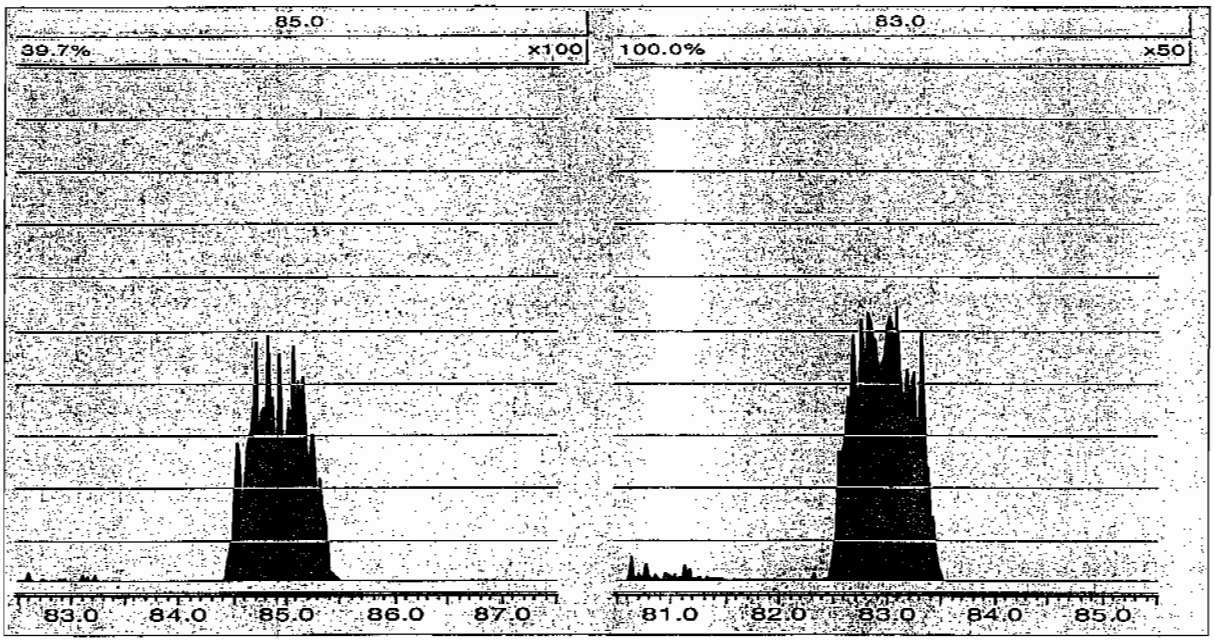
File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Monday, March 08, 2010 10:18:13 Eastern Standard Time



Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-2090

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	**per0308006a**	**08-MAR-10**	**19792.7**				
Lower Area Limit			**9896.35**				
Upper Area Limit			**39585.4**				
1202056715	per0308107a	09-MAR-10 07:47	17439.3	3.43	3.44547	1.005	
1202056716	per0308108a	09-MAR-10 07:57	17560.8	3.43	3.44552	1.005	
1202056719	per0308109a	09-MAR-10 08:06	18097.8	3.43	3.44547	1.005	
248108001	per0308110a	09-MAR-10 08:15	17297.8	3.42	3.47042	1.015	

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SAMPLE DATA

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 959046

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE15-10-8407

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090

GEL Sample ID: 248108001

Date Filtered: 05-MAR-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	09-MAR-10 08:15	per0308110a
	Perchlorate Isotope Ratio						1	09-MAR-10 08:15	per0308110a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	09-MAR-10 08:15	per0308110a
	Perchlorate-O(18)			0.443	ug/L		1	09-MAR-10 08:15	per0308110a

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

*Concentration =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

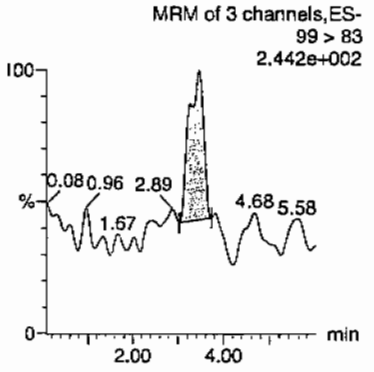
Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308110a
Date: 09-Mar-2010
Time: 08:15:16
ID: 248108001
Vial: 3:1,D

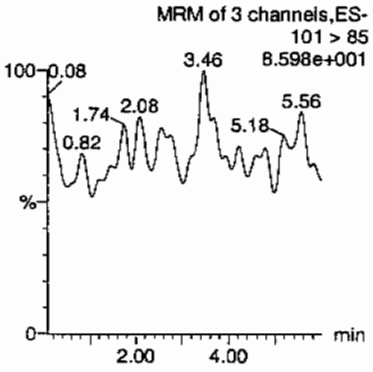
LCMS | 959042 | L2e | 11

GJ 03-09-10

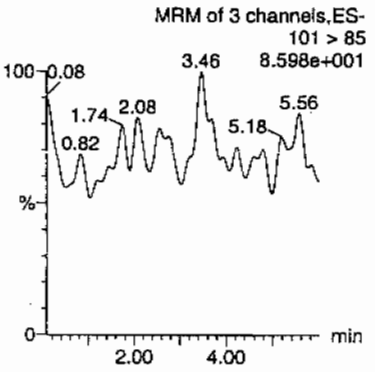
Perchlorate



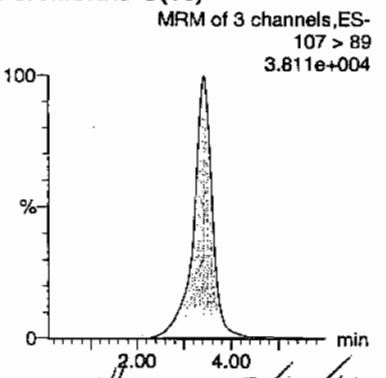
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Anne 03/10/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
48108001	Perchlorate	99 > 83	3.47	52.974	52.974	bb			0.0011			16.997	0.00
48108001	Perchlorate-101	101 > 85											
48108001	Perchlorate-O(18)	107 > 89	3.42	17297.828	17297.828	bb			0.4430	88.60	-11.40	2151.7...	

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STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–2090

Lab Code: GEL

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

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 47047.38

Response Type: External Standard

Curve Type: RF

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Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-2090

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 08-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

Parmname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 14296.94

Response Type: External Standard

Curve Type: RF

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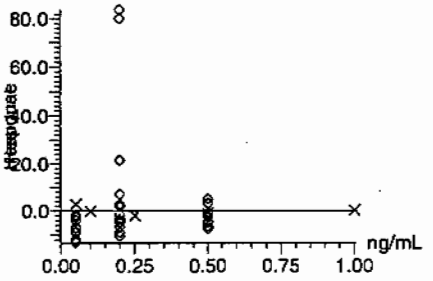
uantify Calibration Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

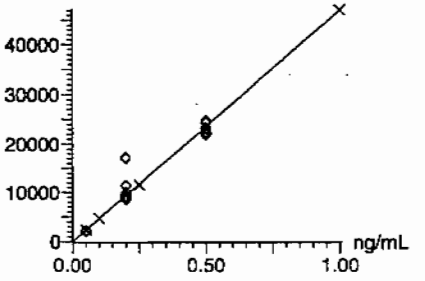
ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

ıst Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
inted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

ethod: C:\MassLynx\Perchlorate.PRO\MethDB\per030810a.mdb 09 Mar 2010 12:48:33
alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030810a.cdb 09 Mar 2010 12:48:47

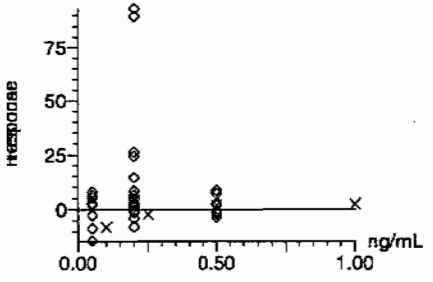
ompound name: Perchlorate
esponse Factor: 47047.4
RF SD: 838.521, % Relative SD: 1.78229
esponse type: External Std, Area
urve type: RF

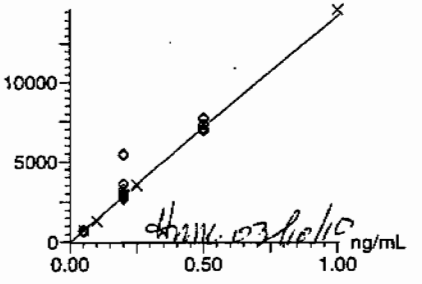




C33
03-09-10

ompound name: Perchlorate-101
esponse Factor: 14297
RF SD: 749.315, % Relative SD: 5.24108
esponse type: External Std, Area
urve type: RF





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

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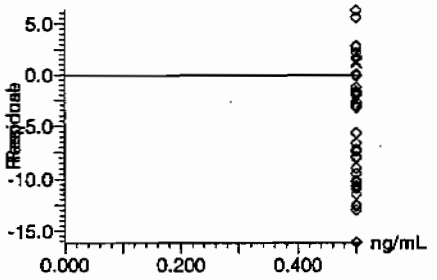
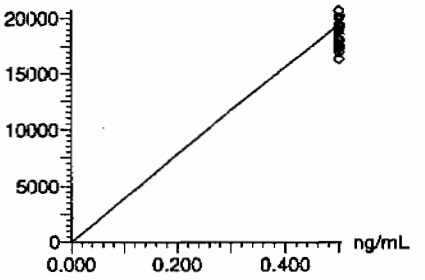
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

ıst Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

ompound name: Perchlorate-O(18)
esponse Factor: 39049
RF SD: 832.552, % Relative SD: 2.13207
esponse type: External Std, Area
urve type: RF





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Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–2090

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.53	105.14	08–MAR–10 16:57	per0308009a
Perchlorate Isotope Ratio		3.18		08–MAR–10 16:57	per0308009a
Perchlorate–101	.5	.54	108.66	08–MAR–10 16:57	per0308009a

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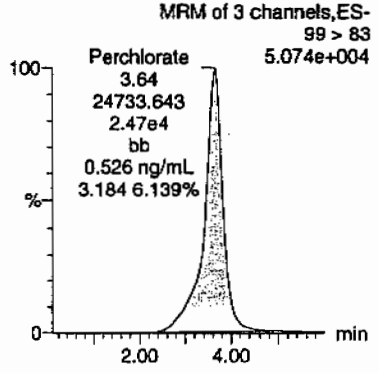
Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

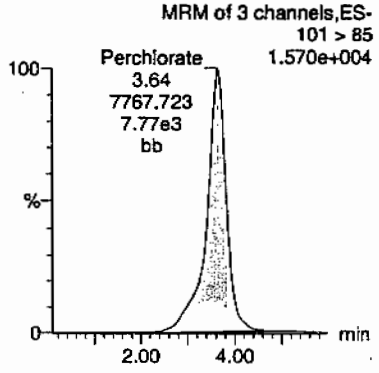
Name: per0308009a
Date: 08-Mar-2010
Time: 16:57:17
ID: WCL100227-06ICV
Vial: 1:2,A

Per 339 3-09-10

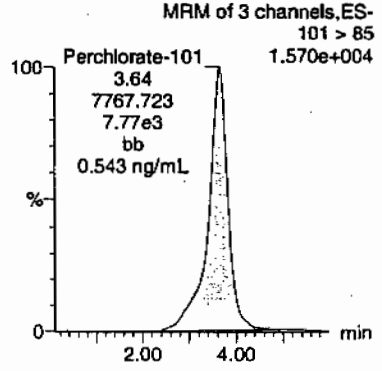
Perchlorate



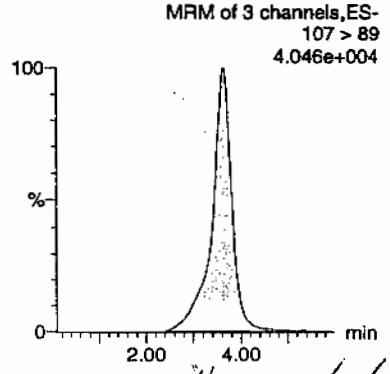
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HWK. 03/16/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06ICV	Perchlorate	99 > 83	3.64	24733.643	24733.643	bb			0.5257	105.14	5.14	543.107	3.18
WCL100227-06ICV	Perchlorate-101	101 > 85	3.64	7767.723	7767.723	bb			0.5433	108.66	8.66	159.570	
WCL100227-06ICV	Perchlorate-O(18)	107 > 89	3.63	19967.303	19967.303	bb			0.5113	102.27	2.27	1535.3...	

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Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-2090

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.52	103.28	08-MAR-10 18:46	per0308021a
Perchlorate Isotope Ratio		3.14		08-MAR-10 18:46	per0308021a
Perchlorate-101	.5	.54	108.41	08-MAR-10 18:46	per0308021a
Perchlorate	.5	.53	105.15	08-MAR-10 20:44	per0308034a
Perchlorate Isotope Ratio		3.23		08-MAR-10 20:44	per0308034a
Perchlorate-101	.5	.54	107.08	08-MAR-10 20:44	per0308034a
Perchlorate	.5	.52	103.16	08-MAR-10 22:42	per0308047a
Perchlorate Isotope Ratio		3.13		08-MAR-10 22:42	per0308047a
Perchlorate-101	.5	.54	108.56	08-MAR-10 22:42	per0308047a
Perchlorate	.5	.5	99.29	09-MAR-10 00:40	per0308060a
Perchlorate Isotope Ratio		3.17		09-MAR-10 00:40	per0308060a
Perchlorate-101	.5	.51	102.95	09-MAR-10 00:40	per0308060a
Perchlorate	.5	.48	95.1	09-MAR-10 02:38	per0308073a

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Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–2090

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.07		09–MAR–10 02:38	per0308073a
Perchlorate–101	.5	.51	101.9	09–MAR–10 02:38	per0308073a
Perchlorate	.5	.46	92.67	09–MAR–10 04:36	per0308086a
Perchlorate Isotope Ratio		3.1		09–MAR–10 04:36	per0308086a
Perchlorate–101	.5	.49	98.48	09–MAR–10 04:36	per0308086a
Perchlorate	.5	.47	93.76	09–MAR–10 06:34	per0308099a
Perchlorate Isotope Ratio		3.2		09–MAR–10 06:34	per0308099a
Perchlorate–101	.5	.48	96.42	09–MAR–10 06:34	per0308099a
Perchlorate	.5	.48	95.65	09–MAR–10 08:33	per0308112a
Perchlorate Isotope Ratio		3.22		09–MAR–10 08:33	per0308112a
Perchlorate–101	.5	.49	97.77	09–MAR–10 08:33	per0308112a

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ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

ast Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

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ate: 08-Mar-2010
ime: 18:46:13
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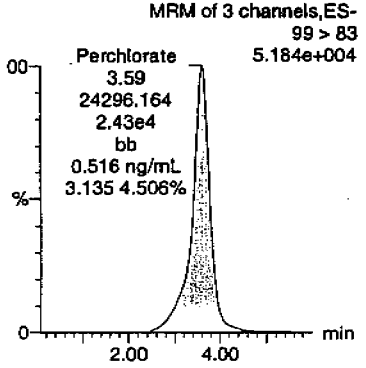
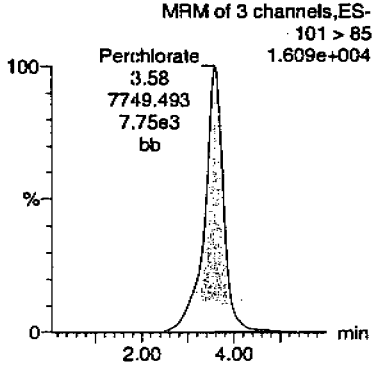
ial: 1:2,A

P33
3309-10

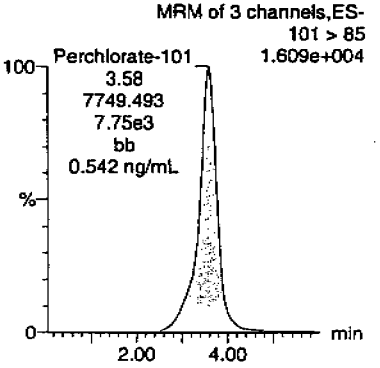
erchlorate



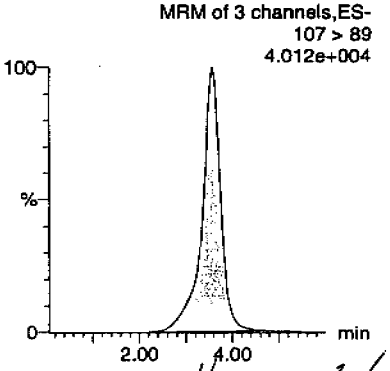
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmk 03/10/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100227-06CCV	Perchlorate	99 > 83	3.59	24296.164	24296.164	bb			0.5164	103.28	3.28	2058.4...	3.14
/CL100227-06CCV	Perchlorate-101	101 > 85	3.58	7749.493	7749.493	bb			0.5420	108.41	8.41	842.163	
/CL100227-06CCV	Perchlorate-O(18)	107 > 89	3.57	18892.500	18892.500	bb			0.4838	96.76	-3.24	3961.4...	

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

ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

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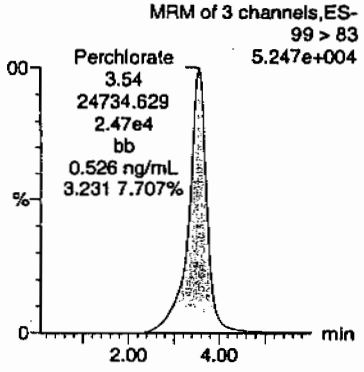
rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

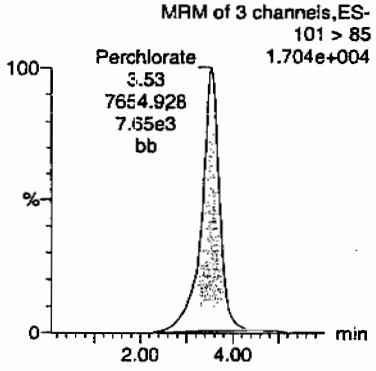
ame: per0308034a
ate: 08-Mar-2010
ime: 20:44:08
): WCL100227-06CCV
ial: 1:2,A

P28
33
03-29-10

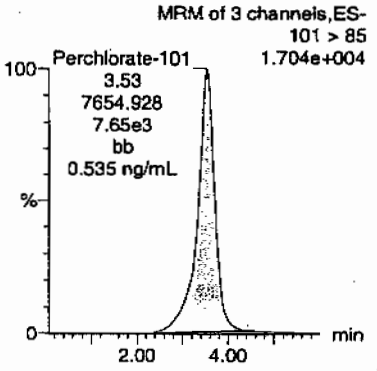
erchlorate



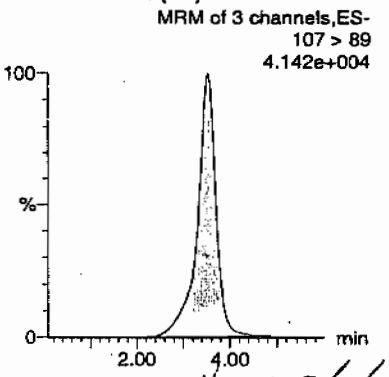
Perchlorate



Perchlorate-101



Perchlorate-O(18)



dmw 03/10/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100227-06CCV	Perchlorate	99 > 83	3.54	24734.629	24734.629	bb			0.5257	105.15	5.15	2200.8...	3.23
/CL100227-06CCV	Perchlorate-101	101 > 85	3.53	7654.928	7654.928	bb			0.5354	107.08	7.08	2331.6...	
/CL100227-06CCV	Perchlorate-O(18)	107 > 89	3.53	19141.506	19141.506	bb			0.4902	98.04	-1.96	1232.7...	

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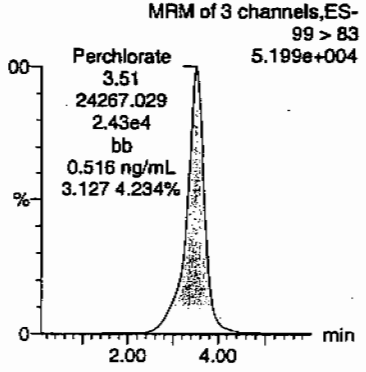
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308047a
Date: 08-Mar-2010
Time: 22:42:18
ID: WCL100227-06CCV
Vial: 1:2,A

Perchlorate



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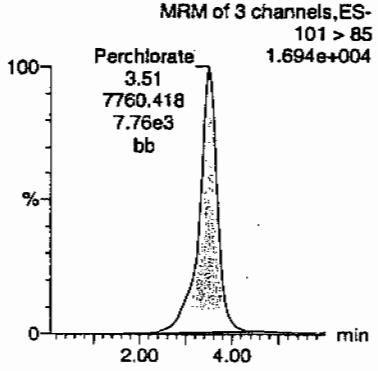
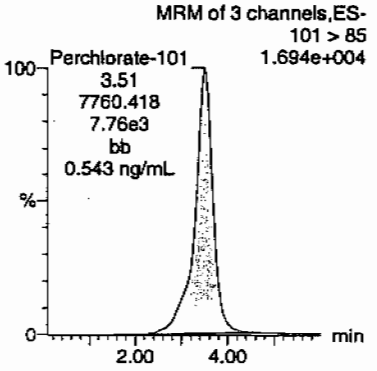


Perchlorate-101



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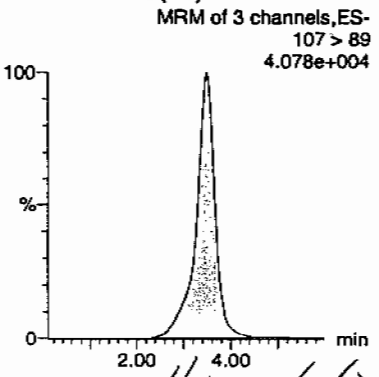

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	3.51	24267.029	24267.029	bb			0.5158	103.16	3.16	1490.7...	3.13
WCL100227-06CCV	Perchlorate-101	101 > 85	3.51	7760.418	7760.418	bb			0.5428	108.56	8.56	1343.7...	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	3.50	18936.834	18936.834	bb			0.4849	96.99	-3.01	1821.0...	

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson
Page 60 of 139

ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

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rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

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ime: 00:40:46
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ial: 1:2,A

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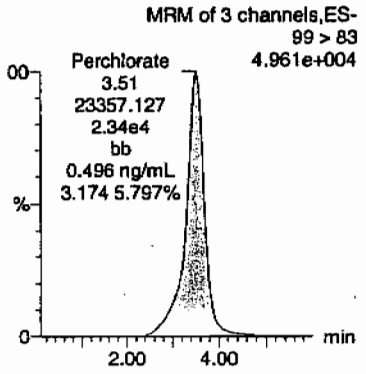
03-09-10

erchlorate



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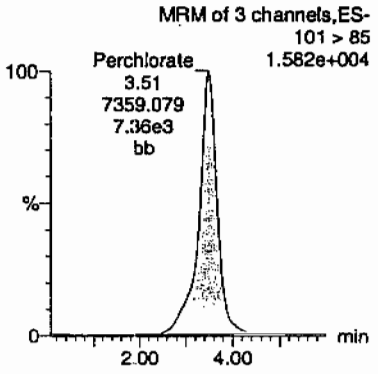

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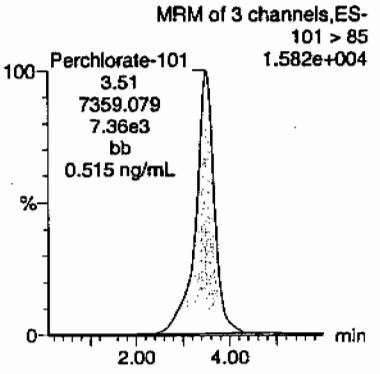
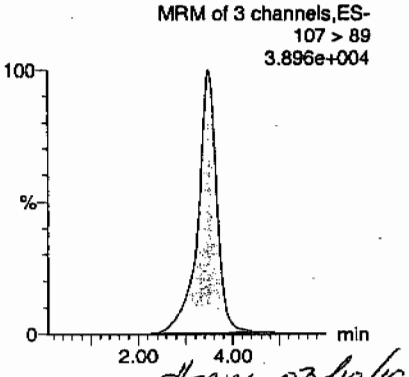


Perchlorate-O(18)



#nm 03/10/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'CL100227-06CCV	Perchlorate	99 > 83	3.51	23357.127	23357.127	bb			0.4965	99.29	-0.71	1630.4...	3.17
'CL100227-06CCV	Perchlorate-101	101 > 85	3.51	7359.079	7359.079	bb			0.5147	102.95	2.95	1965.3...	
'CL100227-06CCV	Perchlorate-O(18)	107 > 89	3.48	18080.102	18080.102	bb			0.4630	92.60	-7.40	1265.2...	

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

ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

ast Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

P33
33
03-04-10

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late: 09-Mar-2010
ime: 02:38:45
): WCL100227-06CCV
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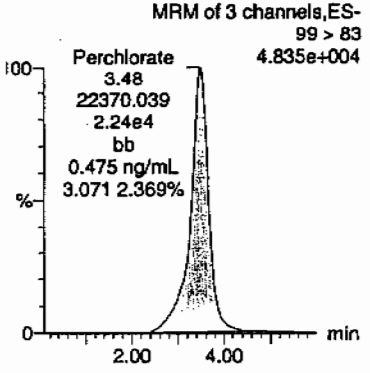
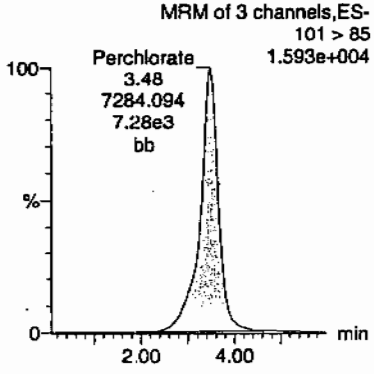
erchlorate



Perchlorate



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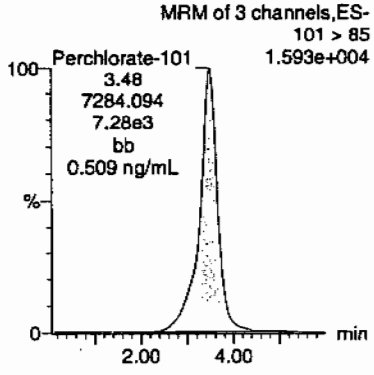

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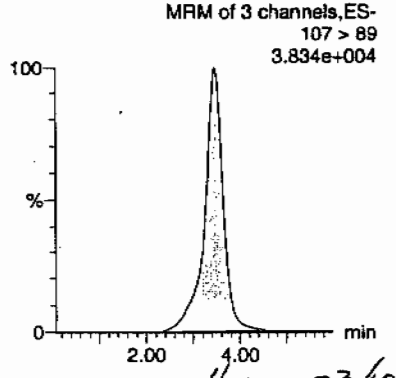

Hmc 03/10/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
VCL100227-06CCV	Perchlorate	99 > 83	3.48	22370.039	22370.039	bb			0.4755	95.10	-4.90	2051.0...	3.07
VCL100227-06CCV	Perchlorate-101	101 > 85	3.48	7284.094	7284.094	bb			0.5095	101.90	1.90	930.289	
VCL100227-06CCV	Perchlorate-O(18)	107 > 89	3.47	17683.076	17683.076	bb			0.4528	90.57	-9.43	2477.5...	

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ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

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rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

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ime: 04:36:48
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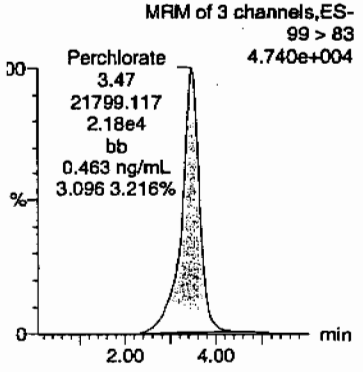
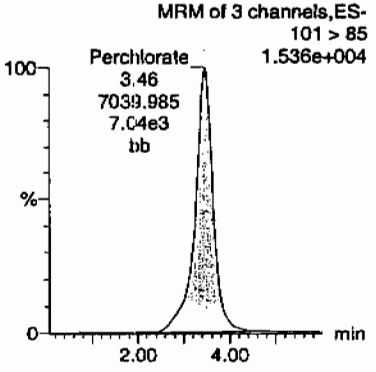
RSD 33 03-04-10

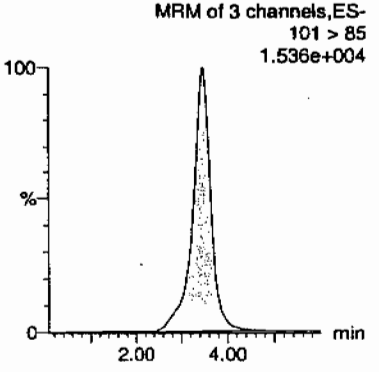
erchlorate



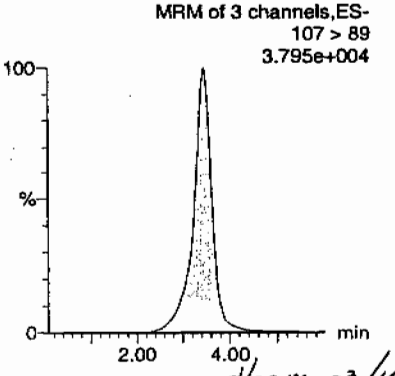
Perchlorate



Perchlorate-101



Perchlorate-O(18)



dmm 03/10/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100227-06CCV	Perchlorate	99 > 83	3.47	21799.117	21799.117	bb			0.4633	92.67	-7.33	1295.8...	3.10
CL100227-06CCV	Perchlorate-101	101 > 85	3.46	7039.985	7039.985	bb			0.4924	98.48	-1.52	178.389	
CL100227-06CCV	Perchlorate-O(18)	107 > 89	3.45	17451.631	17451.631	bb			0.4469	89.38	-10.62	1763.3...	

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

ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

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rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Pam 3/3 03-09-10

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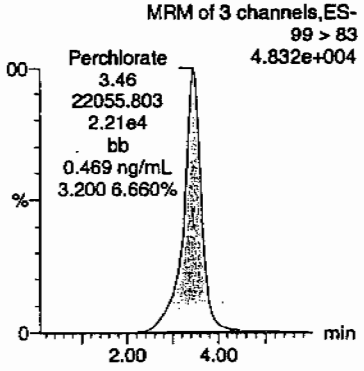
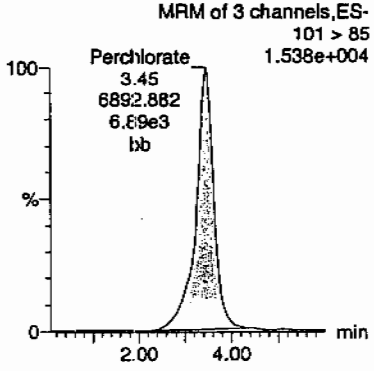
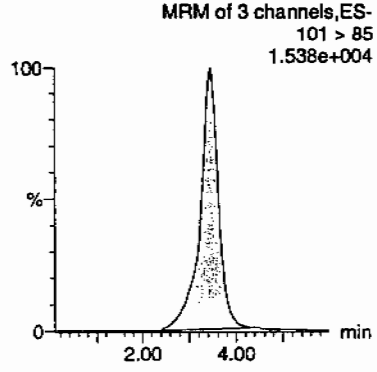
erchlorate



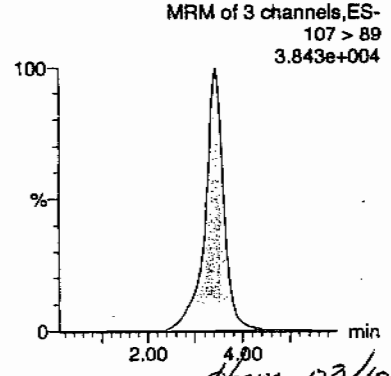
Perchlorate



Perchlorate-101



Perchlorate-O(18)



4min 03/10/10

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/CL100227-06CCV	Perchlorate	99 > 83	3.46	22055.803	22055.803	bb			0.4688	93.76	-6.24	2548.4...	3.20
/CL100227-06CCV	Perchlorate-101	101 > 85	3.45	6892.882	6892.882	bb			0.4821	96.42	-3.58	112.288	
/CL100227-06CCV	Perchlorate-O(18)	107 > 89	3.43	17439.898	17439.898	bb			0.4466	89.32	-10.68	1716.7...	

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

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he GEL Group, LLC Analyst: Charlers W. Wilson
Page 112 of 139

ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

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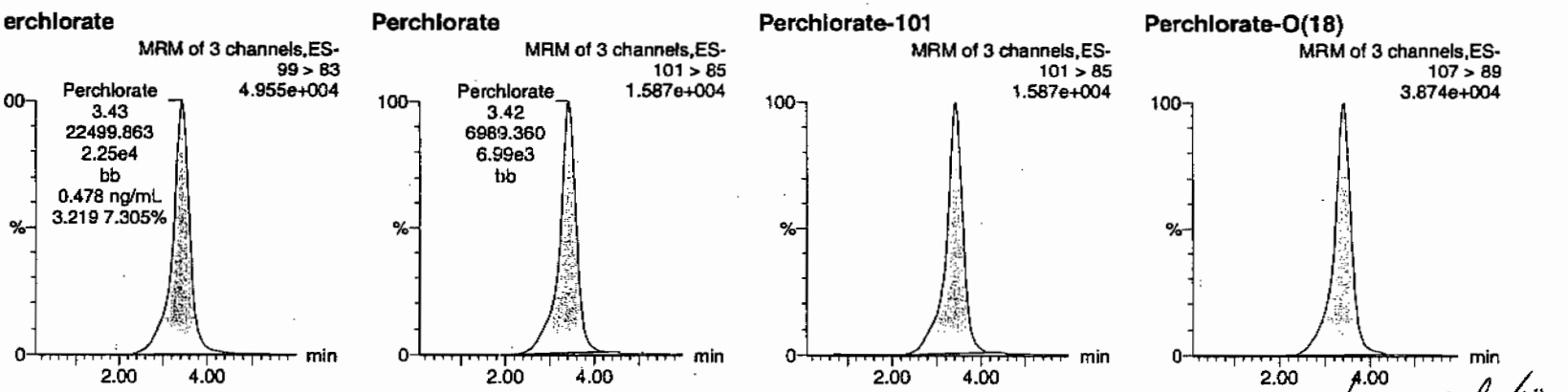
Pass
03-09-10



)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
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/CL100227-06CCV	Perchlorate-101	101 > 85	3.42	6989.360	6989.360	bb			0.4889	97.77	-2.23	1178.6...	
/CL100227-06CCV	Perchlorate-O(18)	107 > 89	3.42	17548.695	17548.695	bb			0.4494	89.88	-10.12	1305.7...	

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

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2090

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	91.57	08-MAR-10 17:15	per0308011a
Perchlorate Isotope Ratio		2.95		08-MAR-10 17:15	per0308011a
Perchlorate-101	.05	.05	102.06	08-MAR-10 17:15	per0308011a
Perchlorate	.05	.05	97.28	08-MAR-10 19:04	per0308023a
Perchlorate Isotope Ratio		2.97		08-MAR-10 19:04	per0308023a
Perchlorate-101	.05	.05	107.82	08-MAR-10 19:04	per0308023a
Perchlorate	.05	.05	97.48	08-MAR-10 21:02	per0308036a
Perchlorate Isotope Ratio		3.14		08-MAR-10 21:02	per0308036a
Perchlorate-101	.05	.05	102.17	08-MAR-10 21:02	per0308036a
Perchlorate	.05	.05	98.41	08-MAR-10 23:00	per0308049a
Perchlorate Isotope Ratio		3.08		08-MAR-10 23:00	per0308049a

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Perchlorate MDL Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–2090

Lab Code: GEL

Reporting Units: ug/L

Perchlorate–101	.05	.05	105.1	08–MAR–10 23:00	per0308049a
Perchlorate	.05	.05	92.76	09–MAR–10 00:59	per0308062a
Perchlorate Isotope Ratio		3.13		09–MAR–10 00:59	per0308062a
Perchlorate–101	.05	.05	97.6	09–MAR–10 00:59	per0308062a
Perchlorate	.05	.04	87.02	09–MAR–10 02:57	per0308075a
Perchlorate Isotope Ratio		2.95		09–MAR–10 02:57	per0308075a
Perchlorate–101	.05	.05	97.15	09–MAR–10 02:57	per0308075a
Perchlorate	.05	.04	88.07	09–MAR–10 04:55	per0308088a
Perchlorate Isotope Ratio		2.98		09–MAR–10 04:55	per0308088a
Perchlorate–101	.05	.05	97.34	09–MAR–10 04:55	per0308088a
Perchlorate	.05	.05	93.32	09–MAR–10 06:53	per0308101a

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–2090

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.36		09–MAR–10 06:53	per0308101a
Perchlorate–101	.05	.05	91.41	09–MAR–10 06:53	per0308101a
Perchlorate	.05	.05	96.02	09–MAR–10 08:51	per0308114a
Perchlorate Isotope Ratio		3.69		09–MAR–10 08:51	per0308114a
Perchlorate–101	.05	.04	85.66	09–MAR–10 08:51	per0308114a

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ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

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ime: 17:15:29
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ial: 1:2,B

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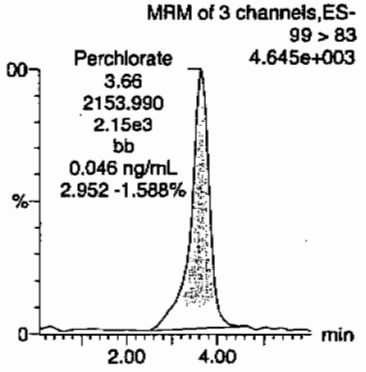
erchlorate



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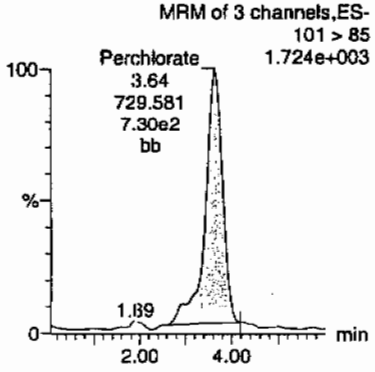

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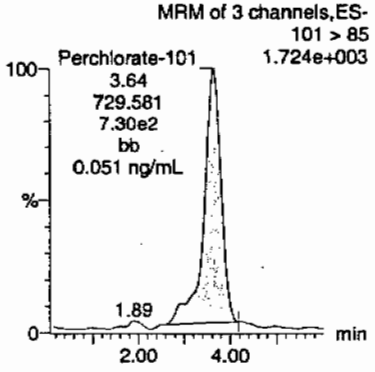

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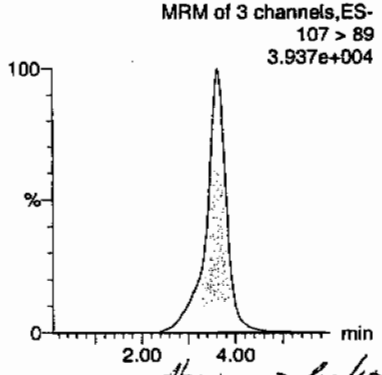

Hwl 03/10/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'CL100227-07CRI	Perchlorate	99 > 83	3.66	2153.990	2153.990	bb			0.0458	91.57	-8.43	192.273	2.95
'CL100227-07CRI	Perchlorate-101	101 > 85	3.64	729.581	729.581	bb			0.0510	102.06	2.06	143.835	
'CL100227-07CRI	Perchlorate-O(18)	107 > 89	3.63	19505.877	19505.877	bb			0.4995	99.90	-0.10	1304.1...	

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

ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

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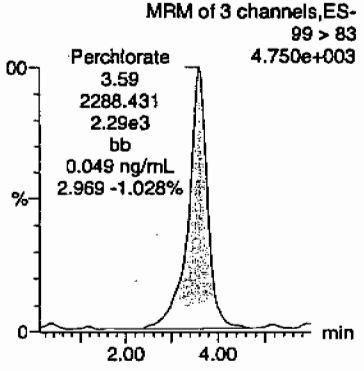

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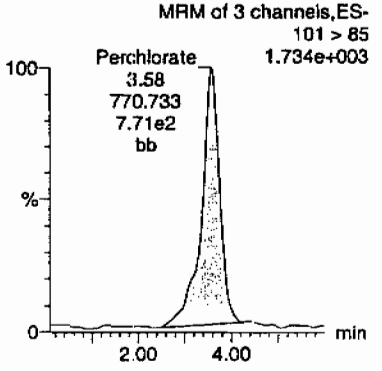

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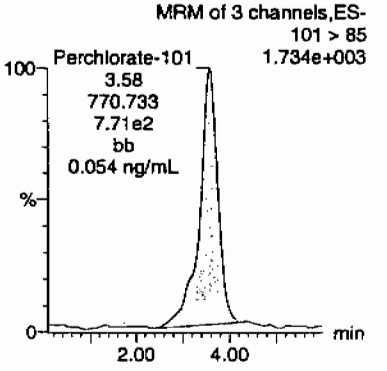
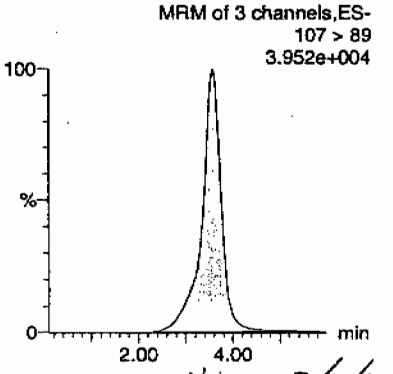


Perchlorate-O(18)



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/CL100227-07CRI	Perchlorate	99 > 83	3.59	2288.431	2288.431	bb			0.0486	97.28	-2.72	379.669	2.97
/CL100227-07CRI	Perchlorate-101	101 > 85	3.58	770.733	770.733	bb			0.0539	107.82	7.82	84.015	
/CL100227-07CRI	Perchlorate-O(18)	107 > 89	3.57	18985.990	18985.990	bb			0.4862	97.24	-2.76	3992.9...	

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

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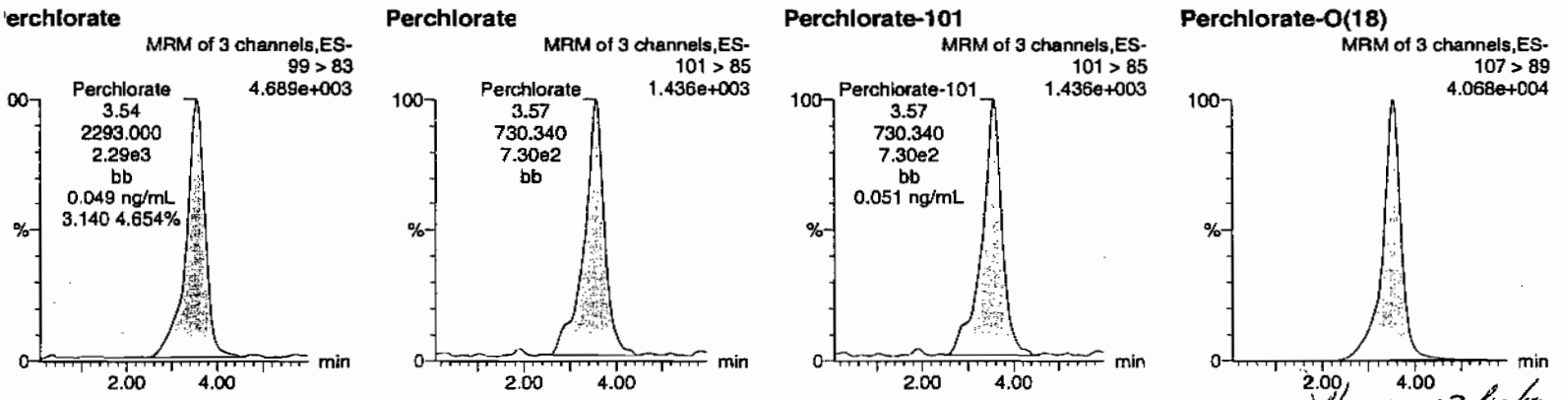

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/CL100227-07CRI	Perchlorate-101	101 > 85	3.57	730.340	730.340	bb			0.0511	102.17	2.17	21.006	
/CL100227-07CRI	Perchlorate-O(18)	107 > 89	3.53	19152.959	19152.959	bb			0.4905	98.10	-1.90	2778.2...	

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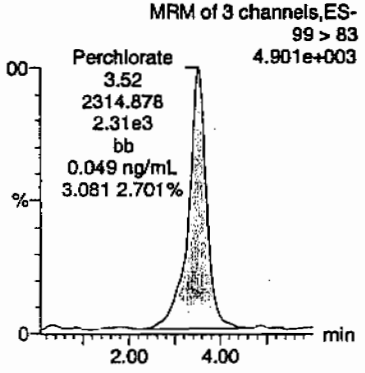

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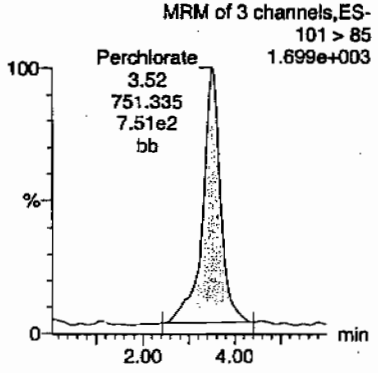

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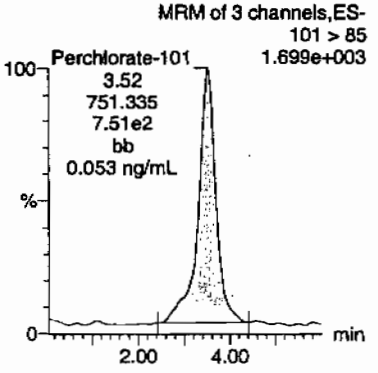

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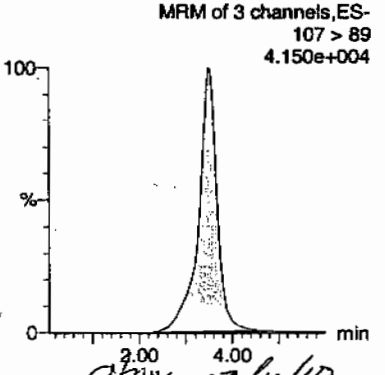

AMM 03/10/10

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/CL100227-07CRI	Perchlorate-101	101 > 85	3.52	751.335	751.335	bb			0.0526	105.10	5.10	86.661	
/CL100227-07CRI	Perchlorate-O(18)	107 > 89	3.51	19220.762	19220.762	bb			0.4922	98.44	-1.56	1856.7...	

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

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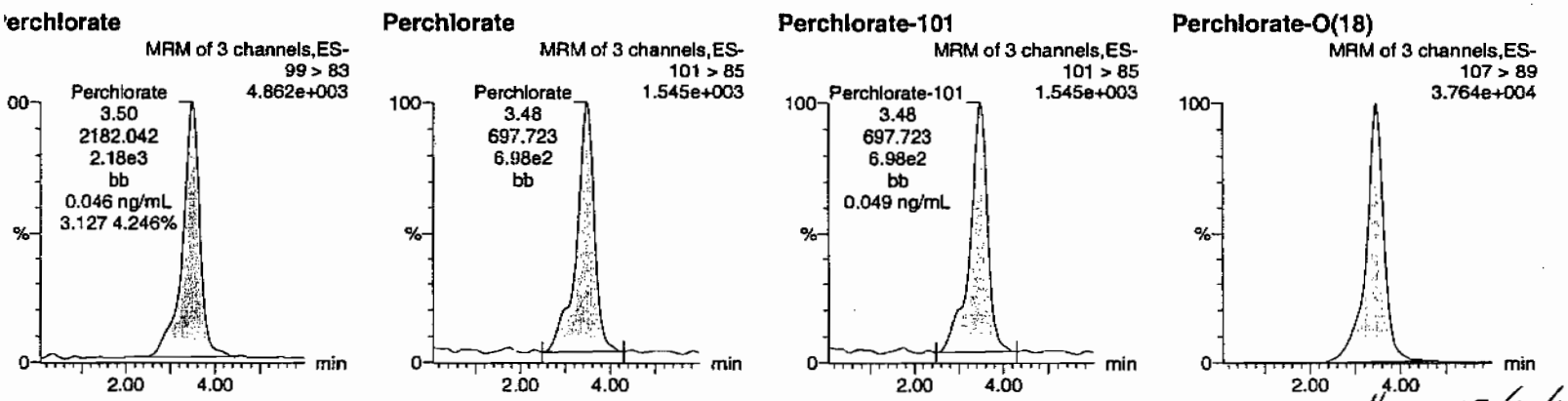

HMM 03/10/10

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/CL100227-07CRI	Perchlorate-O(18)	107 > 89	3.47	17393.770	17393.770	bb			0.4454	89.09	-10.91	764.961	

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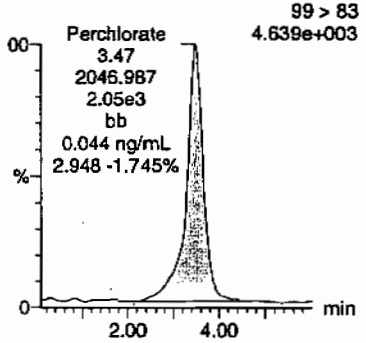
erchlorate



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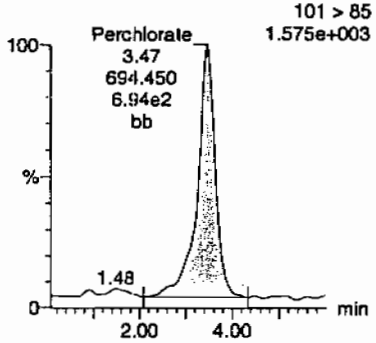

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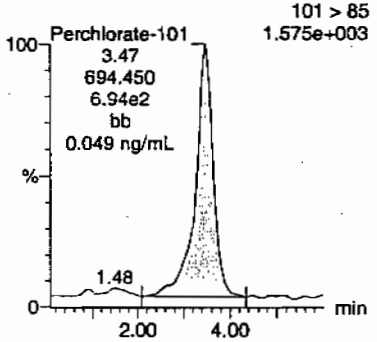

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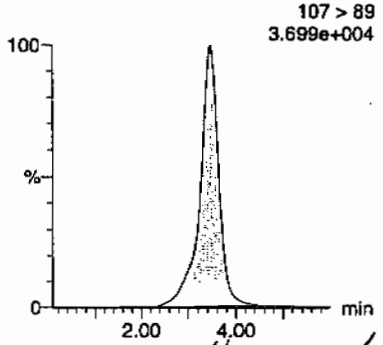

Hmc 03/10/10

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/CL100227-07CRI	Perchlorate-101	101 > 85	3.47	694.450	694.450	bb			0.0486	97.15	-2.85	110.840	
/CL100227-07CRI	Perchlorate-O(18)	107 > 89	3.47	17056.256	17056.256	bb			0.4368	87.36	-12.64	2127.1...	

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

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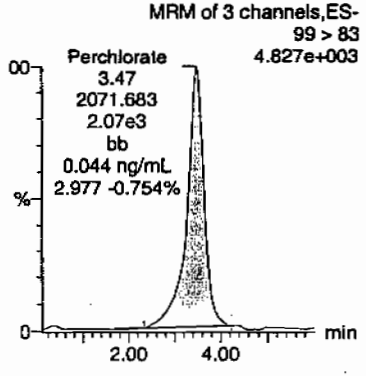

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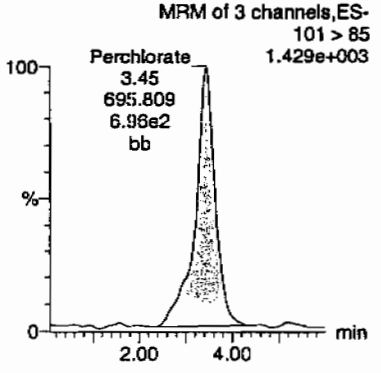

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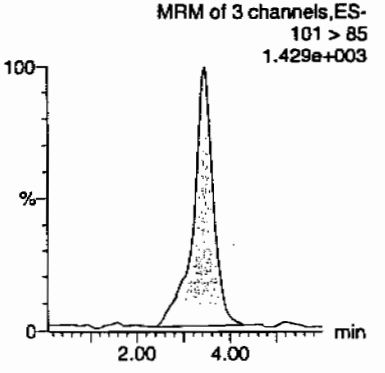

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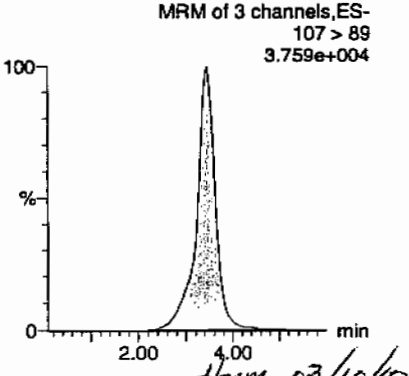

Hmm 03/10/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
VCL100227-07CRI	Perchlorate	99 > 83	3.47	2071.683	2071.683	bb			0.0440	88.07	-11.93	130.882	2.98
VCL100227-07CRI	Perchlorate-101	101 > 85	3.45	695.809	695.809	bb			0.0487	97.34	-2.66	110.757	
VCL100227-07CRI	Perchlorate-O(18)	107 > 89	3.45	17290.361	17290.361	bb			0.4428	88.56	-11.44	1467.3...	

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

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

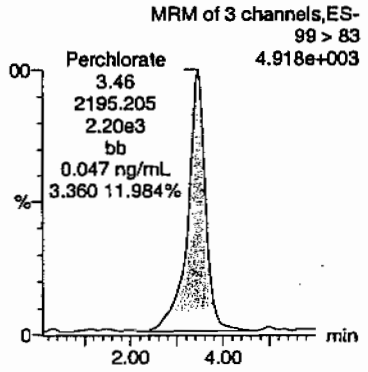
lataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

ast Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
'rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

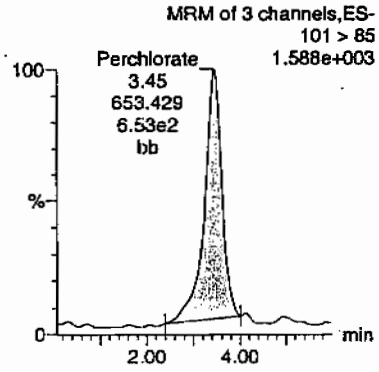
lame: per0308101a
late: 09-Mar-2010
'ime: 06:53:14
): WCL100227-07CRI
'ial: 1:2,B

Pass
CWO
03-09-10

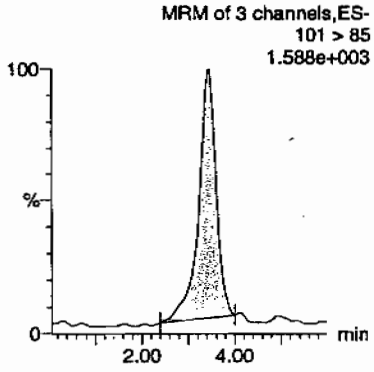
'erchlorate



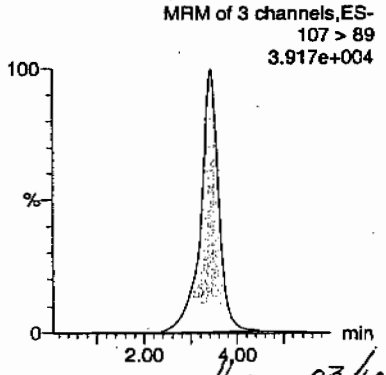
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 03/10/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
VCL100227-07CRI	Perchlorate	99 > 83	3.46	2195.205	2195.205	bb			0.0467	93.32	-6.68	164.590	3.36
VCL100227-07CRI	Perchlorate-101	101 > 85	3.45	653.429	653.429	bb			0.0457	91.41	-8.59	114.897	
VCL100227-07CRI	Perchlorate-O(18)	107 > 89	3.45	17782.246	17782.246	bb			0.4554	91.08	-8.92	2450.7...	

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

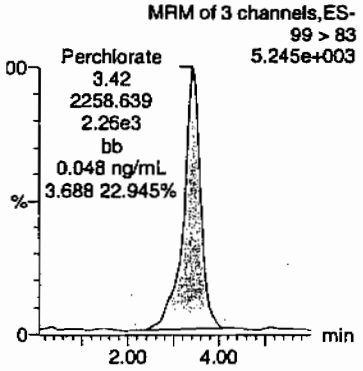
ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

ast Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

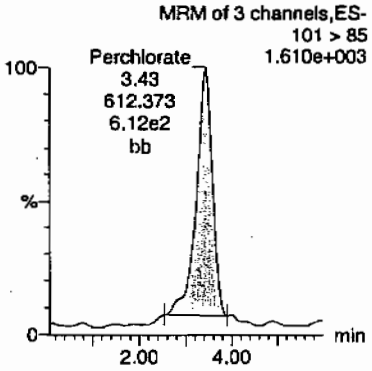
ame: per0308114a
ate: 09-Mar-2010
ime: 08:51:36
): WCL100227-07CRI
ial: 1:2,B

PwD
03-04-10

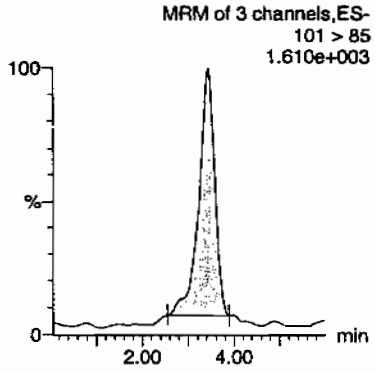
erchlorate



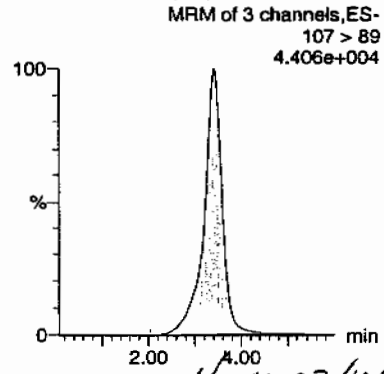
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMC 03/10/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100227-07CRI	Perchlorate	99 > 83	3.42	2258.639	2258.639	bb			0.0480	96.02	-3.98	390.282	3.69
/CL100227-07CRI	Perchlorate-101	101 > 85	3.43	612.373	612.373	bb			0.0428	85.66	-14.34	48.257	
/CL100227-07CRI	Perchlorate-O(18)	107 > 89	3.42	20100.334	20100.334	bb			0.5147	102.95	2.95	5432.1...	

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QUALITY CONTROL

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 959046

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
MB

Date Received: 05-MAR-10

GEL Job No (SDG): 10-2090

GEL Sample ID: 1202056715

Date Filtered: 05-MAR-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	09-MAR-10 07:47	per0308107a
	Perchlorate Isotope Ratio						1	09-MAR-10 07:47	per0308107a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	09-MAR-10 07:47	per0308107a
	Perchlorate-O(18)			0.447	ug/L		1	09-MAR-10 07:47	per0308107a

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

*Concentration =

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

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

ataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

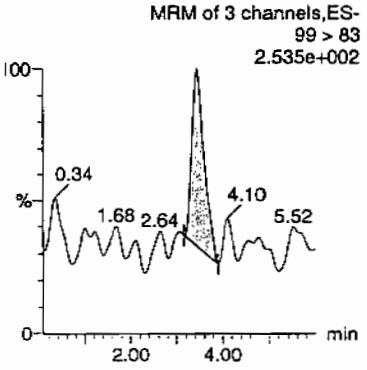
ast Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
rinted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

lame: per0308107a
ate: 09-Mar-2010
ime: 07:47:57
D: 1202056715
ial: 3:1,A

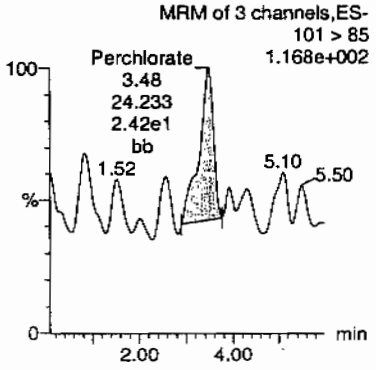
|LANL|959047|LIQ|MB|1|

CWS 03-09-10

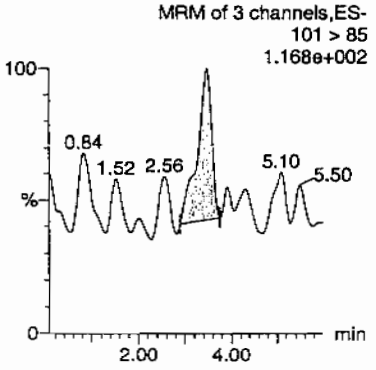
erchlorate



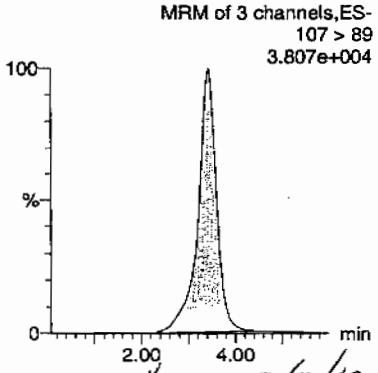
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hnm 03/10/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202056715	Perchlorate	99 > 83	3.45	54.168	54.168	bb			0.0012			19.278	2.24
202056715	Perchlorate-101	101 > 85	3.48	24.233	24.233	bb			0.0017			28.878	
202056715	Perchlorate-O(18)	107 > 89	3.43	17439.324	17439.324	bb			0.4466	89.32	-10.68	565.332	

OK 74
<0.0500

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 959046

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
LCS

Date Received: 05-MAR-10

GEL Job No (SDG): 10-2090

GEL Sample ID: 1202056716

Date Filtered: 05-MAR-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	0.187	ug/L	J	1	09-MAR-10 07:57	per0308108a
	Perchlorate Isotope Ratio			3.13			1	09-MAR-10 07:57	per0308108a
14797-73-0	Perchlorate-101	.05	.2	0.197	ug/L	J	1	09-MAR-10 07:57	per0308108a
	Perchlorate-O(18)			0.450	ug/L		1	09-MAR-10 07:57	per0308108a

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

*Concentration =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

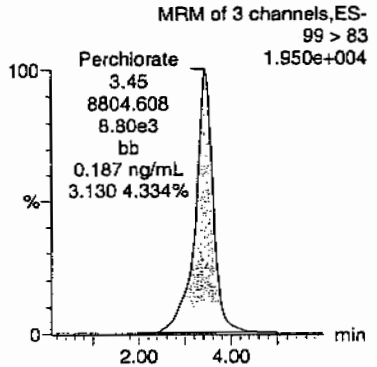
Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308108a
Date: 09-Mar-2010
Time: 07:57:12
ID: 1202056716
Vial: 3:1,B

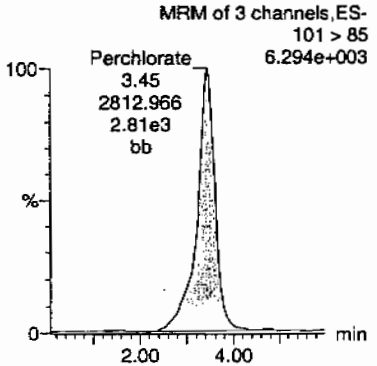
|LANL|959047|LZQ|LC5|1|

03-09-10

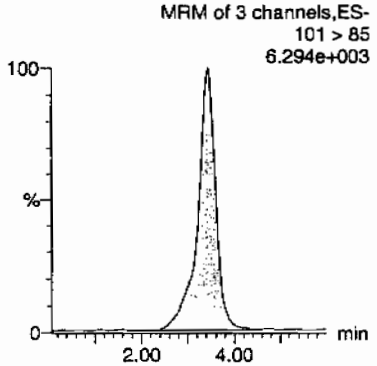
Perchlorate



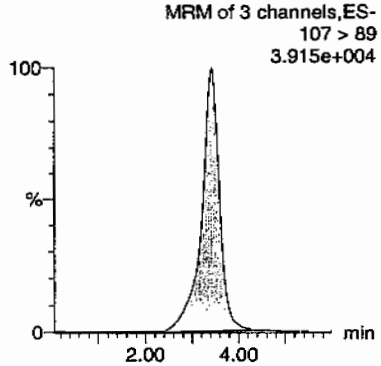
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202056716	Perchlorate	99 > 83	3.45	8804.608	8804.608	bb			0.1871	93.57	-6.43	837.751	3.13
1202056716	Perchlorate-101	101 > 85	3.45	2812.966	2812.966	bb			0.1968	98.38	-1.62	753.206	
1202056716	Perchlorate-O(18)	107 > 89	3.43	17560.795	17560.795	bb			0.4497	89.94	-10.06	1081.8...	

$\frac{8804.608}{47047.4} = 0.1871$

Hmm 03/10/10

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MISCELLANEOUS DATA

Prep Logbook

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

Batch ID: 959046 Verified by:
Analyst: Kaylie Westmoreland
Method: SW846 6850 Modified

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

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1202056715 MB	05-MAR-2010 15:17:00	10	10	1
1202056716 LCS	05-MAR-2010 15:17:00	10	10	1
248108001	05-MAR-2010 15:17:00	10	10	1
248117001	05-MAR-2010 15:17:00	10	10	1
248127001	05-MAR-2010 15:17:00	10	10	1
248127002	05-MAR-2010 15:17:00	10	10	1
248162001	05-MAR-2010 15:17:00	10	10	1
248162002	05-MAR-2010 15:17:00	10	10	1
1202056717 MS (248162002)	05-MAR-2010 15:17:00	10	10	1
1202056718 MSD (248162002)	05-MAR-2010 15:17:00	10	10	1
248162003	05-MAR-2010 15:17:00	10	10	1
248162004	05-MAR-2010 15:17:00	10	10	1
248168006	05-MAR-2010 15:17:00	10	10	1
248169004	05-MAR-2010 15:17:00	10	10	1
248188001	05-MAR-2010 15:17:00	10	10	1
248199001	05-MAR-2010 15:17:00	10	10	1
248238001	05-MAR-2010 15:17:00	10	10	1
248238002	05-MAR-2010 15:17:00	10	10	1
248242001	05-MAR-2010 15:17:00	10	10	1
248245001	05-MAR-2010 15:17:00	10	10	1
248257001	05-MAR-2010 15:17:00	10	10	1
248257002	05-MAR-2010 15:17:00	10	10	1
248261001	05-MAR-2010 15:17:00	10	10	1
1202056719 ICS	05-MAR-2010 15:17:00	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1202056719	10 ug/L ICV/CCV Second Source	UCL100226-01.1	.2	mL
LCS	1202056716	10 ug/L ICV/CCV Second Source	UCL100226-01.1	.2	mL
MS	1202056717	10 ug/L ICV/CCV Second Source	UCL100226-01.1	.2	mL
MSD	1202056718	10 ug/L ICV/CCV Second Source	UCL100226-01.1	.2	mL
REAGENT	All	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1267890	10	mL
REAGENT	All	02SI HPLC Grade Water	1271949	10	mL

Comments:

Desalting Cartridges used: 100224-1-Ba & 100217-1-H

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GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS#2

Date: 03/07/10 Method: EPA 6850-Modified Reviewed BY: [signature]
Extr. Injection Volume: 20uL Int. Std.: UCL100126-01 Date: 03/10/10
Sequence Number: per030710a Mobile Phase Lot#: 1278668, 1271949 SOP: GL-OA-E-067 Rev.6
Initial Calibration Date: 03/07/10 Standard-Samp Reagent Lot#:: 1271949 Alt Check Std. ID: WCL100227-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0308001a	IPB001	CWW	3/8/2010 15:44			1		USE	B
per0308002a	IPB001	CWW	3/8/2010 15:53			1		USE	B
per0308003a	WCLICAL-01	CWW	3/8/2010 16:02			1		USE	I
per0308004a	WCLICAL-02	CWW	3/8/2010 16:11			1		USE	I
per0308005a	WCLICAL-03	CWW	3/8/2010 16:20			1		USE	I
per0308006a	WCLICAL-04	CWW	3/8/2010 16:29			1		USE	I
per0308007a	WCLICAL-05	CWW	3/8/2010 16:39			1		USE	I
per0308008a	IPB002	CWW	3/8/2010 16:48			1		USE	B
per0308009a	WCLICV	CWW	3/8/2010 16:57			1		USE	C
per0308010a	IPB003	CWW	3/8/2010 17:06			1		USE	B
per0308011a	WCLCRI	CWW	3/8/2010 17:15			1		USE	C
per0308012a	246870009	CWW	3/8/2010 17:24	955688	10-1782	1	LANL	USE	S
per0308013a	246870010	CWW	3/8/2010 17:33	955688	10-1782	1	LANL	USE	S
per0308014a	246982001	CWW	3/8/2010 17:42	955688	10-1812	1	LANL	USE	S
per0308015a	246982002	CWW	3/8/2010 17:51	955688	10-1812	1	LANL	USE	S
per0308016a	246982003	CWW	3/8/2010 18:01	955688	10-1812	1	LANL	USE	S
per0308017a	246982004	CWW	3/8/2010 18:10	955688	10-1812	1	LANL	USE	S
per0308018a	246982005	CWW	3/8/2010 18:19	955688	10-1812	1	LANL	USE	S
per0308019a	246982006	CWW	3/8/2010 18:28	955688	10-1812	1	LANL	USE	S
per0308020a	246982007	CWW	3/8/2010 18:37	955688	10-1812	1	LANL	USE	S
per0308021a	WCLCCV	CWW	3/8/2010 18:46			1		USE	C
per0308022a	IPB004	CWW	3/8/2010 18:55			1		USE	B
per0308023a	WCLCRI	CWW	3/8/2010 19:04			1		USE	C
per0308024a	1202049003	CWW	3/8/2010 19:13	955691	10-1809	1	LANL	USE	S
per0308025a	1202049004	CWW	3/8/2010 19:22	955691	10-1809	1	LANL	USE	S
per0308026a	1202049007	CWW	3/8/2010 19:31	955691	10-1809	1	LANL	USE	S
per0308027a	246974001	CWW	3/8/2010 19:40	955691	10-1809	1	LANL	USE	S
per0308028a	1202049005	CWW	3/8/2010 19:49	955691	10-1809	1	LANL	USE	S
per0308029a	1202049006	CWW	3/8/2010 19:58	955691	10-1809	1	LANL	USE	S

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per0308030a	246974002	CWW	3/8/2010 20:07	955691	10-1809	1	LANL	USE	S
per0308031a	246974003	CWW	3/8/2010 20:16	955691	10-1809	1	LANL	USE	S
per0308032a	246974004	CWW	3/8/2010 20:26	955691	10-1809	1	LANL	USE	S
per0308033a	246974005	CWW	3/8/2010 20:35	955691	10-1809	1	LANL	USE	S
per0308034a	WCLCCV	CWW	3/8/2010 20:44			1		USE	C
per0308035a	IPB005	CWW	3/8/2010 20:53			1		USE	B
per0308036a	WCLCRI	CWW	3/8/2010 21:02			1		USE	C
per0308037a	246974006	CWW	3/8/2010 21:11	955691	10-1809	1	LANL	USE	S
per0308038a	246974007	CWW	3/8/2010 21:20	955691	10-1809	1	LANL	USE	S
per0308039a	246974008	CWW	3/8/2010 21:29	955691	10-1809	1	LANL	USE	S
per0308040a	246974009	CWW	3/8/2010 21:38	955691	10-1809	1	LANL	USE	S
per0308041a	246974010	CWW	3/8/2010 21:47	955691	10-1809	1	LANL	USE	S
per0308042a	246974011	CWW	3/8/2010 21:56	955691	10-1809	1	LANL	USE	S
per0308043a	246974012	CWW	3/8/2010 22:05	955691	10-1809	1	LANL	USE	S
per0308044a	246974013	CWW	3/8/2010 22:14	955691	10-1809	1	LANL	USE	S
per0308045a	246974014	CWW	3/8/2010 22:23	955691	10-1809	1	LANL	USE	S
per0308046a	246974015	CWW	3/8/2010 22:32	955691	10-1809	1	LANL	USE	S
per0308047a	WCLCCV	CWW	3/8/2010 22:42			1		USE	C
per0308048a	IPB006	CWW	3/8/2010 22:51			1		USE	B
per0308049a	WCLCRI	CWW	3/8/2010 23:00			1		USE	C
per0308050a	246974016	CWW	3/8/2010 23:09	955691	10-1809	1	LANL	USE	S
per0308051a	246974017	CWW	3/8/2010 23:18	955691	10-1809	1	LANL	USE	S
per0308052a	IPB007	CWW	3/8/2010 23:27			1		USE	B
per0308053a	1202049064	CWW	3/8/2010 23:36	955724	VARIOUS	1	LANL	USE	S
per0308054a	1202049065	CWW	3/8/2010 23:46	955724	VARIOUS	1	LANL	USE	S
per0308055a	1202049068	CWW	3/8/2010 23:55	955724	VARIOUS	1	LANL	USE	S
per0308056a	246964002	CWW	3/9/2010 0:04	955724	10-1802	1	LANL	USE	S
per0308057a	246964004	CWW	3/9/2010 0:13	955724	10-1802	1	LANL	USE	S
per0308058a	246967001	CWW	3/9/2010 0:22	955724	10-1807	1	LANL	USE	S
per0308059a	246967004	CWW	3/9/2010 0:31	955724	10-1807	1	LANL	DUSE-DL	S
per0308060a	WCLCCV	CWW	3/9/2010 0:40			1		USE	C
per0308061a	IPB008	CWW	3/9/2010 0:50			1		USE	B
per0308062a	WCLCRI	CWW	3/9/2010 0:59			1		USE	C
per0308063a	247036002	CWW	3/9/2010 1:08	955724	10-1826	1	LANL	USE	S
per0308064a	247036003	CWW	3/9/2010 1:17	955724	10-1826	1	LANL	USE	S
per0308065a	247036006	CWW	3/9/2010 1:26	955724	10-1826	1	LANL	USE	S
per0308066a	247037001	CWW	3/9/2010 1:35	955724	10-1823	1	LANL	DUSE-DL	S

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per0308067a	247042002	CWW	3/9/2010 1:44	955724	10-1817	1	LANL	DUSE-RA	S
per0308068a	247042004	CWW	3/9/2010 1:53	955724	10-1817	1	LANL	USE	S
per0308069a	247042006	CWW	3/9/2010 2:02	955724	10-1817	1	LANL	USE	S
per0308070a	247261004	CWW	3/9/2010 2:11	955724	10-1886	1	LANL	USE	S
per0308071a	1202049066	CWW	3/9/2010 2:20	955724	10-1886	1	LANL	USE	S
per0308072a	1202049067	CWW	3/9/2010 2:29	955724	10-1886	1	LANL	USE	S
per0308073a	WCLCCV	CWW	3/9/2010 2:38			1		USE	C
per0308074a	IPB009	CWW	3/9/2010 2:48			1		USE	B
per0308075a	WCLCRI	CWW	3/9/2010 2:57			1		USE	C
per0308076a	1202056710	CWW	3/9/2010 3:06	959044	VARIOUS	1	LANL	USE	S
per0308077a	1202056711	CWW	3/9/2010 3:15	959044	VARIOUS	1	LANL	USE	S
per0308078a	1202056714	CWW	3/9/2010 3:24	959044	VARIOUS	1	LANL	USE	S
per0308079a	247908001	CWW	3/9/2010 3:33	959044	10-2013-1	1	LANL	USE	S
per0308080a	1202056712	CWW	3/9/2010 3:42	959044	10-2013-1	1	LANL	USE	S
per0308081a	1202056713	CWW	3/9/2010 3:51	959044	10-2013-1	1	LANL	USE	S
per0308082a	247908002	CWW	3/9/2010 4:00	959044	10-2013-1	1	LANL	USE	S
per0308083a	247908003	CWW	3/9/2010 4:09	959044	10-2013-1	1	LANL	USE	S
per0308084a	247919001	CWW	3/9/2010 4:18	959044	10-2016-1	1	LANL	USE	S
per0308085a	247919002	CWW	3/9/2010 4:27	959044	10-2016-1	1	LANL	USE	S
per0308086a	WCLCCV	CWW	3/9/2010 4:36			1		USE	C
per0308087a	IPB010	CWW	3/9/2010 4:46			1		USE	B
per0308088a	WCLCRI	CWW	3/9/2010 4:55			1		USE	C
per0308089a	247922004	CWW	3/9/2010 5:04	959044	10-2022	1	LANL	USE	S
per0308090a	247997001	CWW	3/9/2010 5:13	959044	10-2025	1	LANL	USE	S
per0308091a	248001001	CWW	3/9/2010 5:22	959044	10-2028	1	LANL	USE	S
per0308092a	248019001	CWW	3/9/2010 5:31	959044	10-2052	1	LANL	USE	S
per0308093a	248019002	CWW	3/9/2010 5:40	959044	10-2052	1	LANL	USE	S
per0308094a	248034001	CWW	3/9/2010 5:49	959044	10-2072-1	1	LANL	USE	S
per0308095a	248038001	CWW	3/9/2010 5:58	959044	10-2066-1	1	LANL	USE	S
per0308096a	248038002	CWW	3/9/2010 6:07	959044	10-2066-1	1	LANL	USE	S
per0308097a	248039001	CWW	3/9/2010 6:16	959044	10-2069	1	LANL	USE	S
per0308098a	248046001	CWW	3/9/2010 6:25	959044	10-2075-1	1	LANL	USE	S
per0308099a	WCLCCV	CWW	3/9/2010 6:34			1		USE	C
per0308100a	IPB011	CWW	3/9/2010 6:44			1		USE	B
per0308101a	WCLCRI	CWW	3/9/2010 6:53			1		USE	C
per0308102a	248046002	CWW	3/9/2010 7:02	959044	10-2075-1	1	LANL	USE	S
per0308103a	248053001	CWW	3/9/2010 7:11	959044	10-2081	1	LANL	USE	S

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per0308104a	248053002	CWW	3/9/2010 7:20	959044	10-2081	1	LANL	USE	S
per0308105a	248053003	CWW	3/9/2010 7:29	959044	10-2081	1	LANL	USE	S
per0308106a	IPB012	CWW	3/9/2010 7:38			1		USE	B
per0308107a	1202056715	CWW	3/9/2010 7:47	959047	VARIOUS	1	LANL	USE	S
per0308108a	1202056716	CWW	3/9/2010 7:57	959047	VARIOUS	1	LANL	USE	S
per0308109a	1202056719	CWW	3/9/2010 8:06	959047	VARIOUS	1	LANL	USE	S
per0308110a	248108001	CWW	3/9/2010 8:15	959047	10-2090	1	LANL	USE	S
per0308111a	248117001	CWW	3/9/2010 8:24	959047	10-2093	1	LANL	USE	S
per0308112a	WCLCCV	CWW	3/9/2010 8:33			1		USE	C
per0308113a	IPB013	CWW	3/9/2010 8:42			1		USE	B
per0308114a	WCLCRI	CWW	3/9/2010 8:51			1		USE	C
per0308115a	248127001	CWW	3/9/2010 9:00	959047	10-2096	1	LANL	USE	S
per0308116a	248127002	CWW	3/9/2010 9:09	959047	10-2096	1	LANL	USE	S
per0308117a	248162001	CWW	3/9/2010 9:18	959047	10-2103	1	LANL	USE	S
per0308118a	248162002	CWW	3/9/2010 9:27	959047	10-2103	1	LANL	USE	S
per0308119a	1202056717	CWW	3/9/2010 9:37	959047	10-2103	1	LANL	USE	S
per0308120a	1202056718	CWW	3/9/2010 9:46	959047	10-2103	1	LANL	USE	S
per0308121a	248162003	CWW	3/9/2010 9:55	959047	10-2103	1	LANL	USE	S
per0308122a	248162004	CWW	3/9/2010 10:04	959047	10-2103	1	LANL	USE	S
per0308123a	248168006	CWW	3/9/2010 10:13	959047	10-2107	1	LANL	USE	S
per0308124a	248169004	CWW	3/9/2010 10:22	959047	10-2108	1	LANL	USE	S
per0308125a	WCLCCV	CWW	3/9/2010 10:31			1		USE	C
per0308126a	IPB014	CWW	3/9/2010 10:40			1		USE	B
per0308127a	WCLCRI	CWW	3/9/2010 10:49			1		USE	C
per0308128a	248188001	CWW	3/9/2010 10:58	959047	10-2120	1	LANL	USE	S
per0308129a	248199001	CWW	3/9/2010 11:07	959047	10-2122-1	1	LANL	USE	S
per0308130a	248238001	CWW	3/9/2010 11:16	959047	10-2132-1	1	LANL	USE	S
per0308131a	248238002	CWW	3/9/2010 11:25	959047	10-2132-1	1	LANL	USE	S
per0308132a	248242001	CWW	3/9/2010 11:34	959047	10-2135-1	1	LANL	USE	S
per0308133a	248245001	CWW	3/9/2010 11:43	959047	10-2138	1	LANL	USE	S
per0308134a	248257001	CWW	3/9/2010 11:52	959047	10-2146-1	1	LANL	USE	S
per0308135a	248257002	CWW	3/9/2010 12:02	959047	10-2146-1	1	LANL	USE	S
per0308136a	248261001	CWW	3/9/2010 12:11	959047	10-2149	1	LANL	USE	S
per0308137a	WCLCCV	CWW	3/9/2010 12:20			1		USE	C
per0308138a	IPB015	CWW	3/9/2010 12:29			1		USE	B
per0308139a	WCLCRI	CWW	3/9/2010 12:38			1		USE	C

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

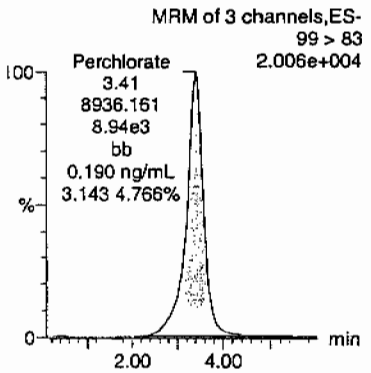
Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308119a
Date: 09-Mar-2010
Time: 09:37:00
ID: 1202056717
Vial: 3:2,D

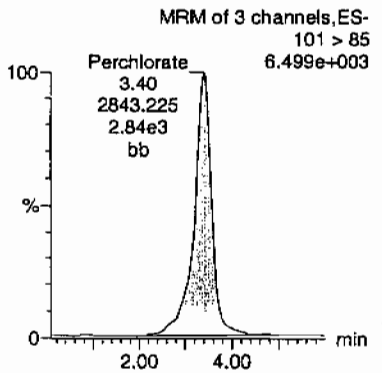
|LANL|959047|LZQ|MS|1|

CW 03-09-10

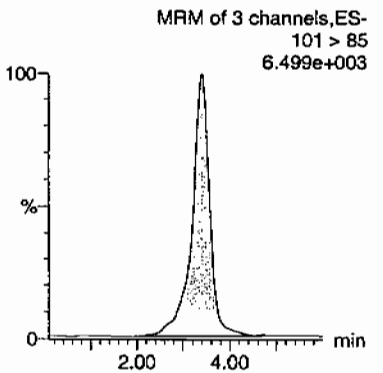
Perchlorate



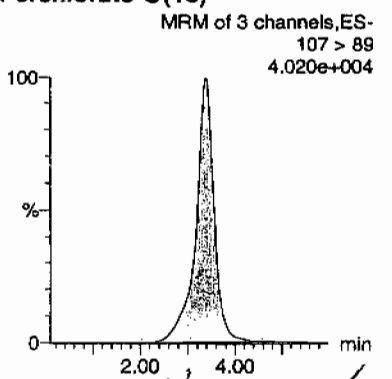
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HNM 03/10/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202056717	Perchlorate	99 > 83	3.41	8936.161	8936.161	bb			0.1899	94.97	-5.03	309.674	3.14
202056717	Perchlorate-101	101 > 85	3.40	2843.225	2843.225	bb			0.1989	99.43	-0.57	415.047	
202056717	Perchlorate-O(18)	107 > 89	3.38	17994.619	17994.619	bb			0.4608	92.16	-7.84	888.553	

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

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

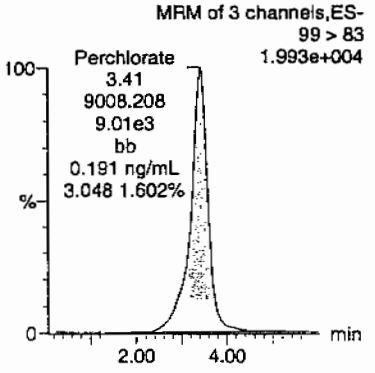
Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308120a
Date: 09-Mar-2010
Time: 09:46:02
ID: 1202056718
Vial: 3:2,E

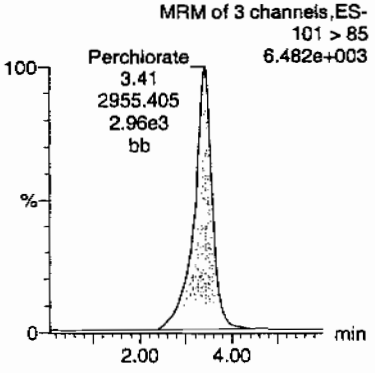
|LANL|959047|LIQ|MSD|1|

3/9-10

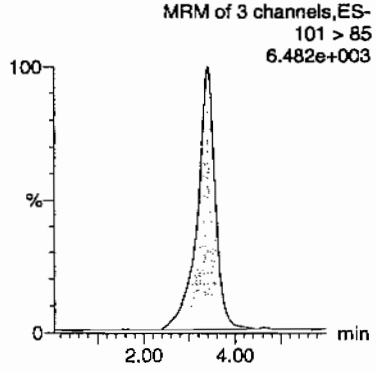
Perchlorate



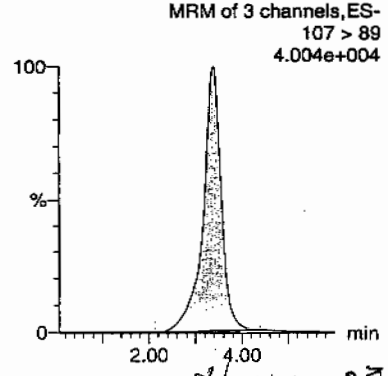
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm. 03/10/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202056718	Perchlorate	99 > 83	3.41	9008.208	9008.208	bb			0.1915	95.74	-4.26	1050.0...	3.05
202056718	Perchlorate-101	101 > 85	3.41	2955.405	2955.405	bb			0.2067	103.36	3.36	549.086	
202056718	Perchlorate-O(18)	107 > 89	3.38	17971.195	17971.195	bb			0.4602	92.04	-7.96	2544.5...	

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Isotope Ratio Criteria

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

2.31-3.85

Tune Criteria

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

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LC/MS/MS PERCHLORATE ANALYSIS

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Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-2090-1

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:	958963
Prep Batch Number:	958955

Sample Analysis

Sample ID	Client ID
248110001	RE15-10-8404
248110002	RE15-10-8396
248110003	RE15-10-8393
248110004	RE15-10-8395
248110005	RE15-10-8398
248110006	RE15-10-8394
248110007	RE15-10-8399
248110008	RE15-10-8397
1202056598	Interference Check Sample (ICS)
1202056594	Method Blank (MB)
1202056595	Laboratory Control Sample (LCS)
1202056596	248110001(RE15-10-8404) Matrix Spike (MS)
1202056597	248110001(RE15-10-8404) Matrix Spike Duplicate (MSD)

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

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Preparation/Analytical Method Verification

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

Calibration Information

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

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

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

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

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

Quality Control (QC) Information

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

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

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

QC Sample Designation
Sample 248110001 (RE15-10-8404) was chosen for matrix spike and matrix spike duplicate analysis.

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

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

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

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

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

Technical Information

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

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

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

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

Miscellaneous Information

Data Exception (DER) Documentation
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception 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.

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

System Configuration

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

Chromatographic Columns

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

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

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

Review Validation:

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

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

Reviewer: Kenneth Maier **Date:** 07/17/10

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SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8404

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110001

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 90.6

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.552	2.21	0.700	ug/kg	J	1	15-MAR-10 02:45	per0314083a
	Perchlorate Isotope Ratio			3.02			1	15-MAR-10 02:45	per0314083a
14797-73-0	Perchlorate-101	.552	2.21	0.715	ug/kg	J	1	15-MAR-10 02:45	per0314083a
	Perchlorate-O(18)			5.22	ug/kg		1	15-MAR-10 02:45	per0314083a

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

*Concentration =

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

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8396

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110002

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 91.3

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.548	2.19	0.681	ug/kg	J	1	15-MAR-10 03:09	per0314086a
	Perchlorate Isotope Ratio			3.07			1	15-MAR-10 03:09	per0314086a
14797-73-0	Perchlorate-101	.548	2.19	0.686	ug/kg	J	1	15-MAR-10 03:09	per0314086a
	Perchlorate-O(18)			4.75	ug/kg		1	15-MAR-10 03:09	per0314086a

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

*Concentration =

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

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8393

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110003

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 80

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.626	2.5	0.626	ug/kg	U	1	15-MAR-10 03:42	per0314090a
	Perchlorate Isotope Ratio						1	15-MAR-10 03:42	per0314090a
14797-73-0	Perchlorate-101	.626	2.5	0.626	ug/kg	U	1	15-MAR-10 03:42	per0314090a
	Perchlorate-O(18)			5.13	ug/kg		1	15-MAR-10 03:42	per0314090a

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

*Concentration =

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

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8395

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110004

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 95.6

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.523	2.09	0.907	ug/kg	J	1	15-MAR-10 03:50	per0314091a
	Perchlorate Isotope Ratio			2.94			1	15-MAR-10 03:50	per0314091a
14797-73-0	Perchlorate-101	.523	2.09	0.953	ug/kg	J	1	15-MAR-10 03:50	per0314091a
	Perchlorate-O(18)			4.40	ug/kg		1	15-MAR-10 03:50	per0314091a

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

*Concentration =

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

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8398

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110005

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.574	2.29	0.737	ug/kg	J	1	15-MAR-10 03:58	per0314092a
	Perchlorate Isotope Ratio			3.08			1	15-MAR-10 03:58	per0314092a
14797-73-0	Perchlorate-101	.574	2.29	0.739	ug/kg	J	1	15-MAR-10 03:58	per0314092a
	Perchlorate-O(18)			4.60	ug/kg		1	15-MAR-10 03:58	per0314092a

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

*Concentration =

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

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8394

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110006

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	1.50	ug/kg	J	1	15-MAR-10 04:06	per0314093a
	Perchlorate Isotope Ratio			3.05			1	15-MAR-10 04:06	per0314093a
14797-73-0	Perchlorate-101	.558	2.23	1.52	ug/kg	J	1	15-MAR-10 04:06	per0314093a
	Perchlorate-O(18)			4.98	ug/kg		1	15-MAR-10 04:06	per0314093a

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

*Concentration =

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

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8399

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110007

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 88

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.566	2.26	1.23	ug/kg	J	1	15-MAR-10 04:14	per0314094a
	Perchlorate Isotope Ratio			3.07			1	15-MAR-10 04:14	per0314094a
14797-73-0	Perchlorate-101	.566	2.26	1.24	ug/kg	J	1	15-MAR-10 04:14	per0314094a
	Perchlorate-O(18)			4.56	ug/kg		1	15-MAR-10 04:14	per0314094a

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

*Concentration =

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

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8397

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110008

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 93.9

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.533	2.13	0.631	ug/kg	J	1	15-MAR-10 04:22	per0314095a
	Perchlorate Isotope Ratio			2.85			1	15-MAR-10 04:22	per0314095a
14797-73-0	Perchlorate-101	.533	2.13	0.684	ug/kg	J	1	15-MAR-10 04:22	per0314095a
	Perchlorate-O(18)			4.03	ug/kg		1	15-MAR-10 04:22	per0314095a

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

*Concentration =

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

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QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-2090-1

Extract Batch Code: 958955

Date Filtered: 06-MAR-10

Matrix: SOIL

Sample ID: 1202056595

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.04	ug/kg	102		70 – 130
Perchlorate Isotope Ratio		2.99				–
Perchlorate-101	2.00	2.11	ug/kg	105		70 – 130
Perchlorate-O(18)		4.7	ug/kg			–

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

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Form 5a

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–2090–1

Extract Batch Code: 958955

Date Filtered: 06–MAR–10

Matrix: SOIL

Sample ID: 1202056598

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.08	ug/kg	104		70 – 130
Perchlorate Isotope Ratio		3.01				
Perchlorate–101	2.00	2.14	ug/kg	107		70 – 130
Perchlorate–O(18)		4.88	ug/kg			

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

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

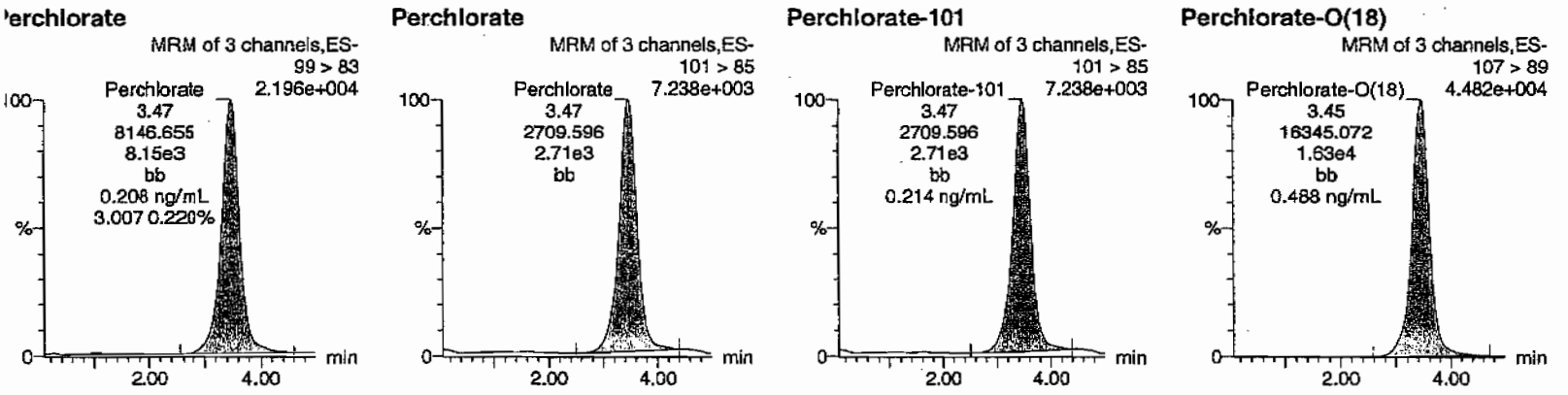
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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: per0314068a
Date: 15-Mar-2010
Time: 00:43:48
ID: 1202056598
Vial: 2:4,C

|LANL|958963|SOVED|ICS|1|

CWW 03-15-10



	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202056598	Perchlorate	99 > 83	3.47	8146.655	8146.655	bb			0.2081	104.03	4.03	275.219	3.01
202056598	Perchlorate-101	101 > 85	3.47	2709.596	2709.596	bb			0.2137	106.85	6.85	483.346	
202056598	Perchlorate-O(18)	107 > 89	3.45	16345.072	16345.072	bb			0.4885	97.69	-2.31	2153.5...	

MAP 3/16/10

$$\frac{8146.655}{2709.596} = 3.0066$$

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

Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10–2090–1

Extract Batch Code: 958955

Date Extracted: 06–MAR–10

GEL MS/PS ID: 1202056596

Client ID: RE15–10–8404

GEL MSD/PSD ID: 1202056597

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	2.21	0.700	ug/kg	2.91	100	2.76	93.5	5.25	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		2.96		3.04		0		–
Perchlorate–101	2.21	0.715	ug/kg	3.04	105	2.81	94.8	8.01	30	75 – 125
Perchlorate–O(18)	0	5.22	ug/kg	4.98		4.96		.35		–

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

Comments:

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Form 4

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-2090-1

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

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

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

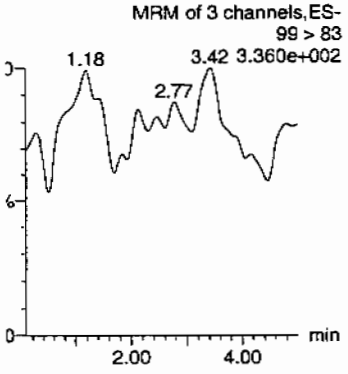
st Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
nted: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

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

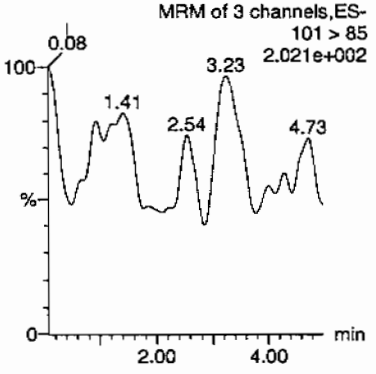
me: per0314001a
te: 14-Mar-2010
ne: 15:41:14
IPB001
l: 1:1,A

CWS 03-15-10

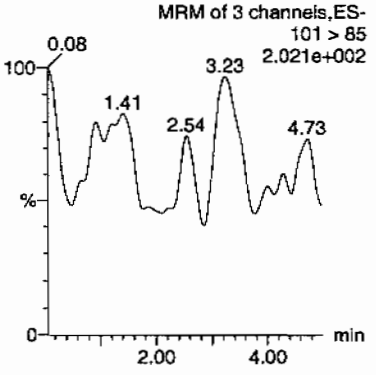
rchlorate



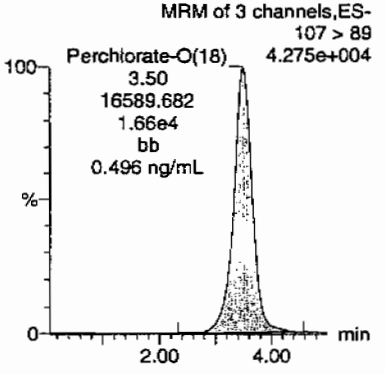
Perchlorate



Perchlorate-101



Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3001	Perchlorate	99 > 83											0.00
3001	Perchlorate-101	101 > 85											
3001	Perchlorate-O(18)	107 > 89	3.50	16589.682	16589.682	bb			0.4958	99.15	-0.85	1780.0...	

MM 3/16/10

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

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

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

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

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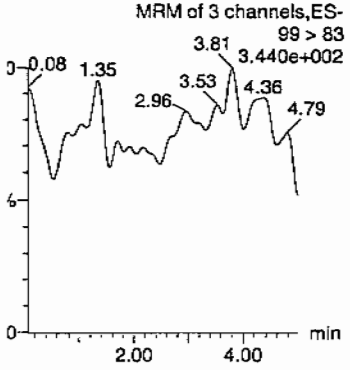
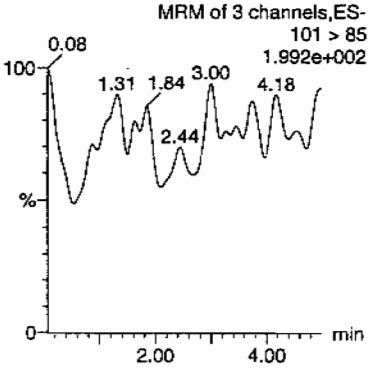
te: 14-Mar-2010
ne: 15:49:17
IPB001
il: 1:1,A

333 03-15-10

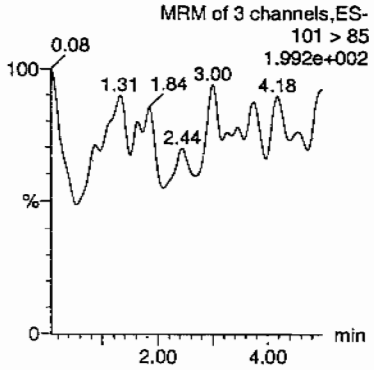
rchlorate



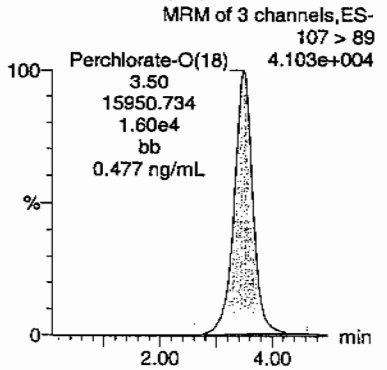
Perchlorate



Perchlorate-101



Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3001	Perchlorate	99 > 83											0.00
3001	Perchlorate-101	101 > 85											
3001	Perchlorate-O(18)	107 > 89	3.50	15950.734	15950.734	bb			0.4767	95.34	-4.66	1555.8...	

MM 3/16/10

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

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Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–2090–1

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
Perchlorate	0.00	0	NA	14–MAR–10	per0314062a	IPB008

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Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-2090-1

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate-101	0.00	0	NA	14-MAR-10	per0314062a	IPB008
Perchlorate	0.00	0	NA	15-MAR-10	per0314065a	IPB009
Perchlorate-101	0.00	0	NA	15-MAR-10	per0314065a	IPB009
Perchlorate	0.00	0	NA	15-MAR-10	per0314075a	IPB010
Perchlorate-101	0.00	0	NA	15-MAR-10	per0314075a	IPB010
Perchlorate	0.00	0	NA	15-MAR-10	per0314088a	IPB011
Perchlorate-101	0.00	0	NA	15-MAR-10	per0314088a	IPB011
Perchlorate	0.00	0	NA	15-MAR-10	per0314097a	IPB012
Perchlorate-101	0.00	0	NA	15-MAR-10	per0314097a	IPB012

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

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

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

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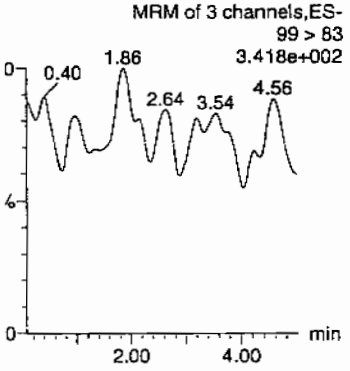
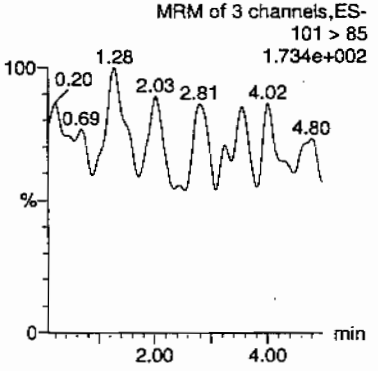
te: 14-Mar-2010
ne: 16:37:25
IPB002
il: 1:1,A

333
03-15-10

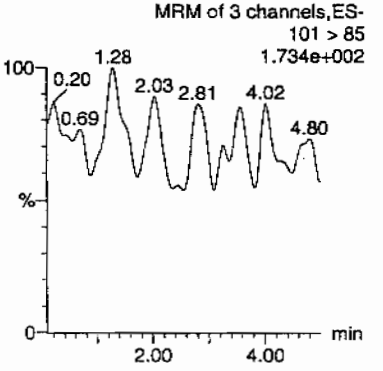
rchlorate



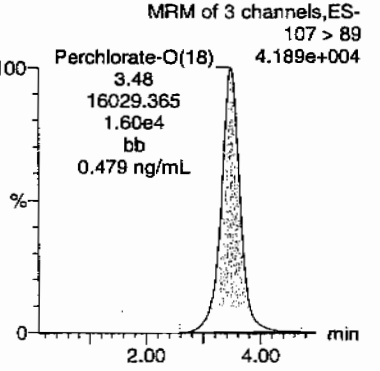
Perchlorate



Perchlorate-101



Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3002	Perchlorate	99 > 83											0.00
3002	Perchlorate-101	101 > 85											
3002	Perchlorate-O(18)	107 > 89	3.48	16029.365	16029.365	bb			0.4790	95.81	-4.19	1104.5...	

MM
3/16/10

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

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

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

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

ıme: per0314010a
ıte: 14-Mar-2010
ne: 16:53:41
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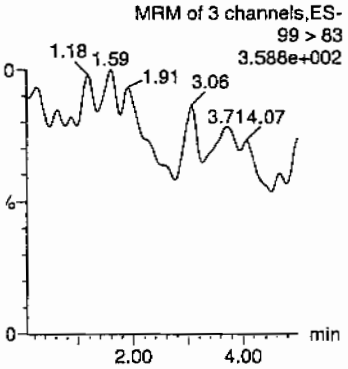
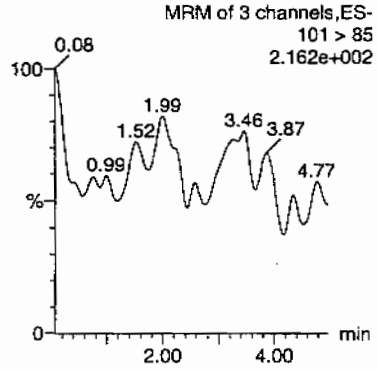
al: 1:1,A

3/15/10

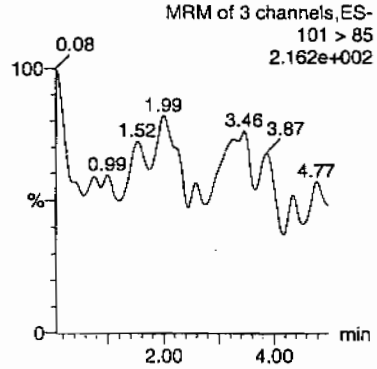
rchlorate



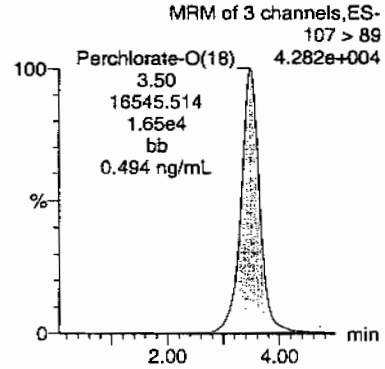
Perchlorate



Perchlorate-101



Perchlorate-O(18)



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3003	Perchlorate	99 > 83											0.00
3003	Perchlorate-101	101 > 85											
3003	Perchlorate-O(18)	107 > 89	3.50	16545.514	16545.514	bb			0.4945	98.89	-1.11	1258.9...	

MM 3/16/10

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

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

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

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ıte: 14-Mar-2010
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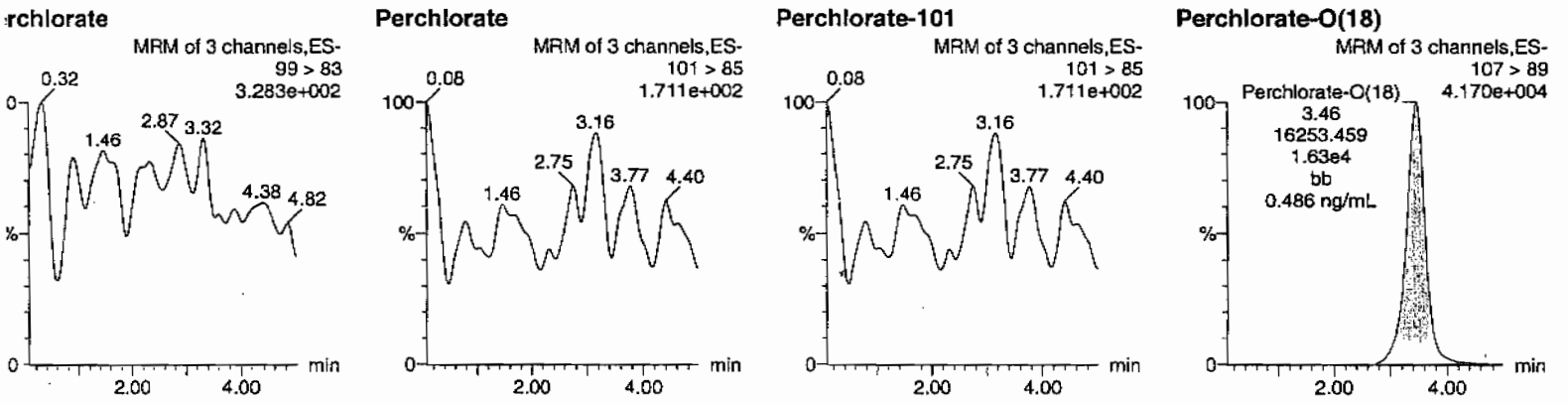
: IPB004
al: 1:1,A

03-15-10



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3004	Perchlorate-101	101 > 85											
3004	Perchlorate-O(18)	107 > 89	3.46	16253.459	16253.459	bb			0.4857	97.14	-2.86	1623.8...	

MAT 3/16/10

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

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

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

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

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te: 14-Mar-2010
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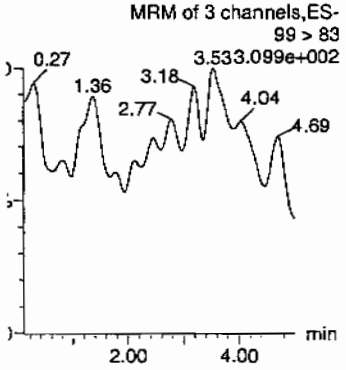
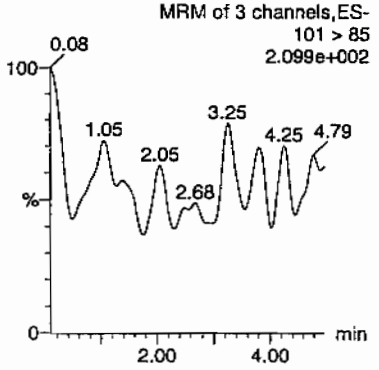
IPB005
il: 1:1,A

333
03-15-10

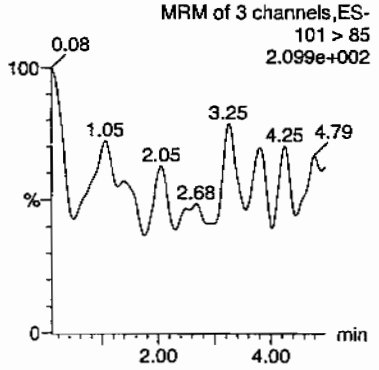
rchlorate



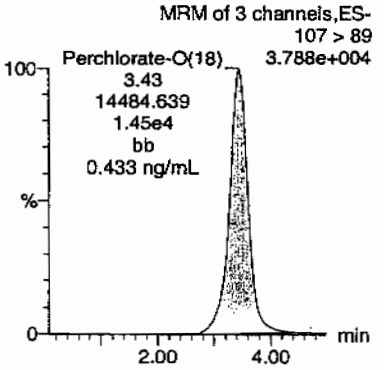
Perchlorate



Perchlorate-101



Perchlorate-O(18)



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005	Perchlorate	99 > 83											0.00
005	Perchlorate-101	101 > 85											
005	Perchlorate-O(18)	107 > 89	3.43	14484.639	14484.639	bb			0.4329	86.57	-13.43	330.725	

MAP 3/16/10

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

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

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

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ne: 21:04:20
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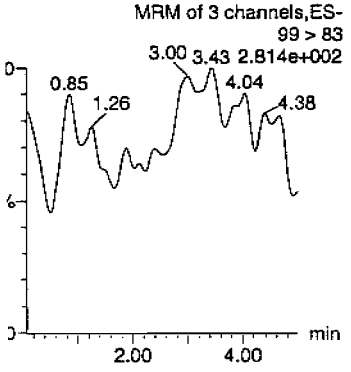
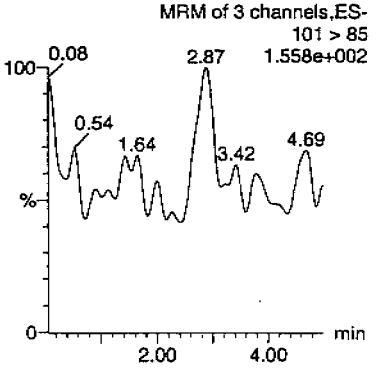
GWO
03-15-10

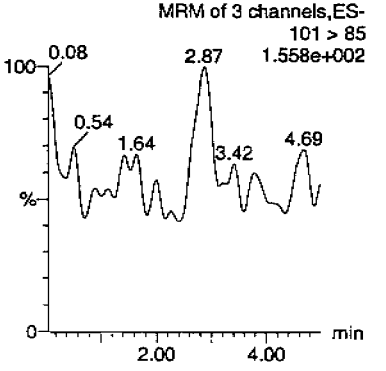
rchlorate



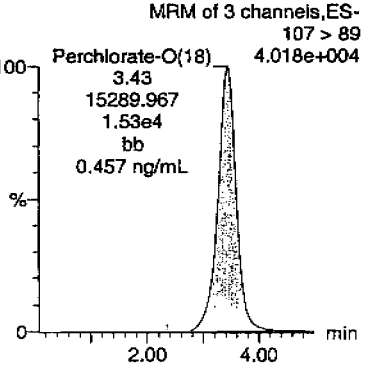
Perchlorate



Perchlorate-101



Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1006	Perchlorate	99 > 83											0.00
1006	Perchlorate-101	101 > 85											
1006	Perchlorate-O(18)	107 > 89	3.43	15289.967	15289.967	bb			0.4569	91.39	-8.61	4719.0...	

MMP 3/16/10

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

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

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

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

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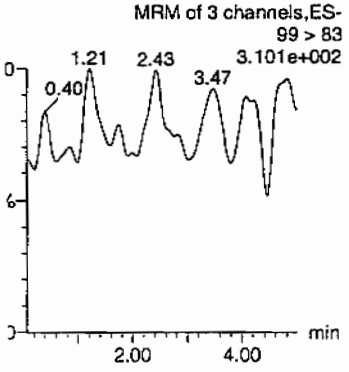
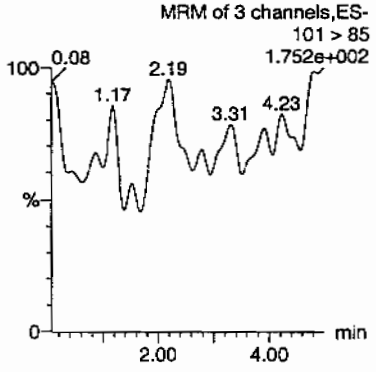
te: 14-Mar-2010
ne: 22:09:28
: IPB007
l: 1:1,A

CWO 03-15-10

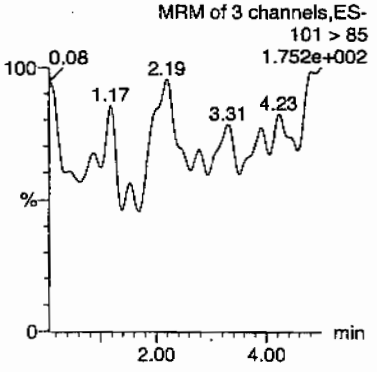
rchlorate



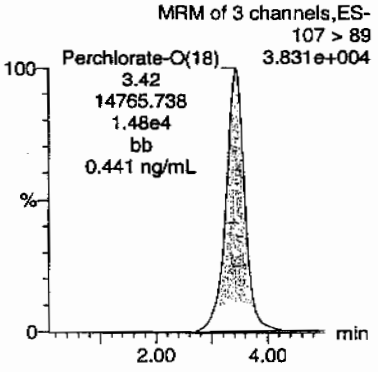
Perchlorate



Perchlorate-101



Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
i007	Perchlorate	99 > 83											0.00
i007	Perchlorate-101	101 > 85											
i007	Perchlorate-O(18)	107 > 89	3.42	14765.738	14765.738	bb			0.4413	88.25	-11.75	2275.0...	

MAT 3/16/10

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

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

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

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

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ate: 14-Mar-2010
me: 23:54:34
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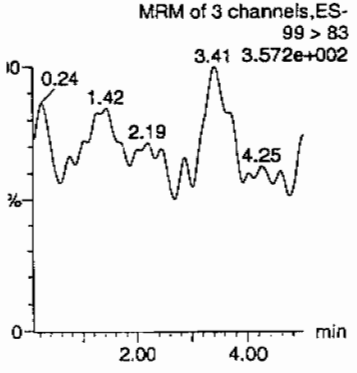
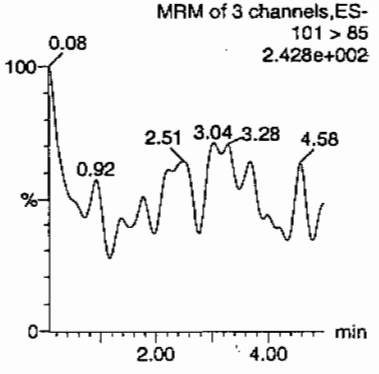
al: 1:1,A

CWD 03-6-10

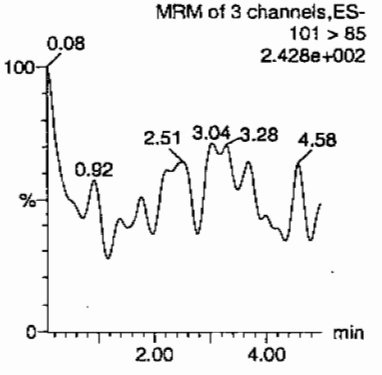
erchlorate



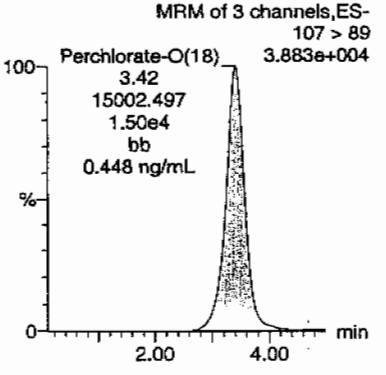
Perchlorate



Perchlorate-101



Perchlorate-O(18)



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3008	Perchlorate	99 > 83											0.00
3008	Perchlorate-101	101 > 85											
3008	Perchlorate-O(18)	107 > 89	3.42	15002.497	15002.497	bb			0.4483	89.67	-10.33	1644.4...	

MM? 3/16/10

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

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

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te: 15-Mar-2010
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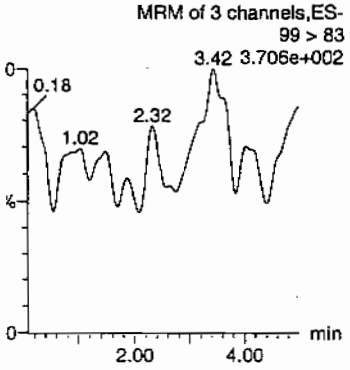
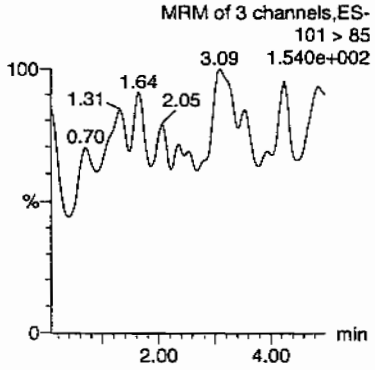
CWO
03-15-10

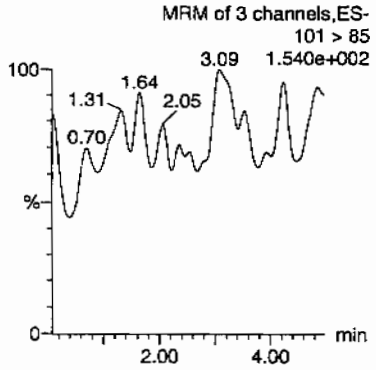
rchlorate



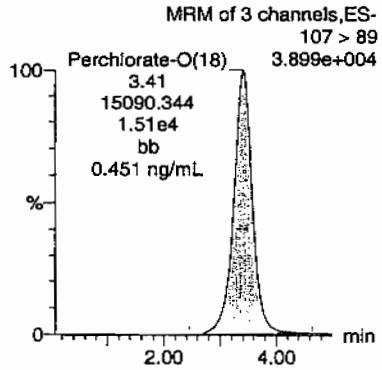
Perchlorate



Perchlorate-101



Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3009	Perchlorate	99 > 83											0.00
3009	Perchlorate-101	101 > 85											
3009	Perchlorate-O(18)	107 > 89	3.41	15090.344	15090.344	bb			0.4510	90.19	-9.81	1592.9...	

MAT
3/16/10

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

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

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

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

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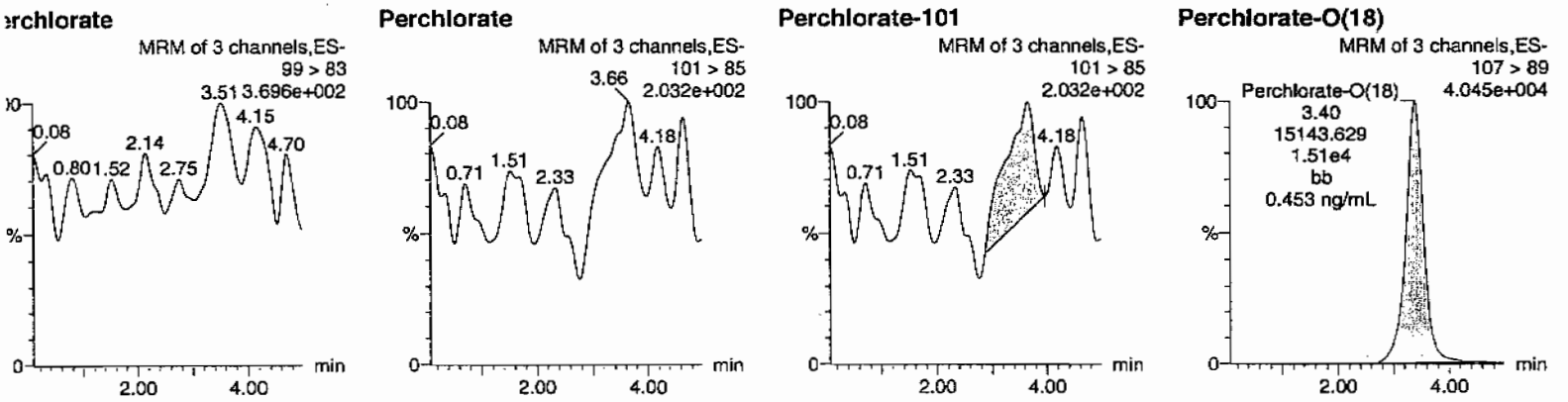
03
03-13-10



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B010	Perchlorate	99 > 83											0.00
B010	Perchlorate-101	101 > 85	3.66	54.354	54.354	bb			0.0043			5.863	
B010	Perchlorate-O(18)	107 > 89	3.40	15143.629	15143.629	bb			0.4526	90.51	-9.49	564.320	

MM
3/16/10

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

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

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

.st Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
inted: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

ıme: per0314088a
ıte: 15-Mar-2010
ıme: 03:25:54
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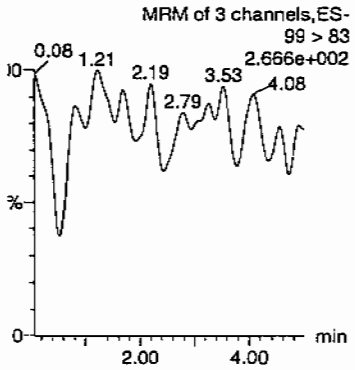
al: 1:1,A

CWB 03-15-10

erchlorate



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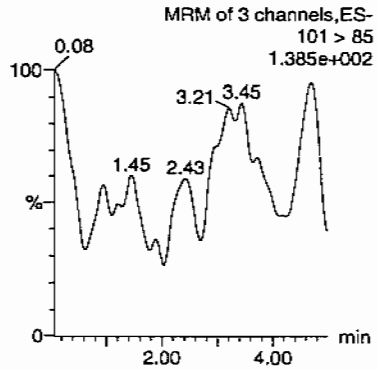

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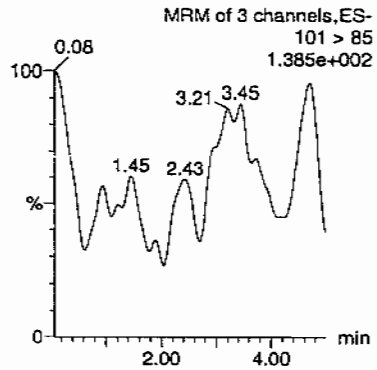
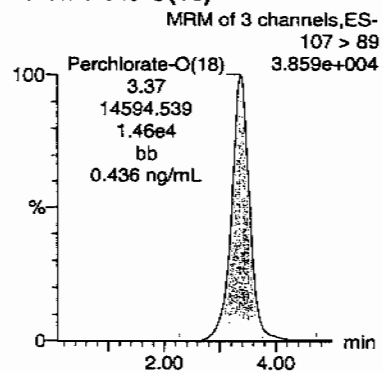


Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B011	Perchlorate	99 > 83											0.00
B011	Perchlorate-101	101 > 85											
B011	Perchlorate-O(18)	107 > 89	3.37	14594.539	14594.539	bb			0.4361	87.23	-12.77	4711.3...	

MM 3/16/10

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

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e GEL Group, LLC Analyst: Charlers W. Wilson

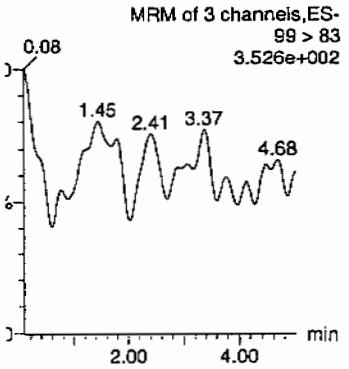
taset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

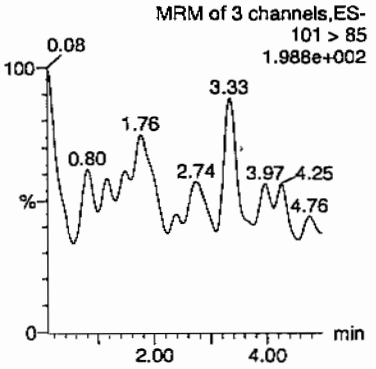
me: per0314097a
te: 15-Mar-2010
ne: 04:39:01
IPB012
l: 1:1,A

333
03-05-10

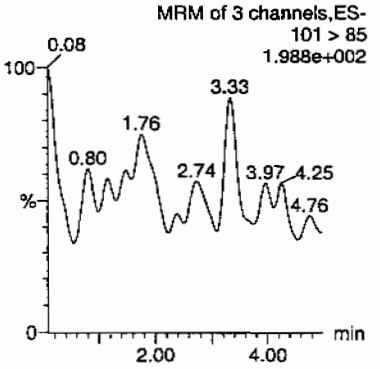
rchlorate



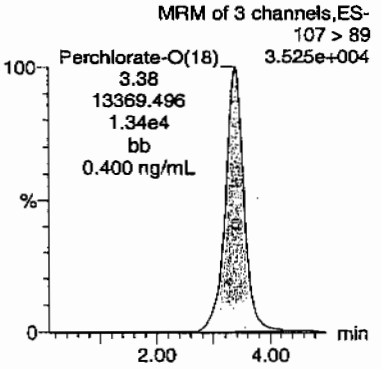
Perchlorate



Perchlorate-101



Perchlorate-O(18)



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
i012	Perchlorate	99 > 83											0.00
i012	Perchlorate-101	101 > 85											
i012	Perchlorate-O(18)	107 > 89	3.38	13369.496	13369.496	bb			0.3995	79.91	-20.09	3999.4...	

MM
3/16/10

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

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Nairb.ref

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

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

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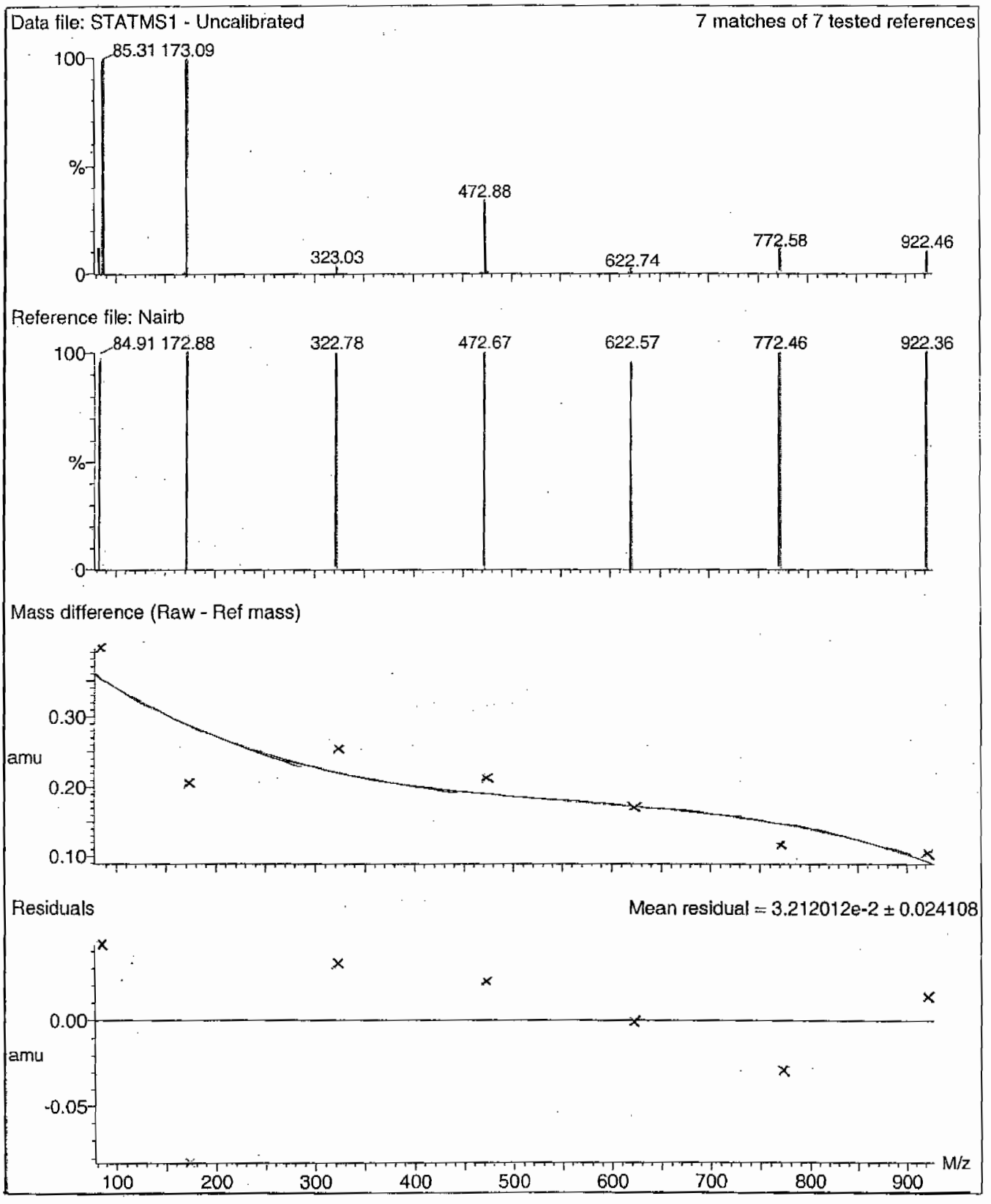
QUATTRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

Printed: Tue Jan 08 12:19:12 2008

PEAKS HIGHLIGHTED BY CWM 01-09-08



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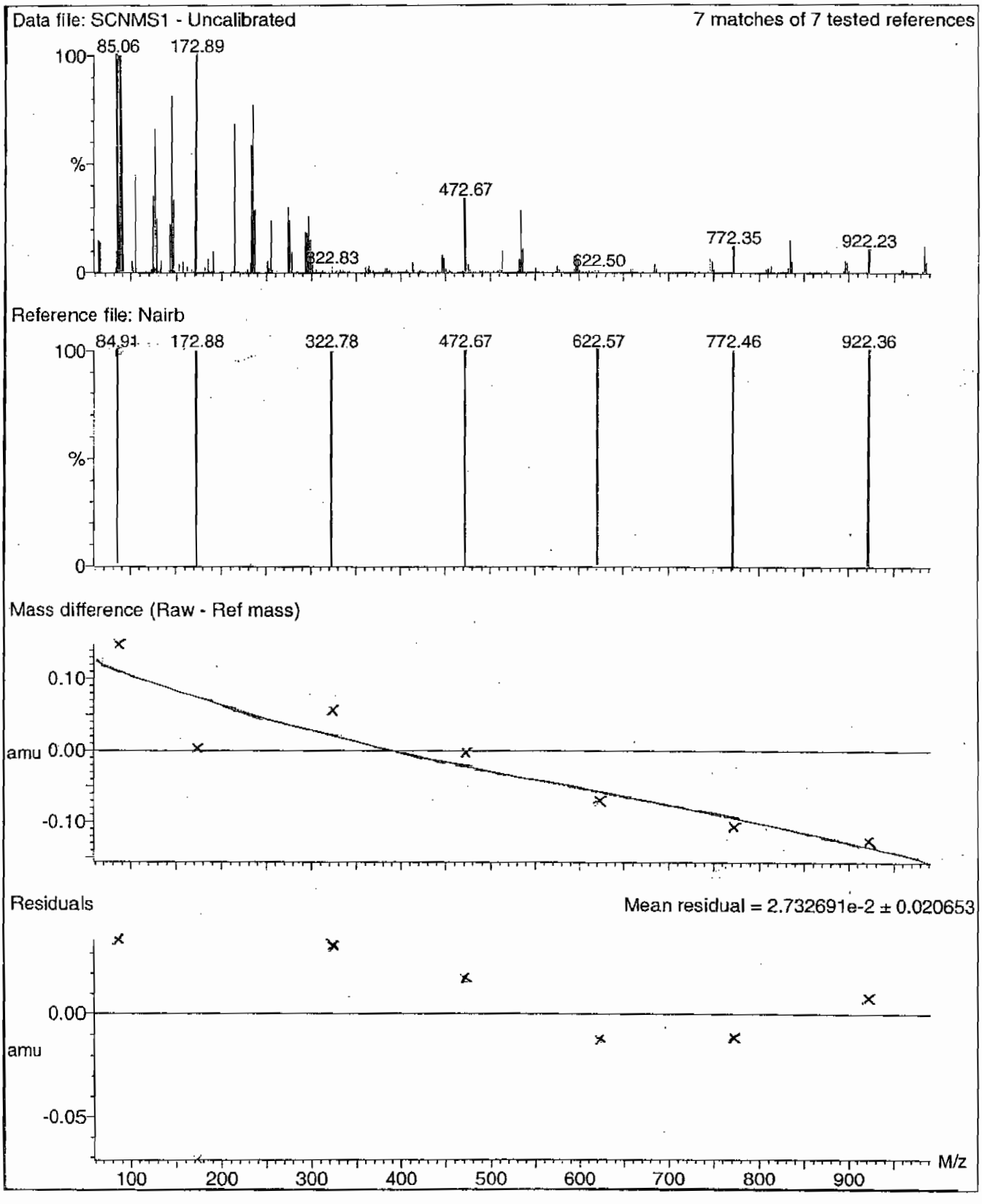
Calibration Report - MS1 Scanning

Printed: **Tue Jan 08 12:20:09 2008**



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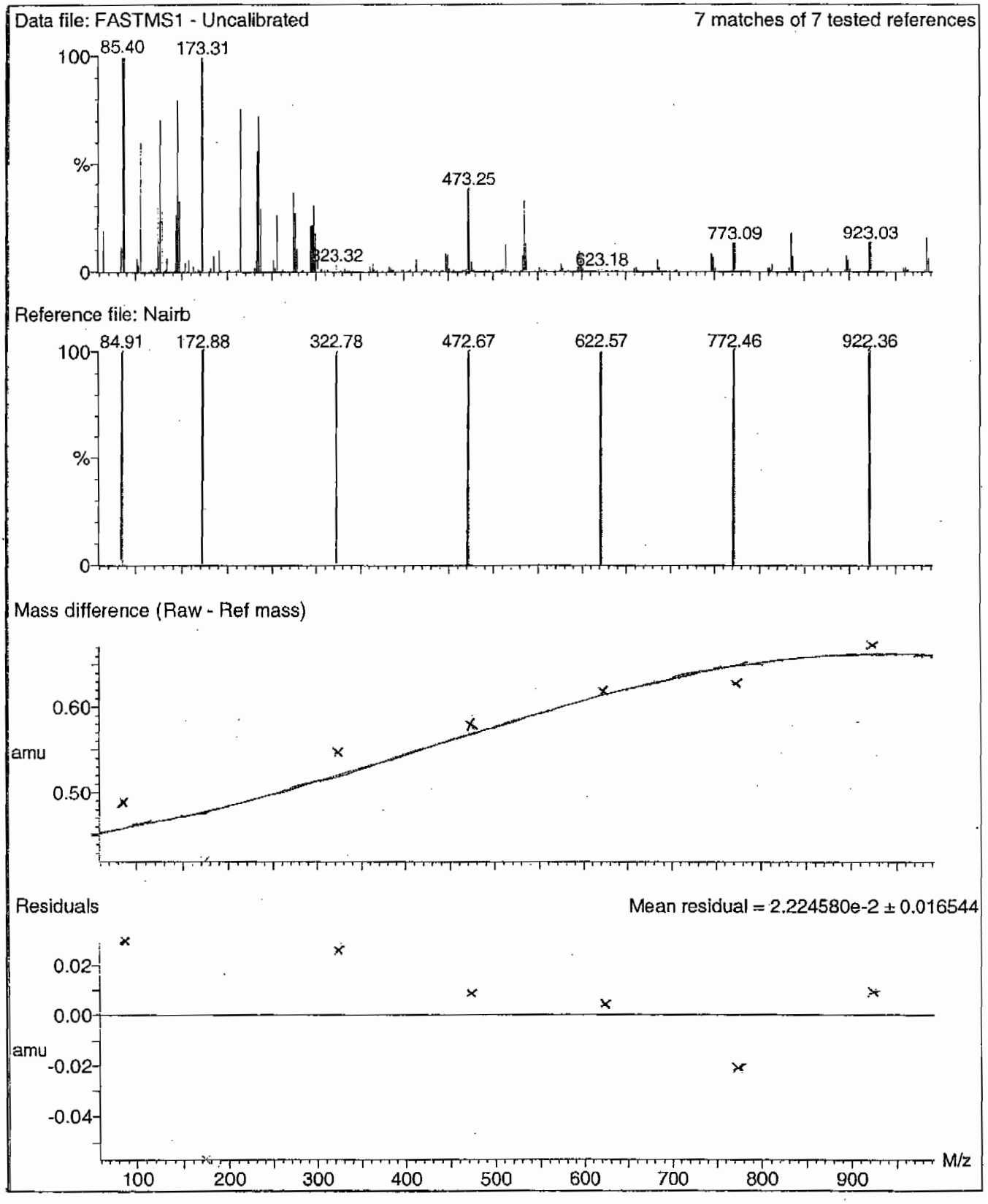
Calibration Report - MS1 Scan Speed Compensation

Printed: Tue Jan 08 12:21:04 2008



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

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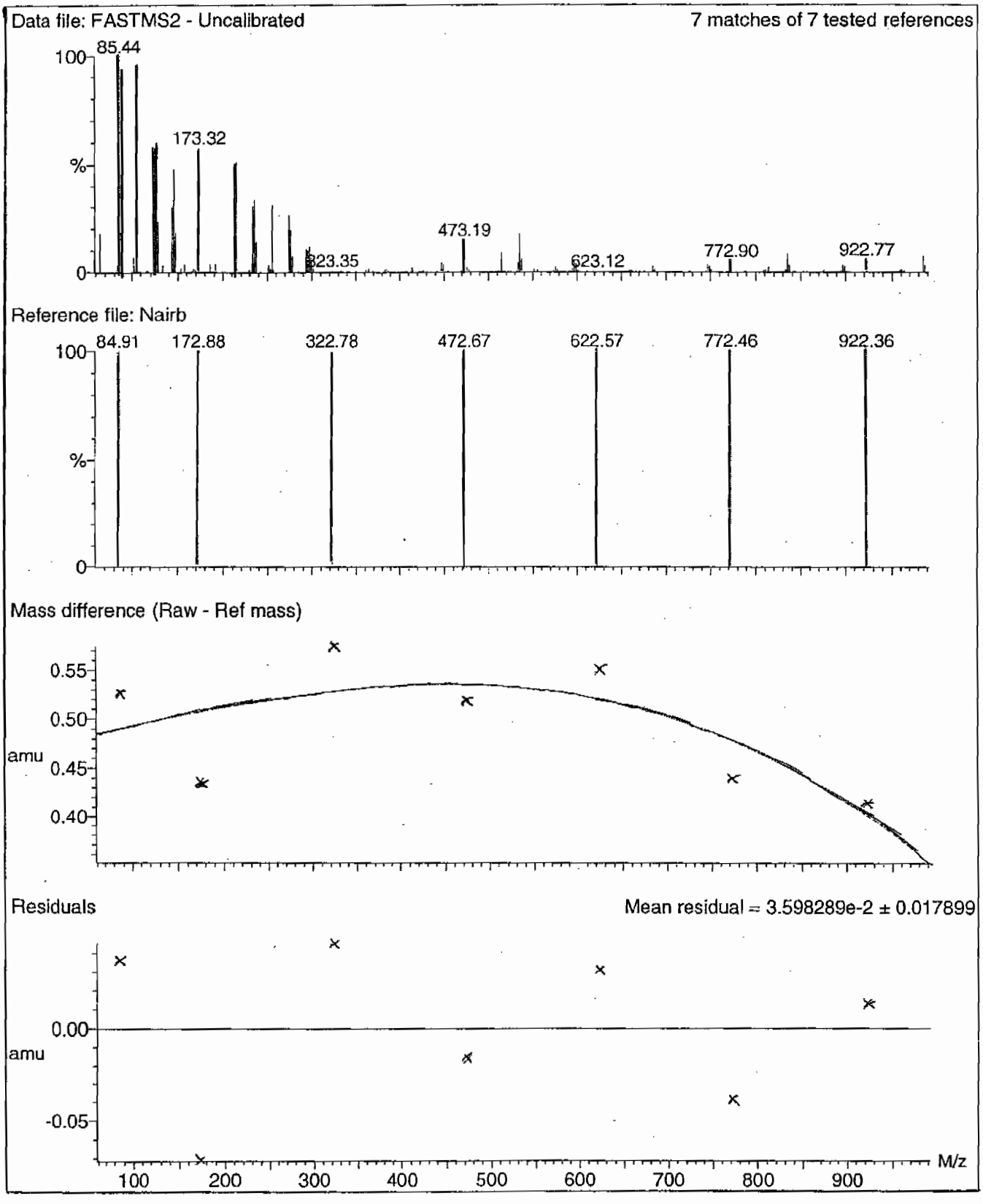
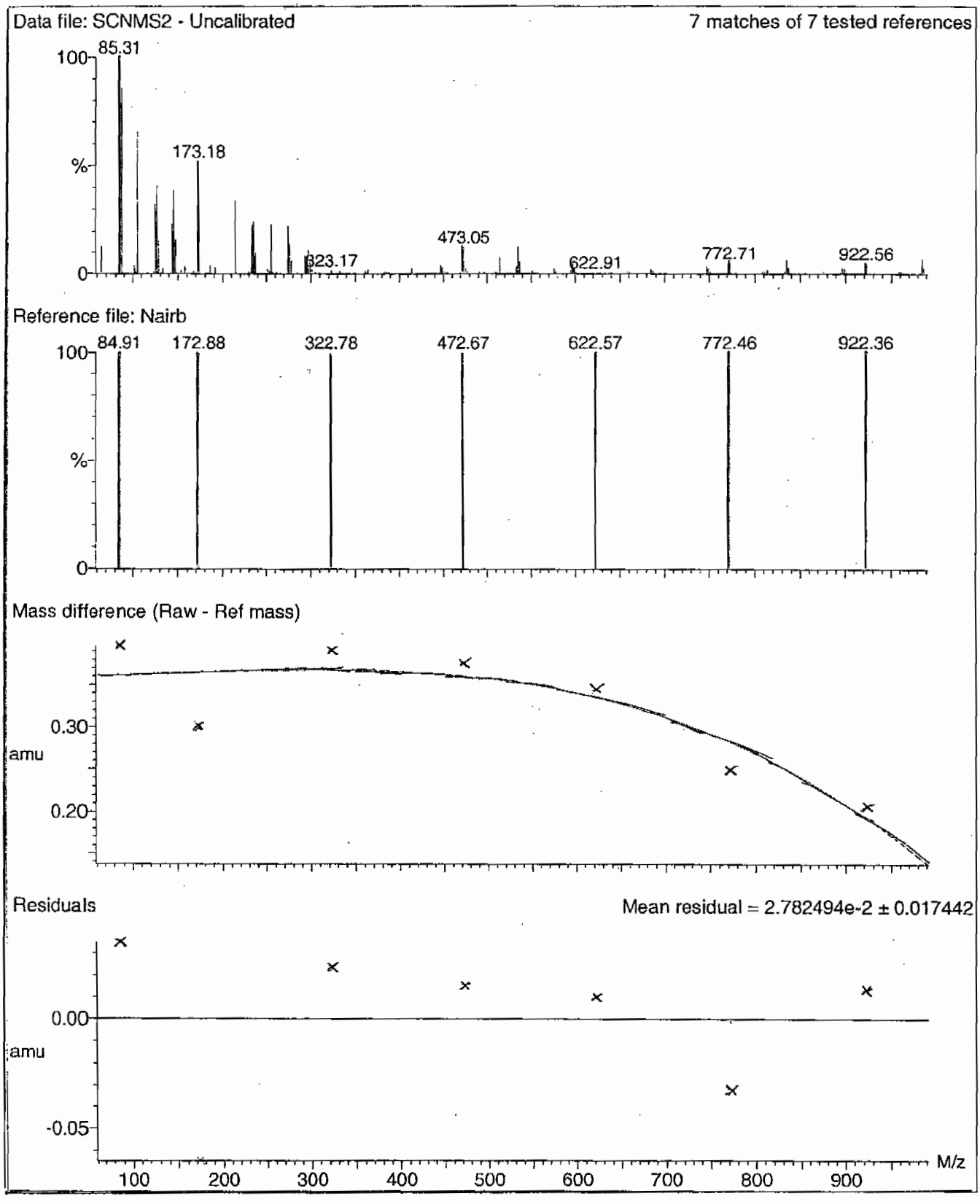


PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Printed: Tue Jan 08 12:22:56 2008



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

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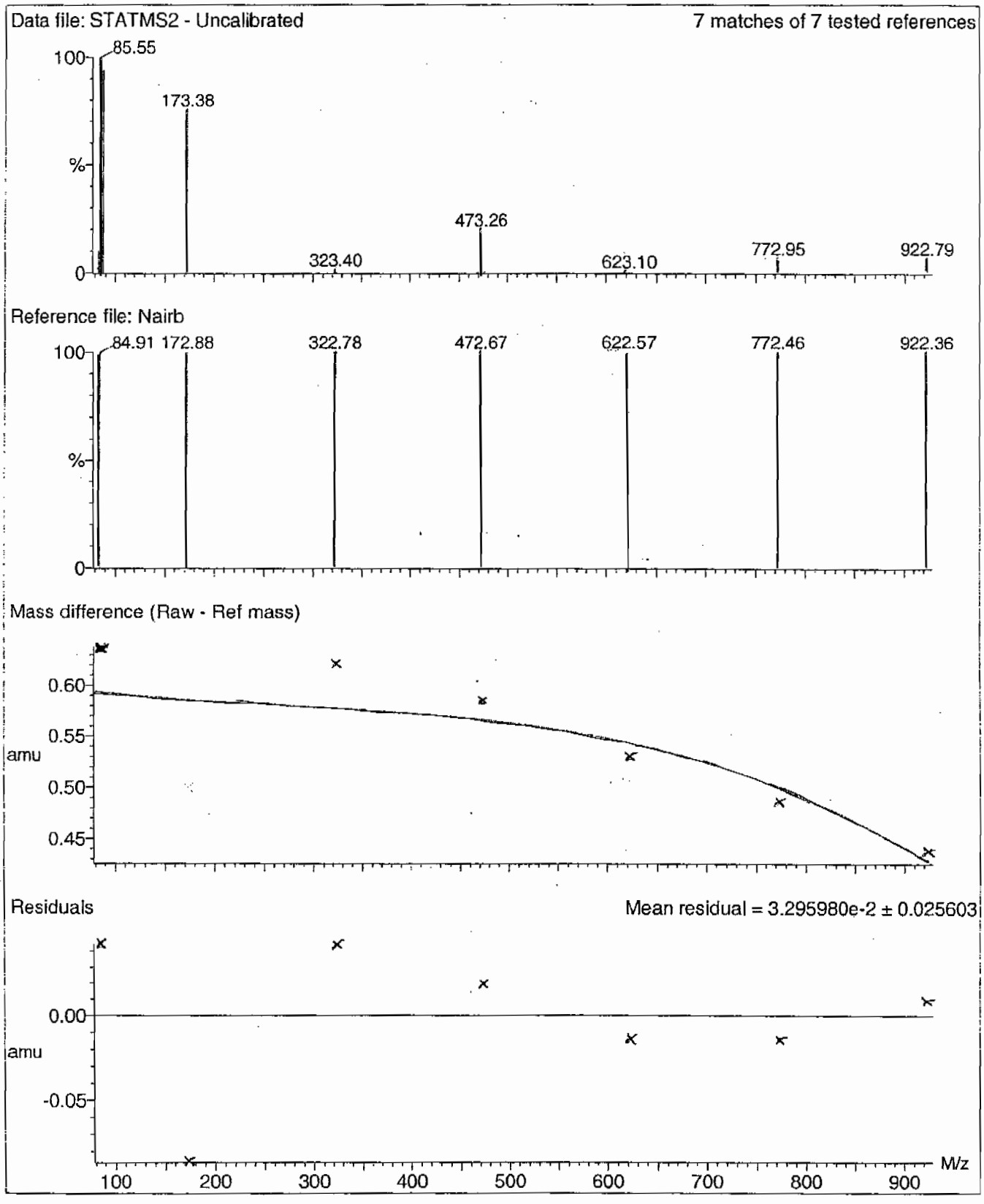
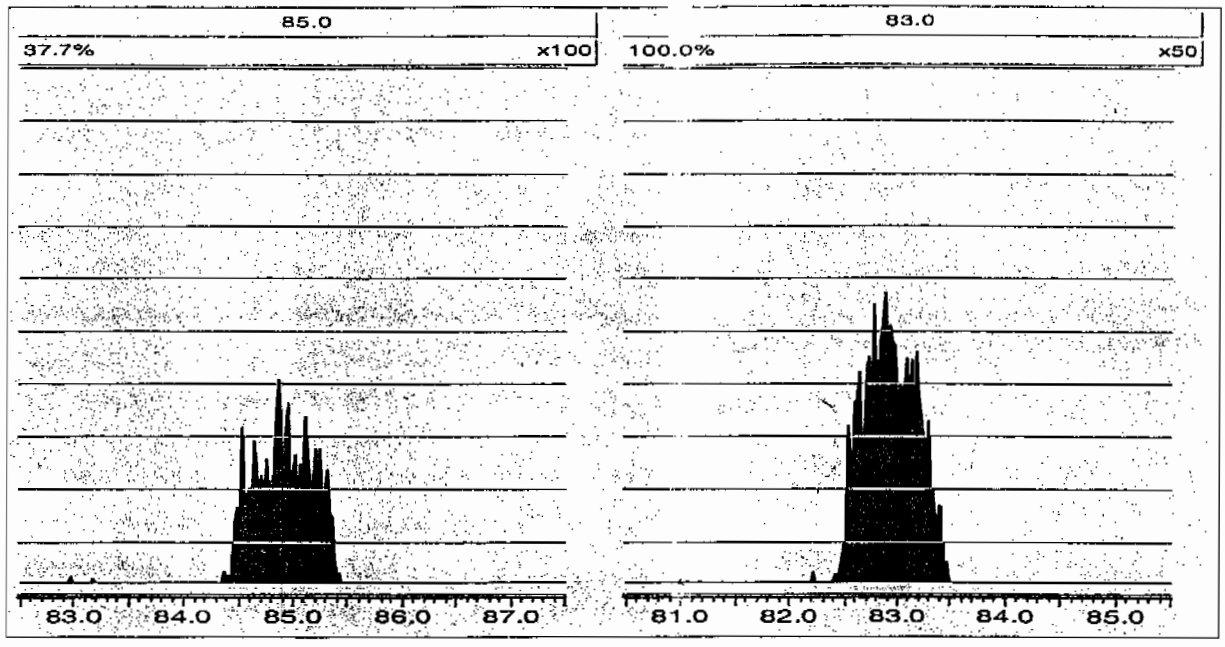


PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

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

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



Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–2090–1

Lab Code: GEL

Instrument ID: LCMSMS

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

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98–1.02
MidLevel Standard Area	**per0314006a**	**14–MAR–10**	**17326**				
Lower Area Limit			**8663**				
Upper Area Limit			**34652**				
1202056594	per0314066a	15–MAR–10 00:27	15157.8	3.41	3.44548	1.01	
1202056595	per0314067a	15–MAR–10 00:35	15721	3.4	3.4208	1.006	
1202056598	per0314068a	15–MAR–10 00:43	16345.1	3.45	3.47043	1.006	
248110001	per0314083a	15–MAR–10 02:45	15816.9	3.38	3.39588	1.005	
1202056596	per0314084a	15–MAR–10 02:53	15089.7	3.37	3.39592	1.008	
1202056597	per0314085a	15–MAR–10 03:01	15036.9	3.38	3.3959	1.005	
248110002	per0314086a	15–MAR–10 03:09	14503.1	3.37	3.3834	1.004	
248110003	per0314090a	15–MAR–10 03:42	13704.5	3.37	3.40822	1.011	

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Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–2090–1

Lab Code: GEL

Instrument ID: LCMSMS

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

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98–1.02
MidLevel Standard Area	**per0314006a**	**14–MAR–10**	**17326**				
Lower Area Limit			**8663**				
Upper Area Limit			**34652**				
248110004	per0314091a	15–MAR–10 03:50	14069.5	3.37	3.3834	1.004	
248110005	per0314092a	15–MAR–10 03:58	13424.3	3.37	3.39588	1.008	
248110006	per0314093a	15–MAR–10 04:06	14949.5	3.37	3.39587	1.008	
248110007	per0314094a	15–MAR–10 04:14	13485	3.38	3.39592	1.005	
248110008	per0314095a	15–MAR–10 04:22	12667.9	3.37	3.3834	1.004	

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SAMPLE DATA

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8404

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110001

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 90.6

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.552	2.21	0.700	ug/kg	J	1	15-MAR-10 02:45	per0314083a
	Perchlorate Isotope Ratio			3.02			1	15-MAR-10 02:45	per0314083a
14797-73-0	Perchlorate-101	.552	2.21	0.715	ug/kg	J	1	15-MAR-10 02:45	per0314083a
	Perchlorate-O(18)			5.22	ug/kg		1	15-MAR-10 02:45	per0314083a

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

*Concentration =

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

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

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

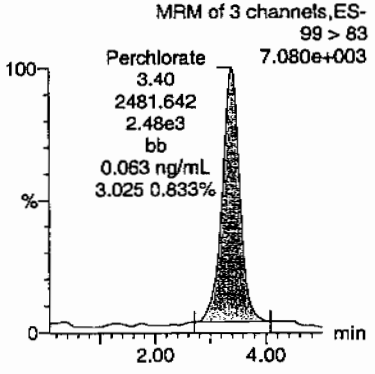
Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314083a
Date: 15-Mar-2010
Time: 02:45:26
ID: 248110001
Vial: 2:6,C

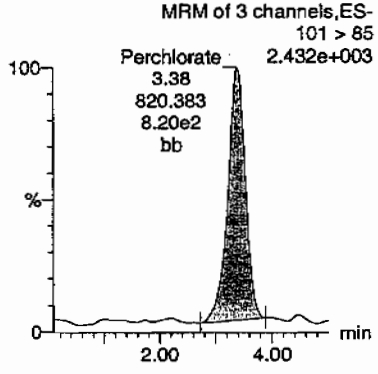
|LANL|958963|50120|1|

cwd
03-15-10

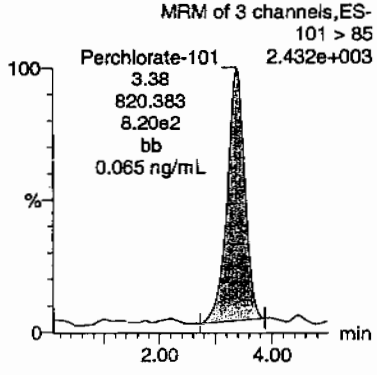
Perchlorate



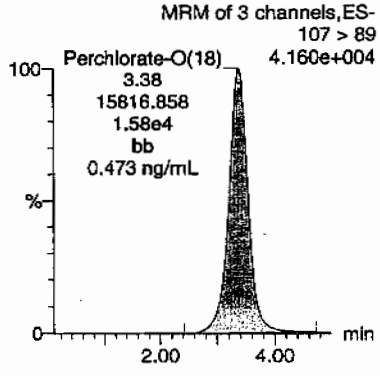
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248110001	Perchlorate	99 > 83	3.40	2481.642	2481.642	bb			0.0634			403.602	3.02
248110001	Perchlorate-101	101 > 85	3.38	820.383	820.383	bb			0.0647			189.746	
248110001	Perchlorate-O(18)	107 > 89	3.38	15816.858	15816.858	bb			0.4727	94.54	-5.46	775.948	

MAP
3/16/10

$$\frac{2481.682 \mid 10 \mid 100}{39154.1 \mid \quad \mid 90.56} = 0.700$$

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8396

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110002

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 91.3

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.548	2.19	0.681	ug/kg	J	1	15-MAR-10 03:09	per0314086a
	Perchlorate Isotope Ratio			3.07			1	15-MAR-10 03:09	per0314086a
14797-73-0	Perchlorate-101	.548	2.19	0.686	ug/kg	J	1	15-MAR-10 03:09	per0314086a
	Perchlorate-O(18)			4.75	ug/kg		1	15-MAR-10 03:09	per0314086a

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

*Concentration =

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

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

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

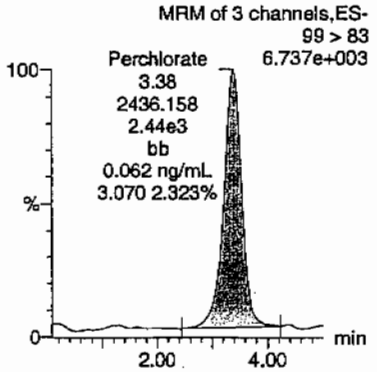
Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314086a
Date: 15-Mar-2010
Time: 03:09:34
ID: 248110002
Vial: 2:6,F

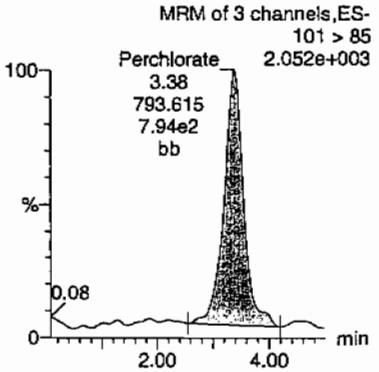
LANL | 958963 | 5078 | 11

CWJ 03-15-10

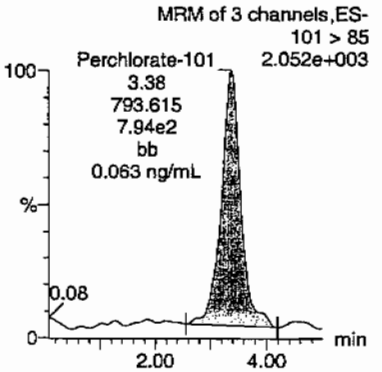
Perchlorate



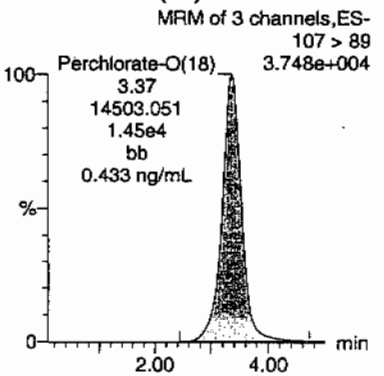
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248110002	Perchlorate	99 > 83	3.38	2436.158	2436.158	bb			0.0622			207.974	3.07
248110002	Perchlorate-101	101 > 85	3.38	793.615	793.615	bb			0.0626			144.130	
248110002	Perchlorate-O(18)	107 > 89	3.37	14503.051	14503.051	bb			0.4334	86.68	-13.32	7272.6...	

MM 3/16/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8393

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110003

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 80

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.626	2.5	0.626	ug/kg	U	1	15-MAR-10 03:42	per0314090a
	Perchlorate Isotope Ratio						1	15-MAR-10 03:42	per0314090a
14797-73-0	Perchlorate-101	.626	2.5	0.626	ug/kg	U	1	15-MAR-10 03:42	per0314090a
	Perchlorate-O(18)			5.13	ug/kg		1	15-MAR-10 03:42	per0314090a

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

*Concentration =

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

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

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

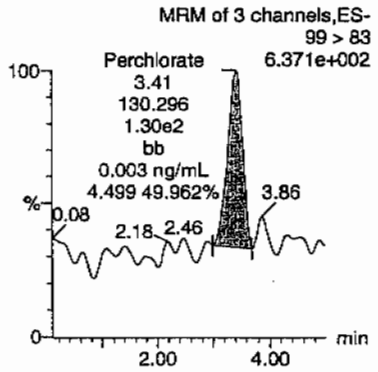
Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314090a
Date: 15-Mar-2010
Time: 03:42:06
ID: 248110003
Vial: 2:7,A

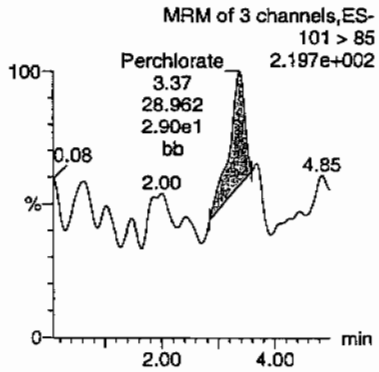
|LANL|958963|SOLID|1|

CWJ
03-15-10

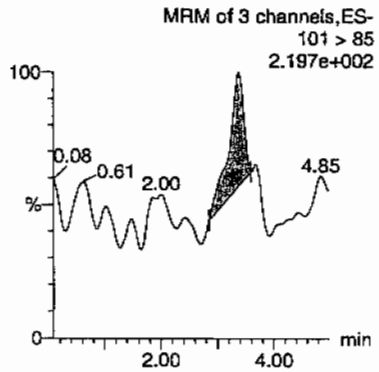
Perchlorate



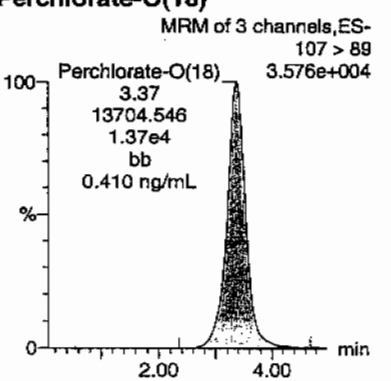
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248110003	Perchlorate	99 > 83	3.41	130.296	130.296	bb			0.0033			7.165	4.50
248110003	Perchlorate-101	101 > 85	3.37	28.962	28.962	bb			0.0023			7.968	
248110003	Perchlorate-O(18)	107 > 89	3.37	13704.546	13704.546	bb			0.4096	81.91	-18.09	1422.7...	

OKAY
<0.500

MAD
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: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8395

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110004

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 95.6

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.523	2.09	0.907	ug/kg	J	1	15-MAR-10 03:50	per0314091a
	Perchlorate Isotope Ratio			2.94			1	15-MAR-10 03:50	per0314091a
14797-73-0	Perchlorate-101	.523	2.09	0.953	ug/kg	J	1	15-MAR-10 03:50	per0314091a
	Perchlorate-O(18)			4.40	ug/kg		1	15-MAR-10 03:50	per0314091a

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

*Concentration =

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

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

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

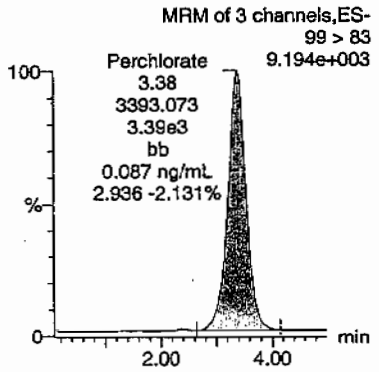
Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314091a
Date: 15-Mar-2010
Time: 03:50:21
ID: 248110004
Vial: 2:7,B

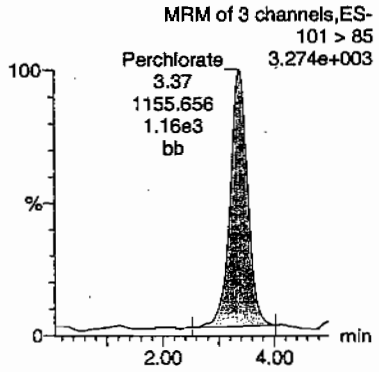
LANL 958963 5070 1 1

03-15-10

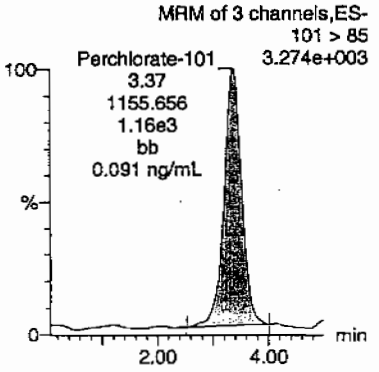
Perchlorate



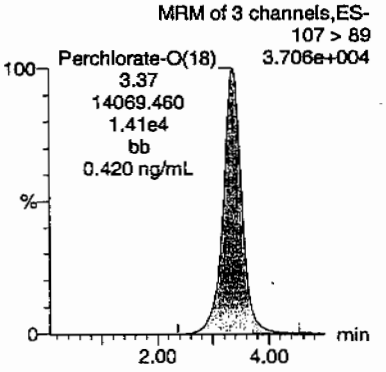
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248110004	Perchlorate	99 > 83	3.38	3393.073	3393.073	bb			0.0867			492.344	2.94
248110004	Perchlorate-101	101 > 85	3.37	1155.656	1155.656	bb			0.0911			177.760	
248110004	Perchlorate-O(18)	107 > 89	3.37	14069.460	14069.460	bb			0.4205	84.09	-15.91	2135.0...	

MM 3/16/10

$$\frac{3393.073}{39154.1} = 0.0867$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8398

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110005

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.574	2.29	0.737	ug/kg	J	1	15-MAR-10 03:58	per0314092a
	Perchlorate Isotope Ratio			3.08			1	15-MAR-10 03:58	per0314092a
14797-73-0	Perchlorate-101	.574	2.29	0.739	ug/kg	J	1	15-MAR-10 03:58	per0314092a
	Perchlorate-O(18)			4.60	ug/kg		1	15-MAR-10 03:58	per0314092a

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

*Concentration =

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

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

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

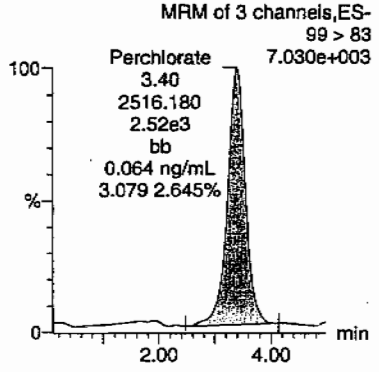
Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314092a
Date: 15-Mar-2010
Time: 03:58:25
ID: 248110005
Vial: 2:7,C

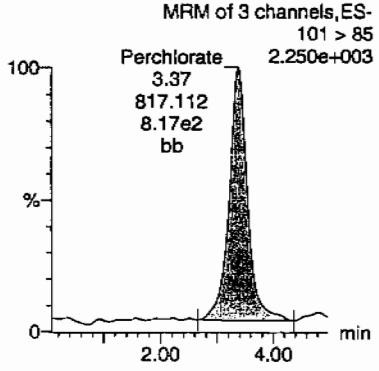
|LANL|958963|SOLID|1|

03-15-10

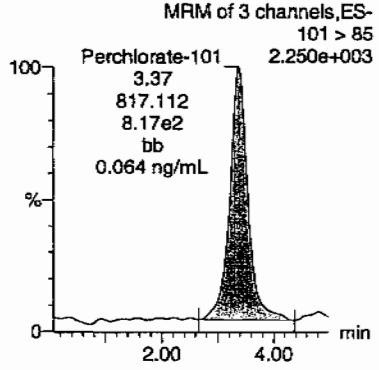
Perchlorate



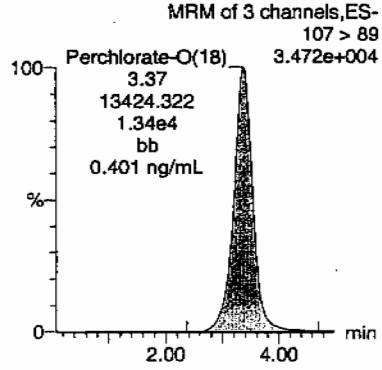
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248110005	Perchlorate	99 > 83	3.40	2516.180	2516.180	bb			0.0643			275.414	3.08
248110005	Perchlorate-101	101 > 85	3.37	817.112	817.112	bb			0.0644			206.303	
248110005	Perchlorate-O(18)	107 > 89	3.37	13424.322	13424.322	bb			0.4012	80.24	-19.76	388.868	

MAP 3/16/10

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

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8394

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110006

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.558	2.23	1.50	ug/kg	J	1	15-MAR-10 04:06	per0314093a
	Perchlorate Isotope Ratio			3.05			1	15-MAR-10 04:06	per0314093a
14797-73-0	Perchlorate-101	.558	2.23	1.52	ug/kg	J	1	15-MAR-10 04:06	per0314093a
	Perchlorate-O(18)			4.98	ug/kg		1	15-MAR-10 04:06	per0314093a

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

*Concentration =

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

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

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

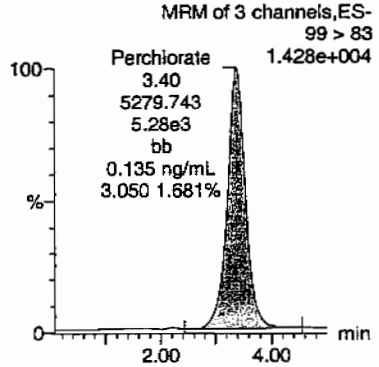
Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314093a
Date: 15-Mar-2010
Time: 04:06:29
ID: 248110006
Vial: 2:7,D

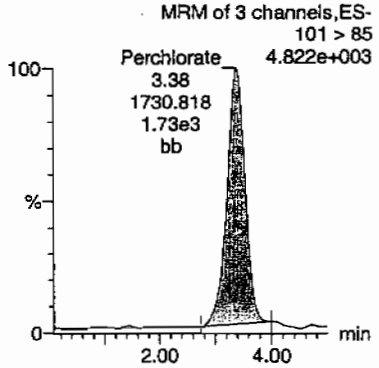
LCMS | 958963 | SOP | 1 |

03-15-10

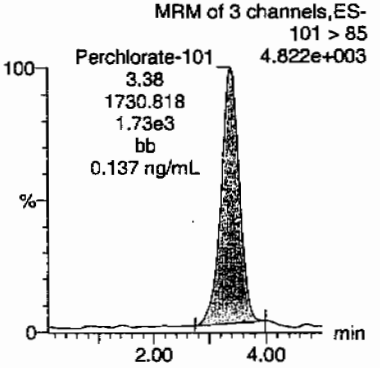
Perchlorate



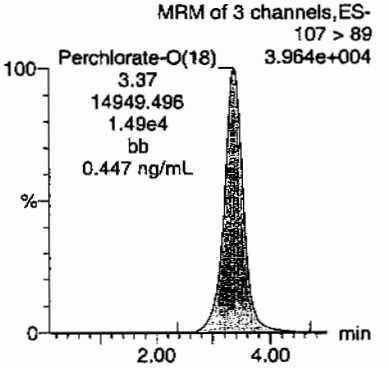
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	ModDate	ModTime	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248110006	Perchlorate	99 > 83	3.40	5279.743	5279.743	bb			0.1348			865.827	3.05
248110006	Perchlorate-101	101 > 85	3.38	1730.818	1730.818	bb			0.1365			210.371	
248110006	Perchlorate-O(18)	107 > 89	3.37	14949.496	14949.496	bb			0.4468	89.35	-10.65	1083.7...	

MM 3/16/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8399

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110007

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 88

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.566	2.26	1.23	ug/kg	J	1	15-MAR-10 04:14	per0314094a
	Perchlorate Isotope Ratio			3.07			1	15-MAR-10 04:14	per0314094a
14797-73-0	Perchlorate-101	.566	2.26	1.24	ug/kg	J	1	15-MAR-10 04:14	per0314094a
	Perchlorate-O(18)			4.56	ug/kg		1	15-MAR-10 04:14	per0314094a

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

*Concentration =

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

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

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

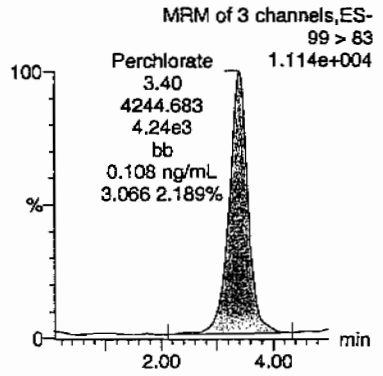
Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314094a
Date: 15-Mar-2010
Time: 04:14:32
ID: 248110007
Vial: 2:7,E

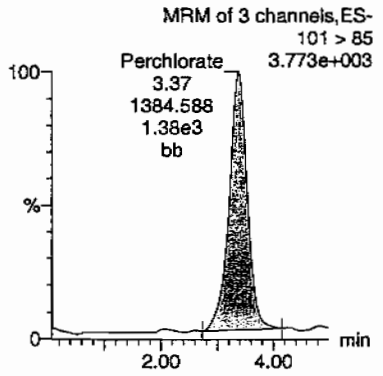
|LANL|958963|30120|1|

GW 03-1570

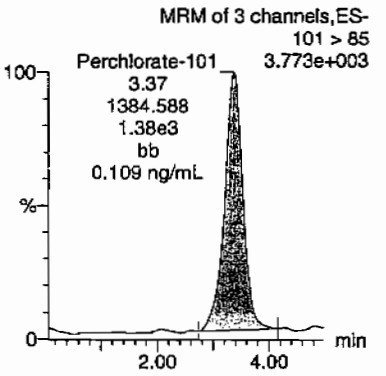
Perchlorate



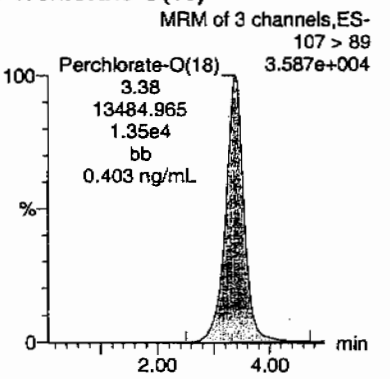
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248110007	Perchlorate	99 > 83	3.40	4244.683	4244.683	bb			0.1084			415.811	3.07
248110007	Perchlorate-101	101 > 85	3.37	1384.588	1384.588	bb			0.1092			262.671	
248110007	Perchlorate-O(18)	107 > 89	3.38	13484.965	13484.965	bb			0.4030	80.60	-19.40	590.203	

MM 3/16/10

$$\frac{4244.683}{39154.1} = 0.1084$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8397

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 248110008

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 93.9

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.533	2.13	0.631	ug/kg	J	1	15-MAR-10 04:22	per0314095a
	Perchlorate Isotope Ratio			2.85			1	15-MAR-10 04:22	per0314095a
14797-73-0	Perchlorate-101	.533	2.13	0.684	ug/kg	J	1	15-MAR-10 04:22	per0314095a
	Perchlorate-O(18)			4.03	ug/kg		1	15-MAR-10 04:22	per0314095a

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

*Concentration =

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

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

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

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

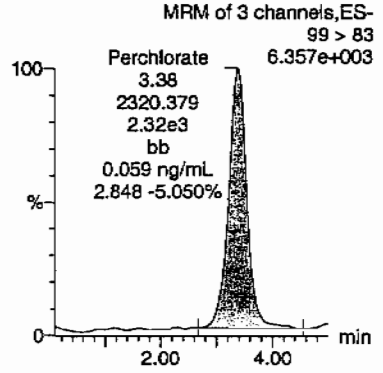
Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314095a
Date: 15-Mar-2010
Time: 04:22:34
ID: 248110008
Vial: 2:7,F

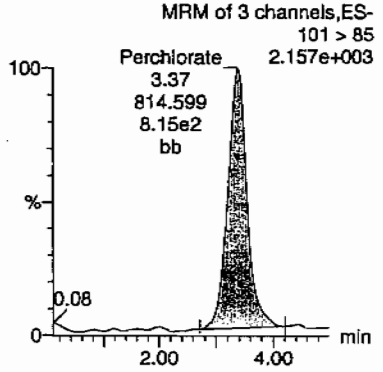
|LANL|958963|50120|1|

GWJ
03-15-10

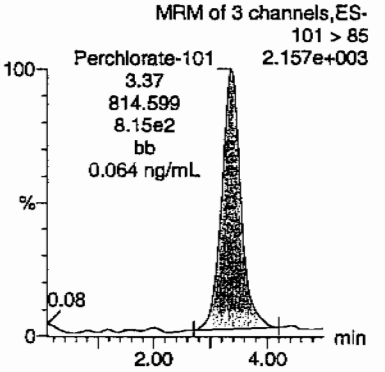
Perchlorate



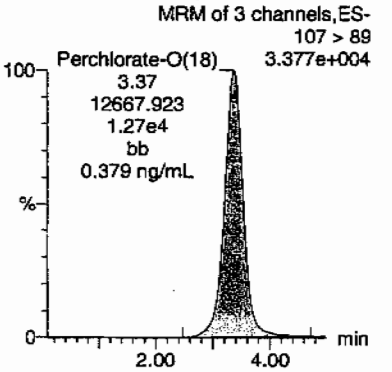
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248110008	Perchlorate	99 > 83	3.38	2320.379	2320.379	bb			0.0593			176.741	2.85
248110008	Perchlorate-101	101 > 85	3.37	814.599	814.599	bb			0.0642			45.350	
248110008	Perchlorate-O(18)	107 > 89	3.37	12667.923	12667.923	bb			0.3786	75.71	-24.29	797.138	

MAP
3/16/10

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

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STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-2090-1

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

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 39154.12

Response Type: External Standard

Curve Type: RF

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Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-2090-1

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

Parmname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 12679.04

Response Type: External Standard

Curve Type: RF

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

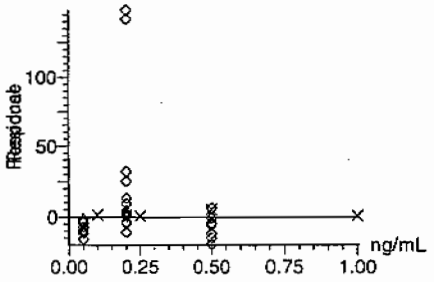
Quantify Calibration Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

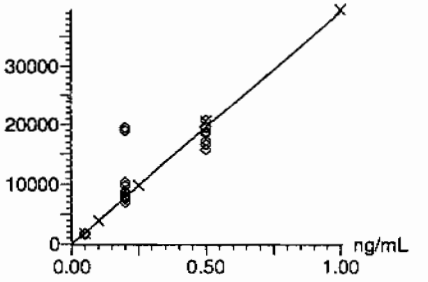
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

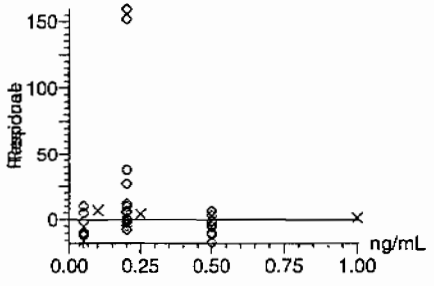
Compound name: Perchlorate
Response Factor: 39154.1
RRF SD: 1960.58, % Relative SD: 5.00734
Response type: External Std, Area
Curve type: RF

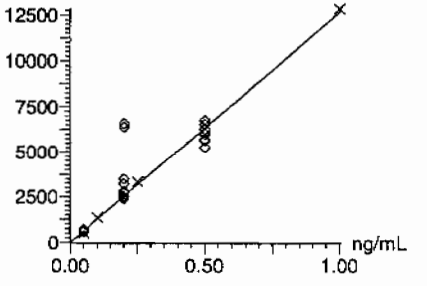




3303-15-10

Compound name: Perchlorate-101
Response Factor: 12679
RRF SD: 1159.92, % Relative SD: 9.14836
Response type: External Std, Area
Curve type: RF





MM 3/16/10

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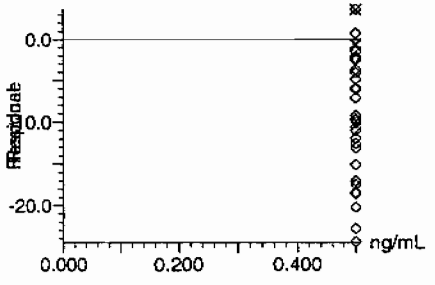
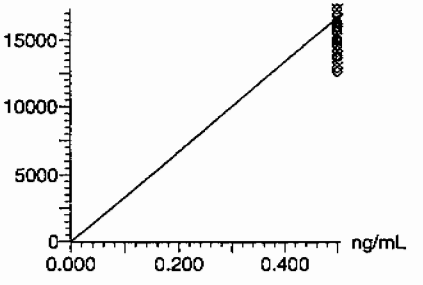
Quantify Calibration Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\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





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

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

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–2090–1

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

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The GEL Group, LLC Analyst: Charlers W. Wilson

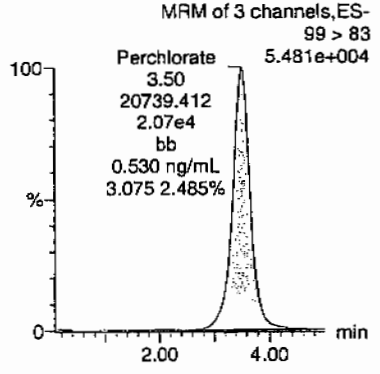
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

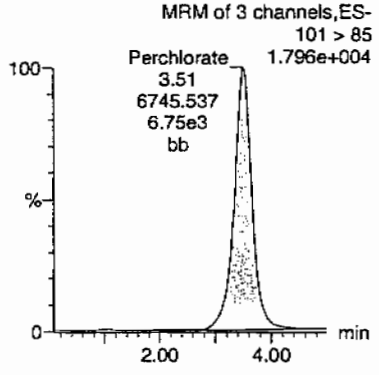
Name: per0314009a
Date: 14-Mar-2010
Time: 16:45:39
ID: WCL100309-06ICV
Vial: 1:2,A

Per 633 03-15-10

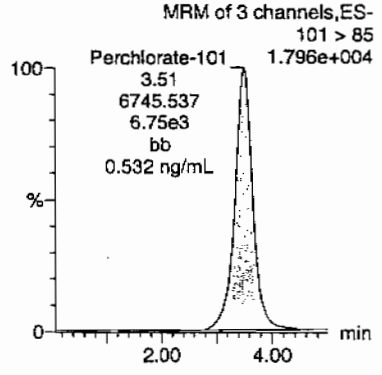
Perchlorate



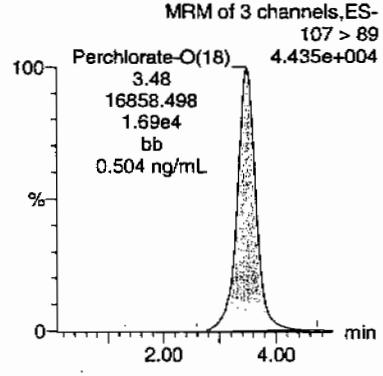
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-06ICV	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...	

MM 3/16/10

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

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Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–2090–1

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
Perchlorate	.5	.48	95.03	14–MAR–10 23:46	per0314061a
Perchlorate Isotope Ratio		3.05		14–MAR–10 23:46	per0314061a
Perchlorate–101	.5	.48	96.29	14–MAR–10 23:46	per0314061a
Perchlorate	.5	.48	96.15	15–MAR–10 01:32	per0314074a

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Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-2090-1

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate Isotope Ratio		2.99		15-MAR-10 01:32	per0314074a
Perchlorate-101	.5	.5	99.3	15-MAR-10 01:32	per0314074a
Perchlorate	.5	.47	93.97	15-MAR-10 03:17	per0314087a
Perchlorate Isotope Ratio		3.07		15-MAR-10 03:17	per0314087a
Perchlorate-101	.5	.47	94.57	15-MAR-10 03:17	per0314087a
Perchlorate	.5	.44	88.22	15-MAR-10 04:30	per0314096a
Perchlorate Isotope Ratio		3.01		15-MAR-10 04:30	per0314096a
Perchlorate-101	.5	.45	90.6	15-MAR-10 04:30	per0314096a

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

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

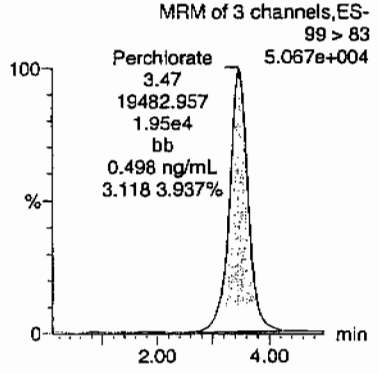
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

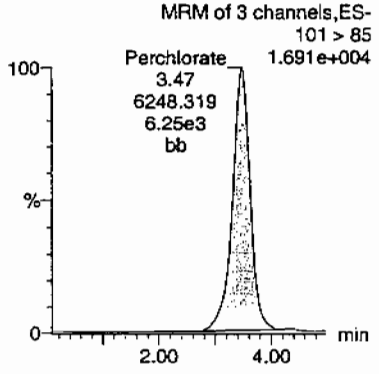
Name: per0314022a
Date: 14-Mar-2010
Time: 18:30:11
ID: WCL100309-06CCV
Vial: 1:2,A

Pass
and
03-15-10

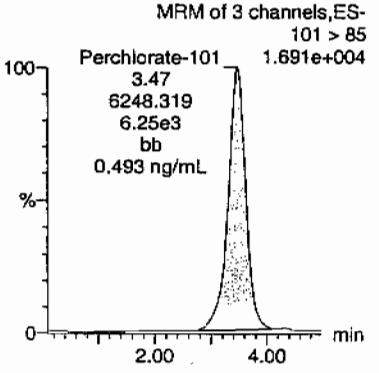
Perchlorate



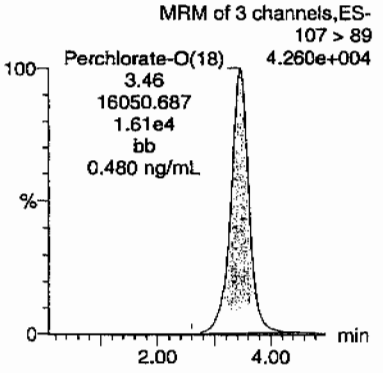
Perchlorate



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	3.47	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			0.4797	95.93	-4.07	2122.7...	

MAT
3/16/10

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

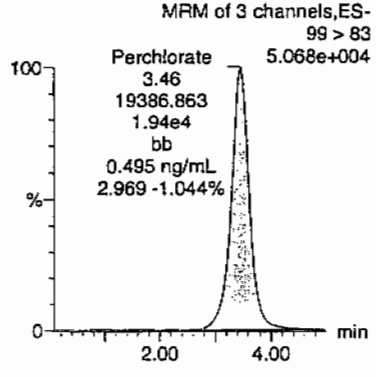
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

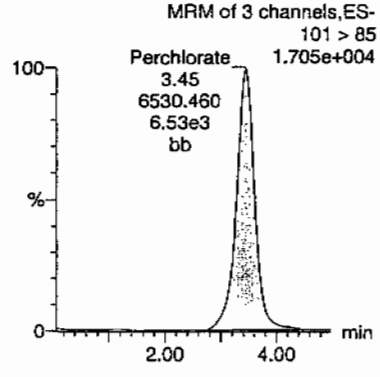
Name: per0314035a
Date: 14-Mar-2010
Time: 20:15:24
ID: WCL100309-06CCV
Vial: 1:2,A

Pass
03-15-10

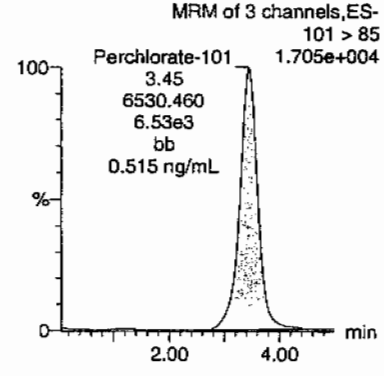
Perchlorate



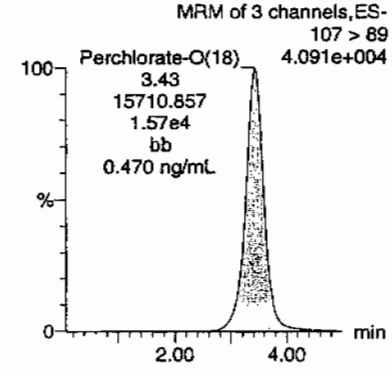
Perchlorate



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	3.46	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...	

MM 3/16/10

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

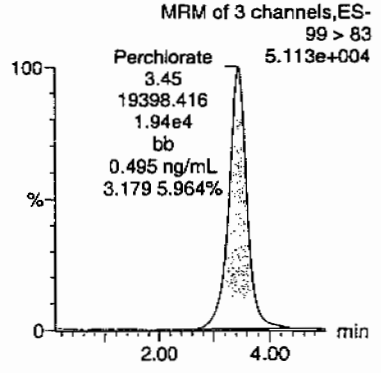
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

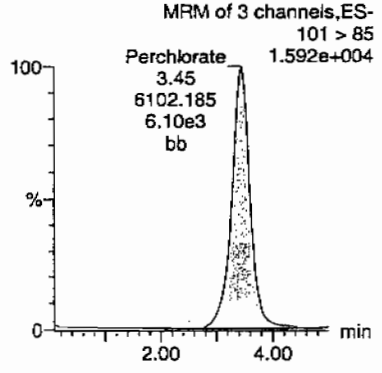
Name: per0314048a
Date: 14-Mar-2010
Time: 22:01:03
ID: WCL100309-06CCV
Vial: 1:2,A

Per 33 03-15-10

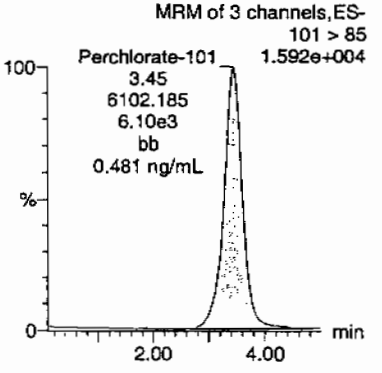
Perchlorate



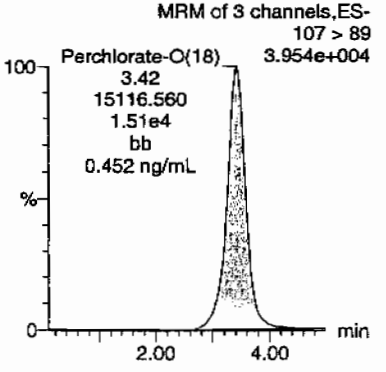
Perchlorate



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...	

MM 3/16/10

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

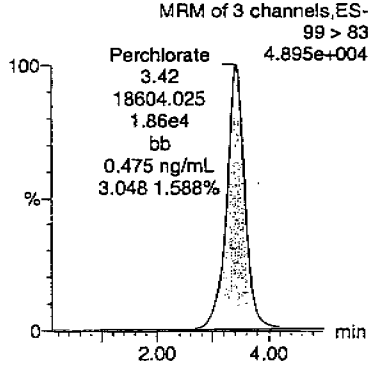
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

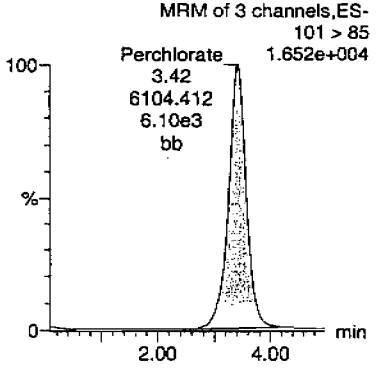
Name: per0314061a
Date: 14-Mar-2010
Time: 23:46:17
ID: WCL100309-06CCV
Vial: 1:2,A

PM
03-15-10

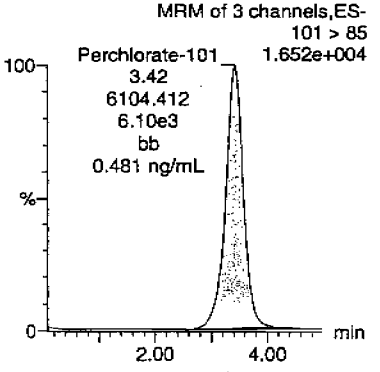
Perchlorate



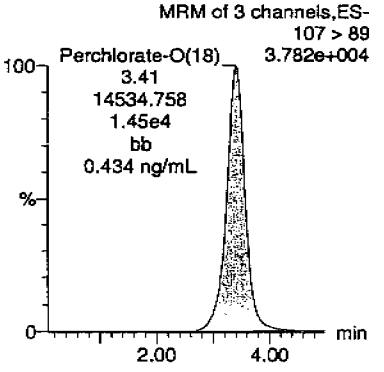
Perchlorate



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	3.42	18604.025	18604.025	bb			0.4751	95.03	-4.97	1515.8...	3.05
WCL100309-06CCV	Perchlorate-101	101 > 85	3.42	6104.412	6104.412	bb			0.4815	96.29	-3.71	357.264	
WCL100309-06CCV	Perchlorate-O(18)	107 > 89	3.41	14534.758	14534.758	bb			0.4344	86.87	-13.13	1454.4...	

MM
3/16/10

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

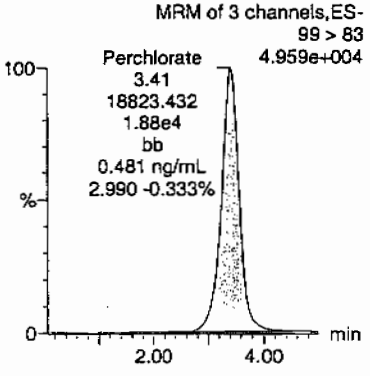
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

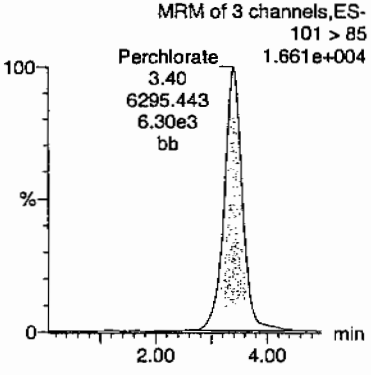
Name: per0314074a
Date: 15-Mar-2010
Time: 01:32:03
ID: WCL100309-06CCV
Vial: 1:2,A

Per
CWW
03-15-10

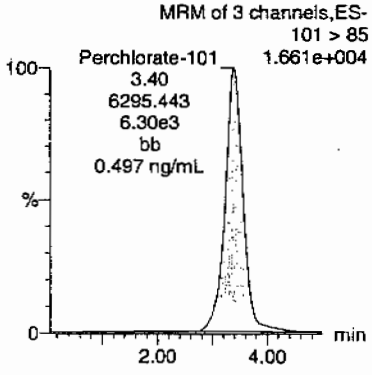
Perchlorate



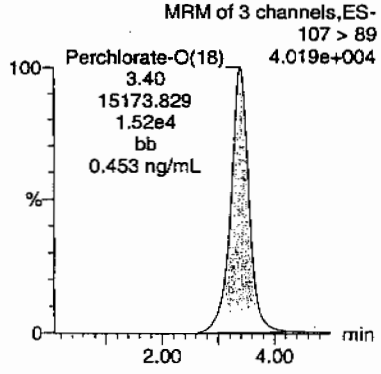
Perchlorate



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	3.41	18823.432	18823.432	bb			0.4808	96.15	-3.85	1562.4...	2.99
WCL100309-06CCV	Perchlorate-101	101 > 85	3.40	✓6295.443	6295.443	bb			0.4965	99.30	-0.70	1743.7...	
WCL100309-06CCV	Perchlorate-O(18)	107 > 89	3.40	15173.829	15173.829	bb			0.4535	90.69	-9.31	2249.6...	

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

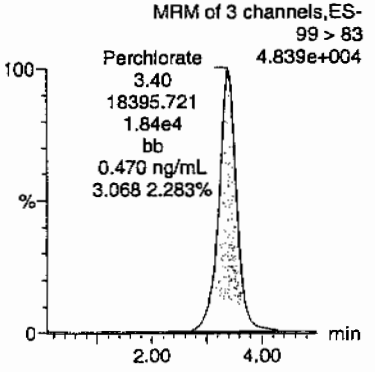
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

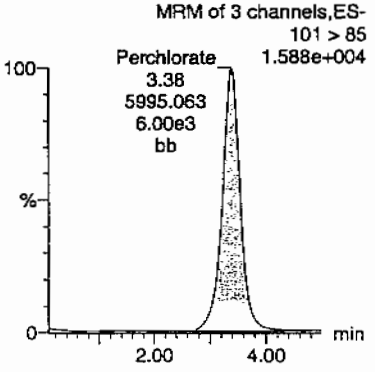
Name: per0314087a
Date: 15-Mar-2010
Time: 03:17:37
ID: WCL100309-06CCV
Vial: 1:2,A

Perc
03-15-10

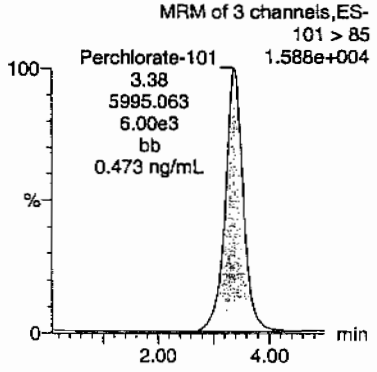
Perchlorate



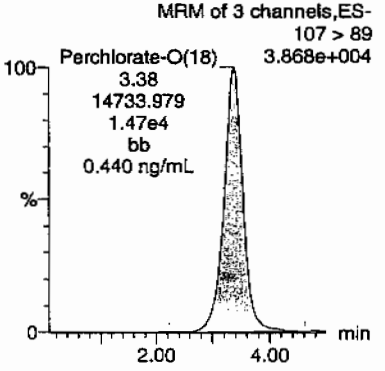
Perchlorate



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	3.40	18395.721	18395.721	bb			0.4698	93.97	-6.03	1140.5...	3.07
WCL100309-06CCV	Perchlorate-101	101 > 85	3.38	5995.063	5995.063	bb			0.4728	94.57	-5.43	719.324	
WCL100309-06CCV	Perchlorate-O(18)	107 > 89	3.38	14733.979	14733.979	bb			0.4403	88.06	-11.94	1435.1...	

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

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

The GEL Group, LLC Analyst: Charlers W. Wilson

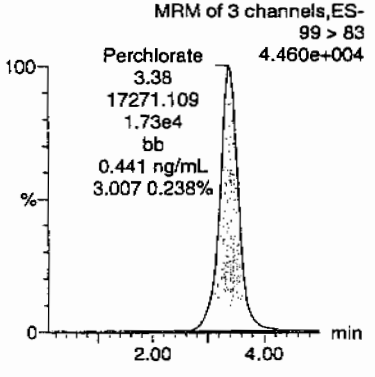
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

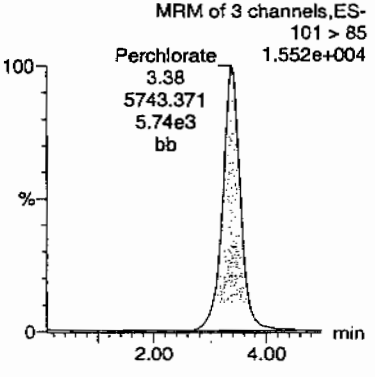
Name: per0314096a
Date: 15-Mar-2010
Time: 04:30:36
ID: WCL100309-06CCV
Vial: 1:2,A

03-15-10

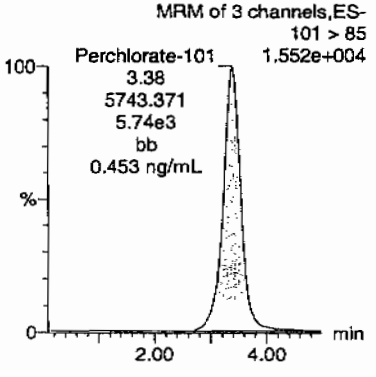
Perchlorate



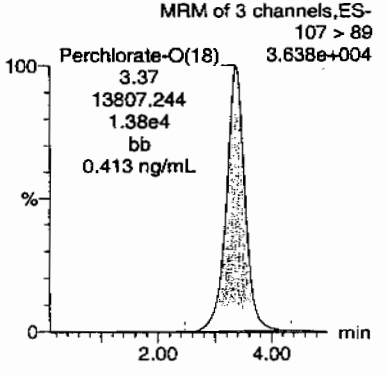
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-06CCV	Perchlorate	99 > 83	3.38	17271.109	17271.109	bb			0.4411	88.22	-11.78	1276.1...	3.01
WCL100309-06CCV	Perchlorate-101	101 > 85	3.38	5743.371	5743.371	bb			0.4530	90.60	-9.40	1304.3...	
WCL100309-06CCV	Perchlorate-O(18)	107 > 89	3.37	13807.244	13807.244	bb			0.4126	82.52	-17.48	1718.7...	

3/16/10

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–2090–1

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

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2090-1

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate-101	.05	.05	90.8	14-MAR-10 22:17	per0314050a
Perchlorate	.05	.05	92.88	15-MAR-10 00:02	per0314063a
Perchlorate Isotope Ratio		3.19		15-MAR-10 00:02	per0314063a
Perchlorate-101	.05	.04	89.83	15-MAR-10 00:02	per0314063a
Perchlorate	.05	.04	89.61	15-MAR-10 01:48	per0314076a
Perchlorate Isotope Ratio		3.04		15-MAR-10 01:48	per0314076a
Perchlorate-101	.05	.05	91.15	15-MAR-10 01:48	per0314076a
Perchlorate	.05	.05	95.99	15-MAR-10 03:34	per0314089a
Perchlorate Isotope Ratio		3.01		15-MAR-10 03:34	per0314089a
Perchlorate-101	.05	.05	98.6	15-MAR-10 03:34	per0314089a
Perchlorate	.05	.04	84.18	15-MAR-10 04:47	per0314098a

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–2090–1

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate Isotope Ratio		2.93		15–MAR–10 04:47	per0314098a
Perchlorate–101	.05	.04	88.63	15–MAR–10 04:47	per0314098a

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The GEL Group, LLC Analyst: Charlers W. Wilson

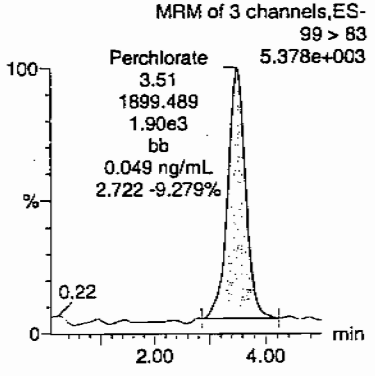
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

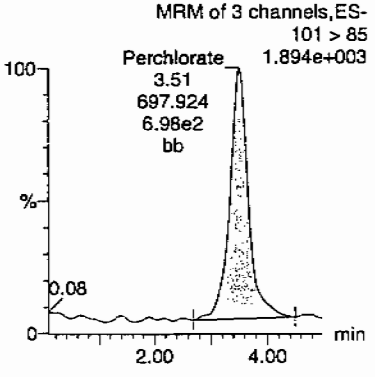
Name: per0314011a
Date: 14-Mar-2010
Time: 17:01:44
ID: WCL100309-07CRI
Vial: 1:2,B

Per 03-15-10

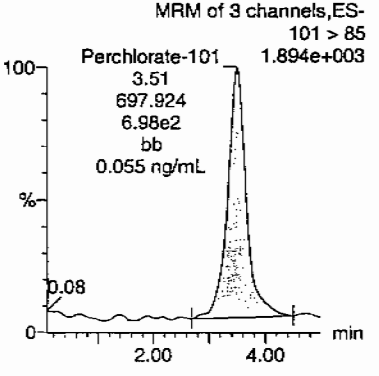
Perchlorate



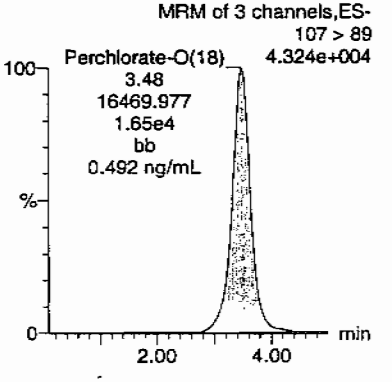
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-07CRI	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...	

MM 3/16/10

$\frac{1899.489}{39154.1} = 0.0485$

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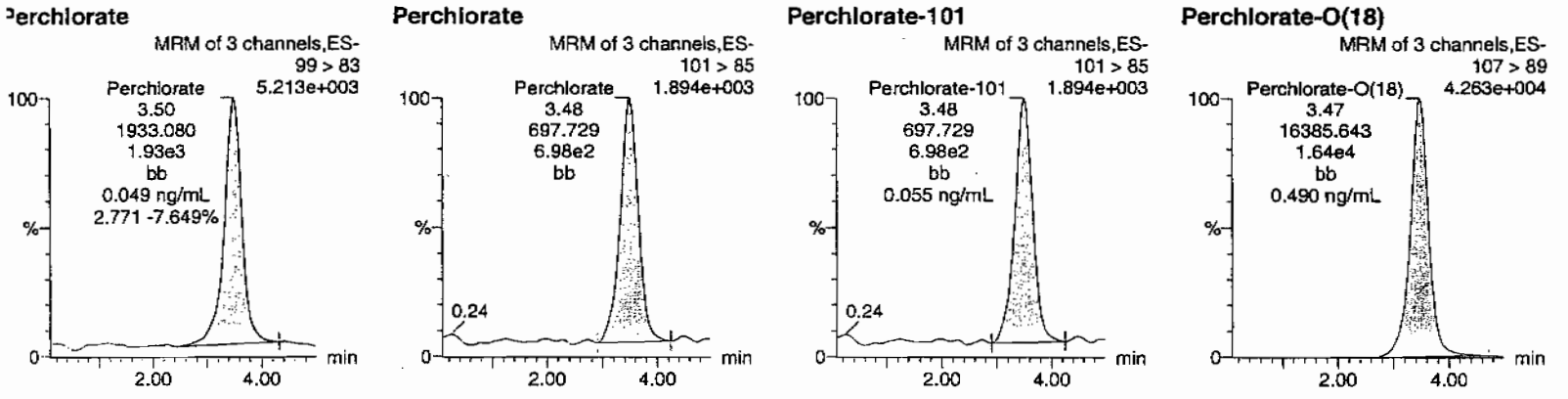
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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: per0314024a
Date: 14-Mar-2010
Time: 18:46:16
ID: WCL100309-07CRI
Vial: 1:2,B

Perch
ano
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	3.50	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...	

MAP
3/16/10

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

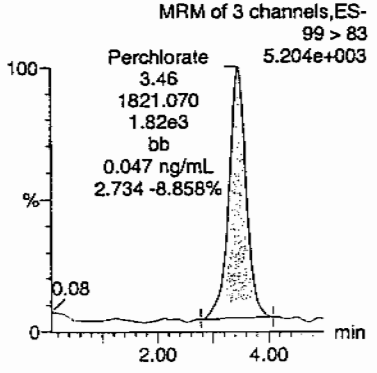
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

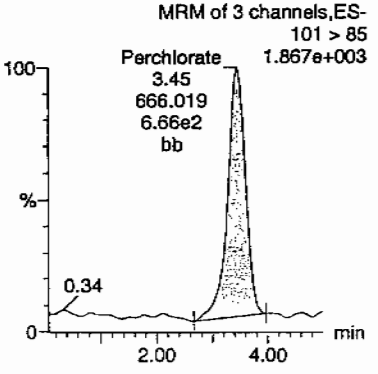
Name: per0314037a
Date: 14-Mar-2010
Time: 20:32:00
ID: WCL100309-07CRI
Vial: 1:2,B

Per 33 03-15-10

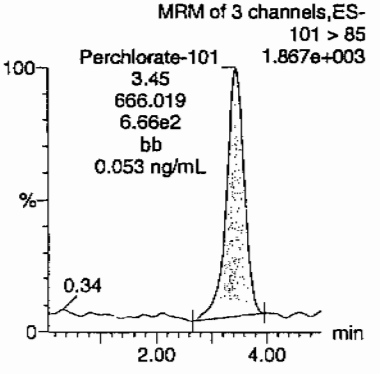
Perchlorate



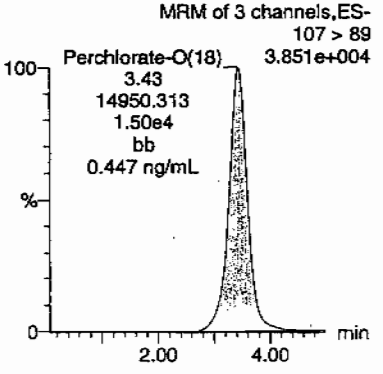
Perchlorate



Perchlorate-101



Perchlorate-O(18)



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	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	

MM 3/16/10

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

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

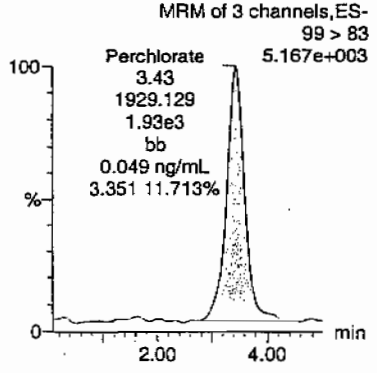
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

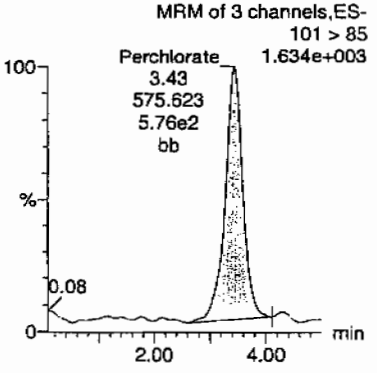
Name: per0314050a
Date: 14-Mar-2010
Time: 22:17:38
ID: WCL100309-07CRI
Vial: 1:2,B

Page 32 03-15-10

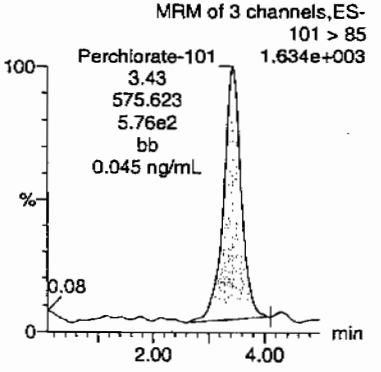
Perchlorate



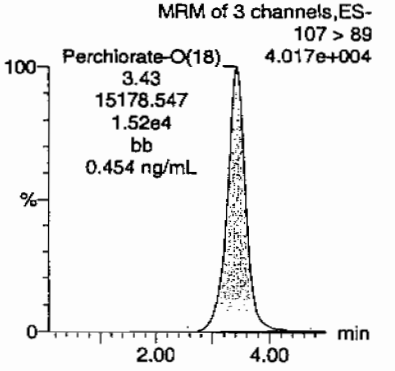
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-07CRI	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...	

MM 3/16/10

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

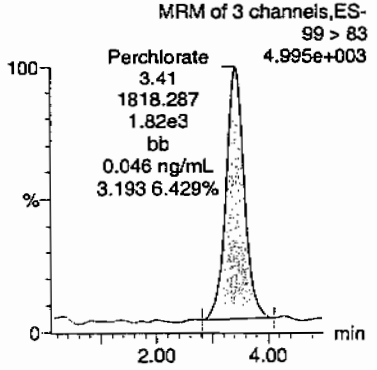
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

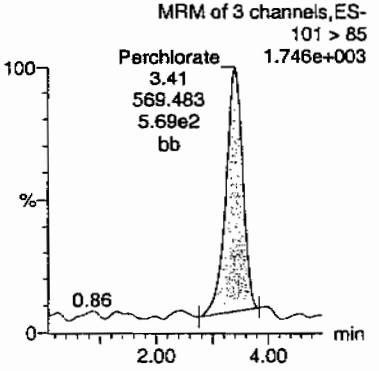
Name: per0314063a
Date: 15-Mar-2010
Time: 00:02:44
ID: WCL100309-07CRI
Vial: 1:2,B

P 3
03-15-10

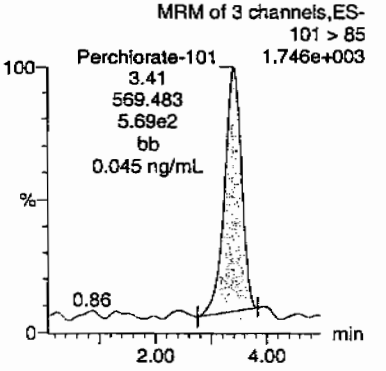
Perchlorate



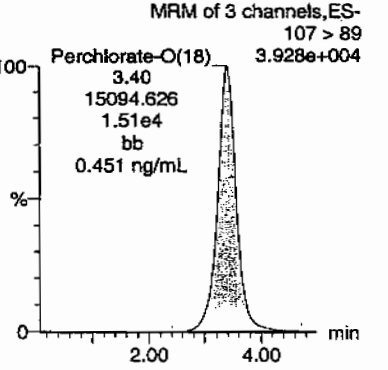
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-07CRI	Perchlorate	99 > 83	3.41	1818.287	1818.287	bb			0.0464	92.88	-7.12	192.354	3.19
WCL100309-07CRI	Perchlorate-101	101 > 85	3.41	569.483	569.483	bb			0.0449	89.83	-10.17	82.964	
WCL100309-07CRI	Perchlorate-O(18)	107 > 89	3.40	15094.626	15094.626	bb			0.4511	90.22	-9.78	3053.1...	

MM
5/16/10

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

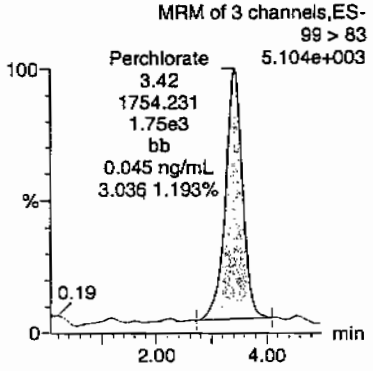
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

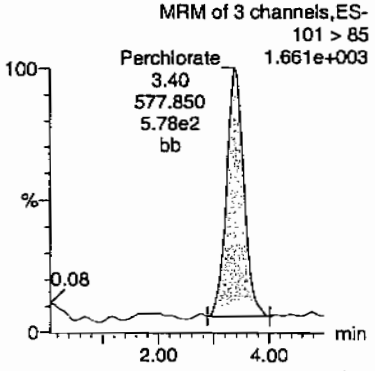
Name: per0314076a
Date: 15-Mar-2010
Time: 01:48:30
ID: WCL100309-07CRI
Vial: 1:2,B

Per 2
and
03-15-10

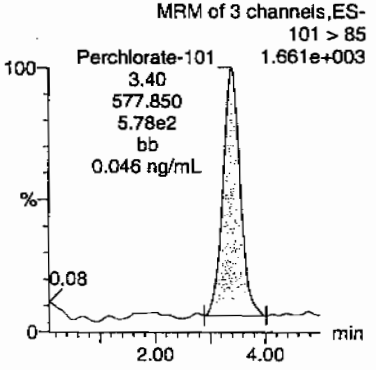
Perchlorate



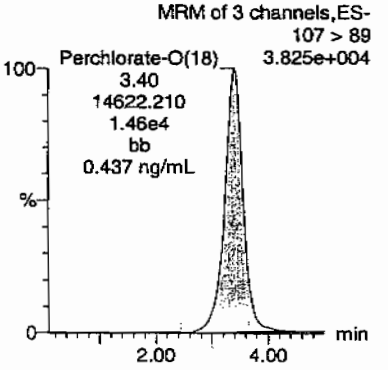
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-07CRI	Perchlorate	99 > 83	3.42	1754.231	1754.231	bb			0.0448	89.61	-10.39	207.159	3.04
WCL100309-07CRI	Perchlorate-101	101 > 85	3.40	577.850	577.850	bb			0.0456	91.15	-8.85	58.650	
WCL100309-07CRI	Perchlorate-O(18)	107 > 89	3.40	14622.210	14622.210	bb			0.4370	87.39	-12.61	6788.0...	

MM
3/16/10

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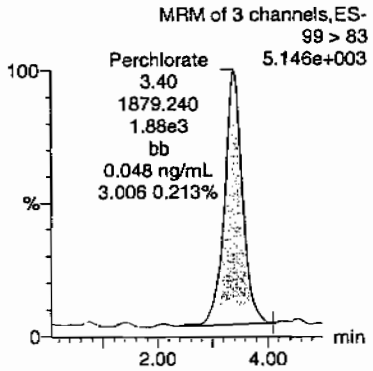
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

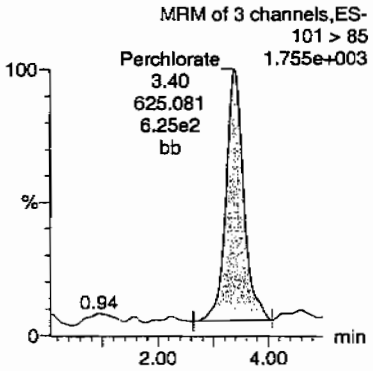
Name: per0314089a
Date: 15-Mar-2010
Time: 03:34:04
ID: WCL100309-07CRI
Vial: 1:2,B

Per 03-15-10

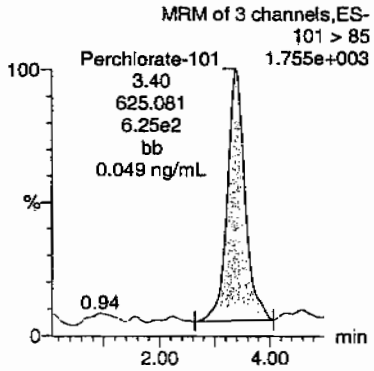
Perchlorate



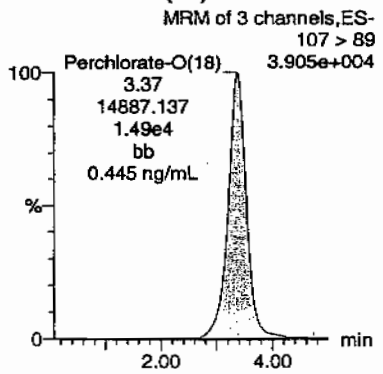
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-07CRI	Perchlorate	99 > 83	3.40	1879.240	1879.240	bb			0.0480	95.99	-4.01	285.465	3.01
WCL100309-07CRI	Perchlorate-101	101 > 85	3.40	625.081	625.081	bb			0.0493	98.60	-1.40	82.054	
WCL100309-07CRI	Perchlorate-O(18)	107 > 89	3.37	14887.137	14887.137	bb			0.4449	88.98	-11.02	4375.0...	

MM? 3/16/10

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

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

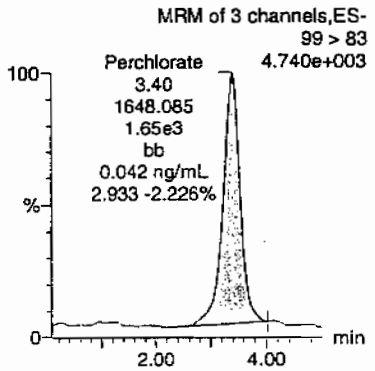
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

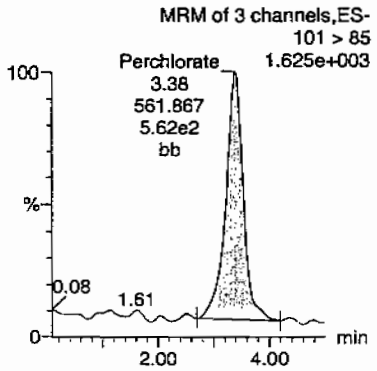
Name: per0314098a
Date: 15-Mar-2010
Time: 04:47:03
ID: WCL100309-07CRI
Vial: 1:2,B

Pwas
Cwo
03.15.10

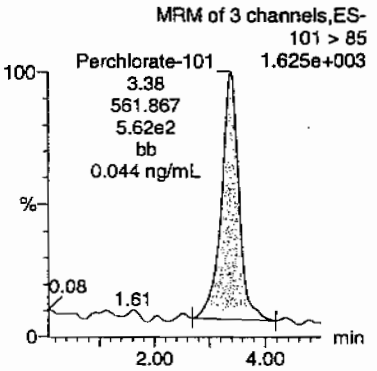
Perchlorate



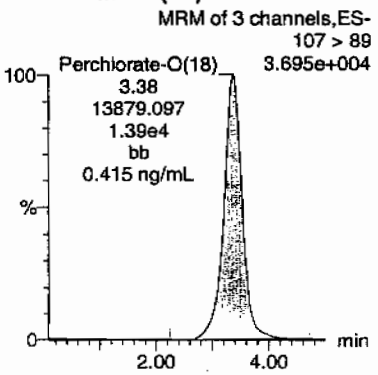
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-07CRI	Perchlorate	99 > 83	3.40	1648.085	1648.085	bb			0.0421	84.18	-15.82	184.355	2.93
WCL100309-07CRI	Perchlorate-101	101 > 85	3.38	561.867	561.867	bb			0.0443	88.63	-11.37	104.223	
WCL100309-07CRI	Perchlorate-O(18)	107 > 89	3.38	13879.097	13879.097	bb			0.4148	82.95	-17.05	2015.1...	

MAT
3/16/10

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

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

QUALITY CONTROL

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

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): 10-2090-1

GEL Sample ID: 1202056594

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	15-MAR-10 00:27	per0314066a
	Perchlorate Isotope Ratio						1	15-MAR-10 00:27	per0314066a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	15-MAR-10 00:27	per0314066a
	Perchlorate-O(18)			4.53	ug/kg		1	15-MAR-10 00:27	per0314066a

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

*Concentration =

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

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

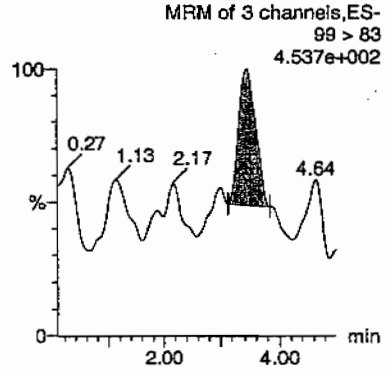
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

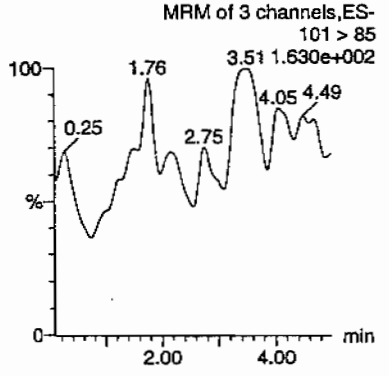
Name: per0314066a
Date: 15-Mar-2010
Time: 00:27:31
ID: 1202056594
Vial: 2:4,A

LANL | 958963 | SOLID | MB | 1 | 03-15-10

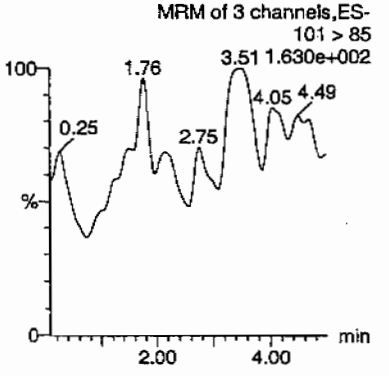
Perchlorate



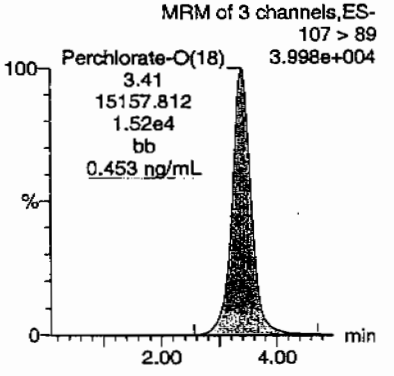
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Modified	Mod Time	Conc	%Rec	%Dev	S/N	Ion Ratio
1202056594	Perchlorate	99 > 83	3.45	74.077	74.077	bb			0.0019			4.938	0.00
1202056594	Perchlorate-101	101 > 85											
1202056594	Perchlorate-O(18)	107 > 89	3.41	15157.812	15157.812	bb			0.4530	90.60	-9.40	3322.9...	

MM 3/16/10

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
LCS

Date Received: 06-MAR-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 1202056595

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	2.04	ug/kg		1	15-MAR-10 00:35	per0314067a
	Perchlorate Isotope Ratio			2.99			1	15-MAR-10 00:35	per0314067a
14797-73-0	Perchlorate-101	.5	2	2.11	ug/kg		1	15-MAR-10 00:35	per0314067a
	Perchlorate-O(18)			4.70	ug/kg		1	15-MAR-10 00:35	per0314067a

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

*Concentration =

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

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

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

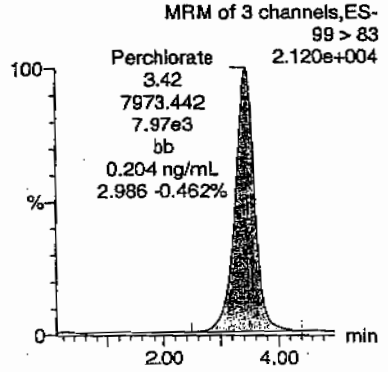
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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

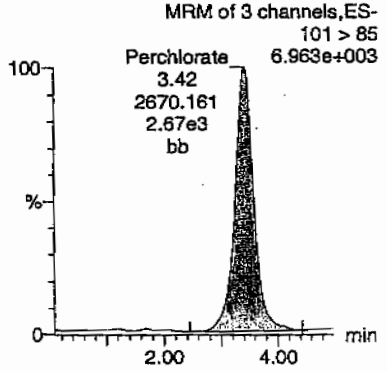
Name: per0314067a
Date: 15-Mar-2010
Time: 00:35:45
ID: 1202056595 |LANL|958963|50120|LCS|1|
Vial: 2:4,B

CWD 03-15-10

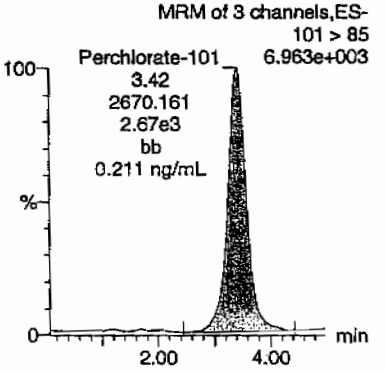
Perchlorate



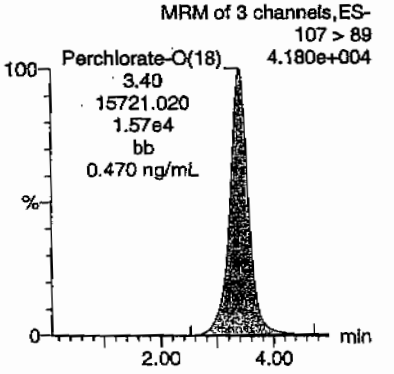
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202056595	Perchlorate	99 > 83	3.42	7973.442	7973.442	bb			0.2036	101.82	1.82	499.371	2.99
1202056595	Perchlorate-101	101 > 85	3.42	2670.161	2670.161	bb			0.2106	105.30	5.30	251.541	
1202056595	Perchlorate-O(18)	107 > 89	3.40	15721.020	15721.020	bb			0.4698	93.96	-6.04	3141.7...	

MM? 3/16/10

$\frac{7973.442}{39154.1} = 0.2036$

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

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8404MS

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 1202056596

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 90.6

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.552	2.21	2.91	ug/kg		1	15-MAR-10 02:53	per0314084a
	Perchlorate Isotope Ratio			2.96			1	15-MAR-10 02:53	per0314084a
14797-73-0	Perchlorate-101	.552	2.21	3.04	ug/kg		1	15-MAR-10 02:53	per0314084a
	Perchlorate-O(18)			4.98	ug/kg		1	15-MAR-10 02:53	per0314084a

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

*Concentration =

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

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

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

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

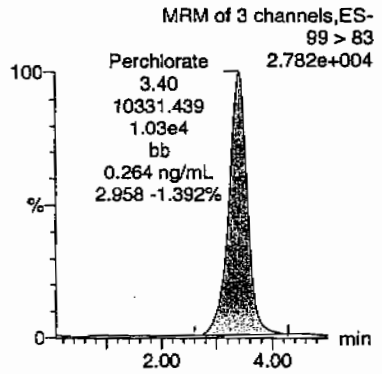
Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314084a
Date: 15-Mar-2010
Time: 02:53:29
ID: 1202056596
Vial: 2:6,D

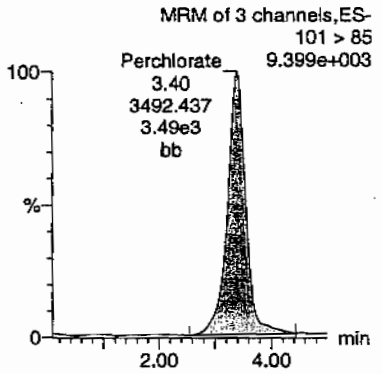
|LANL|958963|50L20|MS|1|

03-15-10

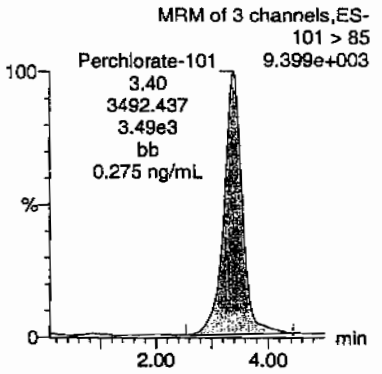
Perchlorate



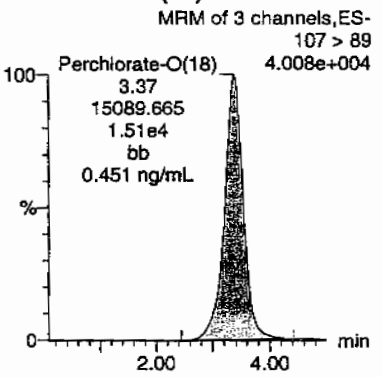
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	% Rec	dev	S/N	Ion Ratio
1202056596	Perchlorate	99 > 83	3.40	10331.439	10331.439	bb			0.2639	131.93	31.93	987.126	2.96
1202056596	Perchlorate-101	101 > 85	3.40	3492.437	3492.437	bb			0.2754	137.72	37.72	970.227	
1202056596	Perchlorate-O(18)	107 > 89	3.37	15089.665	15089.665	bb			0.4509	90.19	-9.81	1227.9...	

MM 3/16/10

$$\frac{10331.439}{3492.437} = 2.9582$$

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

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8404MSD

Date Received: 26-FEB-10

GEL Job No (SDG): 10-2090-1

GEL Sample ID: 1202056597

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 90.6

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.552	2.21	2.76	ug/kg		1	15-MAR-10 03:01	per0314085a
	Perchlorate Isotope Ratio			3.04			1	15-MAR-10 03:01	per0314085a
14797-73-0	Perchlorate-101	.552	2.21	2.81	ug/kg		1	15-MAR-10 03:01	per0314085a
	Perchlorate-O(18)			4.96	ug/kg		1	15-MAR-10 03:01	per0314085a

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

*Concentration =

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

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

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

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

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

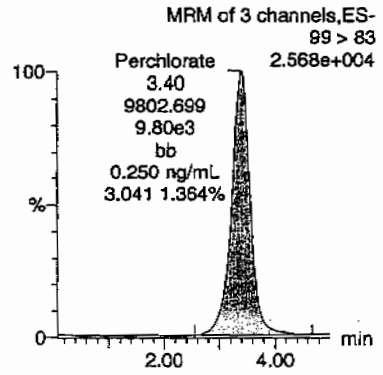
Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314085a
Date: 15-Mar-2010
Time: 03:01:31
ID: 1202056597
Vial: 2:6,E

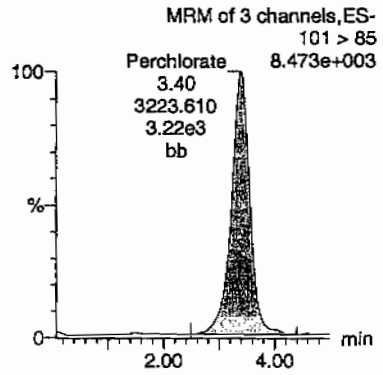
|LANL|958963|SOLID|1|

CWW 03-15-10

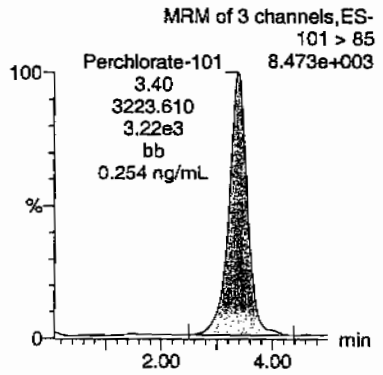
Perchlorate



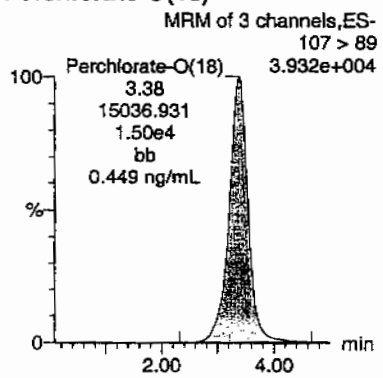
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202056597	Perchlorate	99 > 83	3.40	9802.699	9802.699	bb			0.2504	125.18	25.18	572.848	3.04
1202056597	Perchlorate-101	101 > 85	3.40	3223.610	3223.610	bb			0.2542	127.12	27.12	1455.2...	
1202056597	Perchlorate-O(18)	107 > 89	3.38	15036.931	15036.931	bb			0.4494	89.87	-10.13	2304.9...	

MMD 3/16/10

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

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MISCELLANEOUS DATA

Prep Logbook

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

Batch ID: 958955 Verified by: _____

Analyst: Jareth Shirley

Method: SW846 6850 Modified

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

Instrument: MicroMass Quatro Ultima

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202056594 MB	06-MAR-2010 16:48:00	2	20	10
1202056595 LCS	06-MAR-2010 16:48:00	2	20	10
248041001	06-MAR-2010 16:48:00	2	20	10
248041002	06-MAR-2010 16:48:00	2	20	10
248041003	06-MAR-2010 16:48:00	2	20	10
248041004	06-MAR-2010 16:48:00	2	20	10
248041005	06-MAR-2010 16:48:00	2	20	10
248054001	06-MAR-2010 16:48:00	2	20	10
248054002	06-MAR-2010 16:48:00	2	20	10
248054003	06-MAR-2010 16:48:00	2	20	10
248054004	06-MAR-2010 16:48:00	2	20	10
248068001	06-MAR-2010 16:48:00	2	20	10
248068002	06-MAR-2010 16:48:00	2	20	10
248110001	06-MAR-2010 16:48:00	2	20	10
1202056596 MS (248110001)	06-MAR-2010 16:48:00	2	20	10
1202056597 MSD (248110001)	06-MAR-2010 16:48:00	2	20	10
248110002	06-MAR-2010 16:48:00	2	20	10
248110003	06-MAR-2010 16:48:00	2	20	10
248110004	06-MAR-2010 16:48:00	2	20	10
248110005	06-MAR-2010 16:48:00	2	20	10
248110006	06-MAR-2010 16:48:00	2	20	10
248110007	06-MAR-2010 16:48:00	2	20	10
248110008	06-MAR-2010 16:48:00	2	20	10
1202056598 ICS	06-MAR-2010 16:48:00	2	20	10

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1202056598	10 ug/L ICV/CCV Second Source	UCL100226-01.1	.4	mL
LCS	1202056595	10 ug/L ICV/CCV Second Source	UCL100226-01.1	.4	mL
MS	1202056596	10 ug/L ICV/CCV Second Source	UCL100226-01.1	.4	mL
MSD	1202056597	10 ug/L ICV/CCV Second Source	UCL100226-01.1	.4	mL

Comments:

Desalting cartridges used: 100217-1-H & 100204-1-Ba

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GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS#2

Date: 03/14/10 Method: EPA 6850-Modified Reviewed BY: [illegible]
Extr. Injection Volume: 20uL Int. Std.: UCL100210-01 Date: 3/16/10
Sequence Number: per031410a Mobile Phase Lot#: 1278668, 1271949 SOP: GL-OA-E-067 Rev.6
Initial Calibration Date: 03/14/10 Standard-Samp Reagent Lot#:: 1271949 Alt Check Std. ID: WCL100309-06

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

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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

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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

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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

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Isotope Ratio Criteria

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

2.31-3.85

Tune Criteria

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

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2090

Sample Analysis

Sample ID	Client ID
248108001	RE15-10-8407
1202056866	Method Blank (MB) **ICP**
1202056867	Laboratory Control Sample (LCS)
1202056870	248199001(RE36-10-7529L) Serial Dilution (SD)
1202056868	248199001(RE36-10-7529D) Sample Duplicate (DUP)
1202056869	248199001(RE36-10-7529S) Matrix Spike (MS)
1202056872	Method Blank (MB) **ICP-MS**
1202056873	Laboratory Control Sample (LCS)
1202056876	248199001(RE36-10-7529L) Serial Dilution (SD)
1202056874	248199001(RE36-10-7529D) Sample Duplicate (DUP)
1202056875	248199001(RE36-10-7529S) Matrix Spike (MS)
1202056573	Method Blank (MB) **CVAA**
1202056574	Laboratory Control Sample (LCS)
1202056577	248145001(WST16-10-12239L) Serial Dilution (SD)
1202056575	248145001(WST16-10-12239D) Sample Duplicate (DUP)
1202056576	248145001(WST16-10-12239S) Matrix Spike (MS)

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

Method/Analysis Information

Analytical Batch:	959109, 959112 and 958951
Prep Batch :	959108, 959110 and 958949
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 7300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

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

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria with the exception of thallium in CCB04.

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: 248199001 (RE36-10-7529)-ICP and ICP-MS and 248145001 (WST16-10-12239)-CVAA.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Duplicate Relative Percent Difference (RPD) Statement
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

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

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight

on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

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

Miscellaneous Information

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

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

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

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

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

Review Validation:

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

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

Reviewer: Nikki-Cole A. Elmore **Date:** 4-17-10

Sample Data Summary

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10–2090 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248108001 **BASIS:** As Received **DATE COLLECTED** 22–FEB–10

CLIENT ID: RE15–10–8407 **LEVEL:** Low **DATE RECEIVED** 26–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	03/29/10 20:36	032910C–1	959109
7440–36–0	Antimony	3	ug/L	U	1	3	3	1	MS	PRB	04/13/10 13:46	100413–3	959112
7440–38–2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	03/29/10 20:36	032910C–1	959109
7440–39–3	Barium	5	ug/L	U	1	5	5	1	P	HSC	03/29/10 20:36	032910C–1	959109
7440–41–7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BCD1	04/12/10 04:15	100411–2	959112
7440–43–9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BCD1	04/12/10 04:15	100411–2	959112
7440–70–2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	03/29/10 20:36	032910C–1	959109
7440–47–3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	03/29/10 20:36	032910C–1	959109
7440–48–4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	03/29/10 20:36	032910C–1	959109
7440–50–8	Copper	10	ug/L	U	3	10	10	1	P	HSC	03/29/10 20:36	032910C–1	959109
7439–89–6	Iron	100	ug/L	U	30	100	100	1	P	HSC	03/29/10 20:36	032910C–1	959109
7439–92–1	Lead	0.851	ug/L	J	0.5	2	2	1	MS	BCD1	04/12/10 04:15	100411–2	959112
7439–95–4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	03/29/10 20:36	032910C–1	959109
7439–96–5	Manganese	5	ug/L	U	1	5	5	1	MS	BCD1	04/12/10 04:15	100411–2	959112
7439–97–6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	03/02/10 11:56	030210W3–6	958951
7440–02–0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	03/29/10 20:36	032910C–1	959109
7440–09–7	Potassium	66.3	ug/L	J	50	150	150	1	P	HSC	03/29/10 20:36	032910C–1	959109
7782–49–2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	03/29/10 20:36	032910C–1	959109
7440–22–4	Silver	5	ug/L	U	1	5	5	1	P	HSC	03/29/10 20:36	032910C–1	959109
7440–23–5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	03/29/10 20:36	032910C–1	959109
7440–28–0	Thallium	0.626	ug/L	J	0.3	1	1	1	MS	BCD1	04/12/10 04:15	100411–2	959112
7440–61–1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	04/13/10 16:20	100413–5	959112
7440–62–2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	03/29/10 20:36	032910C–1	959109
7440–66–6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	03/29/10 20:36	032910C–1	959109

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958951	958949	SW846 7470A Prep	20	mL	20	mL	03/01/10	TXB3
959109	959108	SW846 3005A	50	mL	50	mL	03/04/10	FGA
959112	959110	SW846 3005A	50	mL	50	mL	03/04/10	FGA

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–2090

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Mercury	5.2	ug/L	5	ug/L	104	90.0 – 110.0	AV	02–MAR–10 08:39	030210W3–6
	Aluminum	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	29–MAR–10 18:35	032910C–1
	Arsenic	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	29–MAR–10 18:35	032910C–1
	Barium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	29–MAR–10 18:35	032910C–1
	Calcium	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	29–MAR–10 18:35	032910C–1
	Chromium	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	29–MAR–10 18:35	032910C–1
	Cobalt	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	29–MAR–10 18:35	032910C–1
	Copper	510	ug/L	500	ug/L	102	90.0 – 110.0	P	29–MAR–10 18:35	032910C–1
	Iron	5010	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	29–MAR–10 18:35	032910C–1
	Magnesium	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	29–MAR–10 18:35	032910C–1
	Nickel	495	ug/L	500	ug/L	99	90.0 – 110.0	P	29–MAR–10 18:35	032910C–1
	Potassium	2470	ug/L	2500	ug/L	98.7	90.0 – 110.0	P	29–MAR–10 18:35	032910C–1
	Selenium	2470	ug/L	2500	ug/L	98.8	90.0 – 110.0	P	29–MAR–10 18:35	032910C–1
	Silver	257	ug/L	250	ug/L	102.8	90.0 – 110.0	P	29–MAR–10 18:35	032910C–1
	Sodium	2460	ug/L	2500	ug/L	98.5	90.0 – 110.0	P	29–MAR–10 18:35	032910C–1
	Vanadium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	29–MAR–10 18:35	032910C–1
	Zinc	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	29–MAR–10 18:35	032910C–1
	Beryllium	51.8	ug/L	50	ug/L	103.6	90.0 – 110.0	MS	12–APR–10 03:01	100411–2
	Cadmium	51.2	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	12–APR–10 03:01	100411–2
	Lead	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	12–APR–10 03:01	100411–2
	Manganese	53.3	ug/L	50	ug/L	106.6	90.0 – 110.0	MS	12–APR–10 03:01	100411–2
	Thallium	50	ug/L	50	ug/L	99.9	90.0 – 110.0	MS	12–APR–10 03:01	100411–2
	Antimony	53.1	ug/L	50	ug/L	106.3	90.0 – 110.0	MS	13–APR–10 11:52	100413–3
	Uranium	49.6	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	13–APR–10 15:17	100413–5
CCV01										
	Mercury	5.16	ug/L	5	ug/L	103.1	80.0 – 120.0	AV	02–MAR–10 08:45	030210W3–6
	Aluminum	5090	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	29–MAR–10 18:49	032910C–1
	Arsenic	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	29–MAR–10 18:49	032910C–1
	Barium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	29–MAR–10 18:49	032910C–1
	Calcium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	29–MAR–10 18:49	032910C–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2090

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Chromium	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Cobalt	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Copper	496	ug/L	500	ug/L	99.3	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Iron	4940	ug/L	5000	ug/L	98.8	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Magnesium	5080	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Nickel	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Potassium	5440	ug/L	5000	ug/L	108.7	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Selenium	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Silver	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Sodium	10000	ug/L	10000	ug/L	100	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Vanadium	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Zinc	488	ug/L	500	ug/L	97.7	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Beryllium	49	ug/L	50	ug/L	98	90.0 - 110.0	MS	12-APR-10 03:32	100411-2
	Cadmium	50.8	ug/L	50	ug/L	101.7	90.0 - 110.0	MS	12-APR-10 03:32	100411-2
	Lead	51.3	ug/L	50	ug/L	102.7	90.0 - 110.0	MS	12-APR-10 03:32	100411-2
	Manganese	52.9	ug/L	50	ug/L	105.8	90.0 - 110.0	MS	12-APR-10 03:32	100411-2
	Thallium	50.3	ug/L	50	ug/L	100.6	90.0 - 110.0	MS	12-APR-10 03:32	100411-2
	Antimony	52.6	ug/L	50	ug/L	105.1	90.0 - 110.0	MS	13-APR-10 12:04	100413-3
	Uranium	49.3	ug/L	50	ug/L	98.6	90.0 - 110.0	MS	13-APR-10 15:26	100413-5
CCV02										
	Mercury	5.13	ug/L	5	ug/L	102.6	80.0 - 120.0	AV	02-MAR-10 09:08	030210W3-6
	Aluminum	5100	ug/L	5000	ug/L	102	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Arsenic	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Barium	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Calcium	4970	ug/L	5000	ug/L	99.4	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Chromium	492	ug/L	500	ug/L	98.5	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Cobalt	490	ug/L	500	ug/L	98	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Copper	495	ug/L	500	ug/L	99	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Iron	4920	ug/L	5000	ug/L	98.4	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Magnesium	5070	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2090

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Nickel	491	ug/L	500	ug/L	98.3	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Potassium	4890	ug/L	5000	ug/L	97.8	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Selenium	483	ug/L	500	ug/L	96.6	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Silver	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Sodium	9880	ug/L	10000	ug/L	98.8	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Vanadium	500	ug/L	500	ug/L	100	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Zinc	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Beryllium	49.9	ug/L	50	ug/L	99.9	90.0 - 110.0	MS	12-APR-10 03:51	100411-2
	Cadmium	52.1	ug/L	50	ug/L	104.2	90.0 - 110.0	MS	12-APR-10 03:51	100411-2
	Lead	52.4	ug/L	50	ug/L	104.8	90.0 - 110.0	MS	12-APR-10 03:51	100411-2
	Manganese	53.6	ug/L	50	ug/L	107.2	90.0 - 110.0	MS	12-APR-10 03:51	100411-2
	Thallium	50.8	ug/L	50	ug/L	101.7	90.0 - 110.0	MS	12-APR-10 03:51	100411-2
	Antimony	52.9	ug/L	50	ug/L	105.8	90.0 - 110.0	MS	13-APR-10 12:31	100413-3
	Uranium	50.4	ug/L	50	ug/L	100.7	90.0 - 110.0	MS	13-APR-10 15:44	100413-5
CCV03										
	Mercury	5.06	ug/L	5	ug/L	101.1	80.0 - 120.0	AV	02-MAR-10 09:31	030210W3-6
	Aluminum	5160	ug/L	5000	ug/L	103.3	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Arsenic	515	ug/L	500	ug/L	103	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Barium	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Calcium	4960	ug/L	5000	ug/L	99.2	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Chromium	488	ug/L	500	ug/L	97.7	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Cobalt	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Copper	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Iron	4930	ug/L	5000	ug/L	98.5	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Magnesium	5060	ug/L	5000	ug/L	101.2	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Nickel	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Potassium	4830	ug/L	5000	ug/L	96.6	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Selenium	476	ug/L	500	ug/L	95.2	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Silver	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Sodium	9860	ug/L	10000	ug/L	98.6	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2090

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Vanadium	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Zinc	480	ug/L	500	ug/L	96.1	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Beryllium	49.2	ug/L	50	ug/L	98.4	90.0 - 110.0	MS	12-APR-10 05:05	100411-2
	Cadmium	50.4	ug/L	50	ug/L	100.8	90.0 - 110.0	MS	12-APR-10 05:05	100411-2
	Lead	50.7	ug/L	50	ug/L	101.4	90.0 - 110.0	MS	12-APR-10 05:05	100411-2
	Manganese	51.8	ug/L	50	ug/L	103.6	90.0 - 110.0	MS	12-APR-10 05:05	100411-2
	Thallium	48	ug/L	50	ug/L	96	90.0 - 110.0	MS	12-APR-10 05:05	100411-2
	Antimony	52.3	ug/L	50	ug/L	104.6	90.0 - 110.0	MS	13-APR-10 12:53	100413-3
	Uranium	48.8	ug/L	50	ug/L	97.6	90.0 - 110.0	MS	13-APR-10 15:59	100413-5
CCV04										
	Mercury	5.02	ug/L	5	ug/L	100.3	80.0 - 120.0	AV	02-MAR-10 09:54	030210W3-6
	Aluminum	5160	ug/L	5000	ug/L	103.1	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Arsenic	520	ug/L	500	ug/L	104.1	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Barium	498	ug/L	500	ug/L	99.5	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Calcium	4950	ug/L	5000	ug/L	98.9	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Chromium	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Cobalt	486	ug/L	500	ug/L	97.1	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Copper	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Iron	4910	ug/L	5000	ug/L	98.3	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Magnesium	5060	ug/L	5000	ug/L	101.2	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Nickel	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Potassium	4830	ug/L	5000	ug/L	96.7	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Selenium	476	ug/L	500	ug/L	95.2	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Silver	495	ug/L	500	ug/L	99.1	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Sodium	9860	ug/L	10000	ug/L	98.6	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Vanadium	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Zinc	479	ug/L	500	ug/L	95.8	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Beryllium	50.9	ug/L	50	ug/L	101.8	90.0 - 110.0	MS	12-APR-10 05:42	100411-2
	Cadmium	50	ug/L	50	ug/L	100	90.0 - 110.0	MS	12-APR-10 05:42	100411-2
	Lead	50.4	ug/L	50	ug/L	100.8	90.0 - 110.0	MS	12-APR-10 05:42	100411-2

METALS
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Initial and Continuing Calibration Verification

SDG No: 10–2090

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Manganese	52	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	12–APR–10 05:42	100411–2
	Thallium	48.2	ug/L	50	ug/L	96.5	90.0 – 110.0	MS	12–APR–10 05:42	100411–2
	Antimony	51.4	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	13–APR–10 13:21	100413–3
	Uranium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	13–APR–10 16:14	100413–5
CCV05										
	Mercury	5	ug/L	5	ug/L	99.9	80.0 – 120.0	AV	02–MAR–10 10:17	030210W3–6
	Aluminum	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Arsenic	532	ug/L	500	ug/L	106.5	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Barium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Calcium	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Chromium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Cobalt	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Copper	495	ug/L	500	ug/L	99	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Iron	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Magnesium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Nickel	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Potassium	4780	ug/L	5000	ug/L	95.7	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Selenium	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Silver	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Sodium	9800	ug/L	10000	ug/L	98	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Zinc	482	ug/L	500	ug/L	96.5	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Antimony	52.7	ug/L	50	ug/L	105.4	90.0 – 110.0	MS	13–APR–10 13:36	100413–3
	Uranium	49.5	ug/L	50	ug/L	98.9	90.0 – 110.0	MS	13–APR–10 16:29	100413–5
CCV06										
	Mercury	5.06	ug/L	5	ug/L	101.2	80.0 – 120.0	AV	02–MAR–10 10:41	030210W3–6
	Aluminum	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Arsenic	533	ug/L	500	ug/L	106.7	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Barium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Calcium	4890	ug/L	5000	ug/L	97.8	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1

METALS
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Initial and Continuing Calibration Verification

SDG No: 10–2090

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Chromium	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Cobalt	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Copper	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Iron	4870	ug/L	5000	ug/L	97.5	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Magnesium	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Nickel	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Potassium	4730	ug/L	5000	ug/L	94.6	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Selenium	471	ug/L	500	ug/L	94.2	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Silver	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Sodium	9760	ug/L	10000	ug/L	97.6	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Vanadium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Zinc	478	ug/L	500	ug/L	95.7	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Antimony	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	13–APR–10 13:59	100413–3
	Uranium	48.8	ug/L	50	ug/L	97.6	90.0 – 110.0	MS	13–APR–10 16:44	100413–5
CCV07										
	Mercury	5.01	ug/L	5	ug/L	100.3	80.0 – 120.0	AV	02–MAR–10 11:04	030210W3–6
	Antimony	51	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	13–APR–10 14:21	100413–3
CCV08										
	Mercury	5.21	ug/L	5	ug/L	104.3	80.0 – 120.0	AV	02–MAR–10 11:27	030210W3–6
CCV09										
	Mercury	4.93	ug/L	5	ug/L	98.7	80.0 – 120.0	AV	02–MAR–10 11:50	030210W3–6
CCV10										
	Mercury	5.01	ug/L	5	ug/L	100.1	80.0 – 120.0	AV	02–MAR–10 12:14	030210W3–6

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–2090

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.24	ug/L	.2	ug/L	120	70.0 – 130.0	AV	02–MAR–10 08:43	030210W3–6
	Lead	2.32	ug/L	2	ug/L	115.8	70.0 – 130.0	MS	12–APR–10 03:14	100411–2
	Thallium	1.14	ug/L	1	ug/L	114.3	70.0 – 130.0	MS	12–APR–10 03:14	100411–2
	Manganese	6.18	ug/L	5	ug/L	123.5	70.0 – 130.0	MS	12–APR–10 03:14	100411–2
	Cadmium	1.19	ug/L	1	ug/L	119	70.0 – 130.0	MS	12–APR–10 03:14	100411–2
	Beryllium	.545	ug/L	.5	ug/L	109	70.0 – 130.0	MS	12–APR–10 03:14	100411–2
	Antimony	2.94	ug/L	3	ug/L	98.1	70.0 – 130.0	MS	13–APR–10 11:57	100413–3
	Uranium	.216	ug/L	.2	ug/L	108	70.0 – 130.0	MS	13–APR–10 15:21	100413–5
PQL01										
	Aluminum	201	ug/L	200	ug/L	100.4	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Iron	103	ug/L	100	ug/L	103.4	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Magnesium	303	ug/L	300	ug/L	101.1	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Nickel	5.03	ug/L	5	ug/L	100.7	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Potassium	170	ug/L	150	ug/L	113.4	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Silver	4.62	ug/L	5	ug/L	92.4	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Sodium	260	ug/L	300	ug/L	86.8	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Arsenic	29.8	ug/L	30	ug/L	99.4	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Barium	5.16	ug/L	5	ug/L	103.1	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Chromium	4.84	ug/L	5	ug/L	96.8	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Cobalt	5.14	ug/L	5	ug/L	102.7	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Copper	10.1	ug/L	10	ug/L	101.4	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Vanadium	4.53	ug/L	5	ug/L	90.6	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Zinc	9.92	ug/L	10	ug/L	99.2	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Calcium	204	ug/L	200	ug/L	101.8	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Selenium	29.5	ug/L	30	ug/L	98.3	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–2090

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	02–MAR–10 08:41	030210W3–6
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	29–MAR–10 18:37	032910C–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	29–MAR–10 18:37	032910C–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 18:37	032910C–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	29–MAR–10 18:37	032910C–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 18:37	032910C–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 18:37	032910C–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	29–MAR–10 18:37	032910C–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	29–MAR–10 18:37	032910C–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	29–MAR–10 18:37	032910C–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	29–MAR–10 18:37	032910C–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	29–MAR–10 18:37	032910C–1
	Selenium	5.57	+/–30	J	5.0	30.0	LIQ	P	29–MAR–10 18:37	032910C–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 18:37	032910C–1
	Sodium	100	+/–300	U	100	300	LIQ	P	29–MAR–10 18:37	032910C–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 18:37	032910C–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	29–MAR–10 18:37	032910C–1
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	12–APR–10 03:08	100411–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	12–APR–10 03:08	100411–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	12–APR–10 03:08	100411–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	12–APR–10 03:08	100411–2
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	12–APR–10 03:08	100411–2
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	13–APR–10 11:54	100413–3
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	13–APR–10 15:19	100413–5
CCB01										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	02–MAR–10 08:47	030210W3–6
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	29–MAR–10 18:51	032910C–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	29–MAR–10 18:51	032910C–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 18:51	032910C–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	29–MAR–10 18:51	032910C–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 18:51	032910C–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2090

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	29-MAR-10 18:51	032910C-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	29-MAR-10 18:51	032910C-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	29-MAR-10 18:51	032910C-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	29-MAR-10 18:51	032910C-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	29-MAR-10 18:51	032910C-1
	Potassium	152.39	+/-150		50.0	150	LIQ	P	29-MAR-10 18:51	032910C-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	29-MAR-10 18:51	032910C-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	29-MAR-10 18:51	032910C-1
	Sodium	100	+/-300	U	100	300	LIQ	P	29-MAR-10 18:51	032910C-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	29-MAR-10 18:51	032910C-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	29-MAR-10 18:51	032910C-1
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	12-APR-10 03:38	100411-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	12-APR-10 03:38	100411-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	12-APR-10 03:38	100411-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	12-APR-10 03:38	100411-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	12-APR-10 03:38	100411-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	13-APR-10 12:07	100413-3
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	13-APR-10 15:27	100413-5
CCB02										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	02-MAR-10 09:10	030210W3-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	29-MAR-10 18:59	032910C-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	29-MAR-10 18:59	032910C-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	29-MAR-10 18:59	032910C-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	29-MAR-10 18:59	032910C-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	29-MAR-10 18:59	032910C-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	29-MAR-10 18:59	032910C-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	29-MAR-10 18:59	032910C-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	29-MAR-10 18:59	032910C-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	29-MAR-10 18:59	032910C-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	29-MAR-10 18:59	032910C-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	29-MAR-10 18:59	032910C-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–2090

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	29–MAR–10 18:59	032910C–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 18:59	032910C–1
	Sodium	100	+/–300	U	100	300	LIQ	P	29–MAR–10 18:59	032910C–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 18:59	032910C–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	29–MAR–10 18:59	032910C–1
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	12–APR–10 03:57	100411–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	12–APR–10 03:57	100411–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	12–APR–10 03:57	100411–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	12–APR–10 03:57	100411–2
	Thallium	0.597	+/–1	J	0.3	1.0	LIQ	MS	12–APR–10 03:57	100411–2
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	13–APR–10 12:34	100413–3
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	13–APR–10 15:45	100413–5
CCB03										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	02–MAR–10 09:33	030210W3–6
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	29–MAR–10 19:33	032910C–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	29–MAR–10 19:33	032910C–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 19:33	032910C–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	29–MAR–10 19:33	032910C–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 19:33	032910C–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 19:33	032910C–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	29–MAR–10 19:33	032910C–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	29–MAR–10 19:33	032910C–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	29–MAR–10 19:33	032910C–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	29–MAR–10 19:33	032910C–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	29–MAR–10 19:33	032910C–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	29–MAR–10 19:33	032910C–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 19:33	032910C–1
	Sodium	100	+/–300	U	100	300	LIQ	P	29–MAR–10 19:33	032910C–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 19:33	032910C–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	29–MAR–10 19:33	032910C–1
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	12–APR–10 05:11	100411–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–2090

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	12–APR–10 05:11	100411–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	12–APR–10 05:11	100411–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	12–APR–10 05:11	100411–2
	Thallium	0.37	+/–1	J	0.3	1.0	LIQ	MS	12–APR–10 05:11	100411–2
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	13–APR–10 12:56	100413–3
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	13–APR–10 16:00	100413–5
CCB04										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	02–MAR–10 09:56	030210W3–6
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	29–MAR–10 19:54	032910C–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	29–MAR–10 19:54	032910C–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 19:54	032910C–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	29–MAR–10 19:54	032910C–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 19:54	032910C–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 19:54	032910C–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	29–MAR–10 19:54	032910C–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	29–MAR–10 19:54	032910C–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	29–MAR–10 19:54	032910C–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	29–MAR–10 19:54	032910C–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	29–MAR–10 19:54	032910C–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	29–MAR–10 19:54	032910C–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 19:54	032910C–1
	Sodium	100	+/–300	U	100	300	LIQ	P	29–MAR–10 19:54	032910C–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 19:54	032910C–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	29–MAR–10 19:54	032910C–1
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	12–APR–10 05:49	100411–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	12–APR–10 05:49	100411–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	12–APR–10 05:49	100411–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	12–APR–10 05:49	100411–2
	Thallium	1.12	+/–1		0.3	1.0	LIQ	MS	12–APR–10 05:49	100411–2
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	13–APR–10 13:24	100413–3
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	13–APR–10 16:15	100413–5

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–2090

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB05										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	02–MAR–10 10:19	030210W3–6
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	29–MAR–10 20:16	032910C–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	29–MAR–10 20:16	032910C–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 20:16	032910C–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	29–MAR–10 20:16	032910C–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 20:16	032910C–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 20:16	032910C–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	29–MAR–10 20:16	032910C–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	29–MAR–10 20:16	032910C–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	29–MAR–10 20:16	032910C–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	29–MAR–10 20:16	032910C–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	29–MAR–10 20:16	032910C–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	29–MAR–10 20:16	032910C–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 20:16	032910C–1
	Sodium	100	+/–300	U	100	300	LIQ	P	29–MAR–10 20:16	032910C–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 20:16	032910C–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	29–MAR–10 20:16	032910C–1
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	13–APR–10 13:39	100413–3
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	13–APR–10 16:30	100413–5
CCB06										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	02–MAR–10 10:42	030210W3–6
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	29–MAR–10 20:41	032910C–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	29–MAR–10 20:41	032910C–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 20:41	032910C–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	29–MAR–10 20:41	032910C–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 20:41	032910C–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 20:41	032910C–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	29–MAR–10 20:41	032910C–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	29–MAR–10 20:41	032910C–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	29–MAR–10 20:41	032910C–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	29–MAR–10 20:41	032910C–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–2090

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	29–MAR–10 20:41	032910C–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	29–MAR–10 20:41	032910C–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	29–MAR–10 20:41	032910C–1
	Sodium	100	+/–300	U	100	300	LIQ	P	29–MAR–10 20:41	032910C–1
	Vanadium	–1.05	+/–5	J	1.0	5.0	LIQ	P	29–MAR–10 20:41	032910C–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	29–MAR–10 20:41	032910C–1
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	13–APR–10 14:01	100413–3
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	13–APR–10 16:45	100413–5
CCB07										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	02–MAR–10 11:06	030210W3–6
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	13–APR–10 14:23	100413–3
CCB08										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	02–MAR–10 11:29	030210W3–6
CCB09										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	02–MAR–10 11:52	030210W3–6
CCB10										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	02–MAR–10 12:15	030210W3–6

METALS
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PREPARATION BLANK SUMMARY

SDG NO. 10-2090
Contract: LANL01004
Matrix: WATER

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1202056573								
	Mercury	0.066	ug/L	+/-0.2	U	AV	0.066	0.2
1202056866								
	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
	Barium	1	ug/L	+/-5	U	P	1	5
	Arsenic	5	ug/L	+/-30	U	P	5	30
	Aluminum	68	ug/L	+/-200	U	P	68	200
	Zinc	3.3	ug/L	+/-10	U	P	3.3	10
	Calcium	50	ug/L	+/-200	U	P	50	200
	Selenium	5	ug/L	+/-30	U	P	5	30
	Potassium	50	ug/L	+/-150	U	P	50	150
	Nickel	1.5	ug/L	+/-5	U	P	1.5	5
	Magnesium	85	ug/L	+/-300	U	P	85	300
	Iron	30	ug/L	+/-100	U	P	30	100
	Copper	3	ug/L	+/-10	U	P	3	10
	Cobalt	1	ug/L	+/-5	U	P	1	5
	Chromium	1	ug/L	+/-5	U	P	1	5
1202056872								
	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	1.11	ug/L	+/-2	J	MS	0.5	2
	Manganese	1	ug/L	+/-5	U	MS	1	5
	Thallium	0.338	ug/L	+/-1	J	MS	0.3	1
	Uranium	0.05	ug/L	+/-0.2	U	MS	0.05	0.2

METALS
-4-
Interference Check Sample

SDG No: 10-2090

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	511000	ug/L	500000	ug/L	102	80.0 - 120.0	29-MAR-10 18:43	032910C-1
	Arsenic	4.51	ug/L					29-MAR-10 18:43	032910C-1
	Barium	0.49	ug/L					29-MAR-10 18:43	032910C-1
	Calcium	479000	ug/L	500000	ug/L	95.7	80.0 - 120.0	29-MAR-10 18:43	032910C-1
	Chromium	1.9	ug/L					29-MAR-10 18:43	032910C-1
	Cobalt	-6.27	ug/L					29-MAR-10 18:43	032910C-1
	Copper	-2.45	ug/L					29-MAR-10 18:43	032910C-1
	Iron	189000	ug/L	200000	ug/L	94.6	80.0 - 120.0	29-MAR-10 18:43	032910C-1
	Magnesium	481000	ug/L	500000	ug/L	96.2	80.0 - 120.0	29-MAR-10 18:43	032910C-1
	Nickel	2.89	ug/L					29-MAR-10 18:43	032910C-1
	Potassium	-157.0	ug/L					29-MAR-10 18:43	032910C-1
	Selenium	-3.7	ug/L					29-MAR-10 18:43	032910C-1
	Silver	0.683	ug/L					29-MAR-10 18:43	032910C-1
	Sodium	12.5	ug/L					29-MAR-10 18:43	032910C-1
	Vanadium	1.57	ug/L					29-MAR-10 18:43	032910C-1
	Zinc	7.6	ug/L					29-MAR-10 18:43	032910C-1
ICSAB01									
	Aluminum	520000	ug/L	500000	ug/L	104	80.0 - 120.0	29-MAR-10 18:45	032910C-1
	Arsenic	526	ug/L	500	ug/L	105	80.0 - 120.0	29-MAR-10 18:45	032910C-1
	Barium	500	ug/L	500	ug/L	100	80.0 - 120.0	29-MAR-10 18:45	032910C-1
	Calcium	487000	ug/L	500000	ug/L	97.4	80.0 - 120.0	29-MAR-10 18:45	032910C-1
	Chromium	485	ug/L	500	ug/L	96.9	80.0 - 120.0	29-MAR-10 18:45	032910C-1
	Cobalt	437	ug/L	500	ug/L	87.5	80.0 - 120.0	29-MAR-10 18:45	032910C-1
	Copper	537	ug/L	500	ug/L	107	80.0 - 120.0	29-MAR-10 18:45	032910C-1
	Iron	191000	ug/L	200000	ug/L	95.3	80.0 - 120.0	29-MAR-10 18:45	032910C-1
	Magnesium	483000	ug/L	500000	ug/L	96.6	80.0 - 120.0	29-MAR-10 18:45	032910C-1
	Nickel	451	ug/L	500	ug/L	90.1	80.0 - 120.0	29-MAR-10 18:45	032910C-1
	Potassium	5450	ug/L	5000	ug/L	109	80.0 - 120.0	29-MAR-10 18:45	032910C-1
	Selenium	2360	ug/L	2500	ug/L	94.4	80.0 - 120.0	29-MAR-10 18:45	032910C-1

METALS
-4-
Interference Check Sample

SDG No: 10-2090

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Silver	271	ug/L	250	ug/L	108	80.0 – 120.0	29-MAR-10 18:45	032910C-1
	Sodium	5320	ug/L	5000	ug/L	106	80.0 – 120.0	29-MAR-10 18:45	032910C-1
	Vanadium	517	ug/L	500	ug/L	103	80.0 – 120.0	29-MAR-10 18:45	032910C-1
	Zinc	484	ug/L	500	ug/L	96.8	80.0 – 120.0	29-MAR-10 18:45	032910C-1

METALS
-4-
Interference Check Sample

SDG No: 10-2090

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.135	ug/L					12-APR-10 03:20	100411-2
	Cadmium	0.235	ug/L					12-APR-10 03:20	100411-2
	Lead	0.207	ug/L					12-APR-10 03:20	100411-2
	Manganese	5.81	ug/L					12-APR-10 03:20	100411-2
	Thallium	-0.037	ug/L					12-APR-10 03:20	100411-2
ICSAB01									
	Beryllium	17.9	ug/L	20	ug/L	89.5	80.0 - 120.0	12-APR-10 03:26	100411-2
	Cadmium	19.0	ug/L	20.44	ug/L	92.7	80.0 - 120.0	12-APR-10 03:26	100411-2
	Lead	18.5	ug/L	20.19	ug/L	91.7	80.0 - 120.0	12-APR-10 03:26	100411-2
	Manganese	25.4	ug/L	25.8	ug/L	98.4	80.0 - 120.0	12-APR-10 03:26	100411-2
	Thallium	17.7	ug/L	20	ug/L	88.5	80.0 - 120.0	12-APR-10 03:26	100411-2

METALS
–4–
Interference Check Sample

SDG No: 10–2090

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	0.265	ug/L					13–APR–10 11:59	100413–3
ICSAB01									
	Antimony	20.3	ug/L	20	ug/L	101	80.0 – 120.0	13–APR–10 12:02	100413–3

METALS
-4-
Interference Check Sample

SDG No: 10-2090

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Uranium	-0.002	ug/L					13-APR-10 15:22	100413-5
ICSAB01									
	Uranium	21.0	ug/L	20	ug/L	105	80.0 - 120.0	13-APR-10 15:24	100413-5

METALS
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Matrix Spike Summary

SDG NO. 10–2090 **Client ID** WST16–10–12239S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 248145001 **Spike ID:** 1202056576

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75–125	2.27		0.066	U	2	112		AV

METALS
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Matrix Spike Summary

SDG NO. 10–2090 **Client ID** RE36–10–7529S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 248199001 **Spike ID:** 1202056869

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cobalt	ug/L	75–125	474		1	U	500	94.8		P
Copper	ug/L	75–125	496		3	U	500	99		P
Iron	ug/L	75–125	4880		30	U	5000	97.1		P
Magnesium	ug/L	75–125	5060		85	U	5000	101		P
Nickel	ug/L	75–125	487		1.5	U	500	97.4		P
Potassium	ug/L	75–125	4860		50	U	5000	96.2		P
Selenium	ug/L	75–125	461		5	U	500	92.2		P
Silver	ug/L	75–125	476		1	U	500	95.1		P
Sodium	ug/L	75–125	5030		115	J	5000	98.3		P
Vanadium	ug/L	75–125	497		1	U	500	99.4		P
Zinc	ug/L	75–125	467		3.3	U	500	93.1		P
Aluminum	ug/L	75–125	5190		68	U	5000	104		P
Arsenic	ug/L	75–125	535		5	U	500	107		P
Barium	ug/L	75–125	502		1	U	500	100		P
Calcium	ug/L	75–125	4930		50	U	5000	97.8		P
Chromium	ug/L	75–125	486		1	U	500	97.1		P

METALS
-5a-

Matrix Spike Summary

SDG NO. 10-2090 **Client ID** RE36-10-7529S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 248199001 **Spike ID:** 1202056875

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	206		1	U	200	103		MS
Beryllium	ug/L	75-125	48.6		0.1	U	50	97.2		MS
Cadmium	ug/L	75-125	9.94		0.11	U	10	99.4		MS
Lead	ug/L	75-125	41.5		1.43	J	40	100		MS
Manganese	ug/L	75-125	51.9		1	U	50	103		MS
Thallium	ug/L	75-125	84.4		0.3	U	100	84.1		MS
Uranium	ug/L	75-125	45.2		0.05	U	50	90.4		MS

Metals
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Duplicate Sample Summary

SDG No.: 10-2090

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** WST16-10-12239D

Sample ID: 248145001 **Duplicate ID:** 1202056575 **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
–6–
Duplicate Sample Summary

SDG No.: 10–2090

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE36–10–7529D

Sample ID: 248199001 **Duplicate ID:** 1202056868 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68	U	68	U			P
Arsenic	ug/L		5	U	5	U			P
Barium	ug/L		1	U	1	U			P
Calcium	ug/L		50	U	50	U			P
Chromium	ug/L		1	U	1	U			P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L		3	U	3	U			P
Iron	ug/L		30	U	30	U			P
Magnesium	ug/L		85	U	85	U			P
Nickel	ug/L		1.5	U	1.5	U			P
Potassium	ug/L		50	U	50	U			P
Selenium	ug/L		5	U	5	U			P
Silver	ug/L		1	U	1	U			P
Sodium	ug/L	+/–300	115	J	105	J	9.86		P
Vanadium	ug/L		1	U	1	U			P
Zinc	ug/L		3.3	U	3.3	U			P

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-2090

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE36-10-7529D

Sample ID: 248199001 **Duplicate ID:** 1202056874 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		1	U	1	U			MS
Beryllium	ug/L		0.1	U	0.1	U			MS
Cadmium	ug/L		0.11	U	0.11	U			MS
Lead	ug/L	+/-2	1.43	J	0.631	J	77.4		MS
Manganese	ug/L		1	U	1	U			MS
Thallium	ug/L		0.3	U	0.3	U			MS
Uranium	ug/L		0.05	U	0.05	U			MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-2090

Contract: LANL01004

Aqueous LCS Source: GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202056574								
	Mercury	ug/L	2	2.21		110	80-120	AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-2090

Contract: LANL01004

Aqueous LCS Source: OS21 **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202056867								
	Aluminum	ug/L	5000	5200		104	80-120	P
	Arsenic	ug/L	500	539		108	80-120	P
	Barium	ug/L	500	509		102	80-120	P
	Calcium	ug/L	5000	4960		99.1	80-120	P
	Chromium	ug/L	500	492		98.3	80-120	P
	Cobalt	ug/L	500	481		96.2	80-120	P
	Copper	ug/L	500	502		100	80-120	P
	Iron	ug/L	5000	4920		98.3	80-120	P
	Magnesium	ug/L	5000	5110		102	80-120	P
	Nickel	ug/L	500	496		99.2	80-120	P
	Potassium	ug/L	5000	4810		96.2	80-120	P
	Selenium	ug/L	500	475		95	80-120	P
	Silver	ug/L	500	482		96.5	80-120	P
	Sodium	ug/L	5000	4930		98.6	80-120	P
	Vanadium	ug/L	500	504		101	80-120	P
	Zinc	ug/L	500	477		95.3	80-120	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-2090

Contract: LANL01004

Aqueous LCS Source: O2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202056873								
	Antimony	ug/L	50	55.1		110	80-120	MS
	Beryllium	ug/L	50	48.6		97.1	80-120	MS
	Cadmium	ug/L	50	48.2		96.4	80-120	MS
	Lead	ug/L	50	52.2		104	80-120	MS
	Manganese	ug/L	50	53.8		108	80-120	MS
	Thallium	ug/L	50	47.8		95.6	80-120	MS
	Uranium	ug/L	50	44.9		89.7	80-120	MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-2090 **Client ID** WST16-10-12239L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 248145001 **Serial Dilution ID:** 1202056577

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

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-2090 **Client ID** RE36-10-7529L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 248199001 **Serial Dilution ID:** 1202056870

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	68	U	340	U				P
Arsenic	5	U	25	U				P
Barium	1	U	5	U				P
Calcium	50	U	250	U				P
Chromium	1	U	5	U				P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	30	U	150	U				P
Magnesium	85	U	425	U				P
Nickel	1.5	U	7.5	U				P
Potassium	50	U	250	U				P
Selenium	5	U	25	U				P
Silver	1	U	5	U				P
Sodium	115	J	500	U	100			P
Vanadium	1	U	5	U				P
Zinc	3.3	U	16.5	U				P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-2090 **Client ID** RE36-10-7529L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 248199001 **Serial Dilution ID:** 1202056876

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	1	U	5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	1.43	J	2.5	U	100			MS
Manganese	1	U	5	U				MS
Thallium	.3	U	13.4					MS
Uranium	.05	U	.25	U				MS

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2090 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 959108							
1202056866	MB for batch 959108	MB	W	04-MAR-10	50mL	50mL	
1202056867	LCS for batch 959108	LCS	W	04-MAR-10	50mL	50mL	
1202056869	RE36-10-7529S	MS	W	04-MAR-10	50mL	50mL	
1202056868	RE36-10-7529D	DUP	W	04-MAR-10	50mL	50mL	
248108001	RE15-10-8407	SAMPLE	W	04-MAR-10	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2090 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 959110							
1202056872	MB for batch 959110	MB	W	04-MAR-10	50mL	50mL	
1202056873	LCS for batch 959110	LCS	W	04-MAR-10	50mL	50mL	
1202056875	RE36-10-7529S	MS	W	04-MAR-10	50mL	50mL	
1202056874	RE36-10-7529D	DUP	W	04-MAR-10	50mL	50mL	
248108001	RE15-10-8407	SAMPLE	W	04-MAR-10	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2090 **Method Type**: AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 958949							
1202056573	MB for batch 958949	MB	W	01-MAR-10	20mL	20mL	
1202056574	LCS for batch 958949	LCS	W	01-MAR-10	20mL	20mL	
1202056576	WST16-10-12239S	MS	W	01-MAR-10	20mL	20mL	
1202056575	WST16-10-12239D	DUP	W	01-MAR-10	20mL	20mL	
248108001	RE15-10-8407	SAMPLE	W	01-MAR-10	20mL	20mL	

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 13–APR–10 **End Date:** 13–APR–10

Client Sdg: 10–2090
Method MS
Data File: 100413–3

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	11:45:00		X																						
S10	1	11:47:00		X																						
S100	1	11:49:00		X																						
ICV01	1	11:52:00		X																						
ICB01	1	11:54:00		X																						
CRDL01	1	11:57:00		X																						
ICSA01	1	11:59:00		X																						
ICSAB01	1	12:02:00		X																						
CCV01	1	12:04:00		X																						
CCB01	1	12:07:00		X																						
ZZZZZZ	1	12:09:00																								
ZZZZZZ	1	12:12:00																								
ZZZZZZ	1	12:14:00																								
ZZZZZZ	1	12:16:00																								
ZZZZZZ	1	12:19:00																								
ZZZZZZ	1	12:21:00																								
ZZZZZZ	1	12:24:00																								
ZZZZZZ	5	12:26:00																								
ZZZZZZ	1	12:29:00																								
CCV02	1	12:31:00		X																						
CCB02	1	12:34:00		X																						
ZZZZZZ	1	12:36:00																								
ZZZZZZ	1	12:39:00																								
ZZZZZZ	1	12:41:00																								
ZZZZZZ	1	12:44:00																								
ZZZZZZ	1	12:46:00																								
ZZZZZZ	1	12:48:00																								
ZZZZZZ	1	12:51:00																								
CCV03	1	12:53:00		X																						
CCB03	1	12:56:00		X																						
ZZZZZZ	1	12:58:00																								
ZZZZZZ	1	13:01:00																								
ZZZZZZ	1	13:03:00																								
ZZZZZZ	1	13:06:00																								
ZZZZZZ	1	13:08:00																								
ZZZZZZ	1	13:11:00																								
ZZZZZZ	5	13:13:00																								
ZZZZZZ	1	13:19:00																								
CCV04	1	13:21:00		X																						
CCB04	1	13:24:00		X																						

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																								
ZZZZZZ	1	13:26:00																								
ZZZZZZ	1	13:29:00																								
ZZZZZZ	1	13:31:00																								
ZZZZZZ	5	13:34:00																								
CCV05	1	13:36:00		X																						
CCB05	1	13:39:00		X																						
1202056872	1	13:41:00		X																						
1202056873	1	13:44:00		X																						
248108001	1	13:46:00		X																						
ZZZZZZ	1	13:49:00																								
ZZZZZZ	1	13:51:00																								
ZZZZZZ	1	13:54:00																								
ZZZZZZ	1	13:56:00																								
CCV06	1	13:59:00		X																						
CCB06	1	14:01:00		X																						
ZZZZZZ	1	14:04:00																								
ZZZZZZ	1	14:06:00																								
ZZZZZZ	1	14:08:00																								
ZZZZZZ	1	14:11:00																								
1202056874	1	14:13:00		X																						
1202056875	1	14:16:00		X																						
1202056876	5	14:18:00		X																						
CCV07	1	14:21:00		X																						
CCB07	1	14:23:00		X																						

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 13–APR–10 **End Date:** 13–APR–10

Client Sdg: 10–2090
Method MS
Data File: 100413–5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	15:12:00																						X		
S10	1	15:14:00																						X		
S100	1	15:16:00																						X		
ICV01	1	15:17:00																						X		
ICB01	1	15:19:00																						X		
CRDL01	1	15:21:00																						X		
ICSA01	1	15:22:00																						X		
ICSAB01	1	15:24:00																						X		
CCV01	1	15:26:00																						X		
CCB01	1	15:27:00																						X		
ZZZZZZ	1	15:29:00																								
ZZZZZZ	1	15:31:00																								
ZZZZZZ	1	15:32:00																								
ZZZZZZ	1	15:34:00																								
ZZZZZZ	1	15:35:00																								
ZZZZZZ	1	15:37:00																								
ZZZZZZ	1	15:39:00																								
ZZZZZZ	5	15:40:00																								
ZZZZZZ	1	15:42:00																								
CCV02	1	15:44:00																						X		
CCB02	1	15:45:00																						X		
ZZZZZZ	1	15:47:00																								
ZZZZZZ	1	15:49:00																								
ZZZZZZ	1	15:50:00																								
ZZZZZZ	1	15:52:00																								
ZZZZZZ	1	15:54:00																								
ZZZZZZ	1	15:55:00																								
ZZZZZZ	1	15:57:00																								
CCV03	1	15:59:00																						X		
CCB03	1	16:00:00																						X		
ZZZZZZ	1	16:02:00																								
ZZZZZZ	1	16:04:00																								
ZZZZZZ	1	16:05:00																								
ZZZZZZ	1	16:07:00																								
ZZZZZZ	1	16:09:00																								
ZZZZZZ	1	16:10:00																								
ZZZZZZ	5	16:12:00																								
CCV04	1	16:14:00																						X		
CCB04	1	16:15:00																						X		
1202056872	1	16:17:00																						X		

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																					X		
1202056873	1	16:19:00																					X		
248108001	1	16:20:00																					X		
ZZZZZZ	1	16:22:00																							
ZZZZZZ	1	16:24:00																							
ZZZZZZ	1	16:25:00																							
ZZZZZZ	1	16:27:00																							
CCV05	1	16:29:00																					X		
CCB05	1	16:30:00																					X		
ZZZZZZ	1	16:32:00																							
ZZZZZZ	1	16:34:00																							
ZZZZZZ	1	16:35:00																							
ZZZZZZ	1	16:37:00																							
1202056874	1	16:39:00																					X		
1202056875	1	16:40:00																					X		
1202056876	5	16:42:00																					X		
CCV06	1	16:44:00																					X		
CCB06	1	16:45:00																					X		

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 02-MAR-10 **End Date:** 02-MAR-10

Client Sdg: 10-2090
Method AV
Data File: 030210W3-6

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	08:28:00															X									
S0.2	1	08:30:00															X									
S0.5	1	08:31:00															X									
S2.0	1	08:33:00															X									
S5.0	1	08:35:00															X									
S10.0	1	08:37:00															X									
ICV01	1	08:39:00															X									
ICB01	1	08:41:00															X									
CRDL01	1	08:43:00															X									
CCV01	1	08:45:00															X									
CCB01	1	08:47:00															X									
ZZZZZZ	1	08:49:00																								
ZZZZZZ	1	08:51:00																								
ZZZZZZ	1	08:53:00																								
ZZZZZZ	1	08:55:00																								
ZZZZZZ	1	08:57:00																								
ZZZZZZ	5	08:58:00																								
ZZZZZZ	1	09:00:00																								
ZZZZZZ	1	09:02:00																								
ZZZZZZ	1	09:04:00																								
ZZZZZZ	1	09:06:00																								
CCV02	1	09:08:00															X									
CCB02	1	09:10:00															X									
ZZZZZZ	1	09:12:00																								
ZZZZZZ	1	09:14:00																								
ZZZZZZ	1	09:16:00																								
ZZZZZZ	1	09:18:00																								
ZZZZZZ	1	09:20:00																								
ZZZZZZ	1	09:21:00																								
ZZZZZZ	1	09:23:00																								
ZZZZZZ	1	09:25:00																								
ZZZZZZ	5	09:27:00																								
ZZZZZZ	1	09:29:00																								
CCV03	1	09:31:00															X									
CCB03	1	09:33:00															X									
ZZZZZZ	1	09:35:00																								
ZZZZZZ	1	09:37:00																								
ZZZZZZ	1	09:39:00																								
ZZZZZZ	1	09:41:00																								
ZZZZZZ	1	09:43:00																								

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																								
ZZZZZZ	1	09:45:00																								
ZZZZZZ	1	09:47:00																								
ZZZZZZ	1	09:48:00																								
ZZZZZZ	1	09:50:00																								
ZZZZZZ	1	09:52:00																								
CCV04	1	09:54:00														X										
CCB04	1	09:56:00														X										
ZZZZZZ	1	09:58:00																								
ZZZZZZ	1	10:00:00																								
ZZZZZZ	1	10:02:00																								
ZZZZZZ	5	10:04:00																								
ZZZZZZ	1	10:06:00																								
ZZZZZZ	1	10:08:00																								
ZZZZZZ	1	10:10:00																								
ZZZZZZ	1	10:12:00																								
ZZZZZZ	1	10:13:00																								
ZZZZZZ	1	10:15:00																								
CCV05	1	10:17:00														X										
CCB05	1	10:19:00														X										
ZZZZZZ	1	10:21:00																								
ZZZZZZ	1	10:23:00																								
ZZZZZZ	1	10:25:00																								
ZZZZZZ	1	10:27:00																								
ZZZZZZ	1	10:29:00																								
ZZZZZZ	5	10:31:00																								
ZZZZZZ	1	10:33:00																								
ZZZZZZ	1	10:35:00																								
ZZZZZZ	1	10:37:00																								
ZZZZZZ	1	10:39:00																								
CCV06	1	10:41:00														X										
CCB06	1	10:42:00														X										
ZZZZZZ	1	10:44:00																								
ZZZZZZ	1	10:46:00																								
ZZZZZZ	1	10:48:00																								
ZZZZZZ	1	10:50:00																								
ZZZZZZ	1	10:52:00																								
ZZZZZZ	1	10:54:00																								
ZZZZZZ	1	10:56:00																								
ZZZZZZ	1	10:58:00																								
ZZZZZZ	1	11:00:00																								

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	5	11:02:00																								
CCV07	1	11:04:00															X									
CCB07	1	11:06:00															X									
ZZZZZZ	1	11:08:00																								
ZZZZZZ	1	11:09:00																								
ZZZZZZ	1	11:11:00																								
ZZZZZZ	1	11:13:00																								
1202056573	1	11:15:00															X									
1202056574	1	11:17:00															X									
ZZZZZZ	1	11:19:00																								
ZZZZZZ	1	11:21:00																								
ZZZZZZ	1	11:23:00																								
ZZZZZZ	1	11:25:00																								
CCV08	1	11:27:00															X									
CCB08	1	11:29:00															X									
ZZZZZZ	1	11:31:00																								
ZZZZZZ	1	11:33:00																								
ZZZZZZ	1	11:35:00																								
ZZZZZZ	1	11:37:00																								
ZZZZZZ	1	11:39:00																								
ZZZZZZ	1	11:40:00																								
ZZZZZZ	1	11:42:00																								
ZZZZZZ	1	11:44:00																								
ZZZZZZ	1	11:46:00																								
ZZZZZZ	1	11:48:00																								
CCV09	1	11:50:00															X									
CCB09	1	11:52:00															X									
ZZZZZZ	1	11:54:00																								
248108001	1	11:56:00															X									
ZZZZZZ	1	11:58:00																								
ZZZZZZ	1	12:00:00																								
1202056575	1	12:02:00															X									
1202056576	1	12:04:00															X									
1202056577	5	12:06:00															X									
ZZZZZZ	1	12:08:00																								
ZZZZZZ	1	12:10:00																								
ZZZZZZ	1	12:12:00																								
CCV10	1	12:14:00															X									
CCB10	1	12:15:00															X									

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA4
Start Date: 29-MAR-10 **End Date:** 29-MAR-10

Client Sdg: 10-2090
Method P
Data File: 032910C-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	18:25:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S0.1	1	18:28:00			X	X				X	X	X						X	X	X	X				X	X
S0.5	1	18:30:00	X		X	X			X	X	X	X			X			X	X	X	X				X	X
SCAL	1	18:32:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S10	1	18:34:00	X						X				X		X							X				
ICV01	1	18:35:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICB01	1	18:37:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
PQL01	1	18:40:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSA01	1	18:43:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSAB01	1	18:45:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR01	1	18:46:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR02	1	18:48:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV01	1	18:49:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB01	1	18:51:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV02	1	18:57:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB02	1	18:59:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	19:17:00																								
ZZZZZZ	1	19:20:00																								
ZZZZZZ	1	19:21:00																								
ZZZZZZ	1	19:23:00																								
ZZZZZZ	1	19:25:00																								
ZZZZZZ	1	19:26:00																								
ZZZZZZ	5	19:29:00																								
CCV03	1	19:31:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB03	1	19:33:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	19:36:00																								
ZZZZZZ	1	19:38:00																								
ZZZZZZ	1	19:40:00																								
ZZZZZZ	1	19:42:00																								
ZZZZZZ	1	19:44:00																								
ZZZZZZ	1	19:46:00																								
ZZZZZZ	1	19:48:00																								
ZZZZZZ	1	19:50:00																								
CCV04	1	19:52:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB04	1	19:54:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	19:57:00																								
ZZZZZZ	1	19:59:00																								
ZZZZZZ	1	20:02:00																								
ZZZZZZ	1	20:04:00																								
ZZZZZZ	1	20:06:00																								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																							
ZZZZZZ	1	20:08:00																							
ZZZZZZ	1	20:10:00																							
ZZZZZZ	1	20:12:00																							
CCV05	1	20:14:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB05	1	20:16:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202056866	1	20:20:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202056867	1	20:23:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	20:25:00																							
1202056868	1	20:28:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202056869	1	20:31:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202056870	5	20:33:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
248108001	1	20:36:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV06	1	20:39:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB06	1	20:41:00	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: ICPMS4
Start Date: 12-APR-10 **End Date:** 12-APR-10

Client Sdg: 10-2090
Method MS
Data File: 100411-2

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	02:43:00					X	X						X		X							X			
S10	1	02:49:00					X	X						X		X							X			
S100	1	02:55:00					X	X						X		X							X			
ICV01	1	03:01:00					X	X						X		X							X			
ICB01	1	03:08:00					X	X						X		X							X			
CRDL01	1	03:14:00					X	X						X		X							X			
ICSA01	1	03:20:00					X	X						X		X							X			
ICSAB01	1	03:26:00					X	X						X		X							X			
CCV01	1	03:32:00					X	X						X		X							X			
CCB01	1	03:38:00					X	X						X		X							X			
LR01	1	03:44:00					X	X						X		X							X			
CCV02	1	03:51:00					X	X						X		X							X			
CCB02	1	03:57:00					X	X						X		X							X			
1202056872	1	04:03:00					X	X						X		X							X			
1202056873	1	04:09:00					X	X						X		X							X			
248108001	1	04:15:00					X	X						X		X							X			
ZZZZZZ	1	04:22:00																								
ZZZZZZ	1	04:28:00																								
ZZZZZZ	1	04:34:00																								
ZZZZZZ	1	04:40:00																								
ZZZZZZ	1	04:46:00																								
ZZZZZZ	1	04:53:00																								
ZZZZZZ	1	04:59:00																								
CCV03	1	05:05:00					X	X						X		X							X			
CCB03	1	05:11:00					X	X						X		X							X			
ZZZZZZ	1	05:18:00																								
1202056874	1	05:24:00					X	X						X		X							X			
1202056875	1	05:30:00					X	X						X		X							X			
1202056876	5	05:36:00					X	X						X		X							X			
CCV04	1	05:42:00					X	X						X		X							X			
CCB04	1	05:49:00					X	X						X		X							X			

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-2090

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

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

METALS
-10-
Instrument Detection Limits

SDG NO. 10-2090

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

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

METALS
-10-
Instrument Detection Limits

SDG NO. 10-2090

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.0	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	50.0	200
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.752	3.0	10
	Iron	238.204	30.0	100
	Lead	220.353	3.3	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	50.0	150
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	100	300
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-2090
Contract: LANL01004
Instrument: OPTIMA4
Effective Dates: 22-MAR-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	0.00676	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	-0.98369	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.06206	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
Phosphorous	214.914	-0.22134	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.22220	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sodium	589.592	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	-0.01674	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA4
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-2090
Effective Dates: 22-MAR-10

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	14.9992	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	-9.49960	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	3.47778	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	-0.18390	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	-0.60088	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.04741	0.32747
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
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	10.9289
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	-0.07359	0.00000	0.00000
Sodium	589.592	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.02864	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.33675	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.18768	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	-4.30004	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.03286	0.12442	0.79397

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-2090
Contract: LANL01004
Instrument: OPTIMA4
Effective Dates: 22-MAR-10
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Lead	Magnesium	Manganese	Molybdenum	Phosphorous
Aluminum	396.153	0.00000	0.00000	0.00000	46.4438	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	-14.0269	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	-2.84596	0.00000
Barium	233.527	0.00000	0.00000	0.00000	-0.32136	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	0.01216	0.24903	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	-0.02702	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	-2.77286	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	-24.4630	0.00000
Manganese	257.61	0.00000	0.03966	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	-0.01826	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	10.3832	0.00000
Potassium	766.49	0.00000	0.07568	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	13.3443	0.00000
Silver	328.068	0.00000	0.00000	0.28019	-0.03095	0.00000
Sodium	589.592	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	-8.43314	0.00000
Thallium	190.801	0.00000	0.00000	-2.58065	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.08144	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	-6.48399	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	-10.3466	0.00000
Zinc	213.857	0.00000	0.00000	0.06887	-0.04597	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-2090
Contract: LANL01004
Instrument: OPTIMA4 **Effective Dates:** 22-MAR-10
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Potassium	Selenium	Silicon	Silver	Sodium
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
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
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.16274
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sodium	589.592	0.88937	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: 10-2090
Contract: LANL01004
Instrument: OPTIMA4
Effective Dates: 22-MAR-10
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Strontium	Sulfur	Thallium	Tin	Titanium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	-1.82716	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
Lead	220.353	0.00000	0.00000	0.00000	0.00000	-1.32991
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
Phosphorous	214.914	0.00000	0.00000	0.00000	-8.61809	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
Silicon	251.611	0.00000	0.00000	0.00000	6.59640	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sodium	589.592	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	-10.0432
Tin	189.927	0.00000	0.00000	0.00000	0.00000	-3.37234
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	0.92753
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	-0.56798

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-2090
Contract: LANL01004
Instrument: OPTIMA4
Effective Dates: 22-MAR-10
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	-1.62578	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000
Barium	233.527	0.00000	-0.63442	0.00000
Beryllium	313.107	-0.30229	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000
Chromium	267.716	0.78601	-0.47146	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000
Copper	324.752	-0.82619	0.00000	0.00000
Lead	220.353	0.74521	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	-0.33953	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000
Selenium	196.026	-0.96499	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000
Silver	328.068	-1.22996	-11.9401	0.00000
Sodium	589.592	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	-7.37871	0.00000
Tin	189.927	0.00000	0.00000	0.00000
Titanium	334.94	0.40930	0.00000	0.00000
Uranium	409.014	0.00000	-57.5852	0.00000
Vanadium	292.402	-0.67226	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000

METALS
–12–
Linear Ranges

SDG NO. 10–2090

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01–FEB–10
Antimony	1000	250	ug/L	01–FEB–10
Arsenic	1000	1000	ug/L	01–FEB–10
Barium	1000	1000	ug/L	01–FEB–10
Beryllium	1000	1000	ug/L	01–FEB–10
Cadmium	1000	1000	ug/L	01–FEB–10
Calcium	500	50000	ug/L	01–FEB–10
Chromium	1000	1000	ug/L	01–FEB–10
Cobalt	1000	1000	ug/L	01–FEB–10
Copper	1000	1000	ug/L	01–FEB–10
Iron	500	50000	ug/L	01–FEB–10
Lead	1000	5000	ug/L	01–FEB–10
Magnesium	1	50000	ug/L	01–FEB–10
Manganese	1000	1000	ug/L	01–FEB–10
Nickel	1000	1000	ug/L	01–FEB–10
Potassium	1	50000	ug/L	01–FEB–10
Selenium	1000	500	ug/L	01–FEB–10
Silver	1000	250	ug/L	01–FEB–10
Sodium	1	50000	ug/L	01–FEB–10
Thallium	1000	500	ug/L	01–FEB–10
Uranium	1000	5000	ug/L	01–FEB–10
Vanadium	1000	100	ug/L	01–FEB–10
Zinc	1000	2500	ug/L	01–FEB–10

METALS
–12–
Linear Ranges

SDG NO. 10–2090

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA4

Analyte	Integration Time (sec)	LDR	Units	Effective Date
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. 10-2090

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS4

Analyte	Integration Time (msec)	LDR	Units	Effective Date
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
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
Iron	500	50000	ug/L	01-FEB-10

Raw Data

Reprocessing Begun
Logged In Analyst: optima4 Technique: ICP Continuous

Results Data Set (original): 032910B
Results Library (original): C:\pe\optima4\Results\Results.mdb
Results Data Set (reprocessed): 032910C
Results Library (reprocessed): C:\pe\optima4\Results\Results.mdb

Method Loaded
Method Name: Gen Eng fast_new Si Method Last Saved: 3/29/2010 19:12:39
IEC File: 031810.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	No
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	Yes
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
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
SiO2	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

Sequence No.: 1 Autosampler Location: 8
Sample ID: S0 Date Collected: 3/29/2010 18:25:17
Analyst: Data Type: Reprocessed on 3/29/2010 19:14:31
Logged In Analyst (Original) : optima4
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1675486.4	1675486.4	100.16	%	18:27:09
1	Sc RADIAL	146509.4	146509.4	101	%	18:25:47
1	Y 371.029	1022720.1	1022720.1	100.01	%	18:27:09
1	Ag 328.068†	2983.2	2978.4	[0.00]	µg/L	18:27:11
1	Al 396.153Radial†	-35.1	-35.0	[0.00]	µg/L	18:26:07
1	As 188.979†	-19.2	-19.2	[0.00]	µg/L	18:27:31

1	B 249.677†	3447.9	3442.3	[0.00] µg/L	18:27:11
1	Ba 233.527†	-170.9	-170.6	[0.00] µg/L	18:27:31
1	Be 313.107†	-760.2	-759.0	[0.00] µg/L	18:27:11
1	Ca 317.933Radial†	609.6	606.5	[0.00] µg/L	18:26:07
1	Cd 226.502†	-94.3	-94.2	[0.00] µg/L	18:27:31
1	Co 228.616†	-177.2	-176.9	[0.00] µg/L	18:27:31
1	Cr 267.716†	191.1	190.8	[0.00] µg/L	18:27:31
1	Cu 324.752†	2447.0	2443.1	[0.00] µg/L	18:27:11
1	Fe 238.204 Radial†	120.7	120.1	[0.00] µg/L	18:26:07
1	K 766.490 Radial†	1409.9	1402.7	[0.00] µg/L	18:25:47
1	Mg 279.077 IEC†	182.4	181.4	[0.00] µg/L	18:26:07
1	Mn 257.610†	83.5	83.4	[0.00] µg/L	18:27:31
1	Mo 202.031†	-61.5	-61.4	[0.00] µg/L	18:27:31
1	Na 589.592 Radial†	1727.7	1718.8	[0.00] µg/L	18:25:47
1	Ni 231.604†	-12.7	-12.7	[0.00] µg/L	18:27:31
1	P 214.914†	74.6	74.5	[0.00] µg/L	18:27:31
1	Pb 220.353†	124.0	123.8	[0.00] µg/L	18:27:31
1	S 181.975 Axial†	92.2	92.1	[0.00] µg/L	18:27:31
1	Sb 206.836†	94.8	94.7	[0.00] µg/L	18:27:31
1	Se 196.026†	10.9	10.9	[0.00] µg/L	18:27:31
1	SiO2†	1567.1	1564.5	[0.00] µg/L	18:27:31
1	Si 251.611†	683.3	682.2	[0.00] µg/L	18:27:11
1	Sn 189.927†	-0.3	-0.3	[0.00] µg/L	18:27:31
1	Sr 421.552†	-242.7	-241.5	[0.00] µg/L	18:25:47
1	Ti 334.940†	661.0	659.9	[0.00] µg/L	18:27:11
1	Tl 190.801†	-125.7	-125.5	[0.00] µg/L	18:27:31
1	U 409.014†	-452.8	-452.0	[0.00] µg/L	18:27:11
1	V 292.402†	515.3	514.5	[0.00] µg/L	18:27:11
1	Zn 213.857†	458.0	457.2	[0.00] µg/L	18:27:31
2	Sc 361.383	1673882.1	1673882.1	100.07 %	18:27:33
2	Sc RADIAL	143614.2	143614.2	98.5 %	18:26:09
2	Y 371.029	1022767.5	1022767.5	100.02 %	18:27:33
2	Ag 328.068†	3053.8	3051.7	[0.00] µg/L	18:27:35
2	Al 396.153Radial†	-38.9	-39.5	[0.00] µg/L	18:26:29
2	As 188.979†	-15.1	-15.1	[0.00] µg/L	18:27:55
2	B 249.677†	3293.2	3291.1	[0.00] µg/L	18:27:35
2	Ba 233.527†	-175.9	-175.8	[0.00] µg/L	18:27:55
2	Be 313.107†	-530.4	-530.1	[0.00] µg/L	18:27:35
2	Ca 317.933Radial†	602.3	611.3	[0.00] µg/L	18:26:29
2	Cd 226.502†	-94.9	-94.9	[0.00] µg/L	18:27:55
2	Co 228.616†	-169.1	-169.0	[0.00] µg/L	18:27:55
2	Cr 267.716†	157.6	157.5	[0.00] µg/L	18:27:55
2	Cu 324.752†	2326.2	2324.7	[0.00] µg/L	18:27:35
2	Fe 238.204 Radial†	112.7	114.4	[0.00] µg/L	18:26:29
2	K 766.490 Radial†	1475.1	1497.1	[0.00] µg/L	18:26:09
2	Mg 279.077 IEC†	191.8	194.7	[0.00] µg/L	18:26:29
2	Mn 257.610†	69.4	69.3	[0.00] µg/L	18:27:55
2	Mo 202.031†	-55.1	-55.0	[0.00] µg/L	18:27:55
2	Na 589.592 Radial†	1691.1	1716.3	[0.00] µg/L	18:26:09
2	Ni 231.604†	-51.5	-51.5	[0.00] µg/L	18:27:55
2	P 214.914†	99.0	98.9	[0.00] µg/L	18:27:55
2	Pb 220.353†	108.5	108.4	[0.00] µg/L	18:27:55
2	S 181.975 Axial†	90.3	90.2	[0.00] µg/L	18:27:55
2	Sb 206.836†	81.0	81.0	[0.00] µg/L	18:27:55
2	Se 196.026†	15.5	15.5	[0.00] µg/L	18:27:55
2	SiO2†	1541.6	1540.6	[0.00] µg/L	18:27:55
2	Si 251.611†	721.8	721.4	[0.00] µg/L	18:27:35
2	Sn 189.927†	7.0	7.0	[0.00] µg/L	18:27:55
2	Sr 421.552†	-264.2	-268.1	[0.00] µg/L	18:26:09
2	Ti 334.940†	533.5	533.1	[0.00] µg/L	18:27:35
2	Tl 190.801†	-121.5	-121.4	[0.00] µg/L	18:27:55
2	U 409.014†	-565.6	-565.2	[0.00] µg/L	18:27:35
2	V 292.402†	425.8	425.5	[0.00] µg/L	18:27:35
2	Zn 213.857†	466.7	466.4	[0.00] µg/L	18:27:55
3	Sc 361.383	1668955.0	1668955.0	99.772 %	18:27:57
3	Sc RADIAL	147139.1	147139.1	101 %	18:26:31
3	Y 371.029	1022257.2	1022257.2	99.968 %	18:27:57
3	Ag 328.068†	2864.4	2871.0	[0.00] µg/L	18:27:59
3	Al 396.153Radial†	-21.4	-21.2	[0.00] µg/L	18:26:51
3	As 188.979†	-8.4	-8.4	[0.00] µg/L	18:28:20
3	B 249.677†	3326.1	3333.7	[0.00] µg/L	18:27:59

3	Ba 233.527†	-178.4	-178.8	[0.00] µg/L	18:28:20
3	Be 313.107†	-689.7	-691.3	[0.00] µg/L	18:27:59
3	Ca 317.933Radial†	636.8	630.8	[0.00] µg/L	18:26:51
3	Cd 226.502†	-94.0	-94.2	[0.00] µg/L	18:28:20
3	Co 228.616†	-183.5	-183.9	[0.00] µg/L	18:28:20
3	Cr 267.716†	132.1	132.4	[0.00] µg/L	18:28:20
3	Cu 324.752†	2501.2	2506.9	[0.00] µg/L	18:27:59
3	Fe 238.204 Radial†	106.3	105.3	[0.00] µg/L	18:26:51
3	K 766.490 Radial†	1479.1	1465.2	[0.00] µg/L	18:26:31
3	Mg 279.077 IEC†	185.6	183.9	[0.00] µg/L	18:26:51
3	Mn 257.610†	87.1	87.3	[0.00] µg/L	18:28:20
3	Mo 202.031†	-49.1	-49.2	[0.00] µg/L	18:28:20
3	Na 589.592 Radial†	1664.8	1649.1	[0.00] µg/L	18:26:31
3	Ni 231.604†	-58.4	-58.5	[0.00] µg/L	18:28:20
3	P 214.914†	65.2	65.3	[0.00] µg/L	18:28:20
3	Pb 220.353†	104.9	105.1	[0.00] µg/L	18:28:20
3	S 181.975 Axial†	101.9	102.2	[0.00] µg/L	18:28:20
3	Sb 206.836†	84.1	84.3	[0.00] µg/L	18:28:20
3	Se 196.026†	6.3	6.3	[0.00] µg/L	18:28:20
3	SiO2†	1609.7	1613.4	[0.00] µg/L	18:28:20
3	Si 251.611†	624.2	625.6	[0.00] µg/L	18:27:59
3	Sn 189.927†	-0.6	-0.6	[0.00] µg/L	18:28:20
3	Sr 421.552†	-327.4	-324.4	[0.00] µg/L	18:26:31
3	Ti 334.940†	714.3	716.0	[0.00] µg/L	18:27:59
3	Tl 190.801†	-113.7	-113.9	[0.00] µg/L	18:28:20
3	U 409.014†	-419.1	-420.1	[0.00] µg/L	18:27:59
3	V 292.402†	354.6	355.5	[0.00] µg/L	18:27:59
3	Zn 213.857†	468.5	469.6	[0.00] µg/L	18:28:20

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1672774.5	3403.67	0.20%	100.00	%
Sc RADIAL	145754.2	1879.88	1.29%	100	%
Y 371.029	1022581.6	281.95	0.03%	100.00	%
Ag 328.068†	2967.0	90.92	3.06%	[0.00]	µg/L
Al 396.153Radial†	-31.9	9.54	29.92%	[0.00]	µg/L
As 188.979†	-14.2	5.41	37.98%	[0.00]	µg/L
B 249.677†	3355.7	78.00	2.32%	[0.00]	µg/L
Ba 233.527†	-175.1	4.13	2.36%	[0.00]	µg/L
Be 313.107†	-660.1	117.60	17.82%	[0.00]	µg/L
Ca 317.933Radial†	616.2	12.87	2.09%	[0.00]	µg/L
Cd 226.502†	-94.4	0.38	0.41%	[0.00]	µg/L
Co 228.616†	-176.6	7.48	4.23%	[0.00]	µg/L
Cr 267.716†	160.2	29.32	18.30%	[0.00]	µg/L
Cu 324.752†	2424.9	92.45	3.81%	[0.00]	µg/L
Fe 238.204 Radial†	113.3	7.45	6.58%	[0.00]	µg/L
K 766.490 Radial†	1455.0	48.06	3.30%	[0.00]	µg/L
Mg 279.077 IEC†	186.7	7.04	3.77%	[0.00]	µg/L
Mn 257.610†	80.0	9.46	11.83%	[0.00]	µg/L
Mo 202.031†	-55.2	6.06	10.98%	[0.00]	µg/L
Na 589.592 Radial†	1694.7	39.52	2.33%	[0.00]	µg/L
Ni 231.604†	-40.9	24.66	60.28%	[0.00]	µg/L
P 214.914†	79.6	17.37	21.83%	[0.00]	µg/L
Pb 220.353†	112.4	9.96	8.86%	[0.00]	µg/L
S 181.975 Axial†	94.8	6.43	6.78%	[0.00]	µg/L
Sb 206.836†	86.6	7.13	8.23%	[0.00]	µg/L
Se 196.026†	10.9	4.59	42.08%	[0.00]	µg/L
SiO2†	1572.9	37.13	2.36%	[0.00]	µg/L
Si 251.611†	676.4	48.15	7.12%	[0.00]	µg/L
Sn 189.927†	2.0	4.32	214.20%	[0.00]	µg/L
Sr 421.552†	-278.0	42.30	15.22%	[0.00]	µg/L
Ti 334.940†	636.3	93.67	14.72%	[0.00]	µg/L
Tl 190.801†	-120.3	5.87	4.88%	[0.00]	µg/L
U 409.014†	-479.1	76.26	15.92%	[0.00]	µg/L
V 292.402†	431.8	79.70	18.46%	[0.00]	µg/L
Zn 213.857†	464.4	6.40	1.38%	[0.00]	µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Origina1) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 3/29/2010 18:28:28
Data Type: Reprocessed on 3/29/2010 19:14:33

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1661946.1	1661946.1	99.353	%	18:29:20
1	Sc RADIAL	142262.8	142262.8	97.6	%	18:28:58
1	Y 371.029	1013636.7	1013636.7	99.125	%	18:29:20
1	Ag 328.068†	28004.5	25219.9	[100]	µg/L	18:29:22
1	As 188.979†	214.7	230.4	[100]	µg/L	18:29:42
1	B 249.677†	9080.8	5784.2	[100]	µg/L	18:29:22
1	Ba 233.527†	21988.9	22307.2	[100]	µg/L	18:29:22
1	Be 313.107†	303759.0	306398.2	[100]	µg/L	18:29:20
1	Cd 226.502†	14418.1	14606.5	[100]	µg/L	18:29:22
1	Co 228.616†	7233.5	7457.2	[100]	µg/L	18:29:42
1	Cr 267.716†	11824.2	11741.0	[100]	µg/L	18:29:22
1	Cu 324.752†	25515.5	23256.9	[100]	µg/L	18:29:22
1	K 766.490 Radial†	3700.4	2336.2	[1000]	µg/L	18:28:58
1	Mn 257.610†	75396.6	75807.8	[100]	µg/L	18:29:22
1	Mo 202.031†	3080.8	3156.1	[100]	µg/L	18:29:42
1	Ni 231.604†	8001.7	8094.7	[100]	µg/L	18:29:22
1	P 214.914†	2111.9	2046.0	[500]	µg/L	18:29:42
1	Pb 220.353†	1769.2	1668.3	[100]	µg/L	18:29:42
1	S 181.975 Axial†	329.8	237.2	[200]	µg/L	18:29:42
1	Sb 206.836†	823.1	741.9	[100]	µg/L	18:29:42
1	Se 196.026†	270.2	261.0	[100]	µg/L	18:29:42
1	SiO2†	11219.8	9720.0	[1069.5]	µg/L	18:29:22
1	Si 251.611†	30808.9	30333.3	[500]	µg/L	18:29:22
1	Sn 189.927†	1389.8	1396.8	[100]	µg/L	18:29:42
1	Sr 421.552†	43261.6	44601.3	[100]	µg/L	18:28:58
1	Ti 334.940†	97625.2	97625.0	[100]	µg/L	18:29:22
1	Tl 190.801†	629.9	754.3	[100]	µg/L	18:29:42
1	U 409.014†	1288.2	1775.7	[100]	µg/L	18:29:22
1	V 292.402†	18219.3	17906.2	[100]	µg/L	18:29:22
1	Zn 213.857†	16338.0	15980.0	[100]	µg/L	18:29:22
2	Sc 361.383	1666549.8	1666549.8	99.628	%	18:29:44
2	Sc RADIAL	146980.5	146980.5	101	%	18:29:00
2	Y 371.029	1017353.0	1017353.0	99.489	%	18:29:44
2	Ag 328.068†	28245.8	25384.2	[100]	µg/L	18:29:47
2	As 188.979†	216.8	231.9	[100]	µg/L	18:30:07
2	B 249.677†	9095.6	5773.9	[100]	µg/L	18:29:47
2	Ba 233.527†	22220.1	22478.2	[100]	µg/L	18:29:47
2	Be 313.107†	301592.1	303378.7	[100]	µg/L	18:29:44
2	Cd 226.502†	14444.4	14592.7	[100]	µg/L	18:29:47
2	Co 228.616†	7194.5	7397.9	[100]	µg/L	18:30:07
2	Cr 267.716†	11989.4	11874.0	[100]	µg/L	18:29:47
2	Cu 324.752†	25454.5	23124.7	[100]	µg/L	18:29:47
2	K 766.490 Radial†	3828.6	2341.7	[1000]	µg/L	18:29:00
2	Mn 257.610†	75955.3	76159.0	[100]	µg/L	18:29:47
2	Mo 202.031†	3072.9	3139.6	[100]	µg/L	18:30:07
2	Ni 231.604†	7945.1	8015.7	[100]	µg/L	18:29:47
2	P 214.914†	2095.0	2023.3	[500]	µg/L	18:30:07
2	Pb 220.353†	1806.4	1700.7	[100]	µg/L	18:30:07
2	S 181.975 Axial†	328.8	235.2	[200]	µg/L	18:30:07
2	Sb 206.836†	831.1	747.6	[100]	µg/L	18:30:07
2	Se 196.026†	268.7	258.8	[100]	µg/L	18:30:07
2	SiO2†	11380.9	9850.6	[1069.5]	µg/L	18:29:47
2	Si 251.611†	30908.3	30347.4	[500]	µg/L	18:29:47
2	Sn 189.927†	1386.9	1390.0	[100]	µg/L	18:30:07
2	Sr 421.552†	43897.3	43809.0	[100]	µg/L	18:29:00
2	Ti 334.940†	97949.2	97678.7	[100]	µg/L	18:29:47
2	Tl 190.801†	629.9	752.6	[100]	µg/L	18:30:07
2	U 409.014†	1127.3	1610.7	[100]	µg/L	18:29:47

2	V 292.402†	18287.8	17924.3	[100] µg/L	18:29:47
2	Zn 213.857†	16478.9	16076.1	[100] µg/L	18:29:47
3	Sc 361.383	1678711.7	1678711.7	100.35 %	18:30:09
3	Sc RADIAL	143945.0	143945.0	98.8 %	18:29:02
3	Y 371.029	1024374.9	1024374.9	100.18 %	18:30:09
3	Ag 328.068†	27960.9	24894.9	[100] µg/L	18:30:11
3	As 188.979†	221.3	234.7	[100] µg/L	18:30:31
3	B 249.677†	9088.4	5700.5	[100] µg/L	18:30:11
3	Ba 233.527†	21982.2	22079.5	[100] µg/L	18:30:11
3	Be 313.107†	305374.6	304954.6	[100] µg/L	18:30:09
3	Cd 226.502†	14449.3	14492.6	[100] µg/L	18:30:11
3	Co 228.616†	7225.7	7376.7	[100] µg/L	18:30:31
3	Cr 267.716†	11783.4	11581.4	[100] µg/L	18:30:11
3	Cu 324.752†	25635.6	23120.1	[100] µg/L	18:30:11
3	K 766.490 Radial†	3785.9	2378.5	[1000] µg/L	18:29:02
3	Mn 257.610†	75567.2	75219.9	[100] µg/L	18:30:11
3	Mo 202.031†	3088.5	3132.8	[100] µg/L	18:30:31
3	Ni 231.604†	7999.7	8012.3	[100] µg/L	18:30:11
3	P 214.914†	2091.9	2004.9	[500] µg/L	18:30:31
3	Pb 220.353†	1784.3	1665.6	[100] µg/L	18:30:31
3	S 181.975 Axial†	327.0	231.0	[200] µg/L	18:30:31
3	Sb 206.836†	817.3	727.8	[100] µg/L	18:30:31
3	Se 196.026†	251.7	239.9	[100] µg/L	18:30:31
3	SiO2†	11327.9	9715.0	[1069.5] µg/L	18:30:11
3	Si 251.611†	30819.3	30033.9	[500] µg/L	18:30:11
3	Sn 189.927†	1401.4	1394.4	[100] µg/L	18:30:31
3	Sr 421.552†	43851.5	44680.7	[100] µg/L	18:29:02
3	Ti 334.940†	97740.3	96758.3	[100] µg/L	18:30:11
3	Tl 190.801†	620.5	738.6	[100] µg/L	18:30:31
3	U 409.014†	1269.9	1744.5	[100] µg/L	18:30:11
3	V 292.402†	18059.5	17563.8	[100] µg/L	18:30:11
3	Zn 213.857†	16510.7	15987.9	[100] µg/L	18:30:11

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1669069.2	8662.09	0.52%	99.778	%
Sc RADIAL	144396.1	2390.99	1.66%	99.1	%
Y 371.029	1018454.9	5453.26	0.54%	99.596	%
Ag 328.068†	25166.4	249.02	0.99%	[100]	µg/L
As 188.979†	232.3	2.20	0.95%	[100]	µg/L
B 249.677†	5752.9	45.63	0.79%	[100]	µg/L
Ba 233.527†	22288.3	200.02	0.90%	[100]	µg/L
Be 313.107†	304910.5	1510.27	0.50%	[100]	µg/L
Cd 226.502†	14563.9	62.13	0.43%	[100]	µg/L
Co 228.616†	7410.6	41.70	0.56%	[100]	µg/L
Cr 267.716†	11732.1	146.47	1.25%	[100]	µg/L
Cu 324.752†	23167.2	77.70	0.34%	[100]	µg/L
K 766.490 Radial†	2352.1	22.98	0.98%	[1000]	µg/L
Mn 257.610†	75728.9	474.50	0.63%	[100]	µg/L
Mo 202.031†	3142.8	11.99	0.38%	[100]	µg/L
Ni 231.604†	8040.9	46.63	0.58%	[100]	µg/L
P 214.914†	2024.7	20.61	1.02%	[500]	µg/L
Pb 220.353†	1678.2	19.56	1.17%	[100]	µg/L
S 181.975 Axial†	234.4	3.15	1.34%	[200]	µg/L
Sb 206.836†	739.1	10.21	1.38%	[100]	µg/L
Se 196.026†	253.2	11.62	4.59%	[100]	µg/L
SiO2†	9761.9	76.87	0.79%	[1069.5]	µg/L
Si 251.611†	30238.2	177.02	0.59%	[500]	µg/L
Sn 189.927†	1393.8	3.45	0.25%	[100]	µg/L
Sr 421.552†	44363.6	481.98	1.09%	[100]	µg/L
Ti 334.940†	97354.0	516.57	0.53%	[100]	µg/L
Tl 190.801†	748.5	8.62	1.15%	[100]	µg/L
U 409.014†	1710.3	87.69	5.13%	[100]	µg/L
V 292.402†	17798.1	203.14	1.14%	[100]	µg/L
Zn 213.857†	16014.7	53.32	0.33%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 3/29/2010 18:30:39
Data Type: Reprocessed on 3/29/2010 19:14:34
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1666330.4	1666330.4	99.615	%	18:31:37
1	Sc RADIAL	146255.9	146255.9	100	%	18:31:10
1	Y 371.029	1010770.4	1010770.4	98.845	%	18:31:37
1	Ag 328.068†	124810.0	122325.6	[500]	µg/L	18:31:37
1	Al 396.153Radial†	22730.9	22684.8	[5000]	µg/L	18:31:10
1	As 188.979†	1130.3	1148.9	[500]	µg/L	18:31:57
1	B 249.677†	32443.2	29213.0	[500]	µg/L	18:31:37
1	Ba 233.527†	108021.9	108614.7	[500]	µg/L	18:31:37
1	Be 313.107†	1516563.3	1523088.3	[500]	µg/L	18:31:37
1	Ca 317.933Radial†	86179.3	85267.4	[5000]	µg/L	18:31:10
1	Cd 226.502†	71219.1	71589.0	[500]	µg/L	18:31:37
1	Co 228.616†	35394.0	35707.4	[500]	µg/L	18:31:57
1	Cr 267.716†	57615.1	57677.6	[500]	µg/L	18:31:37
1	Cu 324.752†	116290.7	114315.5	[500]	µg/L	18:31:37
1	K 766.490 Radial†	13629.8	12128.1	[5000]	µg/L	18:31:10
1	Mg 279.077 IEC†	12468.2	12238.8	[5000]	µg/L	18:31:10
1	Mn 257.610†	362696.8	364019.5	[500]	µg/L	18:31:37
1	Mo 202.031†	15371.1	15485.8	[500]	µg/L	18:31:57
1	Ni 231.604†	38767.1	38957.9	[500]	µg/L	18:31:37
1	P 214.914†	10122.4	10082.0	[2500]	µg/L	18:31:57
1	Pb 220.353†	8161.6	8080.8	[500]	µg/L	18:31:57
1	S 181.975 Axial†	1278.6	1188.7	[1000]	µg/L	18:31:57
1	Sb 206.836†	3687.2	3614.8	[500]	µg/L	18:31:57
1	Se 196.026†	1225.0	1218.8	[500]	µg/L	18:31:57
1	SiO2†	49926.4	48546.6	[5347.5]	µg/L	18:31:37
1	Si 251.611†	150511.0	150416.7	[2500]	µg/L	18:31:37
1	Sn 189.927†	6828.0	6852.4	[500]	µg/L	18:31:57
1	Sr 421.552†	212817.9	212365.9	[500]	µg/L	18:31:08
1	Ti 334.940†	484276.9	485513.3	[500]	µg/L	18:31:37
1	Tl 190.801†	3503.2	3637.1	[500]	µg/L	18:31:57
1	U 409.014†	6910.1	7415.9	[500]	µg/L	18:31:37
1	V 292.402†	89155.4	89068.4	[500]	µg/L	18:31:37
1	Zn 213.857†	79249.5	79091.5	[500]	µg/L	18:31:37
2	Sc 361.383	1656377.5	1656377.5	99.020	%	18:32:00
2	Sc RADIAL	143364.9	143364.9	98.4	%	18:31:14
2	Y 371.029	1005040.5	1005040.5	98.285	%	18:32:00
2	Ag 328.068†	123893.4	122152.8	[500]	µg/L	18:32:00
2	Al 396.153Radial†	22411.8	22817.2	[5000]	µg/L	18:31:14
2	As 188.979†	1160.9	1186.7	[500]	µg/L	18:32:21
2	B 249.677†	32166.0	29128.7	[500]	µg/L	18:32:00
2	Ba 233.527†	106821.0	108053.5	[500]	µg/L	18:32:00
2	Be 313.107†	1497872.7	1513360.7	[500]	µg/L	18:32:00
2	Ca 317.933Radial†	83955.9	84739.0	[5000]	µg/L	18:31:14
2	Cd 226.502†	70376.7	71167.8	[500]	µg/L	18:32:00
2	Co 228.616†	35865.0	36396.7	[500]	µg/L	18:32:21
2	Cr 267.716†	57094.1	57499.1	[500]	µg/L	18:32:00
2	Cu 324.752†	115218.7	113934.4	[500]	µg/L	18:32:00
2	K 766.490 Radial†	13146.4	11910.5	[5000]	µg/L	18:31:14
2	Mg 279.077 IEC†	12081.5	12096.2	[5000]	µg/L	18:31:14
2	Mn 257.610†	359096.8	362571.6	[500]	µg/L	18:32:00
2	Mo 202.031†	15556.5	15765.7	[500]	µg/L	18:32:21
2	Ni 231.604†	38151.2	38569.7	[500]	µg/L	18:32:00
2	P 214.914†	10250.6	10272.5	[2500]	µg/L	18:32:21
2	Pb 220.353†	8247.6	8216.9	[500]	µg/L	18:32:21
2	S 181.975 Axial†	1295.5	1213.5	[1000]	µg/L	18:32:21
2	Sb 206.836†	3729.7	3679.9	[500]	µg/L	18:32:21
2	Se 196.026†	1259.6	1261.2	[500]	µg/L	18:32:21
2	SiO2†	49488.1	48405.1	[5347.5]	µg/L	18:32:00

2	Si 251.611†	149066.4	149865.6	[2500] µg/L	18:32:00
2	Sn 189.927†	6928.0	6994.5	[500] µg/L	18:32:21
2	Sr 421.552†	210571.1	214358.5	[500] µg/L	18:31:12
2	Ti 334.940†	480119.5	484236.0	[500] µg/L	18:32:00
2	Tl 190.801†	3520.8	3676.0	[500] µg/L	18:32:21
2	U 409.014†	6871.4	7418.6	[500] µg/L	18:32:00
2	V 292.402†	88228.0	88669.5	[500] µg/L	18:32:00
2	Zn 213.857†	78116.6	78425.5	[500] µg/L	18:32:00
3	Sc 361.383	1678591.9	1678591.9	100.35 %	18:32:24
3	Sc RADIAL	148088.8	148088.8	102 %	18:31:18
3	Y 371.029	1018746.9	1018746.9	99.625 %	18:32:24
3	Ag 328.068†	125886.3	122483.0	[500] µg/L	18:32:24
3	Al 396.153Radial†	22914.6	22585.2	[5000] µg/L	18:31:18
3	As 188.979†	1161.2	1171.4	[500] µg/L	18:32:44
3	B 249.677†	32821.8	29352.3	[500] µg/L	18:32:24
3	Ba 233.527†	108685.7	108484.1	[500] µg/L	18:32:24
3	Be 313.107†	1528160.6	1523524.6	[500] µg/L	18:32:24
3	Ca 317.933Radial†	86630.7	84648.8	[5000] µg/L	18:31:18
3	Cd 226.502†	72351.9	72195.6	[500] µg/L	18:32:24
3	Co 228.616†	36165.4	36216.7	[500] µg/L	18:32:44
3	Cr 267.716†	58224.7	57862.7	[500] µg/L	18:32:24
3	Cu 324.752†	117068.1	114237.5	[500] µg/L	18:32:24
3	K 766.490 Radial†	13544.3	11875.7	[5000] µg/L	18:31:18
3	Mg 279.077 IEC†	12711.0	12323.9	[5000] µg/L	18:31:18
3	Mn 257.610†	365977.4	364629.0	[500] µg/L	18:32:24
3	Mo 202.031†	15658.0	15658.9	[500] µg/L	18:32:44
3	Ni 231.604†	38949.9	38855.9	[500] µg/L	18:32:24
3	P 214.914†	10378.5	10262.9	[2500] µg/L	18:32:44
3	Pb 220.353†	8301.3	8160.1	[500] µg/L	18:32:44
3	S 181.975 Axial†	1298.3	1199.0	[1000] µg/L	18:32:44
3	Sb 206.836†	3757.3	3657.7	[500] µg/L	18:32:44
3	Se 196.026†	1268.4	1253.0	[500] µg/L	18:32:44
3	SiO2†	50453.3	48705.6	[5347.5] µg/L	18:32:24
3	Si 251.611†	151847.8	150645.2	[2500] µg/L	18:32:24
3	Sn 189.927†	6976.6	6950.4	[500] µg/L	18:32:44
3	Sr 421.552†	212729.2	209653.5	[500] µg/L	18:31:16
3	Ti 334.940†	487904.2	485577.0	[500] µg/L	18:32:24
3	Tl 190.801†	3573.5	3681.5	[500] µg/L	18:32:44
3	U 409.014†	7083.7	7538.2	[500] µg/L	18:32:24
3	V 292.402†	89928.1	89184.6	[500] µg/L	18:32:24
3	Zn 213.857†	79862.3	79121.1	[500] µg/L	18:32:24

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1667099.9	11127.18	0.67%	99.661	%
Sc RADIAL	145903.2	2381.65	1.63%	100	%
Y 371.029	1011519.3	6883.81	0.68%	98.918	%
Ag 328.068†	122320.5	165.15	0.14%	[500]	µg/L
Al 396.153Radial†	22695.7	116.36	0.51%	[5000]	µg/L
As 188.979†	1169.0	19.01	1.63%	[500]	µg/L
B 249.677†	29231.4	112.94	0.39%	[500]	µg/L
Ba 233.527†	108384.1	293.66	0.27%	[500]	µg/L
Be 313.107†	1519991.2	5746.30	0.38%	[500]	µg/L
Ca 317.933Radial†	84885.1	334.21	0.39%	[5000]	µg/L
Cd 226.502†	71650.8	516.66	0.72%	[500]	µg/L
Co 228.616†	36106.9	357.49	0.99%	[500]	µg/L
Cr 267.716†	57679.8	181.81	0.32%	[500]	µg/L
Cu 324.752†	114162.5	201.35	0.18%	[500]	µg/L
K 766.490 Radial†	11971.4	136.75	1.14%	[5000]	µg/L
Mg 279.077 IEC†	12219.6	115.04	0.94%	[5000]	µg/L
Mn 257.610†	363740.0	1056.77	0.29%	[500]	µg/L
Mo 202.031†	15636.8	141.25	0.90%	[500]	µg/L
Ni 231.604†	38794.5	201.22	0.52%	[500]	µg/L
P 214.914†	10205.8	107.31	1.05%	[2500]	µg/L
Pb 220.353†	8152.6	68.35	0.84%	[500]	µg/L
S 181.975 Axial†	1200.4	12.45	1.04%	[1000]	µg/L
Sb 206.836†	3650.8	33.08	0.91%	[500]	µg/L
Se 196.026†	1244.3	22.47	1.81%	[500]	µg/L
SiO2†	48552.4	150.29	0.31%	[5347.5]	µg/L

Si 251.611†	150309.2	400.75	0.27%	[2500]	µg/L
Sn 189.927†	6932.4	72.76	1.05%	[500]	µg/L
Sr 421.552†	212126.0	2361.66	1.11%	[500]	µg/L
Ti 334.940†	485108.8	756.53	0.16%	[500]	µg/L
Tl 190.801†	3664.9	24.20	0.66%	[500]	µg/L
U 409.014†	7457.6	69.86	0.94%	[500]	µg/L
V 292.402†	88974.2	270.15	0.30%	[500]	µg/L
Zn 213.857†	78879.4	393.36	0.50%	[500]	µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 3/29/2010 18:32:52
Data Type: Reprocessed on 3/29/2010 19:14:34

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1695274.3	1695274.3	101.35	%	18:33:51
1	Sc RADIAL	148093.8	148093.8	102	%	18:33:23
1	Y 371.029	1024428.2	1024428.2	100.18	%	18:33:51
1	Ag 328.068†	253437.3	247106.6	[1000]	µg/L	18:33:51
1	Al 396.153Radial†	47074.8	46363.0	[10000]	µg/L	18:33:23
1	As 188.979†	2423.7	2405.8	[1000]	µg/L	18:33:53
1	B 249.677†	64171.5	59964.1	[1000]	µg/L	18:33:51
1	Ba 233.527†	222696.0	219915.4	[1000]	µg/L	18:33:51
1	Be 313.107†	3125497.2	3084675.4	[1000]	µg/L	18:33:51
1	Ca 317.933Radial†	175989.6	172593.1	[10000]	µg/L	18:33:23
1	Cd 226.502†	147319.9	145459.1	[1000]	µg/L	18:33:51
1	Co 228.616†	73285.4	72489.3	[1000]	µg/L	18:33:53
1	Cr 267.716†	118453.3	116720.9	[1000]	µg/L	18:33:51
1	Cu 324.752†	236158.0	230598.8	[1000]	µg/L	18:33:51
1	Fe 238.204 Radial†	153305.8	150770.6	[10000]	µg/L	18:33:23
1	K 766.490 Radial†	26333.7	24462.7	[10000]	µg/L	18:33:23
1	Mg 279.077 IEC†	25539.7	24949.5	[10000]	µg/L	18:33:23
1	Mn 257.610†	742700.4	732763.2	[1000]	µg/L	18:33:51
1	Mo 202.031†	31916.7	31548.3	[1000]	µg/L	18:33:53
1	Na 589.592 Radial†	67840.0	65073.6	[10000]	µg/L	18:33:23
1	Ni 231.604†	79543.1	78528.3	[1000]	µg/L	18:33:51
1	P 214.914†	21051.1	20692.1	[5000]	µg/L	18:33:53
1	Pb 220.353†	16751.4	16416.6	[1000]	µg/L	18:33:53
1	S 181.975 Axial†	2600.1	2470.7	[2000]	µg/L	18:33:53
1	Sb 206.836†	7615.0	7427.3	[1000]	µg/L	18:33:53
1	Se 196.026†	2517.5	2473.2	[1000]	µg/L	18:33:53
1	SiO2†	101024.7	98111.1	[10695]	µg/L	18:33:51
1	Si 251.611†	307939.1	303175.7	[5000]	µg/L	18:33:51
1	Sn 189.927†	14211.0	14020.4	[1000]	µg/L	18:33:53
1	Sr 421.552†	434456.1	427870.5	[1000]	µg/L	18:33:21
1	Ti 334.940†	997481.3	983606.3	[1000]	µg/L	18:33:51
1	Tl 190.801†	7335.9	7358.9	[1000]	µg/L	18:33:53
1	U 409.014†	16212.4	16476.3	[1000]	µg/L	18:33:51
1	V 292.402†	183867.8	180995.7	[1000]	µg/L	18:33:51
1	Zn 213.857†	161925.8	159312.2	[1000]	µg/L	18:33:51
2	Sc 361.383	1690996.4	1690996.4	101.09	%	18:33:57
2	Sc RADIAL	145999.7	145999.7	100	%	18:33:27
2	Y 371.029	1021922.1	1021922.1	99.936	%	18:33:57
2	Ag 328.068†	252044.6	246361.5	[1000]	µg/L	18:33:57
2	Al 396.153Radial†	46624.8	46578.3	[10000]	µg/L	18:33:27
2	As 188.979†	2403.1	2391.4	[1000]	µg/L	18:33:59
2	B 249.677†	63843.6	59800.0	[1000]	µg/L	18:33:57
2	Ba 233.527†	221227.7	219018.9	[1000]	µg/L	18:33:57
2	Be 313.107†	3107291.9	3074468.3	[1000]	µg/L	18:33:57
2	Ca 317.933Radial†	173656.9	172748.8	[10000]	µg/L	18:33:27
2	Cd 226.502†	146575.4	145090.3	[1000]	µg/L	18:33:57
2	Co 228.616†	74805.8	74176.3	[1000]	µg/L	18:33:59
2	Cr 267.716†	118015.5	116583.5	[1000]	µg/L	18:33:57
2	Cu 324.752†	235118.6	230160.1	[1000]	µg/L	18:33:57
2	Fe 238.204 Radial†	151211.1	150843.6	[10000]	µg/L	18:33:27
2	K 766.490 Radial†	25931.4	24432.8	[10000]	µg/L	18:33:27
2	Mg 279.077 IEC†	24969.0	24740.4	[10000]	µg/L	18:33:27
2	Mn 257.610†	740445.3	732386.4	[1000]	µg/L	18:33:57
2	Mo 202.031†	32495.1	32200.2	[1000]	µg/L	18:33:59
2	Na 589.592 Radial†	67249.4	65441.6	[10000]	µg/L	18:33:27
2	Ni 231.604†	79100.3	78288.9	[1000]	µg/L	18:33:57
2	P 214.914†	21690.5	21377.2	[5000]	µg/L	18:33:59
2	Pb 220.353†	17172.9	16875.4	[1000]	µg/L	18:33:59

2	S 181.975 Axial†	2679.6	2555.9	[2000] µg/L	18:33:59
2	Sb 206.836†	7635.7	7466.8	[1000] µg/L	18:33:59
2	Se 196.026†	2666.5	2626.9	[1000] µg/L	18:33:59
2	SiO2†	100664.8	98007.2	[10695] µg/L	18:33:57
2	Si 251.611†	306502.8	302523.6	[5000] µg/L	18:33:57
2	Sn 189.927†	14443.7	14286.0	[1000] µg/L	18:33:59
2	Sr 421.552†	430963.7	430517.1	[1000] µg/L	18:33:25
2	Ti 334.940†	993955.9	982608.8	[1000] µg/L	18:33:57
2	Tl 190.801†	7531.3	7570.4	[1000] µg/L	18:33:59
2	U 409.014†	16040.6	16346.9	[1000] µg/L	18:33:57
2	V 292.402†	183235.5	180829.1	[1000] µg/L	18:33:57
2	Zn 213.857†	161264.5	159062.3	[1000] µg/L	18:33:57
3	Sc 361.383	1679595.4	1679595.4	100.41 %	18:34:04
3	Sc RADIAL	149693.3	149693.3	103 %	18:33:31
3	Y 371.029	1015550.9	1015550.9	99.312 %	18:34:04
3	Ag 328.068†	251016.5	247030.1	[1000] µg/L	18:34:04
3	Al 396.153Radial†	47551.4	46332.0	[10000] µg/L	18:33:31
3	As 188.979†	2421.2	2425.6	[1000] µg/L	18:34:06
3	B 249.677†	63426.3	59813.0	[1000] µg/L	18:34:04
3	Ba 233.527†	219963.3	219245.0	[1000] µg/L	18:34:04
3	Be 313.107†	3093622.9	3081719.7	[1000] µg/L	18:34:04
3	Ca 317.933Radial†	178184.0	172879.1	[10000] µg/L	18:33:31
3	Cd 226.502†	145509.3	145012.8	[1000] µg/L	18:34:04
3	Co 228.616†	73160.7	73040.2	[1000] µg/L	18:34:06
3	Cr 267.716†	117369.2	116732.4	[1000] µg/L	18:34:04
3	Cu 324.752†	233979.9	230604.8	[1000] µg/L	18:34:04
3	Fe 238.204 Radial†	154947.1	150756.5	[10000] µg/L	18:33:31
3	K 766.490 Radial†	26410.5	24260.6	[10000] µg/L	18:33:31
3	Mg 279.077 IEC†	25740.2	24876.2	[10000] µg/L	18:33:31
3	Mn 257.610†	735902.7	732834.1	[1000] µg/L	18:34:04
3	Mo 202.031†	31675.9	31602.5	[1000] µg/L	18:34:06
3	Na 589.592 Radial†	68591.3	65091.7	[10000] µg/L	18:33:31
3	Ni 231.604†	78372.8	78095.4	[1000] µg/L	18:34:04
3	P 214.914†	21100.1	20934.8	[5000] µg/L	18:34:06
3	Pb 220.353†	16565.8	16386.1	[1000] µg/L	18:34:06
3	S 181.975 Axial†	2538.8	2433.7	[2000] µg/L	18:34:06
3	Sb 206.836†	7547.1	7429.8	[1000] µg/L	18:34:06
3	Se 196.026†	2534.8	2513.6	[1000] µg/L	18:34:06
3	SiO2†	99973.5	97994.7	[10695] µg/L	18:34:04
3	Si 251.611†	304718.9	302805.0	[5000] µg/L	18:34:04
3	Sn 189.927†	14107.2	14047.9	[1000] µg/L	18:34:06
3	Sr 421.552†	434068.2	422924.1	[1000] µg/L	18:33:29
3	Ti 334.940†	988596.9	983945.8	[1000] µg/L	18:34:04
3	Tl 190.801†	7419.8	7510.0	[1000] µg/L	18:34:06
3	U 409.014†	16237.0	16650.2	[1000] µg/L	18:34:04
3	V 292.402†	181988.8	180817.9	[1000] µg/L	18:34:04
3	Zn 213.857†	160057.9	158943.5	[1000] µg/L	18:34:04

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1688622.0	8104.65	0.48%	100.95	%
Sc RADIAL	147928.9	1852.30	1.25%	101	%
Y 371.029	1020633.7	4576.76	0.45%	99.810	%
Ag 328.068†	246832.7	409.85	0.17%	[1000]	µg/L
Al 396.153Radial†	46424.4	134.12	0.29%	[10000]	µg/L
As 188.979†	2407.6	17.16	0.71%	[1000]	µg/L
B 249.677†	59859.0	91.23	0.15%	[1000]	µg/L
Ba 233.527†	219393.1	466.22	0.21%	[1000]	µg/L
Be 313.107†	3080287.8	5252.04	0.17%	[1000]	µg/L
Ca 317.933Radial†	172740.3	143.17	0.08%	[10000]	µg/L
Cd 226.502†	145187.4	238.43	0.16%	[1000]	µg/L
Co 228.616†	73235.3	860.22	1.17%	[1000]	µg/L
Cr 267.716†	116678.9	82.81	0.07%	[1000]	µg/L
Cu 324.752†	230454.6	255.03	0.11%	[1000]	µg/L
Fe 238.204 Radial†	150790.2	46.73	0.03%	[10000]	µg/L
K 766.490 Radial†	24385.4	109.10	0.45%	[10000]	µg/L
Mg 279.077 IEC†	24855.4	106.12	0.43%	[10000]	µg/L
Mn 257.610†	732661.3	240.63	0.03%	[1000]	µg/L
Mo 202.031†	31783.7	361.73	1.14%	[1000]	µg/L

Na 589.592 Radial†	65202.3	207.44	0.32%	[10000] µg/L
Ni 231.604†	78304.2	216.83	0.28%	[1000] µg/L
P 214.914†	21001.4	347.34	1.65%	[5000] µg/L
Pb 220.353†	16559.4	274.11	1.66%	[1000] µg/L
S 181.975 Axial†	2486.8	62.65	2.52%	[2000] µg/L
Sb 206.836†	7441.3	22.10	0.30%	[1000] µg/L
Se 196.026†	2537.9	79.67	3.14%	[1000] µg/L
SiO2†	98037.6	63.89	0.07%	[10695] µg/L
Si 251.611†	302834.8	327.07	0.11%	[5000] µg/L
Sn 189.927†	14118.1	146.08	1.03%	[1000] µg/L
Sr 421.552†	427103.9	3854.12	0.90%	[1000] µg/L
Ti 334.940†	983387.0	694.94	0.07%	[1000] µg/L
Tl 190.801†	7479.8	108.97	1.46%	[1000] µg/L
U 409.014†	16491.1	152.21	0.92%	[1000] µg/L
V 292.402†	180880.9	99.54	0.06%	[1000] µg/L
Zn 213.857†	159106.0	188.24	0.12%	[1000] µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 3/29/2010 18:34:14
Data Type: Reprocessed on 3/29/2010 19:14:35
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1647889.5	1647889.5	98.512	%	18:35:05
1	Sc RADIAL	147922.0	147922.0	101	%	18:34:43
1	Y 371.029	997984.1	997984.1	97.595	%	18:35:05
1	Al 396.153Radial†	231630.6	228268.0	[50000]	µg/L	18:34:43
1	Ca 317.933Radial†	864405.0	851121.2	[50000]	µg/L	18:34:43
1	Fe 238.204 Radial†	304562.8	299986.3	[20000]	µg/L	18:34:43
1	Mg 279.077 IEC†	122786.4	120800.3	[50000]	µg/L	18:34:43
1	Na 589.592 Radial†	134121.8	130461.6	[20000]	µg/L	18:34:43
2	Sc 361.383	1646965.2	1646965.2	98.457	%	18:35:08
2	Sc RADIAL	147135.1	147135.1	101	%	18:34:45
2	Y 371.029	998151.2	998151.2	97.611	%	18:35:08
2	Al 396.153Radial†	231070.3	228933.5	[50000]	µg/L	18:34:45
2	Ca 317.933Radial†	860622.6	851929.2	[50000]	µg/L	18:34:45
2	Fe 238.204 Radial†	303079.0	300121.2	[20000]	µg/L	18:34:45
2	Mg 279.077 IEC†	122393.7	121058.3	[50000]	µg/L	18:34:45
2	Na 589.592 Radial†	133483.0	130535.5	[20000]	µg/L	18:34:45
3	Sc 361.383	1642134.3	1642134.3	98.168	%	18:35:10
3	Sc RADIAL	146873.2	146873.2	101	%	18:34:47
3	Y 371.029	994617.7	994617.7	97.265	%	18:35:10
3	Al 396.153Radial†	231391.3	229660.2	[50000]	µg/L	18:34:47
3	Ca 317.933Radial†	862939.8	855749.1	[50000]	µg/L	18:34:47
3	Fe 238.204 Radial†	304238.1	301806.9	[20000]	µg/L	18:34:47
3	Mg 279.077 IEC†	122676.5	121555.2	[50000]	µg/L	18:34:47
3	Na 589.592 Radial†	134070.7	131354.5	[20000]	µg/L	18:34:47

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1645663.0	3090.68	0.19%	98.379	%
Sc RADIAL	147310.1	545.84	0.37%	101	%
Y 371.029	996917.7	1993.60	0.20%	97.490	%
Al 396.153Radial†	228953.9	696.32	0.30%	[50000]	µg/L
Ca 317.933Radial†	852933.2	2471.89	0.29%	[50000]	µg/L
Fe 238.204 Radial†	300638.1	1014.46	0.34%	[20000]	µg/L
Mg 279.077 IEC†	121137.9	383.71	0.32%	[50000]	µg/L
Na 589.592 Radial†	130783.9	495.57	0.38%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	246.4	0.00000	0.999992	
Al 396.153Radial	3	Lin Thru 0	0.0	4.581	0.00000	0.999996	
As 188.979	3	Lin Thru 0	0.0	2.393	0.00000	0.999929	
B 249.677	3	Lin Thru 0	0.0	59.56	0.00000	0.999952	
Ba 233.527	3	Lin Thru 0	0.0	218.9	0.00000	0.999987	
Be 313.107	3	Lin Thru 0	0.0	3072	0.00000	0.999986	
Ca 317.933Radial	3	Lin Thru 0	0.0	17.07	0.00000	0.999997	
Cd 226.502	3	Lin Thru 0	0.0	144.8	0.00000	0.999986	
Co 228.616	3	Lin Thru 0	0.0	73.04	0.00000	0.999984	
Cr 267.716	3	Lin Thru 0	0.0	116.4	0.00000	0.999990	
Cu 324.752	3	Lin Thru 0	0.0	230.0	0.00000	0.999993	
Fe 238.204 Radia	2	Lin Thru 0	0.0	15.04	0.00000	0.999999	
K 766.490 Radial	3	Lin Thru 0	0.0	2.429	0.00000	0.999970	
Mg 279.077 IEC	3	Lin Thru 0	0.0	2.425	0.00000	0.999987	
Mn 257.610	3	Lin Thru 0	0.0	731.8	0.00000	0.999991	
Mo 202.031	3	Lin Thru 0	0.0	31.68	0.00000	0.999979	

Na 589.592 Radia	2	Lin Thru 0	0.0	6.535	0.00000	0.999999
Ni 231.604	3	Lin Thru 0	0.0	78.18	0.00000	0.999990
P 214.914	3	Lin Thru 0	0.0	4.176	0.00000	0.999933
Pb 220.353	3	Lin Thru 0	0.0	16.51	0.00000	0.999980
S 181.975 Axial	3	Lin Thru 0	0.0	1.234	0.00000	0.999894
Sb 206.836	3	Lin Thru 0	0.0	7.413	0.00000	0.999972
Se 196.026	3	Lin Thru 0	0.0	2.528	0.00000	0.999970
SiO2	3	Lin Thru 0	0.0	9.149	0.00000	0.999993
Si 251.611	3	Lin Thru 0	0.0	60.48	0.00000	0.999996
Sn 189.927	3	Lin Thru 0	0.0	14.07	0.00000	0.999974
Sr 421.552	3	Lin Thru 0	0.0	426.7	0.00000	0.999990
Ti 334.940	3	Lin Thru 0	0.0	980.7	0.00000	0.999985
Tl 190.801	3	Lin Thru 0	0.0	7.450	0.00000	0.999968
U 409.014	3	Lin Thru 0	0.0	16.18	0.00000	0.999235
V 292.402	3	Lin Thru 0	0.0	180.3	0.00000	0.999978
Zn 213.857	3	Lin Thru 0	0.0	158.8	0.00000	0.999994

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 3/29/2010 18:35:18
Data Type: Reprocessed on 3/29/2010 19:14:36
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1701844.8	1701844.8	101.74	%			18:36:17
1	Sc RADIAL	151216.0	151216.0	104	%			18:35:50
1	Y 371.029	1036585.9	1036585.9	101.37	%			18:36:17
1	Ag 328.068†	65858.6	61766.5	256.87	µg/L	256.87	ppb	18:36:17
1	Al 396.153Radial†	24486.5	23634.0	5134.9	µg/L	5134.9	ppb	18:35:50
1	As 188.979†	1140.6	1135.4	481.67	µg/L	481.67	ppb	18:36:37
1	B 249.677†	34168.2	30228.9	505.75	µg/L	505.75	ppb	18:36:17
1	Ba 233.527†	112714.3	110964.0	507.33	µg/L	507.33	ppb	18:36:17
1	Be 313.107†	798269.6	785294.0	255.76	µg/L	255.76	ppb	18:36:17
1	Ca 317.933Radial†	89164.4	85327.7	4999.8	µg/L	4999.8	ppb	18:35:50
1	Cd 226.502†	72993.3	71840.9	495.79	µg/L	495.79	ppb	18:36:17
1	Co 228.616†	37444.2	36981.2	506.64	µg/L	506.64	ppb	18:36:17
1	Cr 267.716†	57873.1	56724.3	487.10	µg/L	487.10	ppb	18:36:17
1	Cu 324.752†	121386.5	116888.2	509.66	µg/L	509.66	ppb	18:36:17
1	Fe 238.204 Radial†	78431.6	75485.5	5018.5	µg/L	5018.5	ppb	18:35:50
1	K 766.490 Radial†	7725.2	5991.2	2463.6	µg/L	2463.6	ppb	18:35:50
1	Mg 279.077 IEC†	13310.9	12643.4	5221.4	µg/L	5221.4	ppb	18:35:50
1	Mn 257.610†	376288.9	369781.3	505.06	µg/L	505.06	ppb	18:36:17
1	Mo 202.031†	16673.6	16444.0	519.54	µg/L	519.54	ppb	18:36:37
1	Na 589.592 Radial†	18471.5	16109.6	2462.8	µg/L	2462.8	ppb	18:35:50
1	Ni 231.604†	39283.0	38652.9	494.42	µg/L	494.42	ppb	18:36:17
1	P 214.914†	10554.2	10294.3	2456.6	µg/L	2456.6	ppb	18:36:37
1	Pb 220.353†	8472.5	8215.3	499.30	µg/L	499.30	ppb	18:36:37
1	S 181.975 Axial†	3123.6	2975.4	2415.0	µg/L	2415.0	ppb	18:36:37
1	Sb 206.836†	3775.1	3624.0	490.49	µg/L	490.49	ppb	18:36:37
1	Se 196.026†	6364.3	6244.7	2470	µg/L	2470	ppb	18:36:37
1	SiO2†	99568.8	96295.2	10503	µg/L	10503	ppb	18:36:17
1	Si 251.611†	303093.3	297239.6	4904.5	µg/L	4904.5	ppb	18:36:17
1	Sn 189.927†	7432.7	7303.7	520.86	µg/L	520.86	ppb	18:36:37
1	Sr 421.552†	233447.1	225293.2	527.99	µg/L	527.99	ppb	18:35:48
1	Ti 334.940†	482527.6	473648.9	482.33	µg/L	482.33	ppb	18:36:17
1	Tl 190.801†	3799.6	3855.0	524.73	µg/L	524.73	ppb	18:36:37
1	U 409.014†	6773.0	7136.4	471.37	µg/L	471.37	ppb	18:36:17
1	V 292.402†	91625.4	89628.5	503.69	µg/L	503.69	ppb	18:36:17
1	Zn 213.857†	81346.1	79492.2	496.47	µg/L	496.47	ppb	18:36:17
2	Sc 361.383	1701980.9	1701980.9	101.75	%			18:36:40
2	Sc RADIAL	148848.9	148848.9	102	%			18:35:54
2	Y 371.029	1036246.9	1036246.9	101.34	%			18:36:40
2	Ag 328.068†	66063.0	61962.3	257.67	µg/L	257.67	ppb	18:36:40
2	Al 396.153Radial†	24189.6	23718.6	5153.2	µg/L	5153.2	ppb	18:35:54
2	As 188.979†	1141.1	1135.8	481.85	µg/L	481.85	ppb	18:37:00
2	B 249.677†	34342.1	30397.1	508.57	µg/L	508.57	ppb	18:36:40
2	Ba 233.527†	113003.6	111239.5	508.60	µg/L	508.60	ppb	18:36:40
2	Be 313.107†	803326.2	790201.1	257.35	µg/L	257.35	ppb	18:36:40
2	Ca 317.933Radial†	87776.3	85335.2	5000.3	µg/L	5000.3	ppb	18:35:54
2	Cd 226.502†	73305.6	72142.1	497.87	µg/L	497.87	ppb	18:36:40
2	Co 228.616†	37456.8	36990.6	506.77	µg/L	506.77	ppb	18:36:40
2	Cr 267.716†	58033.0	56876.9	488.42	µg/L	488.42	ppb	18:36:40
2	Cu 324.752†	121826.1	117310.6	511.48	µg/L	511.48	ppb	18:36:40
2	Fe 238.204 Radial†	77113.3	75396.8	5012.6	µg/L	5012.6	ppb	18:35:54
2	K 766.490 Radial†	7618.8	6005.4	2469.4	µg/L	2469.4	ppb	18:35:54
2	Mg 279.077 IEC†	12970.7	12514.3	5168.3	µg/L	5168.3	ppb	18:35:54
2	Mn 257.610†	377832.0	371268.3	507.10	µg/L	507.10	ppb	18:36:40
2	Mo 202.031†	16755.0	16522.7	522.02	µg/L	522.02	ppb	18:37:00
2	Na 589.592 Radial†	18069.9	15999.5	2445.9	µg/L	2445.9	ppb	18:35:54
2	Ni 231.604†	39447.3	38811.3	496.44	µg/L	496.44	ppb	18:36:40
2	P 214.914†	10626.3	10364.3	2473.3	µg/L	2473.3	ppb	18:37:00
2	Pb 220.353†	8494.9	8236.7	500.61	µg/L	500.61	ppb	18:37:00

2	S 181.975 Axial†	3125.4	2976.9	2416.3 µg/L	2416.3 ppb	18:37:00
2	Sb 206.836†	3806.5	3654.5	494.63 µg/L	494.63 ppb	18:37:00
2	Se 196.026†	6410.3	6289.4	2490 µg/L	2490 ppb	18:37:00
2	SiO2†	100159.6	96868.0	10565 µg/L	10565 ppb	18:36:40
2	Si 251.611†	304136.0	298240.5	4921.0 µg/L	4921.0 ppb	18:36:40
2	Sn 189.927†	7468.1	7337.9	523.29 µg/L	523.29 ppb	18:37:00
2	Sr 421.552†	233080.0	228512.0	535.53 µg/L	535.53 ppb	18:35:52
2	Ti 334.940†	484116.4	475172.5	483.90 µg/L	483.90 ppb	18:36:40
2	Tl 190.801†	3811.9	3866.8	526.34 µg/L	526.34 ppb	18:37:00
2	U 409.014†	6593.5	6959.4	460.57 µg/L	460.57 ppb	18:36:40
2	V 292.402†	92020.5	90009.6	505.83 µg/L	505.83 ppb	18:36:40
2	Zn 213.857†	81495.2	79632.3	497.34 µg/L	497.34 ppb	18:36:40
3	Sc 361.383	1720635.0	1720635.0	102.86 %		18:37:03
3	Sc RADIAL	149044.6	149044.6	102 %		18:35:58
3	Y 371.029	1046771.8	1046771.8	102.37 %		18:37:03
3	Ag 328.068†	66524.8	61707.3	256.63 µg/L	256.63 ppb	18:37:03
3	Al 396.153Radial†	24064.3	23565.0	5120.0 µg/L	5120.0 ppb	18:35:58
3	As 188.979†	1131.9	1114.6	473.00 µg/L	473.00 ppb	18:37:23
3	B 249.677†	34751.0	30428.7	509.10 µg/L	509.10 ppb	18:37:03
3	Ba 233.527†	114119.3	111120.0	508.05 µg/L	508.05 ppb	18:37:03
3	Be 313.107†	809136.9	787290.3	256.41 µg/L	256.41 ppb	18:37:03
3	Ca 317.933Radial†	87762.2	85208.6	4992.9 µg/L	4992.9 ppb	18:35:58
3	Cd 226.502†	74233.6	72263.2	498.71 µg/L	498.71 ppb	18:37:03
3	Co 228.616†	37810.4	36935.2	506.02 µg/L	506.02 ppb	18:37:03
3	Cr 267.716†	58579.7	56790.0	487.67 µg/L	487.67 ppb	18:37:03
3	Cu 324.752†	122627.9	116792.1	509.24 µg/L	509.24 ppb	18:37:03
3	Fe 238.204 Radial†	77211.6	75393.8	5012.4 µg/L	5012.4 ppb	18:35:58
3	K 766.490 Radial†	7631.8	6008.3	2470.6 µg/L	2470.6 ppb	18:35:58
3	Mg 279.077 IEC†	13062.0	12587.0	5198.1 µg/L	5198.1 ppb	18:35:58
3	Mn 257.610†	380724.0	370053.9	505.44 µg/L	505.44 ppb	18:37:03
3	Mo 202.031†	16767.7	16356.5	516.77 µg/L	516.77 ppb	18:37:23
3	Na 589.592 Radial†	18288.4	16189.9	2475.1 µg/L	2475.1 ppb	18:35:58
3	Ni 231.604†	39680.9	38618.1	493.97 µg/L	493.97 ppb	18:37:03
3	P 214.914†	10598.2	10223.8	2439.7 µg/L	2439.7 ppb	18:37:23
3	Pb 220.353†	8535.0	8185.1	497.46 µg/L	497.46 ppb	18:37:23
3	S 181.975 Axial†	3153.8	2971.2	2411.6 µg/L	2411.6 ppb	18:37:23
3	Sb 206.836†	3795.0	3602.8	487.58 µg/L	487.58 ppb	18:37:23
3	Se 196.026†	6408.5	6219.4	2460 µg/L	2460 ppb	18:37:23
3	SiO2†	100969.8	96588.4	10535 µg/L	10535 ppb	18:37:03
3	Si 251.611†	306927.5	297713.8	4912.4 µg/L	4912.4 ppb	18:37:03
3	Sn 189.927†	7476.5	7266.5	518.21 µg/L	518.21 ppb	18:37:23
3	Sr 421.552†	230245.5	225440.5	528.33 µg/L	528.33 ppb	18:35:56
3	Ti 334.940†	487355.2	473162.7	481.84 µg/L	481.84 ppb	18:37:03
3	Tl 190.801†	3807.3	3821.7	520.26 µg/L	520.26 ppb	18:37:23
3	U 409.014†	6788.8	7079.0	467.87 µg/L	467.87 ppb	18:37:03
3	V 292.402†	92755.7	89743.8	504.30 µg/L	504.30 ppb	18:37:03
3	Zn 213.857†	82290.5	79537.1	496.75 µg/L	496.75 ppb	18:37:03

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1708153.5	102.11	%	0.646				0.63%
Sc RADIAL	149703.2	103	%	0.9				0.88%
Y 371.029	1039868.2	101.69	%	0.585				0.58%
Ag 328.068†	61812.1	257.06	µg/L	0.547	257.06	ppb	0.547	0.21%
QC value within limits for Ag 328.068 Recovery = 102.82%								
Al 396.153Radial†	23639.2	5136.0	µg/L	16.67	5136.0	ppb	16.67	0.32%
QC value within limits for Al 396.153Radial Recovery = 102.72%								
As 188.979†	1128.6	478.84	µg/L	5.057	478.84	ppb	5.057	1.06%
QC value within limits for As 188.979 Recovery = 95.77%								
B 249.677†	30351.6	507.81	µg/L	1.804	507.81	ppb	1.804	0.36%
QC value within limits for B 249.677 Recovery = 101.56%								
Ba 233.527†	111107.9	507.99	µg/L	0.632	507.99	ppb	0.632	0.12%
QC value within limits for Ba 233.527 Recovery = 101.60%								
Be 313.107†	787595.1	256.51	µg/L	0.802	256.51	ppb	0.802	0.31%
QC value within limits for Be 313.107 Recovery = 102.60%								
Ca 317.933Radial†	85290.5	4997.7	µg/L	4.16	4997.7	ppb	4.16	0.08%
QC value within limits for Ca 317.933Radial Recovery = 99.95%								
Cd 226.502†	72082.0	497.46	µg/L	1.502	497.46	ppb	1.502	0.30%
QC value within limits for Cd 226.502 Recovery = 99.49%								

Co 228.616†	36969.0	506.48 µg/L	0.406	506.48 ppb	0.406	0.08%
QC value within limits for Co 228.616 Recovery = 101.30%						
Cr 267.716†	56797.1	487.73 µg/L	0.662	487.73 ppb	0.662	0.14%
QC value within limits for Cr 267.716 Recovery = 97.55%						
Cu 324.752†	116997.0	510.13 µg/L	1.195	510.13 ppb	1.195	0.23%
QC value within limits for Cu 324.752 Recovery = 102.03%						
Fe 238.204 Radial†	75425.3	5014.5 µg/L	3.46	5014.5 ppb	3.46	0.07%
QC value within limits for Fe 238.204 Radial Recovery = 100.29%						
K 766.490 Radial†	6001.6	2467.9 µg/L	3.77	2467.9 ppb	3.77	0.15%
QC value within limits for K 766.490 Radial Recovery = 98.71%						
Mg 279.077 IEC†	12581.6	5195.9 µg/L	26.65	5195.9 ppb	26.65	0.51%
QC value within limits for Mg 279.077 IEC Recovery = 103.92%						
Mn 257.610†	370367.8	505.87 µg/L	1.083	505.87 ppb	1.083	0.21%
QC value within limits for Mn 257.610 Recovery = 101.17%						
Mo 202.031†	16441.1	519.44 µg/L	2.624	519.44 ppb	2.624	0.51%
QC value within limits for Mo 202.031 Recovery = 103.89%						
Na 589.592 Radial†	16099.7	2461.3 µg/L	14.63	2461.3 ppb	14.63	0.59%
QC value within limits for Na 589.592 Radial Recovery = 98.45%						
Ni 231.604†	38694.1	494.94 µg/L	1.317	494.94 ppb	1.317	0.27%
QC value within limits for Ni 231.604 Recovery = 98.99%						
P 214.914†	10294.2	2456.5 µg/L	16.81	2456.5 ppb	16.81	0.68%
QC value within limits for P 214.914 Recovery = 98.26%						
Pb 220.353†	8212.4	499.12 µg/L	1.581	499.12 ppb	1.581	0.32%
QC value within limits for Pb 220.353 Recovery = 99.82%						
S 181.975 Axial†	2974.5	2414.3 µg/L	2.40	2414.3 ppb	2.40	0.10%
QC value within limits for S 181.975 Axial Recovery = 96.57%						
Sb 206.836†	3627.1	490.90 µg/L	3.546	490.90 ppb	3.546	0.72%
QC value within limits for Sb 206.836 Recovery = 98.18%						
Se 196.026†	6251.2	2470 µg/L	14.0	2470 ppb	14.0	0.57%
QC value within limits for Se 196.026 Recovery = 98.99%						
SiO2†	96583.8	10534 µg/L	31.3	10534 ppb	31.3	0.30%
QC value within limits for SiO2 Recovery = 98.50%						
Si 251.611†	297731.3	4912.6 µg/L	8.25	4912.6 ppb	8.25	0.17%
QC value within limits for Si 251.611 Recovery = 98.25%						
Sn 189.927†	7302.7	520.79 µg/L	2.541	520.79 ppb	2.541	0.49%
QC value within limits for Sn 189.927 Recovery = 104.16%						
Sr 421.552†	226415.3	530.62 µg/L	4.259	530.62 ppb	4.259	0.80%
QC value within limits for Sr 421.552 Recovery = 106.12%						
Ti 334.940†	473994.7	482.69 µg/L	1.073	482.69 ppb	1.073	0.22%
QC value within limits for Ti 334.940 Recovery = 96.54%						
Tl 190.801†	3847.8	523.78 µg/L	3.151	523.78 ppb	3.151	0.60%
QC value within limits for Tl 190.801 Recovery = 104.76%						
U 409.014†	7058.3	466.61 µg/L	5.511	466.61 ppb	5.511	1.18%
QC value within limits for U 409.014 Recovery = 93.32%						
V 292.402†	89793.9	504.61 µg/L	1.101	504.61 ppb	1.101	0.22%
QC value within limits for V 292.402 Recovery = 100.92%						
Zn 213.857†	79553.9	496.85 µg/L	0.443	496.85 ppb	0.443	0.09%
QC value within limits for Zn 213.857 Recovery = 99.37%						

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 3/29/2010 18:37:32
Data Type: Reprocessed on 3/29/2010 19:14:36

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1718110.5	1718110.5	102.71	%			18:39:24
1	Sc RADIAL	149870.1	149870.1	103	%			18:38:01
1	Y 371.029	1056124.6	1056124.6	103.28	%			18:39:24
1	Ag 328.068†	2764.1	-275.9	-1.1170	µg/L	-1.1170	ppb	18:39:26
1	Al 396.153Radial†	-34.1	-1.3	-0.3025	µg/L	-0.3025	ppb	18:38:21
1	As 188.979†	-13.9	0.8	0.3158	µg/L	0.3158	ppb	18:39:46
1	B 249.677†	3290.8	-151.7	-2.5477	µg/L	-2.5477	ppb	18:39:46
1	Ba 233.527†	-149.3	29.7	0.1352	µg/L	0.1352	ppb	18:39:46
1	Be 313.107†	-642.8	34.2	0.0134	µg/L	0.0134	ppb	18:39:26
1	Ca 317.933Radial†	601.2	-31.5	-1.8457	µg/L	-1.8457	ppb	18:38:21
1	Cd 226.502†	-82.2	14.4	0.0988	µg/L	0.0988	ppb	18:39:46
1	Co 228.616†	-179.0	2.3	0.0321	µg/L	0.0321	ppb	18:39:46
1	Cr 267.716†	164.4	-0.2	-0.0075	µg/L	-0.0075	ppb	18:39:46
1	Cu 324.752†	2372.4	-115.1	-0.4939	µg/L	-0.4939	ppb	18:39:26
1	Fe 238.204 Radial†	141.5	24.3	1.6170	µg/L	1.6170	ppb	18:38:21
1	K 766.490 Radial†	1569.1	71.0	29.223	µg/L	29.223	ppb	18:38:01
1	Mg 279.077 IEC†	162.3	-28.9	-11.902	µg/L	-11.902	ppb	18:38:21
1	Mn 257.610†	162.2	77.9	0.1069	µg/L	0.1069	ppb	18:39:46
1	Mo 202.031†	-48.8	7.7	0.2416	µg/L	0.2416	ppb	18:39:46
1	Na 589.592 Radial†	1595.3	-143.3	-21.948	µg/L	-21.948	ppb	18:38:01
1	Ni 231.604†	-74.2	-31.3	-0.4003	µg/L	-0.4003	ppb	18:39:46
1	P 214.914†	77.1	-4.5	-1.0788	µg/L	-1.0788	ppb	18:39:46
1	Pb 220.353†	105.8	-9.5	-0.5776	µg/L	-0.5776	ppb	18:39:46
1	S 181.975 Axial†	96.4	-1.0	-0.8082	µg/L	-0.8082	ppb	18:39:46
1	Sb 206.836†	76.9	-11.8	-1.5863	µg/L	-1.5863	ppb	18:39:46
1	Se 196.026†	30.3	18.6	7.35	µg/L	7.35	ppb	18:39:46
1	SiO2†	1615.4	-0.1	-0.0156	µg/L	-0.0156	ppb	18:39:46
1	Si 251.611†	756.3	60.0	0.9881	µg/L	0.9881	ppb	18:39:26
1	Sn 189.927†	2.2	0.2	0.0117	µg/L	0.0117	ppb	18:39:46
1	Sr 421.552†	-232.4	51.9	0.1217	µg/L	0.1217	ppb	18:38:01
1	Ti 334.940†	823.7	165.6	0.1667	µg/L	0.1667	ppb	18:39:26
1	Tl 190.801†	-129.5	-5.8	-0.7821	µg/L	-0.7821	ppb	18:39:46
1	U 409.014†	-365.4	123.4	7.5895	µg/L	7.5895	ppb	18:39:26
1	V 292.402†	336.7	-104.0	-0.5695	µg/L	-0.5695	ppb	18:39:26
1	Zn 213.857†	481.8	4.7	0.0326	µg/L	0.0326	ppb	18:39:46
2	Sc 361.383	1718304.1	1718304.1	102.72	%			18:39:48
2	Sc RADIAL	149819.8	149819.8	103	%			18:38:23
2	Y 371.029	1056622.1	1056622.1	103.33	%			18:39:48
2	Ag 328.068†	3062.4	14.3	0.0846	µg/L	0.0846	ppb	18:39:50
2	Al 396.153Radial†	-45.4	-12.3	-2.7171	µg/L	-2.7171	ppb	18:38:44
2	As 188.979†	-10.9	3.6	1.5162	µg/L	1.5162	ppb	18:40:10
2	B 249.677†	3277.0	-165.5	-2.7792	µg/L	-2.7792	ppb	18:40:10
2	Ba 233.527†	-168.1	11.4	0.0526	µg/L	0.0526	ppb	18:40:10
2	Be 313.107†	-415.9	255.2	0.0882	µg/L	0.0882	ppb	18:39:50
2	Ca 317.933Radial†	633.4	0.0	0.0016	µg/L	0.0016	ppb	18:38:44
2	Cd 226.502†	-115.3	-17.9	-0.1235	µg/L	-0.1235	ppb	18:40:10
2	Co 228.616†	-162.9	18.1	0.2472	µg/L	0.2472	ppb	18:40:10
2	Cr 267.716†	189.3	24.1	0.1939	µg/L	0.1939	ppb	18:40:10
2	Cu 324.752†	2490.6	-0.2	0.0132	µg/L	0.0132	ppb	18:39:50
2	Fe 238.204 Radial†	132.2	15.4	1.0215	µg/L	1.0215	ppb	18:38:44
2	K 766.490 Radial†	1519.5	23.3	9.5884	µg/L	9.5884	ppb	18:38:23
2	Mg 279.077 IEC†	195.8	3.8	1.5733	µg/L	1.5733	ppb	18:38:44
2	Mn 257.610†	168.0	83.5	0.1141	µg/L	0.1141	ppb	18:40:10
2	Mo 202.031†	-35.6	20.5	0.6489	µg/L	0.6489	ppb	18:40:10
2	Na 589.592 Radial†	1651.7	-87.8	-13.450	µg/L	-13.450	ppb	18:38:23
2	Ni 231.604†	-55.2	-12.8	-0.1641	µg/L	-0.1641	ppb	18:40:10
2	P 214.914†	83.6	1.8	0.4344	µg/L	0.4344	ppb	18:40:10
2	Pb 220.353†	94.6	-20.3	-1.2399	µg/L	-1.2399	ppb	18:40:10

2	S 181.975 Axial†	84.2	-12.9	-10.416 µg/L	-10.416 ppb	18:40:10
2	Sb 206.836†	72.7	-15.8	-2.1296 µg/L	-2.1296 ppb	18:40:10
2	Se 196.026†	25.1	13.5	5.37 µg/L	5.37 ppb	18:40:10
2	SiO2†	1629.2	13.2	1.4227 µg/L	1.4227 ppb	18:40:10
2	Si 251.611†	776.2	79.3	1.3023 µg/L	1.3023 ppb	18:39:50
2	Sn 189.927†	1.7	-0.4	-0.0258 µg/L	-0.0258 ppb	18:40:10
2	Sr 421.552†	-119.9	161.3	0.3781 µg/L	0.3781 ppb	18:38:23
2	Ti 334.940†	906.1	245.8	0.2435 µg/L	0.2435 ppb	18:39:50
2	Tl 190.801†	-120.0	3.5	0.4698 µg/L	0.4698 ppb	18:40:10
2	U 409.014†	-211.2	273.5	16.929 µg/L	16.929 ppb	18:39:50
2	V 292.402†	536.3	90.3	0.5193 µg/L	0.5193 ppb	18:39:50
2	Zn 213.857†	461.1	-15.5	-0.0967 µg/L	-0.0967 ppb	18:40:10
3	Sc 361.383	1698930.8	1698930.8	101.56 %		18:40:12
3	Sc RADIAL	152143.2	152143.2	104 %		18:38:46
3	Y 371.029	1045315.3	1045315.3	102.22 %		18:40:12
3	Ag 328.068†	3085.7	71.1	0.2837 µg/L	0.2837 ppb	18:40:14
3	Al 396.153Radial†	-62.8	-28.3	-6.2230 µg/L	-6.2230 ppb	18:39:06
3	As 188.979†	-25.2	-10.6	-4.4173 µg/L	-4.4173 ppb	18:40:34
3	B 249.677†	3266.7	-139.3	-2.3411 µg/L	-2.3411 ppb	18:40:34
3	Ba 233.527†	-163.9	13.7	0.0623 µg/L	0.0623 ppb	18:40:34
3	Be 313.107†	-627.7	42.1	0.0141 µg/L	0.0141 ppb	18:40:14
3	Ca 317.933Radial†	630.0	-12.6	-0.7399 µg/L	-0.7399 ppb	18:39:06
3	Cd 226.502†	-76.1	19.4	0.1339 µg/L	0.1339 ppb	18:40:34
3	Co 228.616†	-133.4	45.2	0.6195 µg/L	0.6195 ppb	18:40:34
3	Cr 267.716†	156.7	-5.9	-0.0523 µg/L	-0.0523 ppb	18:40:34
3	Cu 324.752†	2540.5	76.5	0.3341 µg/L	0.3341 ppb	18:40:14
3	Fe 238.204 Radial†	134.4	15.5	1.0313 µg/L	1.0313 ppb	18:39:06
3	K 766.490 Radial†	1520.9	2.1	0.8535 µg/L	0.8535 ppb	18:38:46
3	Mg 279.077 IEC†	186.1	-8.4	-3.4269 µg/L	-3.4269 ppb	18:39:06
3	Mn 257.610†	142.8	60.6	0.0829 µg/L	0.0829 ppb	18:40:34
3	Mo 202.031†	-28.7	26.9	0.8495 µg/L	0.8495 ppb	18:40:34
3	Na 589.592 Radial†	1594.0	-167.7	-25.662 µg/L	-25.662 ppb	18:38:46
3	Ni 231.604†	-74.3	-32.3	-0.4127 µg/L	-0.4127 ppb	18:40:34
3	P 214.914†	71.0	-9.6	-2.3151 µg/L	-2.3151 ppb	18:40:34
3	Pb 220.353†	138.9	24.3	1.4738 µg/L	1.4738 ppb	18:40:34
3	S 181.975 Axial†	87.7	-8.5	-6.8917 µg/L	-6.8917 ppb	18:40:34
3	Sb 206.836†	71.9	-15.8	-2.1234 µg/L	-2.1234 ppb	18:40:34
3	Se 196.026†	21.3	10.1	3.99 µg/L	3.99 ppb	18:40:34
3	SiO2†	1618.8	21.0	2.2686 µg/L	2.2686 ppb	18:40:34
3	Si 251.611†	788.9	100.3	1.6458 µg/L	1.6458 ppb	18:40:14
3	Sn 189.927†	6.3	4.2	0.2956 µg/L	0.2956 ppb	18:40:34
3	Sr 421.552†	-237.8	50.2	0.1176 µg/L	0.1176 ppb	18:38:46
3	Ti 334.940†	556.8	-88.1	-0.0902 µg/L	-0.0902 ppb	18:40:14
3	Tl 190.801†	-119.8	2.3	0.3073 µg/L	0.3073 ppb	18:40:34
3	U 409.014†	-464.1	22.2	1.3392 µg/L	1.3392 ppb	18:40:14
3	V 292.402†	338.6	-98.5	-0.5367 µg/L	-0.5367 ppb	18:40:14
3	Zn 213.857†	460.6	-10.9	-0.0662 µg/L	-0.0662 ppb	18:40:34

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1711781.8	102.33	%	0.665				0.65%
Sc RADIAL	150611.1	103	%	0.9				0.88%
Y 371.029	1052687.3	102.94	%	0.625				0.61%
Ag 328.068†	-63.5	-0.2496	µg/L	0.75780	-0.2496	ppb	0.75780	303.64%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-14.0	-3.0809	µg/L	2.97697	-3.0809	ppb	2.97697	96.63%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.1	-0.8618	µg/L	3.13716	-0.8618	ppb	3.13716	364.04%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-152.2	-2.5560	µg/L	0.21918	-2.5560	ppb	0.21918	8.58%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	18.2	0.0834	µg/L	0.04516	0.0834	ppb	0.04516	54.17%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	110.5	0.0386	µg/L	0.04296	0.0386	ppb	0.04296	111.35%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-14.7	-0.8613	µg/L	0.92961	-0.8613	ppb	0.92961	107.93%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	5.3	0.0364	µg/L	0.13959	0.0364	ppb	0.13959	383.42%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	21.9	0.2996 µg/L	0.29720	0.2996 ppb	0.29720	99.21%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	6.0	0.0447 µg/L	0.13112	0.0447 ppb	0.13112	293.47%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-12.9	-0.0489 µg/L	0.41746	-0.0489 ppb	0.41746	854.27%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	18.4	1.2233 µg/L	0.34099	1.2233 ppb	0.34099	27.88%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	32.1	13.222 µg/L	14.5294	13.222 ppb	14.5294	109.89%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-11.2	-4.5853 µg/L	6.81203	-4.5853 ppb	6.81203	148.56%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	74.0	0.1013 µg/L	0.01630	0.1013 ppb	0.01630	16.09%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	18.4	0.5800 µg/L	0.30975	0.5800 ppb	0.30975	53.40%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-132.9	-20.353 µg/L	6.2604	-20.353 ppb	6.2604	30.76%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-25.5	-0.3257 µg/L	0.14010	-0.3257 ppb	0.14010	43.01%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-4.1	-0.9865 µg/L	1.37705	-0.9865 ppb	1.37705	139.59%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-1.8	-0.1146 µg/L	1.41489	-0.1146 ppb	1.41489	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-7.5	-6.0387 µg/L	4.86046	-6.0387 ppb	4.86046	80.49%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-14.5	-1.9465 µg/L	0.31193	-1.9465 ppb	0.31193	16.03%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	14.1	5.57 µg/L	1.688	5.57 ppb	1.688	30.30%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	11.4	1.2252 µg/L	1.15483	1.2252 ppb	1.15483	94.25%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	79.9	1.3121 µg/L	0.32896	1.3121 ppb	0.32896	25.07%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	1.3	0.0938 µg/L	0.17571	0.0938 ppb	0.17571	187.29%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	87.8	0.2058 µg/L	0.14923	0.2058 ppb	0.14923	72.50%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	107.7	0.1067 µg/L	0.17474	0.1067 ppb	0.17474	163.81%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	0.0	-0.0017 µg/L	0.68072	-0.0017 ppb	0.68072	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	139.7	8.6193 µg/L	7.84577	8.6193 ppb	7.84577	91.03%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-37.4	-0.1957 µg/L	0.61936	-0.1957 ppb	0.61936	316.55%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-7.2	-0.0435 µg/L	0.06758	-0.0435 ppb	0.06758	155.53%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 3/29/2010 18:40:43
Data Type: Reprocessed on 3/29/2010 19:14:37
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1721442.6	1721442.6	102.91	%			18:41:40
1	Sc RADIAL	147903.8	147903.8	101	%			18:41:13
1	Y 371.029	1058404.9	1058404.9	103.50	%			18:41:40
1	Ag 328.068†	4025.6	944.7	3.9659	µg/L	3.9659	ppb	18:41:43
1	Al 396.153Radial†	922.6	941.1	204.98	µg/L	204.98	ppb	18:41:15
1	As 188.979†	70.2	82.5	34.551	µg/L	34.551	ppb	18:42:03
1	B 249.677†	6252.3	2719.8	45.645	µg/L	45.645	ppb	18:41:43
1	Ba 233.527†	968.6	1116.3	5.1042	µg/L	5.1042	ppb	18:42:03
1	Be 313.107†	14893.3	15132.4	4.9477	µg/L	4.9477	ppb	18:41:43
1	Ca 317.933Radial†	4243.5	3565.6	208.93	µg/L	208.93	ppb	18:41:15
1	Cd 226.502†	637.3	713.7	4.9197	µg/L	4.9197	ppb	18:42:03
1	Co 228.616†	202.6	373.5	5.1141	µg/L	5.1141	ppb	18:42:03
1	Cr 267.716†	729.0	548.1	4.6505	µg/L	4.6505	ppb	18:42:03
1	Cu 324.752†	4895.4	2332.1	10.224	µg/L	10.224	ppb	18:41:43
1	Fe 238.204 Radial†	1705.5	1567.4	104.21	µg/L	104.21	ppb	18:41:15
1	K 766.490 Radial†	1904.1	421.4	173.34	µg/L	173.34	ppb	18:41:13
1	Mg 279.077 IEC†	935.0	734.7	303.09	µg/L	303.09	ppb	18:41:15
1	Mn 257.610†	7824.8	7523.6	10.268	µg/L	10.268	ppb	18:41:43
1	Mo 202.031†	258.6	306.5	9.6870	µg/L	9.6870	ppb	18:42:03
1	Na 589.592 Radial†	3412.3	1667.9	255.06	µg/L	255.06	ppb	18:41:15
1	Ni 231.604†	353.8	384.7	4.9210	µg/L	4.9210	ppb	18:42:03
1	P 214.914†	701.3	601.9	143.99	µg/L	143.99	ppb	18:42:03
1	Pb 220.353†	285.3	164.8	9.9640	µg/L	9.9640	ppb	18:42:03
1	S 181.975 Axial†	217.5	116.6	94.518	µg/L	94.518	ppb	18:42:03
1	Sb 206.836†	151.7	60.8	8.2873	µg/L	8.2873	ppb	18:42:03
1	Se 196.026†	93.5	79.9	31.7	µg/L	31.7	ppb	18:42:03
1	SiO2†	3528.6	1856.0	202.45	µg/L	202.45	ppb	18:41:43
1	Si 251.611†	7008.2	6133.7	101.23	µg/L	101.23	ppb	18:41:43
1	Sn 189.927†	141.3	135.3	9.6379	µg/L	9.6379	ppb	18:42:03
1	Sr 421.552†	2328.3	2572.4	6.0274	µg/L	6.0274	ppb	18:41:15
1	Ti 334.940†	5694.2	4896.9	4.9428	µg/L	4.9428	ppb	18:41:43
1	Tl 190.801†	28.4	147.9	19.934	µg/L	19.934	ppb	18:42:03
1	U 409.014†	713.0	1172.0	72.715	µg/L	72.715	ppb	18:41:43
1	V 292.402†	1246.9	779.8	4.4736	µg/L	4.4736	ppb	18:41:43
1	Zn 213.857†	2077.4	1554.3	9.7365	µg/L	9.7365	ppb	18:42:03
2	Sc 361.383	1724623.2	1724623.2	103.10	%			18:42:05
2	Sc RADIAL	148676.2	148676.2	102	%			18:41:17
2	Y 371.029	1060877.7	1060877.7	103.75	%			18:42:05
2	Ag 328.068†	4441.5	1340.9	5.5444	µg/L	5.5444	ppb	18:42:07
2	Al 396.153Radial†	882.0	896.6	195.25	µg/L	195.25	ppb	18:41:19
2	As 188.979†	60.0	72.5	30.385	µg/L	30.385	ppb	18:42:27
2	B 249.677†	6195.0	2653.1	44.524	µg/L	44.524	ppb	18:42:07
2	Ba 233.527†	972.4	1118.3	5.1130	µg/L	5.1130	ppb	18:42:27
2	Be 313.107†	15035.6	15243.7	4.9775	µg/L	4.9775	ppb	18:42:07
2	Ca 317.933Radial†	4053.9	3358.0	196.76	µg/L	196.76	ppb	18:41:19
2	Cd 226.502†	642.0	717.1	4.9432	µg/L	4.9432	ppb	18:42:27
2	Co 228.616†	195.2	365.9	5.0104	µg/L	5.0104	ppb	18:42:27
2	Cr 267.716†	741.9	559.4	4.7640	µg/L	4.7640	ppb	18:42:27
2	Cu 324.752†	4804.6	2235.3	9.7851	µg/L	9.7851	ppb	18:42:07
2	Fe 238.204 Radial†	1689.7	1543.2	102.60	µg/L	102.60	ppb	18:41:19
2	K 766.490 Radial†	1941.0	447.8	184.20	µg/L	184.20	ppb	18:41:17
2	Mg 279.077 IEC†	934.9	729.8	301.08	µg/L	301.08	ppb	18:41:19
2	Mn 257.610†	7840.1	7524.4	10.269	µg/L	10.269	ppb	18:42:07
2	Mo 202.031†	268.7	315.9	9.9813	µg/L	9.9813	ppb	18:42:27
2	Na 589.592 Radial†	3585.8	1820.6	278.41	µg/L	278.41	ppb	18:41:19
2	Ni 231.604†	360.6	390.7	4.9969	µg/L	4.9969	ppb	18:42:27
2	P 214.914†	704.9	604.1	144.53	µg/L	144.53	ppb	18:42:27
2	Pb 220.353†	256.9	136.7	8.2831	µg/L	8.2831	ppb	18:42:27

2	S 181.975 Axial†	211.0	109.8	89.075 µg/L	89.075 ppb	18:42:27
2	Sb 206.836†	139.1	48.3	6.6025 µg/L	6.6025 ppb	18:42:27
2	Se 196.026†	85.2	71.7	28.4 µg/L	28.4 ppb	18:42:27
2	SiO2†	3666.3	1983.3	216.34 µg/L	216.34 ppb	18:42:07
2	Si 251.611†	6987.0	6100.5	100.67 µg/L	100.67 ppb	18:42:07
2	Sn 189.927†	148.9	142.4	10.142 µg/L	10.142 ppb	18:42:27
2	Sr 421.552†	2257.8	2491.4	5.8378 µg/L	5.8378 ppb	18:41:19
2	Ti 334.940†	5599.5	4794.8	4.8474 µg/L	4.8474 ppb	18:42:07
2	Tl 190.801†	28.5	147.9	19.938 µg/L	19.938 ppb	18:42:27
2	U 409.014†	356.1	824.5	51.229 µg/L	51.229 ppb	18:42:07
2	V 292.402†	1199.8	731.9	4.1969 µg/L	4.1969 ppb	18:42:07
2	Zn 213.857†	2110.9	1583.0	9.9172 µg/L	9.9172 ppb	18:42:27
3	Sc 361.383	1709181.0	1709181.0	102.18 %		18:42:29
3	Sc RADIAL	148765.1	148765.1	102 %		18:41:21
3	Y 371.029	1051117.1	1051117.1	102.79 %		18:42:29
3	Ag 328.068†	4096.5	1042.2	4.3518 µg/L	4.3518 ppb	18:42:31
3	Al 396.153Radial†	913.9	927.3	201.93 µg/L	201.93 ppb	18:41:23
3	As 188.979†	45.1	58.4	24.503 µg/L	24.503 ppb	18:42:51
3	B 249.677†	6365.0	2873.8	48.229 µg/L	48.229 ppb	18:42:31
3	Ba 233.527†	993.8	1147.7	5.2479 µg/L	5.2479 ppb	18:42:51
3	Be 313.107†	15404.4	15736.4	5.1406 µg/L	5.1406 ppb	18:42:31
3	Ca 317.933Radial†	4204.3	3503.0	205.26 µg/L	205.26 ppb	18:41:23
3	Cd 226.502†	656.9	737.3	5.0831 µg/L	5.0831 ppb	18:42:51
3	Co 228.616†	214.1	386.1	5.2868 µg/L	5.2868 ppb	18:42:51
3	Cr 267.716†	776.9	600.1	5.1070 µg/L	5.1070 ppb	18:42:51
3	Cu 324.752†	4905.4	2376.0	10.405 µg/L	10.405 ppb	18:42:31
3	Fe 238.204 Radial†	1701.7	1554.0	103.31 µg/L	103.31 ppb	18:41:23
3	K 766.490 Radial†	1863.7	371.0	152.58 µg/L	152.58 ppb	18:41:21
3	Mg 279.077 IEC†	946.2	740.4	305.43 µg/L	305.43 ppb	18:41:23
3	Mn 257.610†	7932.9	7683.9	10.487 µg/L	10.487 ppb	18:42:31
3	Mo 202.031†	276.9	326.2	10.308 µg/L	10.308 ppb	18:42:51
3	Na 589.592 Radial†	3380.4	1617.2	247.32 µg/L	247.32 ppb	18:41:23
3	Ni 231.604†	372.2	405.1	5.1823 µg/L	5.1823 ppb	18:42:51
3	P 214.914†	693.9	599.5	143.42 µg/L	143.42 ppb	18:42:51
3	Pb 220.353†	299.1	180.3	10.914 µg/L	10.914 ppb	18:42:51
3	S 181.975 Axial†	216.9	117.4	95.241 µg/L	95.241 ppb	18:42:51
3	Sb 206.836†	178.2	87.8	11.935 µg/L	11.935 ppb	18:42:51
3	Se 196.026†	84.3	71.6	28.4 µg/L	28.4 ppb	18:42:51
3	SiO2†	3665.9	2015.0	219.80 µg/L	219.80 ppb	18:42:31
3	Si 251.611†	7292.1	6460.4	106.62 µg/L	106.62 ppb	18:42:31
3	Sn 189.927†	146.0	140.9	10.035 µg/L	10.035 ppb	18:42:51
3	Sr 421.552†	2185.8	2419.5	5.6692 µg/L	5.6692 ppb	18:41:23
3	Ti 334.940†	5763.7	5004.6	5.0573 µg/L	5.0573 ppb	18:42:31
3	Tl 190.801†	37.2	156.7	21.117 µg/L	21.117 ppb	18:42:51
3	U 409.014†	504.2	972.6	60.421 µg/L	60.421 ppb	18:42:31
3	V 292.402†	1321.2	861.3	4.9254 µg/L	4.9254 ppb	18:42:31
3	Zn 213.857†	2122.4	1612.8	10.103 µg/L	10.103 ppb	18:42:51

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1718415.6	102.73	%	0.487				0.47%
Sc RADIAL	148448.4	102	%	0.3				0.32%
Y 371.029	1056799.9	103.35	%	0.496				0.48%
Ag 328.068†	1109.3	4.6207	µg/L	0.82285	4.6207	ppb	0.82285	17.81%
QC value within limits for Ag 328.068 Recovery = 92.41%								
Al 396.153Radial†	921.7	200.72	µg/L	4.978	200.72	ppb	4.978	2.48%
QC value within limits for Al 396.153Radial Recovery = 100.36%								
As 188.979†	71.1	29.813	µg/L	5.0483	29.813	ppb	5.0483	16.93%
QC value within limits for As 188.979 Recovery = 99.38%								
B 249.677†	2748.9	46.133	µg/L	1.8998	46.133	ppb	1.8998	4.12%
QC value within limits for B 249.677 Recovery = 92.27%								
Ba 233.527†	1127.4	5.1550	µg/L	0.08056	5.1550	ppb	0.08056	1.56%
QC value within limits for Ba 233.527 Recovery = 103.10%								
Be 313.107†	15370.8	5.0219	µg/L	0.10386	5.0219	ppb	0.10386	2.07%
QC value within limits for Be 313.107 Recovery = 100.44%								
Ca 317.933Radial†	3475.5	203.65	µg/L	6.241	203.65	ppb	6.241	3.06%
QC value within limits for Ca 317.933Radial Recovery = 101.83%								
Cd 226.502†	722.7	4.9820	µg/L	0.08834	4.9820	ppb	0.08834	1.77%
QC value within limits for Cd 226.502 Recovery = 99.64%								

Co 228.616†	375.2	5.1371 µg/L	0.13962	5.1371 ppb	0.13962	2.72%
QC value within limits for Co 228.616 Recovery = 102.74%						
Cr 267.716†	569.2	4.8405 µg/L	0.23770	4.8405 ppb	0.23770	4.91%
QC value within limits for Cr 267.716 Recovery = 96.81%						
Cu 324.752†	2314.5	10.138 µg/L	0.3187	10.138 ppb	0.3187	3.14%
QC value within limits for Cu 324.752 Recovery = 101.38%						
Fe 238.204 Radial†	1554.9	103.37 µg/L	0.806	103.37 ppb	0.806	0.78%
QC value within limits for Fe 238.204 Radial Recovery = 103.37%						
K 766.490 Radial†	413.4	170.04 µg/L	16.070	170.04 ppb	16.070	9.45%
QC value within limits for K 766.490 Radial Recovery = 113.36%						
Mg 279.077 IEC†	735.0	303.20 µg/L	2.180	303.20 ppb	2.180	0.72%
QC value within limits for Mg 279.077 IEC Recovery = 101.07%						
Mn 257.610†	7577.3	10.342 µg/L	0.1261	10.342 ppb	0.1261	1.22%
QC value within limits for Mn 257.610 Recovery = 103.42%						
Mo 202.031†	316.2	9.9921 µg/L	0.31074	9.9921 ppb	0.31074	3.11%
QC value within limits for Mo 202.031 Recovery = 99.92%						
Na 589.592 Radial†	1701.9	260.27 µg/L	16.186	260.27 ppb	16.186	6.22%
QC value within limits for Na 589.592 Radial Recovery = 86.76%						
Ni 231.604†	393.5	5.0334 µg/L	0.13439	5.0334 ppb	0.13439	2.67%
QC value within limits for Ni 231.604 Recovery = 100.67%						
P 214.914†	601.9	143.98 µg/L	0.554	143.98 ppb	0.554	0.38%
QC value within limits for P 214.914 Recovery = 95.99%						
Pb 220.353†	160.6	9.7204 µg/L	1.33235	9.7204 ppb	1.33235	13.71%
QC value within limits for Pb 220.353 Recovery = 97.20%						
S 181.975 Axial†	114.6	92.945 µg/L	3.3708	92.945 ppb	3.3708	3.63%
QC value within limits for S 181.975 Axial Recovery = 92.94%						
Sb 206.836†	65.6	8.9415 µg/L	2.72562	8.9415 ppb	2.72562	30.48%
QC value within limits for Sb 206.836 Recovery = 89.41%						
Se 196.026†	74.4	29.5 µg/L	1.90	29.5 ppb	1.90	6.42%
QC value within limits for Se 196.026 Recovery = 98.43%						
SiO2†	1951.4	212.86 µg/L	9.186	212.86 ppb	9.186	4.32%
QC value within limits for SiO2 Recovery = 99.94%						
Si 251.611†	6231.5	102.84 µg/L	3.285	102.84 ppb	3.285	3.19%
QC value within limits for Si 251.611 Recovery = 102.84%						
Sn 189.927†	139.6	9.9381 µg/L	0.26552	9.9381 ppb	0.26552	2.67%
QC value within limits for Sn 189.927 Recovery = 99.38%						
Sr 421.552†	2494.5	5.8448 µg/L	0.17922	5.8448 ppb	0.17922	3.07%
QC value within limits for Sr 421.552 Recovery = 116.90%						
Ti 334.940†	4898.8	4.9492 µg/L	0.10510	4.9492 ppb	0.10510	2.12%
QC value within limits for Ti 334.940 Recovery = 98.98%						
Tl 190.801†	150.8	20.330 µg/L	0.6817	20.330 ppb	0.6817	3.35%
QC value within limits for Tl 190.801 Recovery = 101.65%						
U 409.014†	989.7	61.455 µg/L	10.7804	61.455 ppb	10.7804	17.54%
QC value within limits for U 409.014 Recovery = 122.91%						
V 292.402†	791.0	4.5320 µg/L	0.36774	4.5320 ppb	0.36774	8.11%
QC value within limits for V 292.402 Recovery = 90.64%						
Zn 213.857†	1583.4	9.9190 µg/L	0.18336	9.9190 ppb	0.18336	1.85%
QC value within limits for Zn 213.857 Recovery = 99.19%						

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 3/29/2010 18:43:01
Data Type: Reprocessed on 3/29/2010 19:14:38

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1519975.5	1519975.5	90.866	%			18:44:01
1	Sc RADIAL	137750.3	137750.3	94.5	%			18:43:34
1	Y 371.029	919968.6	919968.6	89.965	%			18:44:01
1	Ag 328.068†	5916.7	3544.4	1.2267	µg/L	1.2267	ppb	18:44:01
1	Al 396.153Radial†	2228558.9	2358079.9	514740	µg/L	514740	ppb	18:43:31
1	As 188.979†	-88.3	-82.9	8.1301	µg/L	8.1301	ppb	18:44:21
1	B 249.677†	3032.6	-18.3	-0.3191	µg/L	-0.3191	ppb	18:44:01
1	Ba 233.527†	439.8	659.1	0.5804	µg/L	0.5804	ppb	18:44:21
1	Be 313.107†	-620.0	-22.3	0.0066	µg/L	0.0066	ppb	18:44:01
1	Ca 317.933Radial†	7783821.6	8235480.1	482560	µg/L	482560	ppb	18:43:31
1	Cd 226.502†	2257.8	2579.2	-2.2506	µg/L	-2.2506	ppb	18:44:21
1	Co 228.616†	76.3	260.5	-6.3814	µg/L	-6.3814	ppb	18:44:21
1	Cr 267.716†	306.4	176.9	2.2002	µg/L	2.2002	ppb	18:44:21
1	Cu 324.752†	-6875.9	-9992.0	-2.5122	µg/L	-2.5122	ppb	18:44:01
1	Fe 238.204 Radial†	2712004.8	2869471.1	190770	µg/L	190770	ppb	18:43:31
1	K 766.490 Radial†	1538.5	172.9	-171.54	µg/L	-171.54	ppb	18:43:34
1	Mg 279.077 IEC†	1111575.2	1175976.0	484700	µg/L	484700	ppb	18:43:31
1	Mn 257.610†	14620.3	16010.1	2.1476	µg/L	2.1476	ppb	18:44:01
1	Mo 202.031†	-501.7	-496.9	0.7251	µg/L	0.7251	ppb	18:44:01
1	Na 589.592 Radial†	1635.3	35.6	5.3873	µg/L	5.3873	ppb	18:43:34
1	Ni 231.604†	146.0	201.6	2.5791	µg/L	2.5791	ppb	18:44:21
1	P 214.914†	148.1	83.5	4.8563	µg/L	4.8563	ppb	18:44:21
1	Pb 220.353†	-247.5	-384.9	2.4276	µg/L	2.4276	ppb	18:44:21
1	S 181.975 Axial†	166.5	88.4	71.471	µg/L	71.471	ppb	18:44:21
1	Sb 206.836†	109.8	34.2	-1.4541	µg/L	-1.4541	ppb	18:44:21
1	Se 196.026†	-143.9	-169.3	-0.728	µg/L	-0.728	ppb	18:44:21
1	SiO2†	1500.4	78.4	8.9950	µg/L	8.9950	ppb	18:44:21
1	Si 251.611†	379.6	-258.7	-4.0756	µg/L	-4.0756	ppb	18:44:21
1	Sn 189.927†	17.0	16.7	1.2650	µg/L	1.2650	ppb	18:44:21
1	Sr 421.552†	1360.0	1717.1	0.2472	µg/L	0.2472	ppb	18:43:34
1	Ti 334.940†	20973.2	22445.2	-4.0421	µg/L	-4.0421	ppb	18:44:01
1	Tl 190.801†	-165.7	-62.0	-7.8287	µg/L	-7.8287	ppb	18:44:21
1	U 409.014†	239.9	743.1	25.180	µg/L	25.180	ppb	18:44:01
1	V 292.402†	5463.3	5580.7	0.4848	µg/L	0.4848	ppb	18:44:01
1	Zn 213.857†	3868.4	3792.8	7.6857	µg/L	7.6857	ppb	18:44:21
2	Sc 361.383	1532514.6	1532514.6	91.615	%			18:44:24
2	Sc RADIAL	139244.5	139244.5	95.5	%			18:43:38
2	Y 371.029	927898.5	927898.5	90.741	%			18:44:24
2	Ag 328.068†	5725.2	3282.1	0.2956	µg/L	0.2956	ppb	18:44:24
2	Al 396.153Radial†	2228857.8	2333088.7	509290	µg/L	509290	ppb	18:43:36
2	As 188.979†	-96.0	-90.5	4.5139	µg/L	4.5139	ppb	18:44:44
2	B 249.677†	3203.6	141.1	2.3574	µg/L	2.3574	ppb	18:44:24
2	Ba 233.527†	417.7	631.0	0.4768	µg/L	0.4768	ppb	18:44:44
2	Be 313.107†	-855.2	-273.4	-0.0781	µg/L	-0.0781	ppb	18:44:24
2	Ca 317.933Radial†	7791433.2	8155066.3	477850	µg/L	477850	ppb	18:43:36
2	Cd 226.502†	2233.3	2532.1	-2.3767	µg/L	-2.3767	ppb	18:44:44
2	Co 228.616†	66.6	249.3	-6.4368	µg/L	-6.4368	ppb	18:44:44
2	Cr 267.716†	246.3	108.6	1.6057	µg/L	1.6057	ppb	18:44:44
2	Cu 324.752†	-6872.9	-9926.8	-2.6212	µg/L	-2.6212	ppb	18:44:24
2	Fe 238.204 Radial†	2714288.8	2841068.4	188880	µg/L	188880	ppb	18:43:36
2	K 766.490 Radial†	1618.0	238.7	-142.04	µg/L	-142.04	ppb	18:43:38
2	Mg 279.077 IEC†	1114260.0	1166165.0	480660	µg/L	480660	ppb	18:43:36
2	Mn 257.610†	14586.8	15841.8	2.0830	µg/L	2.0830	ppb	18:44:24
2	Mo 202.031†	-508.1	-499.4	0.4957	µg/L	0.4957	ppb	18:44:24
2	Na 589.592 Radial†	1714.1	99.5	15.141	µg/L	15.141	ppb	18:43:38
2	Ni 231.604†	152.3	207.2	2.6500	µg/L	2.6500	ppb	18:44:44
2	P 214.914†	105.5	35.5	-6.5606	µg/L	-6.5606	ppb	18:44:44
2	Pb 220.353†	-290.5	-429.6	-0.5500	µg/L	-0.5500	ppb	18:44:44

2	S 181.975 Axial†	171.6	92.5	74.799 µg/L	74.799 ppb	18:44:44
2	Sb 206.836†	130.7	56.0	1.5606 µg/L	1.5606 ppb	18:44:44
2	Se 196.026†	-155.0	-180.1	-5.67 µg/L	-5.67 ppb	18:44:44
2	SiO2†	1504.6	69.4	8.0425 µg/L	8.0425 ppb	18:44:44
2	Si 251.611†	375.1	-267.0	-4.2014 µg/L	-4.2014 ppb	18:44:44
2	Sn 189.927†	-4.2	-6.6	-0.3924 µg/L	-0.3924 ppb	18:44:44
2	Sr 421.552†	1366.5	1708.4	0.2637 µg/L	0.2637 ppb	18:43:38
2	Ti 334.940†	21214.1	22519.4	-3.7556 µg/L	-3.7556 ppb	18:44:24
2	Tl 190.801†	-155.0	-48.9	-6.0537 µg/L	-6.0537 ppb	18:44:44
2	U 409.014†	96.2	584.1	15.646 µg/L	15.646 ppb	18:44:24
2	V 292.402†	5684.6	5773.1	1.8417 µg/L	1.8417 ppb	18:44:24
2	Zn 213.857†	3858.3	3747.0	7.5506 µg/L	7.5506 ppb	18:44:44
3	Sc 361.383	1531662.1	1531662.1	91.564 %		18:44:46
3	Sc RADIAL	139848.7	139848.7	95.9 %		18:43:42
3	Y 371.029	927170.5	927170.5	90.670 %		18:44:46
3	Ag 328.068†	5762.9	3326.8	0.5251 µg/L	0.5251 ppb	18:44:46
3	Al 396.153Radial†	2231390.2	2325648.7	507660 µg/L	507660 ppb	18:43:40
3	As 188.979†	-103.4	-98.7	0.8735 µg/L	0.8735 ppb	18:45:06
3	B 249.677†	3235.4	177.8	2.9710 µg/L	2.9710 ppb	18:44:46
3	Ba 233.527†	402.4	614.5	0.4137 µg/L	0.4137 ppb	18:45:06
3	Be 313.107†	-678.3	-80.7	-0.0209 µg/L	-0.0209 ppb	18:44:46
3	Ca 317.933Radial†	7787439.6	8115669.6	475540 µg/L	475540 ppb	18:43:40
3	Cd 226.502†	2245.5	2546.8	-2.1709 µg/L	-2.1709 ppb	18:45:06
3	Co 228.616†	93.2	278.4	-5.9871 µg/L	-5.9871 ppb	18:45:06
3	Cr 267.716†	275.9	141.1	1.8999 µg/L	1.8999 ppb	18:45:06
3	Cu 324.752†	-6732.3	-9777.4	-2.2074 µg/L	-2.2074 ppb	18:44:46
3	Fe 238.204 Radial†	2711795.4	2826195.2	187900 µg/L	187900 ppb	18:43:40
3	K 766.490 Radial†	1584.0	195.9	-158.63 µg/L	-158.63 ppb	18:43:42
3	Mg 279.077 IEC†	1112495.6	1159287.1	477830 µg/L	477830 ppb	18:43:40
3	Mn 257.610†	14462.2	15714.6	2.0242 µg/L	2.0242 ppb	18:44:46
3	Mo 202.031†	-593.4	-592.8	-2.5422 µg/L	-2.5422 ppb	18:44:46
3	Na 589.592 Radial†	1732.7	111.2	16.939 µg/L	16.939 ppb	18:43:42
3	Ni 231.604†	209.1	269.3	3.4450 µg/L	3.4450 ppb	18:45:06
3	P 214.914†	118.4	49.8	-2.8056 µg/L	-2.8056 ppb	18:45:06
3	Pb 220.353†	-264.9	-401.8	1.0704 µg/L	1.0704 ppb	18:45:06
3	S 181.975 Axial†	171.3	92.2	74.546 µg/L	74.546 ppb	18:45:06
3	Sb 206.836†	101.8	24.6	-2.6986 µg/L	-2.6986 ppb	18:45:06
3	Se 196.026†	-151.8	-176.7	-4.70 µg/L	-4.70 ppb	18:45:06
3	SiO2†	1457.7	19.2	2.6178 µg/L	2.6178 ppb	18:45:06
3	Si 251.611†	375.6	-266.2	-4.1555 µg/L	-4.1555 ppb	18:45:06
3	Sn 189.927†	9.2	8.1	0.6527 µg/L	0.6527 ppb	18:45:06
3	Sr 421.552†	1404.5	1741.8	0.3601 µg/L	0.3601 ppb	18:43:42
3	Ti 334.940†	21500.8	22845.3	-3.2450 µg/L	-3.2450 ppb	18:44:46
3	Tl 190.801†	-148.3	-41.6	-5.0807 µg/L	-5.0807 ppb	18:45:06
3	U 409.014†	-176.5	286.3	-2.6068 µg/L	-2.6068 ppb	18:44:46
3	V 292.402†	5753.1	5851.3	2.3911 µg/L	2.3911 ppb	18:44:46
3	Zn 213.857†	3845.3	3735.2	7.5699 µg/L	7.5699 ppb	18:45:06

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1528050.7	91.348	%	0.4188				0.46%
Sc RADIAL	138947.9	95.3	%	0.74				0.78%
Y 371.029	925012.6	90.459	%	0.4287				0.47%
Ag 328.068†	3384.5	0.6825	µg/L	0.48505	0.6825	ppb	0.48505	71.07%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2338939.1	510560	µg/L	3708.4	510560	ppb	3708.4	0.73%
QC value within limits for Al 396.153Radial Recovery = 102.11%								
As 188.979†	-90.7	4.5059	µg/L	3.62830	4.5059	ppb	3.62830	80.52%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	100.2	1.6697	µg/L	1.74948	1.6697	ppb	1.74948	104.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	634.8	0.4903	µg/L	0.08415	0.4903	ppb	0.08415	17.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-125.5	-0.0308	µg/L	0.04321	-0.0308	ppb	0.04321	140.33%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	8168738.7	478650	µg/L	3578.1	478650	ppb	3578.1	0.75%
QC value within limits for Ca 317.933Radial Recovery = 95.73%								
Cd 226.502†	2552.7	-2.2661	µg/L	0.10379	-2.2661	ppb	0.10379	4.58%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	262.7	-6.2685 µg/L	0.24520	-6.2685 ppb	0.24520	3.91%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	142.2	1.9019 µg/L	0.29723	1.9019 ppb	0.29723	15.63%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-9898.7	-2.4469 µg/L	0.21446	-2.4469 ppb	0.21446	8.76%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	2845578.2	189180 µg/L	1461.8	189180 ppb	1461.8	0.77%
QC value within limits for Fe 238.204 Radial Recovery = 94.59%						
K 766.490 Radial†	202.5	-157.40 µg/L	14.790	-157.40 ppb	14.790	9.40%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1167142.7	481060 µg/L	3456.9	481060 ppb	3456.9	0.72%
QC value within limits for Mg 279.077 IEC Recovery = 96.21%						
Mn 257.610†	15855.5	2.0849 µg/L	0.06170	2.0849 ppb	0.06170	2.96%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-529.7	-0.4405 µg/L	1.82378	-0.4405 ppb	1.82378	414.05%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	82.1	12.489 µg/L	6.2157	12.489 ppb	6.2157	49.77%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	226.0	2.8914 µg/L	0.48079	2.8914 ppb	0.48079	16.63%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	56.3	-1.5033 µg/L	5.81883	-1.5033 ppb	5.81883	387.07%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-405.4	0.9827 µg/L	1.49074	0.9827 ppb	1.49074	151.70%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	91.0	73.605 µg/L	1.8528	73.605 ppb	1.8528	2.52%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	38.3	-0.8640 µg/L	2.19006	-0.8640 ppb	2.19006	253.47%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-175.4	-3.70 µg/L	2.618	-3.70 ppb	2.618	70.77%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	55.7	6.5518 µg/L	3.44005	6.5518 ppb	3.44005	52.51%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	-264.0	-4.1441 µg/L	0.06368	-4.1441 ppb	0.06368	1.54%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	6.1	0.5084 µg/L	0.83805	0.5084 ppb	0.83805	164.84%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	1722.4	0.2904 µg/L	0.06098	0.2904 ppb	0.06098	21.00%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	22603.3	-3.6809 µg/L	0.40375	-3.6809 ppb	0.40375	10.97%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-50.8	-6.3210 µg/L	1.39339	-6.3210 ppb	1.39339	22.04%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	537.8	12.740 µg/L	14.1197	12.740 ppb	14.1197	110.83%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	5735.0	1.5725 µg/L	0.98127	1.5725 ppb	0.98127	62.40%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	3758.3	7.6020 µg/L	0.07306	7.6020 ppb	0.07306	0.96%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 3/29/2010 18:45:15
Data Type: Reprocessed on 3/29/2010 19:14:39

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1510684.4	1510684.4	90.310	%			18:46:21
1	Sc RADIAL	137128.2	137128.2	94.1	%			18:45:49
1	Y 371.029	915417.0	915417.0	89.520	%			18:46:21
1	Ag 328.068†	64579.9	68542.0	271.32	µg/L	271.32	ppb	18:46:21
1	Al 396.153Radial†	2257035.7	2399046.7	523660	µg/L	523660	ppb	18:45:45
1	As 188.979†	1040.4	1166.3	536.34	µg/L	536.34	ppb	18:46:23
1	B 249.677†	30637.0	30568.6	511.66	µg/L	511.66	ppb	18:46:21
1	Ba 233.527†	99072.5	109877.7	499.99	µg/L	499.99	ppb	18:46:21
1	Be 313.107†	681148.0	754892.4	245.89	µg/L	245.89	ppb	18:46:21
1	Ca 317.933Radial†	7888724.1	8384349.0	491290	µg/L	491290	ppb	18:45:45
1	Cd 226.502†	63574.5	70490.2	466.80	µg/L	466.80	ppb	18:46:21
1	Co 228.616†	29268.7	32585.7	436.71	µg/L	436.71	ppb	18:46:23
1	Cr 267.716†	51261.8	56601.7	486.64	µg/L	486.64	ppb	18:46:23
1	Cu 324.752†	105042.3	113888.0	536.82	µg/L	536.82	ppb	18:46:21
1	Fe 238.204 Radial†	2714615.2	2885265.2	191820	µg/L	191820	ppb	18:45:47
1	K 766.490 Radial†	14492.6	13949.3	5495.4	µg/L	5495.4	ppb	18:45:49
1	Mg 279.077 IEC†	1107607.9	1177095.4	485180	µg/L	485180	ppb	18:45:49
1	Mn 257.610†	329092.8	364323.1	478.08	µg/L	478.08	ppb	18:46:21
1	Mo 202.031†	13229.8	14704.5	480.80	µg/L	480.80	ppb	18:46:23
1	Na 589.592 Radial†	34394.1	34862.9	5329.4	µg/L	5329.4	ppb	18:45:49
1	Ni 231.604†	31853.0	35311.6	451.68	µg/L	451.68	ppb	18:46:23
1	P 214.914†	9576.1	10524.0	2499.6	µg/L	2499.6	ppb	18:46:23
1	Pb 220.353†	6597.4	7192.9	463.36	µg/L	463.36	ppb	18:46:23
1	S 181.975 Axial†	3009.0	3237.0	2626.5	µg/L	2626.5	ppb	18:46:23
1	Sb 206.836†	3499.0	3787.8	505.98	µg/L	505.98	ppb	18:46:23
1	Se 196.026†	5309.9	5868.7	2390	µg/L	2390	ppb	18:46:23
1	SiO2†	92256.7	100582.6	10974	µg/L	10974	ppb	18:46:21
1	Si 251.611†	281270.8	310773.6	5129.3	µg/L	5129.3	ppb	18:46:21
1	Sn 189.927†	6022.0	6666.1	475.68	µg/L	475.68	ppb	18:46:23
1	Sr 421.552†	210049.1	223540.3	520.07	µg/L	520.07	ppb	18:45:49
1	Ti 334.940†	468269.2	517876.1	500.97	µg/L	500.97	ppb	18:46:21
1	Tl 190.801†	2818.9	3241.7	443.45	µg/L	443.45	ppb	18:46:23
1	U 409.014†	7133.6	8378.1	528.93	µg/L	528.93	ppb	18:46:21
1	V 292.402†	88326.4	97371.6	516.38	µg/L	516.38	ppb	18:46:21
1	Zn 213.857†	72620.0	79947.4	483.88	µg/L	483.88	ppb	18:46:21
2	Sc 361.383	1518034.6	1518034.6	90.750	%			18:46:26
2	Sc RADIAL	136837.3	136837.3	93.9	%			18:45:56
2	Y 371.029	919619.6	919619.6	89.931	%			18:46:26
2	Ag 328.068†	64494.6	68101.8	269.69	µg/L	269.69	ppb	18:46:26
2	Al 396.153Radial†	2229777.5	2375110.8	518440	µg/L	518440	ppb	18:45:52
2	As 188.979†	1016.8	1134.7	522.67	µg/L	522.67	ppb	18:46:28
2	B 249.677†	30917.4	30713.3	514.09	µg/L	514.09	ppb	18:46:26
2	Ba 233.527†	99392.7	109699.3	499.19	µg/L	499.19	ppb	18:46:26
2	Be 313.107†	684598.1	755042.2	245.93	µg/L	245.93	ppb	18:46:26
2	Ca 317.933Radial†	7784991.4	8291677.2	485860	µg/L	485860	ppb	18:45:52
2	Cd 226.502†	63805.9	70404.3	466.38	µg/L	466.38	ppb	18:46:26
2	Co 228.616†	29275.9	32436.7	434.76	µg/L	434.76	ppb	18:46:28
2	Cr 267.716†	50741.5	55753.6	479.35	µg/L	479.35	ppb	18:46:28
2	Cu 324.752†	105439.6	113762.6	535.91	µg/L	535.91	ppb	18:46:26
2	Fe 238.204 Radial†	2684811.7	2859651.8	190120	µg/L	190120	ppb	18:45:54
2	K 766.490 Radial†	14227.4	13699.5	5395.1	µg/L	5395.1	ppb	18:45:56
2	Mg 279.077 IEC†	1095117.9	1166293.6	480720	µg/L	480720	ppb	18:45:56
2	Mn 257.610†	330574.5	364191.4	478.08	µg/L	478.08	ppb	18:46:26
2	Mo 202.031†	13322.6	14735.9	481.64	µg/L	481.64	ppb	18:46:28
2	Na 589.592 Radial†	34233.3	34769.4	5315.2	µg/L	5315.2	ppb	18:45:56
2	Ni 231.604†	31592.4	34853.7	445.82	µg/L	445.82	ppb	18:46:28
2	P 214.914†	9407.5	10286.9	2442.8	µg/L	2442.8	ppb	18:46:28
2	Pb 220.353†	6453.4	6998.8	451.34	µg/L	451.34	ppb	18:46:28

2	S 181.975 Axial†	2940.7	3145.6	2552.4 µg/L	2552.4 ppb	18:46:28
2	Sb 206.836†	3475.9	3743.6	500.18 µg/L	500.18 ppb	18:46:28
2	Se 196.026†	5145.8	5659.4	2310 µg/L	2310 ppb	18:46:28
2	SiO2†	92799.3	100685.9	10985 µg/L	10985 ppb	18:46:26
2	Si 251.611†	282521.5	310643.8	5127.1 µg/L	5127.1 ppb	18:46:26
2	Sn 189.927†	5996.0	6605.2	471.35 µg/L	471.35 ppb	18:46:28
2	Sr 421.552†	208807.5	222692.2	518.13 µg/L	518.13 ppb	18:45:56
2	Ti 334.940†	470515.6	517840.9	501.16 µg/L	501.16 ppb	18:46:26
2	Tl 190.801†	2878.3	3292.0	450.21 µg/L	450.21 ppb	18:46:28
2	U 409.014†	7163.0	8372.3	528.73 µg/L	528.73 ppb	18:46:26
2	V 292.402†	88754.8	97370.2	516.63 µg/L	516.63 ppb	18:46:26
2	Zn 213.857†	72903.7	79870.6	483.58 µg/L	483.58 ppb	18:46:26
3	Sc 361.383	1509678.5	1509678.5	90.250 %		18:46:31
3	Sc RADIAL	138373.5	138373.5	94.9 %		18:46:03
3	Y 371.029	914674.1	914674.1	89.448 %		18:46:31
3	Ag 328.068†	64587.4	68598.0	271.77 µg/L	271.77 ppb	18:46:31
3	Al 396.153Radial†	2250390.9	2370456.7	517420 µg/L	517420 ppb	18:45:58
3	As 188.979†	1006.1	1129.0	520.40 µg/L	520.40 ppb	18:46:33
3	B 249.677†	30857.6	30835.5	516.13 µg/L	516.13 ppb	18:46:31
3	Ba 233.527†	99227.6	110122.6	501.13 µg/L	501.13 ppb	18:46:31
3	Be 313.107†	682431.3	756816.9	246.51 µg/L	246.51 ppb	18:46:31
3	Ca 317.933Radial†	7834035.4	8251280.0	483490 µg/L	483490 ppb	18:45:58
3	Cd 226.502†	63517.1	70473.5	466.87 µg/L	466.87 ppb	18:46:31
3	Co 228.616†	29487.3	32849.5	440.42 µg/L	440.42 ppb	18:46:33
3	Cr 267.716†	51368.6	56757.9	487.95 µg/L	487.95 ppb	18:46:33
3	Cu 324.752†	105432.6	114397.9	538.71 µg/L	538.71 ppb	18:46:31
3	Fe 238.204 Radial†	2714742.3	2859431.1	190100 µg/L	190100 ppb	18:46:01
3	K 766.490 Radial†	14507.9	13826.8	5448.0 µg/L	5448.0 ppb	18:46:03
3	Mg 279.077 IEC†	1111196.5	1170280.1	482370 µg/L	482370 ppb	18:46:03
3	Mn 257.610†	329292.9	364787.6	478.83 µg/L	478.83 ppb	18:46:31
3	Mo 202.031†	13311.3	14804.5	483.83 µg/L	483.83 ppb	18:46:33
3	Na 589.592 Radial†	34668.7	34823.2	5323.3 µg/L	5323.3 ppb	18:46:03
3	Ni 231.604†	31996.5	35494.2	454.01 µg/L	454.01 ppb	18:46:33
3	P 214.914†	9605.6	10563.7	2508.9 µg/L	2508.9 ppb	18:46:33
3	Pb 220.353†	6567.4	7164.5	461.32 µg/L	461.32 ppb	18:46:33
3	S 181.975 Axial†	2974.8	3201.4	2597.7 µg/L	2597.7 ppb	18:46:33
3	Sb 206.836†	3463.3	3750.8	501.08 µg/L	501.08 ppb	18:46:33
3	Se 196.026†	5291.7	5852.5	2380 µg/L	2380 ppb	18:46:33
3	SiO2†	92489.2	100908.3	11009 µg/L	11009 ppb	18:46:31
3	Si 251.611†	281639.3	311389.5	5139.4 µg/L	5139.4 ppb	18:46:31
3	Sn 189.927†	6087.5	6743.1	481.17 µg/L	481.17 ppb	18:46:33
3	Sr 421.552†	210738.5	222257.1	517.13 µg/L	517.13 ppb	18:46:03
3	Ti 334.940†	470683.6	520896.9	504.08 µg/L	504.08 ppb	18:46:31
3	Tl 190.801†	2864.6	3294.4	450.54 µg/L	450.54 ppb	18:46:33
3	U 409.014†	7145.1	8396.1	530.14 µg/L	530.14 ppb	18:46:31
3	V 292.402†	88390.3	97507.5	517.45 µg/L	517.45 ppb	18:46:31
3	Zn 213.857†	72542.0	79914.6	483.81 µg/L	483.81 ppb	18:46:31

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1512799.2	90.437	%	0.2727				0.30%
Sc RADIAL	137446.3	94.3	%	0.56				0.59%
Y 371.029	916570.2	89.633	%	0.2608				0.29%
Ag 328.068†	68413.9	270.93	µg/L	1.098	270.93	ppb	1.098	0.41%
QC value within limits for Ag 328.068 Recovery = 108.37%								
Al 396.153Radial†	2381538.1	519840	µg/L	3348.7	519840	ppb	3348.7	0.64%
QC value within limits for Al 396.153Radial Recovery = 103.97%								
As 188.979†	1143.3	526.47	µg/L	8.621	526.47	ppb	8.621	1.64%
QC value within limits for As 188.979 Recovery = 105.29%								
B 249.677†	30705.8	513.96	µg/L	2.238	513.96	ppb	2.238	0.44%
QC value within limits for B 249.677 Recovery = 102.79%								
Ba 233.527†	109899.8	500.10	µg/L	0.973	500.10	ppb	0.973	0.19%
QC value within limits for Ba 233.527 Recovery = 100.02%								
Be 313.107†	755583.8	246.11	µg/L	0.349	246.11	ppb	0.349	0.14%
QC value within limits for Be 313.107 Recovery = 98.44%								
Ca 317.933Radial†	8309102.1	486880	µg/L	3997.7	486880	ppb	3997.7	0.82%
QC value within limits for Ca 317.933Radial Recovery = 97.38%								
Cd 226.502†	70456.0	466.68	µg/L	0.262	466.68	ppb	0.262	0.06%
QC value within limits for Cd 226.502 Recovery = 93.34%								

Co 228.616†	32623.9	437.30 µg/L	2.873	437.30 ppb	2.873	0.66%
QC value within limits for Co 228.616 Recovery = 87.46%						
Cr 267.716†	56371.1	484.65 µg/L	4.635	484.65 ppb	4.635	0.96%
QC value within limits for Cr 267.716 Recovery = 96.93%						
Cu 324.752†	114016.2	537.15 µg/L	1.432	537.15 ppb	1.432	0.27%
QC value within limits for Cu 324.752 Recovery = 107.43%						
Fe 238.204 Radial†	2868116.0	190680 µg/L	987.4	190680 ppb	987.4	0.52%
QC value within limits for Fe 238.204 Radial Recovery = 95.34%						
K 766.490 Radial†	13825.2	5446.2 µg/L	50.18	5446.2 ppb	50.18	0.92%
QC value within limits for K 766.490 Radial Recovery = 108.92%						
Mg 279.077 IEC†	1171223.1	482760 µg/L	2251.4	482760 ppb	2251.4	0.47%
QC value within limits for Mg 279.077 IEC Recovery = 96.55%						
Mn 257.610†	364434.0	478.33 µg/L	0.433	478.33 ppb	0.433	0.09%
QC value within limits for Mn 257.610 Recovery = 95.67%						
Mo 202.031†	14748.3	482.09 µg/L	1.569	482.09 ppb	1.569	0.33%
QC value within limits for Mo 202.031 Recovery = 96.42%						
Na 589.592 Radial†	34818.5	5322.6 µg/L	7.14	5322.6 ppb	7.14	0.13%
QC value within limits for Na 589.592 Radial Recovery = 106.45%						
Ni 231.604†	35219.8	450.50 µg/L	4.221	450.50 ppb	4.221	0.94%
QC value within limits for Ni 231.604 Recovery = 90.10%						
P 214.914†	10458.2	2483.8 µg/L	35.79	2483.8 ppb	35.79	1.44%
QC value within limits for P 214.914 Recovery = 99.35%						
Pb 220.353†	7118.7	458.68 µg/L	6.431	458.68 ppb	6.431	1.40%
QC value within limits for Pb 220.353 Recovery = 91.74%						
S 181.975 Axial†	3194.7	2592.2 µg/L	37.32	2592.2 ppb	37.32	1.44%
QC value within limits for S 181.975 Axial Recovery = 103.69%						
Sb 206.836†	3760.7	502.41 µg/L	3.120	502.41 ppb	3.120	0.62%
QC value within limits for Sb 206.836 Recovery = 100.48%						
Se 196.026†	5793.5	2360 µg/L	46.2	2360 ppb	46.2	1.96%
QC value within limits for Se 196.026 Recovery = 94.33%						
SiO2†	100725.6	10989 µg/L	18.1	10989 ppb	18.1	0.16%
QC value within limits for SiO2 Recovery = 102.75%						
Si 251.611†	310935.6	5131.9 µg/L	6.54	5131.9 ppb	6.54	0.13%
QC value within limits for Si 251.611 Recovery = 102.64%						
Sn 189.927†	6671.5	476.07 µg/L	4.919	476.07 ppb	4.919	1.03%
QC value within limits for Sn 189.927 Recovery = 95.21%						
Sr 421.552†	222829.9	518.44 µg/L	1.498	518.44 ppb	1.498	0.29%
QC value within limits for Sr 421.552 Recovery = 103.69%						
Ti 334.940†	518871.3	502.07 µg/L	1.741	502.07 ppb	1.741	0.35%
QC value within limits for Ti 334.940 Recovery = 100.41%						
Tl 190.801†	3276.0	448.07 µg/L	4.004	448.07 ppb	4.004	0.89%
QC value within limits for Tl 190.801 Recovery = 89.61%						
U 409.014†	8382.2	529.27 µg/L	0.763	529.27 ppb	0.763	0.14%
QC value within limits for U 409.014 Recovery = 105.85%						
V 292.402†	97416.4	516.82 µg/L	0.558	516.82 ppb	0.558	0.11%
QC value within limits for V 292.402 Recovery = 103.36%						
Zn 213.857†	79910.9	483.76 µg/L	0.156	483.76 ppb	0.156	0.03%
QC value within limits for Zn 213.857 Recovery = 96.75%						

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 3/29/2010 18:46:42
Data Type: Reprocessed on 3/29/2010 19:14:40
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1475217.1	1475217.1	88.190	%			18:47:41
1	Sc RADIAL	134988.0	134988.0	92.6	%			18:47:14
1	Y 371.029	890652.0	890652.0	87.098	%			18:47:41
1	Ag 328.068†	2600.2	-18.7	4.2300	µg/L	4.2300	ppb	18:47:41
1	Al 396.153Radial†	2173247.9	2346612.0	512240	µg/L	512240	ppb	18:47:12
1	As 188.979†	-221.7	-237.2	2.3463	µg/L	2.3463	ppb	18:47:43
1	B 249.677†	3640.1	771.9	12.918	µg/L	12.918	ppb	18:47:41
1	Ba 233.527†	451.6	687.2	-2.6252	µg/L	-2.6252	ppb	18:47:43
1	Be 313.107†	-13095.3	-14188.9	-0.0322	µg/L	-0.0322	ppb	18:47:41
1	Ca 317.933Radial†	7559025.2	8161296.1	478220	µg/L	478220	ppb	18:47:12
1	Cd 226.502†	5610.9	6456.7	-2.9745	µg/L	-2.9745	ppb	18:47:43
1	Co 228.616†	613.3	872.0	-11.650	µg/L	-11.650	ppb	18:47:43
1	Cr 267.716†	908.0	869.3	5.4318	µg/L	5.4318	ppb	18:47:43
1	Cu 324.752†	-17506.0	-22275.2	-5.5587	µg/L	-5.5587	ppb	18:47:43
1	Fe 238.204 Radial†	6300456.2	6802850.0	452280	µg/L	452280	ppb	18:47:12
1	K 766.490 Radial†	1898.7	595.1	-78.007	µg/L	-78.007	ppb	18:47:14
1	Mg 279.077 IEC†	1069506.5	1154620.7	475670	µg/L	475670	ppb	18:47:12
1	Mn 257.610†	14951.4	16873.6	2.9939	µg/L	2.9939	ppb	18:47:41
1	Mo 202.031†	-853.5	-912.6	-2.2055	µg/L	-2.2055	ppb	18:47:41
1	Na 589.592 Radial†	3064907.6	3307661.5	506110	µg/L	506110	ppb	18:47:12
1	Ni 231.604†	241.8	315.0	4.0298	µg/L	4.0298	ppb	18:47:43
1	P 214.914†	851.2	885.7	19.361	µg/L	19.361	ppb	18:47:43
1	Pb 220.353†	111.2	13.7	6.6643	µg/L	6.6643	ppb	18:47:43
1	S 181.975 Axial†	199.5	131.4	106.18	µg/L	106.18	ppb	18:47:43
1	Sb 206.836†	173.5	110.1	5.3162	µg/L	5.3162	ppb	18:47:43
1	Se 196.026†	-269.6	-316.6	46.3	µg/L	46.3	ppb	18:47:43
1	SiO2†	1875.2	553.5	61.247	µg/L	61.247	ppb	18:47:43
1	Si 251.611†	-2234.1	-3209.7	-52.717	µg/L	-52.717	ppb	18:47:43
1	Sn 189.927†	58.5	64.3	4.6670	µg/L	4.6670	ppb	18:47:43
1	Sr 421.552†	4787.3	5447.1	9.0235	µg/L	9.0235	ppb	18:47:14
1	Ti 334.940†	25472.1	28246.9	-3.7159	µg/L	-3.7159	ppb	18:47:41
1	Tl 190.801†	-294.1	-213.1	-27.836	µg/L	-27.836	ppb	18:47:43
1	U 409.014†	216123.9	245545.7	15094	µg/L	15094	ppb	18:47:41
1	V 292.402†	10776.3	11787.7	3.3989	µg/L	3.3989	ppb	18:47:43
1	Zn 213.857†	7832.8	8417.4	9.2023	µg/L	9.2023	ppb	18:47:43
2	Sc 361.383	1474797.5	1474797.5	88.165	%			18:47:46
2	Sc RADIAL	136487.8	136487.8	93.6	%			18:47:19
2	Y 371.029	890090.9	890090.9	87.044	%			18:47:46
2	Ag 328.068†	2591.0	-28.2	4.2336	µg/L	4.2336	ppb	18:47:46
2	Al 396.153Radial†	2181204.6	2329323.3	508460	µg/L	508460	ppb	18:47:17
2	As 188.979†	-251.7	-271.3	-12.460	µg/L	-12.460	ppb	18:47:48
2	B 249.677†	3729.3	874.2	14.628	µg/L	14.628	ppb	18:47:46
2	Ba 233.527†	527.6	773.5	-2.2009	µg/L	-2.2009	ppb	18:47:48
2	Be 313.107†	-13474.2	-14622.9	-0.1807	µg/L	-0.1807	ppb	18:47:46
2	Ca 317.933Radial†	7600178.4	8115555.5	475540	µg/L	475540	ppb	18:47:17
2	Cd 226.502†	5683.2	6540.6	-2.1393	µg/L	-2.1393	ppb	18:47:48
2	Co 228.616†	752.5	1030.1	-9.3590	µg/L	-9.3590	ppb	18:47:48
2	Cr 267.716†	724.6	661.7	3.6080	µg/L	3.6080	ppb	18:47:48
2	Cu 324.752†	-17459.2	-22227.9	-5.7811	µg/L	-5.7811	ppb	18:47:48
2	Fe 238.204 Radial†	6336284.1	6766355.5	449850	µg/L	449850	ppb	18:47:17
2	K 766.490 Radial†	1981.3	660.8	-49.077	µg/L	-49.077	ppb	18:47:19
2	Mg 279.077 IEC†	1076643.1	1149552.1	473590	µg/L	473590	ppb	18:47:17
2	Mn 257.610†	15045.5	16985.2	3.2356	µg/L	3.2356	ppb	18:47:46
2	Mo 202.031†	-881.3	-944.4	-3.3453	µg/L	-3.3453	ppb	18:47:46
2	Na 589.592 Radial†	3084400.4	3292112.6	503740	µg/L	503740	ppb	18:47:17
2	Ni 231.604†	341.9	428.7	5.4833	µg/L	5.4833	ppb	18:47:48
2	P 214.914†	888.6	928.3	30.390	µg/L	30.390	ppb	18:47:48
2	Pb 220.353†	63.3	-40.6	3.2317	µg/L	3.2317	ppb	18:47:48

2	S 181.975 Axial†	169.7	97.6	78.843 µg/L	78.843 ppb	18:47:48
2	Sb 206.836†	95.2	21.4	-6.5888 µg/L	-6.5888 ppb	18:47:48
2	Se 196.026†	-403.3	-468.4	-14.6 µg/L	-14.6 ppb	18:47:48
2	SiO2†	1816.0	486.9	54.020 µg/L	54.020 ppb	18:47:48
2	Si 251.611†	-2084.7	-3041.0	-49.906 µg/L	-49.906 ppb	18:47:48
2	Sn 189.927†	43.9	47.8	3.4920 µg/L	3.4920 ppb	18:47:48
2	Sr 421.552†	4824.6	5430.1	9.0047 µg/L	9.0047 ppb	18:47:19
2	Ti 334.940†	25083.7	27814.6	-4.0459 µg/L	-4.0459 ppb	18:47:46
2	Tl 190.801†	-241.3	-153.4	-19.840 µg/L	-19.840 ppb	18:47:48
2	U 409.014†	215721.0	245158.5	15071 µg/L	15071 ppb	18:47:46
2	V 292.402†	10612.7	11605.5	2.7405 µg/L	2.7405 ppb	18:47:48
2	Zn 213.857†	7898.7	8494.6	9.8973 µg/L	9.8973 ppb	18:47:48
3	Sc 361.383	1482973.9	1482973.9	88.654 %		18:47:51
3	Sc RADIAL	135581.7	135581.7	93.0 %		18:47:23
3	Y 371.029	894893.3	894893.3	87.513 %		18:47:51
3	Ag 328.068†	2907.1	312.1	5.3159 µg/L	5.3159 ppb	18:47:51
3	Al 396.153Radial†	2198157.6	2363115.2	515840 µg/L	515840 ppb	18:47:21
3	As 188.979†	-166.7	-173.8	30.035 µg/L	30.035 ppb	18:47:53
3	B 249.677†	3819.0	952.0	15.940 µg/L	15.940 ppb	18:47:51
3	Ba 233.527†	467.2	702.0	-2.6283 µg/L	-2.6283 ppb	18:47:53
3	Be 313.107†	-13583.2	-14661.6	-0.1997 µg/L	-0.1997 ppb	18:47:51
3	Ca 317.933Radial†	7679845.3	8255440.6	483730 µg/L	483730 ppb	18:47:21
3	Cd 226.502†	5523.3	6324.6	-4.4547 µg/L	-4.4547 ppb	18:47:53
3	Co 228.616†	665.1	926.8	-11.181 µg/L	-11.181 ppb	18:47:53
3	Cr 267.716†	895.3	849.6	5.3942 µg/L	5.3942 ppb	18:47:53
3	Cu 324.752†	-17409.5	-22062.6	-3.6839 µg/L	-3.6839 ppb	18:47:53
3	Fe 238.204 Radial†	6403813.8	6884172.5	457680 µg/L	457680 ppb	18:47:21
3	K 766.490 Radial†	2077.2	778.0	-6.1386 µg/L	-6.1386 ppb	18:47:23
3	Mg 279.077 IEC†	1090892.1	1172554.0	483060 µg/L	483060 ppb	18:47:21
3	Mn 257.610†	15096.7	16948.9	2.7894 µg/L	2.7894 ppb	18:47:51
3	Mo 202.031†	-879.5	-936.8	-2.6225 µg/L	-2.6225 ppb	18:47:51
3	Na 589.592 Radial†	3116499.7	3348632.9	512380 µg/L	512380 ppb	18:47:21
3	Ni 231.604†	249.4	322.2	4.1219 µg/L	4.1219 ppb	18:47:53
3	P 214.914†	734.4	748.9	-16.245 µg/L	-16.245 ppb	18:47:53
3	Pb 220.353†	-96.4	-221.1	-7.4793 µg/L	-7.4793 ppb	18:47:53
3	S 181.975 Axial†	169.9	96.8	78.205 µg/L	78.205 ppb	18:47:53
3	Sb 206.836†	73.9	-3.3	-10.074 µg/L	-10.074 ppb	18:47:53
3	Se 196.026†	-324.5	-376.9	24.3 µg/L	24.3 ppb	18:47:53
3	SiO2†	1980.5	661.1	72.973 µg/L	72.973 ppb	18:47:53
3	Si 251.611†	-1826.1	-2736.2	-44.905 µg/L	-44.905 ppb	18:47:53
3	Sn 189.927†	110.7	122.9	8.8298 µg/L	8.8298 ppb	18:47:53
3	Sr 421.552†	4811.0	5449.9	8.9869 µg/L	8.9869 ppb	18:47:23
3	Ti 334.940†	25226.4	27818.7	-4.5924 µg/L	-4.5924 ppb	18:47:51
3	Tl 190.801†	-184.7	-88.0	-11.070 µg/L	-11.070 ppb	18:47:53
3	U 409.014†	216613.9	244816.6	15048 µg/L	15048 ppb	18:47:51
3	V 292.402†	10498.6	11410.5	0.4086 µg/L	0.4086 ppb	18:47:53
3	Zn 213.857†	7725.4	8249.7	7.5805 µg/L	7.5805 ppb	18:47:53

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1477662.9	88.336	%	0.2752				0.31%
Sc RADIAL	135685.8	93.1	%	0.52				0.56%
Y 371.029	891878.7	87.218	%	0.2568				0.29%
Ag 328.068†	88.4	4.5932	µg/L	0.62588	4.5932	ppb	0.62588	13.63%
Al 396.153Radial†	2346350.2	512180	µg/L	3688.5	512180	ppb	3688.5	0.72%
QC value within limits for Al 396.153Radial Recovery = 102.44%								
As 188.979†	-227.4	6.6405	µg/L	21.57070	6.6405	ppb	21.57070	324.83%
B 249.677†	866.1	14.495	µg/L	1.5153	14.495	ppb	1.5153	10.45%
Ba 233.527†	720.9	-2.4848	µg/L	0.24586	-2.4848	ppb	0.24586	9.89%
Be 313.107†	-14491.1	-0.1375	µg/L	0.09171	-0.1375	ppb	0.09171	66.68%
Ca 317.933Radial†	8177430.7	479160	µg/L	4179.3	479160	ppb	4179.3	0.87%
QC value within limits for Ca 317.933Radial Recovery = 95.83%								
Cd 226.502†	6440.6	-3.1895	µg/L	1.17255	-3.1895	ppb	1.17255	36.76%
Co 228.616†	943.0	-10.730	µg/L	1.2103	-10.730	ppb	1.2103	11.28%
Cr 267.716†	793.5	4.8113	µg/L	1.04230	4.8113	ppb	1.04230	21.66%
Cu 324.752†	-22188.5	-5.0079	µg/L	1.15199	-5.0079	ppb	1.15199	23.00%
Fe 238.204 Radial†	6817792.7	453270	µg/L	4009.8	453270	ppb	4009.8	0.88%
QC value within limits for Fe 238.204 Radial Recovery = 90.65%								
K 766.490 Radial†	678.0	-44.408	µg/L	36.1609	-44.408	ppb	36.1609	81.43%

Mg 279.077 IEC†	1158908.9	477440 µg/L	4979.6	477440 ppb	4979.6	1.04%
QC value within limits for Mg 279.077 IEC Recovery = 95.49%						
Mn 257.610†	16935.9	3.0063 µg/L	0.22334	3.0063 ppb	0.22334	7.43%
Mo 202.031†	-931.3	-2.7244 µg/L	0.57668	-2.7244 ppb	0.57668	21.17%
Na 589.592 Radial†	3316135.7	507410 µg/L	4467.6	507410 ppb	4467.6	0.88%
QC value within limits for Na 589.592 Radial Recovery = 101.48%						
Ni 231.604†	355.3	4.5450 µg/L	0.81388	4.5450 ppb	0.81388	17.91%
P 214.914†	854.3	11.169 µg/L	24.3729	11.169 ppb	24.3729	218.22%
Pb 220.353†	-82.7	0.8056 µg/L	7.37729	0.8056 ppb	7.37729	915.80%
S 181.975 Axial†	108.6	87.742 µg/L	15.9697	87.742 ppb	15.9697	18.20%
Sb 206.836†	42.7	-3.7822 µg/L	8.06989	-3.7822 ppb	8.06989	213.36%
Se 196.026†	-387.3	18.7 µg/L	30.84	18.7 ppb	30.84	165.04%
SiO2†	567.2	62.747 µg/L	9.5648	62.747 ppb	9.5648	15.24%
Si 251.611†	-2995.6	-49.176 µg/L	3.9567	-49.176 ppb	3.9567	8.05%
Sn 189.927†	78.3	5.6629 µg/L	2.80476	5.6629 ppb	2.80476	49.53%
Sr 421.552†	5442.4	9.0050 µg/L	0.01831	9.0050 ppb	0.01831	0.20%
Ti 334.940†	27960.1	-4.1181 µg/L	0.44268	-4.1181 ppb	0.44268	10.75%
Tl 190.801†	-151.5	-19.582 µg/L	8.3859	-19.582 ppb	8.3859	42.82%
U 409.014†	245173.6	15071 µg/L	23.1	15071 ppb	23.1	0.15%
QC value within limits for U 409.014 Recovery = 100.47%						
V 292.402†	11601.2	2.1827 µg/L	1.57124	2.1827 ppb	1.57124	71.99%
Zn 213.857†	8387.2	8.8934 µg/L	1.18890	8.8934 ppb	1.18890	13.37%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 3/29/2010 18:48:01
Data Type: Reprocessed on 3/29/2010 19:14:40
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1698380.4	1698380.4	101.53	%			18:49:13
1	Sc RADIAL	151205.1	151205.1	104	%			18:48:34
1	Y 371.029	1017103.0	1017103.0	99.464	%			18:49:13
1	Ag 328.068†	-18686.1	-21371.4	31.131	µg/L	31.131	ppb	18:49:15
1	Al 396.153Radial†	2338.4	2286.0	66.356	µg/L	66.356	ppb	18:48:36
1	As 188.979†	24060.3	23711.8	10160	µg/L	10160	ppb	18:49:15
1	B 249.677†	302290.6	294377.4	4910.3	µg/L	4910.3	ppb	18:49:13
1	Ba 233.527†	3091920.0	3045479.3	13922	µg/L	13922	ppb	18:49:13
1	Be 313.107†	8967503.4	8832963.6	2875.2	µg/L	2875.2	ppb	18:49:09
1	Ca 317.933Radial†	1386.8	720.6	42.226	µg/L	42.226	ppb	18:48:36
1	Cd 226.502†	1391850.4	1370960.3	9471.5	µg/L	9471.5	ppb	18:49:13
1	Co 228.616†	680530.5	670447.0	9197.3	µg/L	9197.3	ppb	18:49:13
1	Cr 267.716†	2796482.2	2754160.4	23659	µg/L	23659	ppb	18:49:13
1	Cu 324.752†	4652514.4	4579945.2	19914	µg/L	19914	ppb	18:49:13
1	Fe 238.204 Radial†	-1093.2	-1167.1	-77.594	µg/L	-77.594	ppb	18:48:36
1	K 766.490 Radial†	735082.9	707128.4	291110	µg/L	291110	ppb	18:48:34
1	Mg 279.077 IEC†	-573.2	-739.2	-76.817	µg/L	-76.817	ppb	18:48:36
1	Mn 257.610†	6850554.7	6747191.3	9219.6	µg/L	9219.6	ppb	18:49:13
1	Mo 202.031†	299568.0	295106.7	9318.7	µg/L	9318.7	ppb	18:49:15
1	Na 589.592 Radial†	4106.1	2263.3	87.417	µg/L	87.417	ppb	18:48:36
1	Ni 231.604†	759020.4	747617.8	9562.9	µg/L	9562.9	ppb	18:49:13
1	P 214.914†	61793.1	60781.8	14324	µg/L	14324	ppb	18:49:15
1	Pb 220.353†	385088.4	379170.1	22997	µg/L	22997	ppb	18:49:13
1	S 181.975 Axial†	62300.3	61266.2	49715	µg/L	49715	ppb	18:49:15
1	Sb 206.836†	72365.8	71188.1	9412.3	µg/L	9412.3	ppb	18:49:15
1	Se 196.026†	23983.3	23610.8	9340	µg/L	9340	ppb	18:49:15
1	SiO2†	927224.5	911672.2	99243	µg/L	99243	ppb	18:49:13
1	Si 251.611†	2845330.8	2801756.4	46140	µg/L	46140	ppb	18:49:13
1	Sn 189.927†	135952.5	133900.7	9552.3	µg/L	9552.3	ppb	18:49:15
1	Sr 421.552†	4291141.6	4136725.5	9695.4	µg/L	9695.4	ppb	18:48:32
1	Ti 334.940†	9795412.6	9647094.3	9829.2	µg/L	9829.2	ppb	18:49:09
1	Tl 190.801†	68839.1	67921.6	9266.8	µg/L	9266.8	ppb	18:49:15
1	U 409.014†	-6352.9	-5778.0	247.84	µg/L	247.84	ppb	18:49:15
1	V 292.402†	1822287.8	1794382.0	10142	µg/L	10142	ppb	18:49:13
1	Zn 213.857†	2271454.5	2236744.1	14006	µg/L	14006	ppb	18:49:13
2	Sc 361.383	1692355.1	1692355.1	101.17	%			18:49:22
2	Sc RADIAL	148148.5	148148.5	102	%			18:48:40
2	Y 371.029	1013670.4	1013670.4	99.129	%			18:49:22
2	Ag 328.068†	-18902.0	-21650.3	30.241	µg/L	30.241	ppb	18:49:25
2	Al 396.153Radial†	2166.1	2162.9	32.480	µg/L	32.480	ppb	18:48:43
2	As 188.979†	24382.8	24114.9	10329	µg/L	10329	ppb	18:49:25
2	B 249.677†	301947.2	295098.0	4922.4	µg/L	4922.4	ppb	18:49:22
2	Ba 233.527†	3087006.8	3051465.1	13949	µg/L	13949	ppb	18:49:22
2	Be 313.107†	8888938.4	8786753.2	2860.1	µg/L	2860.1	ppb	18:49:19
2	Ca 317.933Radial†	1193.0	557.5	32.668	µg/L	32.668	ppb	18:48:43
2	Cd 226.502†	1387271.1	1371314.7	9474.0	µg/L	9474.0	ppb	18:49:22
2	Co 228.616†	679503.2	671817.9	9216.1	µg/L	9216.1	ppb	18:49:22
2	Cr 267.716†	2791317.7	2758861.8	23700	µg/L	23700	ppb	18:49:22
2	Cu 324.752†	4645173.2	4589003.5	19954	µg/L	19954	ppb	18:49:22
2	Fe 238.204 Radial†	-1141.0	-1235.9	-82.165	µg/L	-82.165	ppb	18:48:43
2	K 766.490 Radial†	723724.6	710573.4	292530	µg/L	292530	ppb	18:48:40
2	Mg 279.077 IEC†	-594.9	-771.9	-86.616	µg/L	-86.616	ppb	18:48:43
2	Mn 257.610†	6838819.1	6759613.7	9236.6	µg/L	9236.6	ppb	18:49:22
2	Mo 202.031†	303352.5	299897.9	9470.0	µg/L	9470.0	ppb	18:49:25
2	Na 589.592 Radial†	3886.9	2129.3	65.648	µg/L	65.648	ppb	18:48:43
2	Ni 231.604†	757365.3	748643.5	9576.0	µg/L	9576.0	ppb	18:49:22
2	P 214.914†	62941.1	62133.3	14647	µg/L	14647	ppb	18:49:25
2	Pb 220.353†	383628.9	379077.8	22992	µg/L	22992	ppb	18:49:22

2	S 181.975 Axial†	63093.2	62268.3	50529 µg/L	50529 ppb	18:49:25
2	Sb 206.836†	73391.6	72455.9	9585.2 µg/L	9585.2 ppb	18:49:25
2	Se 196.026†	24264.9	23973.2	9480 µg/L	9480 ppb	18:49:25
2	SiO2†	925612.2	913330.0	99418 µg/L	99418 ppb	18:49:22
2	Si 251.611†	2841383.2	2807831.9	46237 µg/L	46237 ppb	18:49:22
2	Sn 189.927†	137626.2	136031.8	9703.7 µg/L	9703.7 ppb	18:49:25
2	Sr 421.552†	4251704.3	4183270.4	9804.5 µg/L	9804.5 ppb	18:48:38
2	Ti 334.940†	9732958.3	9619711.2	9801.3 µg/L	9801.3 ppb	18:49:19
2	Tl 190.801†	69796.1	69108.9	9426.0 µg/L	9426.0 ppb	18:49:25
2	U 409.014†	-6518.6	-5964.1	237.63 µg/L	237.63 ppb	18:49:25
2	V 292.402†	1819682.2	1798196.6	10165 µg/L	10165 ppb	18:49:22
2	Zn 213.857†	2265596.7	2238919.2	14019 µg/L	14019 ppb	18:49:22
3	Sc 361.383	1700875.8	1700875.8	101.68 %		18:49:32
3	Sc RADIAL	149241.8	149241.8	102 %		18:48:47
3	Y 371.029	1018743.4	1018743.4	99.625 %		18:49:32
3	Ag 328.068†	-19043.0	-21695.4	29.614 µg/L	29.614 ppb	18:49:34
3	Al 396.153Radial†	2183.6	2164.5	34.118 µg/L	34.118 ppb	18:48:49
3	As 188.979†	24384.9	23996.2	10278 µg/L	10278 ppb	18:49:34
3	B 249.677†	302272.0	293922.3	4902.7 µg/L	4902.7 ppb	18:49:32
3	Ba 233.527†	3092416.4	3041499.6	13904 µg/L	13904 ppb	18:49:32
3	Be 313.107†	8907241.5	8760739.0	2851.7 µg/L	2851.7 ppb	18:49:28
3	Ca 317.933Radial†	1218.9	574.2	33.647 µg/L	33.647 ppb	18:48:49
3	Cd 226.502†	1391102.2	1368213.3	9452.5 µg/L	9452.5 ppb	18:49:32
3	Co 228.616†	681435.9	670354.0	9196.0 µg/L	9196.0 ppb	18:49:32
3	Cr 267.716†	2794875.2	2748538.9	23611 µg/L	23611 ppb	18:49:32
3	Cu 324.752†	4650199.8	4570945.8	19875 µg/L	19875 ppb	18:49:32
3	Fe 238.204 Radial†	-1251.6	-1335.7	-88.800 µg/L	-88.800 ppb	18:48:49
3	K 766.490 Radial†	729684.2	711177.7	292780 µg/L	292780 ppb	18:48:47
3	Mg 279.077 IEC†	-664.5	-835.6	-113.55 µg/L	-113.55 ppb	18:48:49
3	Mn 257.610†	6850008.1	6736754.4	9205.4 µg/L	9205.4 ppb	18:49:32
3	Mo 202.031†	303976.8	299009.8	9441.9 µg/L	9441.9 ppb	18:49:34
3	Na 589.592 Radial†	3504.7	1728.1	4.0327 µg/L	4.0327 ppb	18:48:49
3	Ni 231.604†	758972.5	746473.9	9548.3 µg/L	9548.3 ppb	18:49:32
3	P 214.914†	62994.4	61874.1	14586 µg/L	14586 ppb	18:49:34
3	Pb 220.353†	384992.3	378519.2	22958 µg/L	22958 ppb	18:49:32
3	S 181.975 Axial†	63225.2	62085.8	50381 µg/L	50381 ppb	18:49:34
3	Sb 206.836†	73461.5	72161.1	9546.2 µg/L	9546.2 ppb	18:49:34
3	Se 196.026†	24345.1	23931.9	9470 µg/L	9470 ppb	18:49:34
3	SiO2†	927967.0	911062.6	99172 µg/L	99172 ppb	18:49:32
3	Si 251.611†	2848954.5	2801208.6	46128 µg/L	46128 ppb	18:49:32
3	Sn 189.927†	137708.4	135431.2	9660.9 µg/L	9660.9 ppb	18:49:34
3	Sr 421.552†	4283363.5	4183546.2	9805.1 µg/L	9805.1 ppb	18:48:45
3	Ti 334.940†	9739101.8	9577559.1	9758.3 µg/L	9758.3 ppb	18:49:28
3	Tl 190.801†	69743.1	68711.1	9371.9 µg/L	9371.9 ppb	18:49:34
3	U 409.014†	-6372.0	-5787.7	246.22 µg/L	246.22 ppb	18:49:34
3	V 292.402†	1821804.8	1791273.7	10126 µg/L	10126 ppb	18:49:32
3	Zn 213.857†	2271404.4	2233412.6	13985 µg/L	13985 ppb	18:49:32

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1697203.7	101.46	%	0.262				0.26%
Sc RADIAL	149531.8	103	%	1.1				1.04%
Y 371.029	1016505.6	99.406	%	0.2532				0.25%
Ag 328.068†	-21572.4	30.328	µg/L	0.7622	30.328	ppb	0.7622	2.51%
Al 396.153Radial†	2204.5	44.318	µg/L	19.1029	44.318	ppb	19.1029	43.10%
As 188.979†	23941.0	10256	µg/L	86.9	10256	ppb	86.9	0.85%
QC value within limits for As 188.979 Recovery = 102.56%								
B 249.677†	294465.9	4911.8	µg/L	9.92	4911.8	ppb	9.92	0.20%
QC value within limits for B 249.677 Recovery = 98.24%								
Ba 233.527†	3046148.0	13925	µg/L	22.9	13925	ppb	22.9	0.16%
QC value within limits for Ba 233.527 Recovery = 92.83%								
Be 313.107†	8793485.2	2862.3	µg/L	11.91	2862.3	ppb	11.91	0.42%
QC value within limits for Be 313.107 Recovery = 95.41%								
Ca 317.933Radial†	617.5	36.181	µg/L	5.2587	36.181	ppb	5.2587	14.53%
Cd 226.502†	1370162.8	9466.0	µg/L	11.73	9466.0	ppb	11.73	0.12%
QC value within limits for Cd 226.502 Recovery = 94.66%								
Co 228.616†	670873.0	9203.1	µg/L	11.25	9203.1	ppb	11.25	0.12%
QC value within limits for Co 228.616 Recovery = 92.03%								
Cr 267.716†	2753853.7	23657	µg/L	44.4	23657	ppb	44.4	0.19%

QC value within limits for Cr 267.716 Recovery = 94.63%						
Cu 324.752†	4579964.8	19914 µg/L	39.3	19914 ppb	39.3	0.20%
QC value within limits for Cu 324.752 Recovery = 99.57%						
Fe 238.204 Radial†	-1246.2	-82.853 µg/L	5.6347	-82.853 ppb	5.6347	6.80%
K 766.490 Radial†	709626.5	292140 µg/L	899.3	292140 ppb	899.3	0.31%
QC value within limits for K 766.490 Radial Recovery = 97.38%						
Mg 279.077 IEC†	-782.2	-92.329 µg/L	19.0229	-92.329 ppb	19.0229	20.60%
Mn 257.610†	6747853.1	9220.5 µg/L	15.64	9220.5 ppb	15.64	0.17%
QC value within limits for Mn 257.610 Recovery = 92.21%						
Mo 202.031†	298004.8	9410.2 µg/L	80.46	9410.2 ppb	80.46	0.86%
QC value within limits for Mo 202.031 Recovery = 94.10%						
Na 589.592 Radial†	2040.3	52.366 µg/L	43.2497	52.366 ppb	43.2497	82.59%
Ni 231.604†	747578.4	9562.4 µg/L	13.88	9562.4 ppb	13.88	0.15%
QC value within limits for Ni 231.604 Recovery = 95.62%						
P 214.914†	61596.4	14519 µg/L	171.5	14519 ppb	171.5	1.18%
QC value within limits for P 214.914 Recovery = 96.79%						
Pb 220.353†	378922.4	22983 µg/L	21.3	22983 ppb	21.3	0.09%
QC value within limits for Pb 220.353 Recovery = 91.93%						
S 181.975 Axial†	61873.4	50208 µg/L	433.1	50208 ppb	433.1	0.86%
QC value within limits for S 181.975 Axial Recovery = 100.42%						
Sb 206.836†	71935.0	9514.6 µg/L	90.66	9514.6 ppb	90.66	0.95%
QC value within limits for Sb 206.836 Recovery = 95.15%						
Se 196.026†	23838.7	9430 µg/L	78.5	9430 ppb	78.5	0.83%
QC value within limits for Se 196.026 Recovery = 94.29%						
SiO2†	912021.6	99278 µg/L	126.7	99278 ppb	126.7	0.13%
QC value within limits for SiO2 Recovery = 92.78%						
Si 251.611†	2803599.0	46168 µg/L	59.8	46168 ppb	59.8	0.13%
QC value within limits for Si 251.611 Recovery = 92.34%						
Sn 189.927†	135121.2	9639.0 µg/L	78.05	9639.0 ppb	78.05	0.81%
QC value within limits for Sn 189.927 Recovery = 96.39%						
Sr 421.552†	4167847.3	9768.3 µg/L	63.17	9768.3 ppb	63.17	0.65%
QC value within limits for Sr 421.552 Recovery = 97.68%						
Ti 334.940†	9614788.2	9796.3 µg/L	35.71	9796.3 ppb	35.71	0.36%
QC value within limits for Ti 334.940 Recovery = 97.96%						
Tl 190.801†	68580.5	9354.9 µg/L	80.95	9354.9 ppb	80.95	0.87%
QC value within limits for Tl 190.801 Recovery = 93.55%						
U 409.014†	-5843.2	243.90 µg/L	5.490	243.90 ppb	5.490	2.25%
V 292.402†	1794617.4	10145 µg/L	19.6	10145 ppb	19.6	0.19%
QC value within limits for V 292.402 Recovery = 101.45%						
Zn 213.857†	2236358.7	14003 µg/L	17.3	14003 ppb	17.3	0.12%
QC value within limits for Zn 213.857 Recovery = 93.36%						

All analyte(s) passed QC.

Sequence No.: 13
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/29/2010 18:49:43
Data Type: Reprocessed on 3/29/2010 19:14:41

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1716469.7	1716469.7	102.61	%			18:50:43
1	Sc RADIAL	154139.7	154139.7	106	%			18:50:16
1	Y 371.029	1044074.8	1044074.8	102.10	%			18:50:43
1	Ag 328.068†	127602.5	121387.1	498.79	µg/L	498.79	ppb	18:50:43
1	Al 396.153Radial†	24715.7	23403.0	5085.7	µg/L	5085.7	ppb	18:50:16
1	As 188.979†	1226.4	1209.4	512.57	µg/L	512.57	ppb	18:51:03
1	B 249.677†	33333.5	29129.3	487.34	µg/L	487.34	ppb	18:50:43
1	Ba 233.527†	111436.2	108774.4	497.32	µg/L	497.32	ppb	18:50:43
1	Be 313.107†	1573483.9	1534088.7	499.51	µg/L	499.51	ppb	18:50:43
1	Ca 317.933Radial†	90206.4	84682.8	4962.0	µg/L	4962.0	ppb	18:50:16
1	Cd 226.502†	72401.2	70652.6	487.60	µg/L	487.60	ppb	18:50:43
1	Co 228.616†	36477.3	35725.3	489.45	µg/L	489.45	ppb	18:50:43
1	Cr 267.716†	59006.8	57344.5	492.41	µg/L	492.41	ppb	18:50:43
1	Cu 324.752†	119200.3	113741.0	495.97	µg/L	495.97	ppb	18:50:43
1	Fe 238.204 Radial†	78399.3	74021.0	4921.2	µg/L	4921.2	ppb	18:50:16
1	K 766.490 Radial†	15543.8	13243.2	5447.9	µg/L	5447.9	ppb	18:50:16
1	Mg 279.077 IEC†	13152.3	12250.1	5058.7	µg/L	5058.7	ppb	18:50:16
1	Mn 257.610†	370669.7	361153.8	493.28	µg/L	493.28	ppb	18:50:43
1	Mo 202.031†	15969.2	15617.9	493.45	µg/L	493.45	ppb	18:51:03
1	Na 589.592 Radial†	70596.7	65061.3	9950.4	µg/L	9950.4	ppb	18:50:16
1	Ni 231.604†	39349.5	38388.8	491.04	µg/L	491.04	ppb	18:50:43
1	P 214.914†	10515.6	10168.3	2426.7	µg/L	2426.7	ppb	18:51:03
1	Pb 220.353†	8561.1	8230.7	500.15	µg/L	500.15	ppb	18:51:03
1	S 181.975 Axial†	1372.2	1242.5	1010.8	µg/L	1010.8	ppb	18:51:03
1	Sb 206.836†	3825.6	3641.6	492.37	µg/L	492.37	ppb	18:51:03
1	Se 196.026†	1275.8	1232.4	490	µg/L	490	ppb	18:51:03
1	SiO2†	51362.9	48482.5	5278.0	µg/L	5278.0	ppb	18:50:43
1	Si 251.611†	154098.4	149499.2	2462.1	µg/L	2462.1	ppb	18:50:43
1	Sn 189.927†	7147.3	6963.3	496.69	µg/L	496.69	ppb	18:51:03
1	Sr 421.552†	225096.8	213129.1	499.48	µg/L	499.48	ppb	18:50:14
1	Ti 334.940†	496998.7	483710.6	492.59	µg/L	492.59	ppb	18:50:43
1	Tl 190.801†	3658.8	3685.9	502.16	µg/L	502.16	ppb	18:51:03
1	U 409.014†	7304.5	7597.6	499.58	µg/L	499.58	ppb	18:50:43
1	V 292.402†	91666.3	88901.0	499.43	µg/L	499.43	ppb	18:50:43
1	Zn 213.857†	80718.2	78199.0	488.38	µg/L	488.38	ppb	18:50:43
2	Sc 361.383	1735506.8	1735506.8	103.75	%			18:51:06
2	Sc RADIAL	152000.4	152000.4	104	%			18:50:20
2	Y 371.029	1054226.6	1054226.6	103.09	%			18:51:06
2	Ag 328.068†	129107.7	121473.9	499.12	µg/L	499.12	ppb	18:51:06
2	Al 396.153Radial†	24426.5	23454.6	5097.3	µg/L	5097.3	ppb	18:50:20
2	As 188.979†	1211.7	1182.2	501.18	µg/L	501.18	ppb	18:51:26
2	B 249.677†	33876.9	29296.7	490.15	µg/L	490.15	ppb	18:51:06
2	Ba 233.527†	112976.1	109067.5	498.66	µg/L	498.66	ppb	18:51:06
2	Be 313.107†	1597015.9	1539949.6	501.42	µg/L	501.42	ppb	18:51:06
2	Ca 317.933Radial†	89516.0	85221.3	4993.6	µg/L	4993.6	ppb	18:50:20
2	Cd 226.502†	73594.6	71028.9	490.19	µg/L	490.19	ppb	18:51:06
2	Co 228.616†	37103.5	35939.0	492.37	µg/L	492.37	ppb	18:51:06
2	Cr 267.716†	59788.6	57467.2	493.47	µg/L	493.47	ppb	18:51:06
2	Cu 324.752†	121059.6	114258.9	498.22	µg/L	498.22	ppb	18:51:06
2	Fe 238.204 Radial†	77655.1	74350.7	4943.1	µg/L	4943.1	ppb	18:50:20
2	K 766.490 Radial†	15260.2	13178.1	5421.1	µg/L	5421.1	ppb	18:50:20
2	Mg 279.077 IEC†	13002.7	12281.7	5071.5	µg/L	5071.5	ppb	18:50:20
2	Mn 257.610†	375944.4	362275.4	494.81	µg/L	494.81	ppb	18:51:06
2	Mo 202.031†	15890.3	15371.2	485.66	µg/L	485.66	ppb	18:51:26
2	Na 589.592 Radial†	70215.3	65635.2	10038	µg/L	10038	ppb	18:50:20
2	Ni 231.604†	40047.6	38641.0	494.26	µg/L	494.26	ppb	18:51:06
2	P 214.914†	10471.7	10013.6	2389.6	µg/L	2389.6	ppb	18:51:26
2	Pb 220.353†	8484.3	8065.2	490.12	µg/L	490.12	ppb	18:51:26

2	S 181.975 Axial†	1365.8	1221.6	993.82 µg/L	993.82 ppb	18:51:26
2	Sb 206.836†	3834.3	3609.1	487.85 µg/L	487.85 ppb	18:51:26
2	Se 196.026†	1280.6	1223.4	486 µg/L	486 ppb	18:51:26
2	SiO2†	52085.9	48630.3	5294.5 µg/L	5294.5 ppb	18:51:06
2	Si 251.611†	156279.7	149954.3	2469.8 µg/L	2469.8 ppb	18:51:06
2	Sn 189.927†	7113.5	6854.4	488.96 µg/L	488.96 ppb	18:51:26
2	Sr 421.552†	226242.9	217223.8	509.08 µg/L	509.08 ppb	18:50:18
2	Ti 334.940†	504866.7	485981.2	494.91 µg/L	494.91 ppb	18:51:06
2	Tl 190.801†	3631.8	3620.9	493.44 µg/L	493.44 ppb	18:51:26
2	U 409.014†	7123.0	7344.6	483.95 µg/L	483.95 ppb	18:51:06
2	V 292.402†	92685.9	88903.8	499.36 µg/L	499.36 ppb	18:51:06
2	Zn 213.857†	81781.8	78361.2	489.37 µg/L	489.37 ppb	18:51:06
3	Sc 361.383	1735485.3	1735485.3	103.75 %		18:51:29
3	Sc RADIAL	153403.0	153403.0	105 %		18:50:24
3	Y 371.029	1055021.0	1055021.0	103.17 %		18:51:29
3	Ag 328.068†	128496.4	120886.2	496.73 µg/L	496.73 ppb	18:51:29
3	Al 396.153Radial†	24553.1	23360.7	5076.8 µg/L	5076.8 ppb	18:50:24
3	As 188.979†	1228.3	1198.2	507.85 µg/L	507.85 ppb	18:51:49
3	B 249.677†	33764.7	29188.9	488.34 µg/L	488.34 ppb	18:51:29
3	Ba 233.527†	112730.4	108832.0	497.58 µg/L	497.58 ppb	18:51:29
3	Be 313.107†	1593609.1	1536684.9	500.35 µg/L	500.35 ppb	18:51:29
3	Ca 317.933Radial†	90597.1	85463.7	5007.8 µg/L	5007.8 ppb	18:50:24
3	Cd 226.502†	73406.3	70848.2	488.94 µg/L	488.94 ppb	18:51:29
3	Co 228.616†	37011.7	35850.9	491.16 µg/L	491.16 ppb	18:51:29
3	Cr 267.716†	59666.8	57350.6	492.47 µg/L	492.47 ppb	18:51:29
3	Cu 324.752†	120307.7	113535.5	495.08 µg/L	495.08 ppb	18:51:29
3	Fe 238.204 Radial†	78518.4	74490.1	4952.4 µg/L	4952.4 ppb	18:50:24
3	K 766.490 Radial†	15451.9	13226.5	5441.0 µg/L	5441.0 ppb	18:50:24
3	Mg 279.077 IEC†	13189.3	12345.0	5097.6 µg/L	5097.6 ppb	18:50:24
3	Mn 257.610†	374488.1	360876.2	492.90 µg/L	492.90 ppb	18:51:29
3	Mo 202.031†	15929.3	15408.9	486.85 µg/L	486.85 ppb	18:51:49
3	Na 589.592 Radial†	70596.2	65381.5	9999.4 µg/L	9999.4 ppb	18:50:24
3	Ni 231.604†	39740.3	38345.2	490.48 µg/L	490.48 ppb	18:51:29
3	P 214.914†	10488.7	10030.1	2393.6 µg/L	2393.6 ppb	18:51:49
3	Pb 220.353†	8512.5	8092.5	491.77 µg/L	491.77 ppb	18:51:49
3	S 181.975 Axial†	1342.5	1199.2	975.68 µg/L	975.68 ppb	18:51:49
3	Sb 206.836†	3856.9	3630.9	490.82 µg/L	490.82 ppb	18:51:49
3	Se 196.026†	1283.1	1225.8	487 µg/L	487 ppb	18:51:49
3	SiO2†	51906.7	48458.3	5275.6 µg/L	5275.6 ppb	18:51:29
3	Si 251.611†	155757.0	149452.4	2461.5 µg/L	2461.5 ppb	18:51:29
3	Sn 189.927†	7131.5	6871.8	490.19 µg/L	490.19 ppb	18:51:49
3	Sr 421.552†	223596.8	212726.1	498.53 µg/L	498.53 ppb	18:50:22
3	Ti 334.940†	502794.3	483989.7	492.88 µg/L	492.88 ppb	18:51:29
3	Tl 190.801†	3635.4	3624.3	493.87 µg/L	493.87 ppb	18:51:49
3	U 409.014†	7197.3	7416.4	488.32 µg/L	488.32 ppb	18:51:29
3	V 292.402†	92498.4	88724.2	498.37 µg/L	498.37 ppb	18:51:29
3	Zn 213.857†	81445.8	78038.4	487.36 µg/L	487.36 ppb	18:51:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1729154.0	103.37	%	0.657				0.64%
Sc RADIAL	153181.0	105	%	0.7				0.71%
Y 371.029	1051107.5	102.79	%	0.597				0.58%
Ag 328.068†	121249.1	498.21	µg/L	1.295	498.21	ppb	1.295	0.26%
QC value within limits for Ag 328.068 Recovery = 99.64%								
Al 396.153Radial†	23406.1	5086.6	µg/L	10.30	5086.6	ppb	10.30	0.20%
QC value within limits for Al 396.153Radial Recovery = 101.73%								
As 188.979†	1196.6	507.20	µg/L	5.724	507.20	ppb	5.724	1.13%
QC value within limits for As 188.979 Recovery = 101.44%								
B 249.677†	29205.0	488.61	µg/L	1.419	488.61	ppb	1.419	0.29%
QC value within limits for B 249.677 Recovery = 97.72%								
Ba 233.527†	108891.3	497.85	µg/L	0.708	497.85	ppb	0.708	0.14%
QC value within limits for Ba 233.527 Recovery = 99.57%								
Be 313.107†	1536907.7	500.43	µg/L	0.954	500.43	ppb	0.954	0.19%
QC value within limits for Be 313.107 Recovery = 100.09%								
Ca 317.933Radial†	85122.6	4987.8	µg/L	23.42	4987.8	ppb	23.42	0.47%
QC value within limits for Ca 317.933Radial Recovery = 99.76%								
Cd 226.502†	70843.2	488.91	µg/L	1.299	488.91	ppb	1.299	0.27%
QC value within limits for Cd 226.502 Recovery = 97.78%								

Co 228.616†	35838.4	490.99 µg/L	1.470	490.99 ppb	1.470	0.30%
QC value within limits for Co 228.616 Recovery = 98.20%						
Cr 267.716†	57387.4	492.78 µg/L	0.599	492.78 ppb	0.599	0.12%
QC value within limits for Cr 267.716 Recovery = 98.56%						
Cu 324.752†	113845.1	496.42 µg/L	1.617	496.42 ppb	1.617	0.33%
QC value within limits for Cu 324.752 Recovery = 99.28%						
Fe 238.204 Radial†	74287.3	4938.9 µg/L	16.02	4938.9 ppb	16.02	0.32%
QC value within limits for Fe 238.204 Radial Recovery = 98.78%						
K 766.490 Radial†	13215.9	5436.6 µg/L	13.92	5436.6 ppb	13.92	0.26%
QC value within limits for K 766.490 Radial Recovery = 108.73%						
Mg 279.077 IEC†	12292.3	5076.0 µg/L	19.85	5076.0 ppb	19.85	0.39%
QC value within limits for Mg 279.077 IEC Recovery = 101.52%						
Mn 257.610†	361435.1	493.67 µg/L	1.013	493.67 ppb	1.013	0.21%
QC value within limits for Mn 257.610 Recovery = 98.73%						
Mo 202.031†	15466.0	488.65 µg/L	4.194	488.65 ppb	4.194	0.86%
QC value within limits for Mo 202.031 Recovery = 97.73%						
Na 589.592 Radial†	65359.4	9996.0 µg/L	44.02	9996.0 ppb	44.02	0.44%
QC value within limits for Na 589.592 Radial Recovery = 99.96%						
Ni 231.604†	38458.3	491.93 µg/L	2.043	491.93 ppb	2.043	0.42%
QC value within limits for Ni 231.604 Recovery = 98.39%						
P 214.914†	10070.7	2403.3 µg/L	20.35	2403.3 ppb	20.35	0.85%
QC value within limits for P 214.914 Recovery = 96.13%						
Pb 220.353†	8129.5	494.02 µg/L	5.379	494.02 ppb	5.379	1.09%
QC value within limits for Pb 220.353 Recovery = 98.80%						
S 181.975 Axial†	1221.1	993.43 µg/L	17.559	993.43 ppb	17.559	1.77%
QC value within limits for S 181.975 Axial Recovery = 99.34%						
Sb 206.836†	3627.2	490.35 µg/L	2.300	490.35 ppb	2.300	0.47%
QC value within limits for Sb 206.836 Recovery = 98.07%						
Se 196.026†	1227.2	488 µg/L	1.8	488 ppb	1.8	0.38%
QC value within limits for Se 196.026 Recovery = 97.52%						
SiO2†	48523.7	5282.7 µg/L	10.27	5282.7 ppb	10.27	0.19%
QC value within limits for SiO2 Recovery = 98.79%						
Si 251.611†	149635.3	2464.5 µg/L	4.63	2464.5 ppb	4.63	0.19%
QC value within limits for Si 251.611 Recovery = 98.58%						
Sn 189.927†	6896.5	491.95 µg/L	4.158	491.95 ppb	4.158	0.85%
QC value within limits for Sn 189.927 Recovery = 98.39%						
Sr 421.552†	214359.7	502.36 µg/L	5.833	502.36 ppb	5.833	1.16%
QC value within limits for Sr 421.552 Recovery = 100.47%						
Ti 334.940†	484560.5	493.46 µg/L	1.265	493.46 ppb	1.265	0.26%
QC value within limits for Ti 334.940 Recovery = 98.69%						
Tl 190.801†	3643.7	496.49 µg/L	4.915	496.49 ppb	4.915	0.99%
QC value within limits for Tl 190.801 Recovery = 99.30%						
U 409.014†	7452.9	490.62 µg/L	8.063	490.62 ppb	8.063	1.64%
QC value within limits for U 409.014 Recovery = 98.12%						
V 292.402†	88843.0	499.05 µg/L	0.592	499.05 ppb	0.592	0.12%
QC value within limits for V 292.402 Recovery = 99.81%						
Zn 213.857†	78199.5	488.37 µg/L	1.004	488.37 ppb	1.004	0.21%
QC value within limits for Zn 213.857 Recovery = 97.67%						

All analyte(s) passed QC.

Sequence No.: 14
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/29/2010 18:51:58
Data Type: Reprocessed on 3/29/2010 19:14:42

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1728897.1	1728897.1	103.36	%			18:53:35
1	Sc RADIAL	154974.9	154974.9	106	%			18:52:27
1	Y 371.029	1063835.8	1063835.8	104.03	%			18:53:35
1	Ag 328.068†	3134.9	66.1	0.2939	µg/L	0.2939	ppb	18:53:37
1	Al 396.153Radial†	-26.1	7.3	1.5617	µg/L	1.5617	ppb	18:52:47
1	As 188.979†	-6.1	8.3	3.4794	µg/L	3.4794	ppb	18:53:57
1	B 249.677†	3279.3	-182.9	-3.0715	µg/L	-3.0715	ppb	18:53:57
1	Ba 233.527†	-172.5	8.1	0.0372	µg/L	0.0372	ppb	18:53:57
1	Be 313.107†	-265.8	402.9	0.1379	µg/L	0.1379	ppb	18:53:37
1	Ca 317.933Radial†	701.7	43.7	2.5615	µg/L	2.5615	ppb	18:52:47
1	Cd 226.502†	-78.0	18.9	0.1302	µg/L	0.1302	ppb	18:53:57
1	Co 228.616†	-150.4	31.1	0.4253	µg/L	0.4253	ppb	18:53:57
1	Cr 267.716†	165.7	0.1	-0.0163	µg/L	-0.0163	ppb	18:53:57
1	Cu 324.752†	2708.5	195.7	0.8692	µg/L	0.8692	ppb	18:53:37
1	Fe 238.204 Radial†	162.5	39.6	2.6306	µg/L	2.6306	ppb	18:52:47
1	K 766.490 Radial†	1937.4	367.1	151.11	µg/L	151.11	ppb	18:52:27
1	Mg 279.077 IEC†	162.4	-33.9	-13.972	µg/L	-13.972	ppb	18:52:47
1	Mn 257.610†	174.4	88.7	0.1218	µg/L	0.1218	ppb	18:53:57
1	Mo 202.031†	-30.8	25.4	0.8010	µg/L	0.8010	ppb	18:53:57
1	Na 589.592 Radial†	2342.1	508.0	77.603	µg/L	77.603	ppb	18:52:27
1	Ni 231.604†	-58.4	-15.6	-0.1996	µg/L	-0.1996	ppb	18:53:57
1	P 214.914†	71.2	-10.7	-2.5700	µg/L	-2.5700	ppb	18:53:57
1	Pb 220.353†	154.2	36.7	2.2095	µg/L	2.2095	ppb	18:53:57
1	S 181.975 Axial†	101.6	3.4	2.7893	µg/L	2.7893	ppb	18:53:57
1	Sb 206.836†	90.3	0.8	0.1164	µg/L	0.1164	ppb	18:53:57
1	Se 196.026†	18.0	6.5	2.59	µg/L	2.59	ppb	18:53:57
1	SiO2†	1694.9	67.0	7.2702	µg/L	7.2702	ppb	18:53:57
1	Si 251.611†	856.4	152.3	2.4932	µg/L	2.4932	ppb	18:53:57
1	Sn 189.927†	32.2	29.2	2.0730	µg/L	2.0730	ppb	18:53:57
1	Sr 421.552†	-130.0	155.7	0.3650	µg/L	0.3650	ppb	18:52:27
1	Ti 334.940†	561.4	-93.1	-0.1029	µg/L	-0.1029	ppb	18:53:37
1	Tl 190.801†	-112.5	11.5	1.5393	µg/L	1.5393	ppb	18:53:57
1	U 409.014†	-122.5	360.6	22.274	µg/L	22.274	ppb	18:53:37
1	V 292.402†	422.0	-23.5	-0.1074	µg/L	-0.1074	ppb	18:53:37
1	Zn 213.857†	665.5	179.5	1.1304	µg/L	1.1304	ppb	18:53:57
2	Sc 361.383	1739415.6	1739415.6	103.98	%			18:53:59
2	Sc RADIAL	153949.0	153949.0	106	%			18:52:49
2	Y 371.029	1070599.7	1070599.7	104.70	%			18:53:59
2	Ag 328.068†	3011.7	-70.7	-0.2648	µg/L	-0.2648	ppb	18:54:01
2	Al 396.153Radial†	-22.1	11.0	2.3766	µg/L	2.3766	ppb	18:53:09
2	As 188.979†	-13.6	1.2	0.4948	µg/L	0.4948	ppb	18:54:21
2	B 249.677†	3226.1	-253.2	-4.2510	µg/L	-4.2510	ppb	18:54:21
2	Ba 233.527†	-183.8	-1.7	-0.0082	µg/L	-0.0082	ppb	18:54:21
2	Be 313.107†	-497.9	181.3	0.0661	µg/L	0.0661	ppb	18:54:01
2	Ca 317.933Radial†	683.5	30.9	1.8113	µg/L	1.8113	ppb	18:53:09
2	Cd 226.502†	-81.2	16.3	0.1120	µg/L	0.1120	ppb	18:54:21
2	Co 228.616†	-169.3	13.8	0.1886	µg/L	0.1886	ppb	18:54:21
2	Cr 267.716†	203.3	35.3	0.2845	µg/L	0.2845	ppb	18:54:21
2	Cu 324.752†	2932.9	395.7	1.7397	µg/L	1.7397	ppb	18:54:01
2	Fe 238.204 Radial†	156.9	35.2	2.3419	µg/L	2.3419	ppb	18:53:09
2	K 766.490 Radial†	1851.5	297.9	122.64	µg/L	122.64	ppb	18:52:49
2	Mg 279.077 IEC†	181.3	-15.0	-6.1810	µg/L	-6.1810	ppb	18:53:09
2	Mn 257.610†	185.1	98.0	0.1342	µg/L	0.1342	ppb	18:54:21
2	Mo 202.031†	-40.6	16.1	0.5093	µg/L	0.5093	ppb	18:54:21
2	Na 589.592 Radial†	2203.5	391.5	59.792	µg/L	59.792	ppb	18:52:49
2	Ni 231.604†	-87.1	-42.9	-0.5483	µg/L	-0.5483	ppb	18:54:21
2	P 214.914†	70.7	-11.6	-2.7920	µg/L	-2.7920	ppb	18:54:21
2	Pb 220.353†	120.5	3.4	0.1904	µg/L	0.1904	ppb	18:54:21

2	S 181.975 Axial†	93.2	-5.2	-4.2193 µg/L	-4.2193 ppb	18:54:21
2	Sb 206.836†	93.2	3.0	0.4017 µg/L	0.4017 ppb	18:54:21
2	Se 196.026†	16.5	5.0	1.99 µg/L	1.99 ppb	18:54:21
2	SiO2†	1661.9	25.3	2.7424 µg/L	2.7424 ppb	18:54:21
2	Si 251.611†	798.6	91.6	1.5029 µg/L	1.5029 ppb	18:54:21
2	Sn 189.927†	13.9	11.4	0.8082 µg/L	0.8082 ppb	18:54:21
2	Sr 421.552†	-162.3	124.3	0.2914 µg/L	0.2914 ppb	18:52:49
2	Ti 334.940†	589.0	-69.9	-0.0804 µg/L	-0.0804 ppb	18:54:01
2	Tl 190.801†	-123.3	1.7	0.2267 µg/L	0.2267 ppb	18:54:21
2	U 409.014†	-105.6	377.6	23.300 µg/L	23.300 ppb	18:54:01
2	V 292.402†	344.7	-100.3	-0.5347 µg/L	-0.5347 ppb	18:54:01
2	Zn 213.857†	642.6	153.6	0.9689 µg/L	0.9689 ppb	18:54:21
3	Sc 361.383	1736015.7	1736015.7	103.78 %		18:54:23
3	Sc RADIAL	153754.9	153754.9	105 %		18:53:11
3	Y 371.029	1068282.8	1068282.8	104.47 %		18:54:23
3	Ag 328.068†	2964.9	-110.2	-0.4509 µg/L	-0.4509 ppb	18:54:26
3	Al 396.153Radial†	-16.1	16.6	3.5986 µg/L	3.5986 ppb	18:53:31
3	As 188.979†	-20.3	-5.3	-2.2272 µg/L	-2.2272 ppb	18:54:46
3	B 249.677†	3208.4	-264.2	-4.4364 µg/L	-4.4364 ppb	18:54:46
3	Ba 233.527†	-175.6	5.8	0.0262 µg/L	0.0262 ppb	18:54:46
3	Be 313.107†	-146.9	518.6	0.1704 µg/L	0.1704 ppb	18:54:26
3	Ca 317.933Radial†	709.7	56.6	3.3147 µg/L	3.3147 ppb	18:53:31
3	Cd 226.502†	-66.7	30.1	0.2078 µg/L	0.2078 ppb	18:54:46
3	Co 228.616†	-149.7	32.3	0.4424 µg/L	0.4424 ppb	18:54:46
3	Cr 267.716†	183.5	16.6	0.1380 µg/L	0.1380 ppb	18:54:46
3	Cu 324.752†	2785.8	259.4	1.1323 µg/L	1.1323 ppb	18:54:26
3	Fe 238.204 Radial†	167.4	45.4	3.0195 µg/L	3.0195 ppb	18:53:31
3	K 766.490 Radial†	2004.9	445.6	183.43 µg/L	183.43 ppb	18:53:11
3	Mg 279.077 IEC†	164.0	-31.2	-12.871 µg/L	-12.871 ppb	18:53:31
3	Mn 257.610†	141.8	56.6	0.0779 µg/L	0.0779 ppb	18:54:46
3	Mo 202.031†	-43.5	13.3	0.4189 µg/L	0.4189 ppb	18:54:46
3	Na 589.592 Radial†	2025.0	224.9	34.251 µg/L	34.251 ppb	18:53:11
3	Ni 231.604†	-54.8	-11.9	-0.1527 µg/L	-0.1527 ppb	18:54:46
3	P 214.914†	63.8	-18.1	-4.3341 µg/L	-4.3341 ppb	18:54:46
3	Pb 220.353†	149.8	31.9	1.9285 µg/L	1.9285 ppb	18:54:46
3	S 181.975 Axial†	104.0	5.4	4.3655 µg/L	4.3655 ppb	18:54:46
3	Sb 206.836†	91.0	1.1	0.1457 µg/L	0.1457 ppb	18:54:46
3	Se 196.026†	19.4	7.7	3.06 µg/L	3.06 ppb	18:54:46
3	SiO2†	1644.1	11.4	1.2195 µg/L	1.2195 ppb	18:54:46
3	Si 251.611†	797.5	92.1	1.5112 µg/L	1.5112 ppb	18:54:46
3	Sn 189.927†	13.8	11.3	0.8038 µg/L	0.8038 ppb	18:54:46
3	Sr 421.552†	-194.0	94.1	0.2206 µg/L	0.2206 ppb	18:53:11
3	Ti 334.940†	849.4	182.1	0.1846 µg/L	0.1846 ppb	18:54:26
3	Tl 190.801†	-118.6	6.0	0.7978 µg/L	0.7978 ppb	18:54:46
3	U 409.014†	-409.0	85.0	5.2024 µg/L	5.2024 ppb	18:54:26
3	V 292.402†	290.0	-152.4	-0.8373 µg/L	-0.8373 ppb	18:54:26
3	Zn 213.857†	615.7	128.9	0.8114 µg/L	0.8114 ppb	18:54:46

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1734776.2	103.71	%	0.321				0.31%
Sc RADIAL	154226.3	106	%	0.4				0.43%
Y 371.029	1067572.8	104.40	%	0.336				0.32%
Ag 328.068†	-38.3	-0.1406	µg/L	0.38763	-0.1406	ppb	0.38763	275.71%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.6	2.5123	µg/L	1.02521	2.5123	ppb	1.02521	40.81%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.4	0.5823	µg/L	2.85430	0.5823	ppb	2.85430	490.14%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-233.4	-3.9196	µg/L	0.74029	-3.9196	ppb	0.74029	18.89%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.1	0.0184	µg/L	0.02367	0.0184	ppb	0.02367	128.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	367.6	0.1248	µg/L	0.05339	0.1248	ppb	0.05339	42.78%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	43.7	2.5625	µg/L	0.75170	2.5625	ppb	0.75170	29.33%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	21.8	0.1500	µg/L	0.05085	0.1500	ppb	0.05085	33.90%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	25.7	0.3521 µg/L	0.14188	0.3521 ppb	0.14188	40.30%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	17.3	0.1354 µg/L	0.15041	0.1354 ppb	0.15041	111.10%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	283.6	1.2471 µg/L	0.44643	1.2471 ppb	0.44643	35.80%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	40.1	2.6640 µg/L	0.34002	2.6640 ppb	0.34002	12.76%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	370.2	152.39 µg/L	30.414	152.39 ppb	30.414	19.96%
QC value greater than the upper limit for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-26.7	-11.008 µg/L	4.2166	-11.008 ppb	4.2166	38.30%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	81.1	0.1113 µg/L	0.02959	0.1113 ppb	0.02959	26.59%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	18.3	0.5764 µg/L	0.19971	0.5764 ppb	0.19971	34.65%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	374.8	57.216 µg/L	21.7906	57.216 ppb	21.7906	38.09%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-23.5	-0.3002 µg/L	0.21614	-0.3002 ppb	0.21614	72.00%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-13.5	-3.2320 µg/L	0.96088	-3.2320 ppb	0.96088	29.73%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	24.0	1.4428 µg/L	1.09369	1.4428 ppb	1.09369	75.80%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	1.2	0.9785 µg/L	4.56987	0.9785 ppb	4.56987	467.04%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	1.6	0.2213 µg/L	0.15695	0.2213 ppb	0.15695	70.93%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	6.4	2.55 µg/L	0.537	2.55 ppb	0.537	21.07%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	34.6	3.7440 µg/L	3.14725	3.7440 ppb	3.14725	84.06%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	112.0	1.8358 µg/L	0.56935	1.8358 ppb	0.56935	31.01%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	17.3	1.2284 µg/L	0.73152	1.2284 ppb	0.73152	59.55%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	124.7	0.2923 µg/L	0.07221	0.2923 ppb	0.07221	24.70%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	6.3	0.0004 µg/L	0.15987	0.0004 ppb	0.15987	>999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	6.4	0.8546 µg/L	0.65815	0.8546 ppb	0.65815	77.01%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	274.4	16.925 µg/L	10.1653	16.925 ppb	10.1653	60.06%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-92.1	-0.4931 µg/L	0.36672	-0.4931 ppb	0.36672	74.37%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	154.0	0.9702 µg/L	0.15951	0.9702 ppb	0.15951	16.44%
QC value within limits for Zn 213.857 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/29/2010 18:57:39
Data Type: Reprocessed on 3/29/2010 19:14:43
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1742170.7	1742170.7	104.15	%			18:58:39
1	Sc RADIAL	154515.3	154515.3	106	%			18:58:11
1	Y 371.029	1059060.1	1059060.1	103.57	%			18:58:39
1	Ag 328.068†	129322.6	121204.2	498.05	µg/L	498.05	ppb	18:58:39
1	Al 396.153Radial†	24823.0	23447.4	5095.8	µg/L	5095.8	ppb	18:58:11
1	As 188.979†	1217.4	1183.1	501.56	µg/L	501.56	ppb	18:58:59
1	B 249.677†	33548.3	28856.2	482.76	µg/L	482.76	ppb	18:58:39
1	Ba 233.527†	113126.0	108794.9	497.41	µg/L	497.41	ppb	18:58:39
1	Be 313.107†	1604803.7	1541539.3	501.94	µg/L	501.94	ppb	18:58:39
1	Ca 317.933Radial†	90245.5	84512.4	4952.1	µg/L	4952.1	ppb	18:58:11
1	Cd 226.502†	73575.0	70738.7	488.19	µg/L	488.19	ppb	18:58:39
1	Co 228.616†	37114.9	35813.1	490.65	µg/L	490.65	ppb	18:58:39
1	Cr 267.716†	59986.2	57436.6	493.20	µg/L	493.20	ppb	18:58:39
1	Cu 324.752†	120959.5	113716.5	495.86	µg/L	495.86	ppb	18:58:39
1	Fe 238.204 Radial†	78194.0	73647.1	4896.3	µg/L	4896.3	ppb	18:58:11
1	K 766.490 Radial†	14176.6	11917.8	4902.2	µg/L	4902.2	ppb	18:58:11
1	Mg 279.077 IEC†	13187.4	12253.0	5059.7	µg/L	5059.7	ppb	18:58:11
1	Mn 257.610†	376145.4	361082.3	493.18	µg/L	493.18	ppb	18:58:39
1	Mo 202.031†	15919.4	15340.5	484.69	µg/L	484.69	ppb	18:58:59
1	Na 589.592 Radial†	70146.9	64474.8	9861.1	µg/L	9861.1	ppb	18:58:11
1	Ni 231.604†	39988.6	38436.6	491.65	µg/L	491.65	ppb	18:58:39
1	P 214.914†	10512.2	10013.9	2389.7	µg/L	2389.7	ppb	18:58:59
1	Pb 220.353†	8436.4	7988.0	485.43	µg/L	485.43	ppb	18:58:59
1	S 181.975 Axial†	1318.2	1170.9	952.74	µg/L	952.74	ppb	18:58:59
1	Sb 206.836†	3856.6	3616.3	488.81	µg/L	488.81	ppb	18:58:59
1	Se 196.026†	1269.9	1208.4	480	µg/L	480	ppb	18:58:59
1	SiO2†	51891.1	48251.3	5253.1	µg/L	5253.1	ppb	18:58:39
1	Si 251.611†	155814.4	148931.5	2452.9	µg/L	2452.9	ppb	18:58:39
1	Sn 189.927†	7088.8	6804.4	485.40	µg/L	485.40	ppb	18:58:59
1	Sr 421.552†	226055.0	213515.6	500.39	µg/L	500.39	ppb	18:58:09
1	Ti 334.940†	505203.6	484443.4	493.34	µg/L	493.34	ppb	18:58:39
1	Tl 190.801†	3627.2	3603.0	491.03	µg/L	491.03	ppb	18:58:59
1	U 409.014†	7391.3	7576.0	498.27	µg/L	498.27	ppb	18:58:39
1	V 292.402†	93133.5	88991.9	499.85	µg/L	499.85	ppb	18:58:39
1	Zn 213.857†	81243.9	77543.3	484.25	µg/L	484.25	ppb	18:58:39
2	Sc 361.383	1731918.8	1731918.8	103.54	%			18:59:02
2	Sc RADIAL	153334.6	153334.6	105	%			18:58:15
2	Y 371.029	1053099.9	1053099.9	102.98	%			18:59:02
2	Ag 328.068†	128679.2	121317.8	498.52	µg/L	498.52	ppb	18:59:02
2	Al 396.153Radial†	24533.3	23352.3	5074.9	µg/L	5074.9	ppb	18:58:15
2	As 188.979†	1225.6	1198.0	507.75	µg/L	507.75	ppb	18:59:22
2	B 249.677†	33340.5	28846.3	482.59	µg/L	482.59	ppb	18:59:02
2	Ba 233.527†	112441.8	108777.0	497.33	µg/L	497.33	ppb	18:59:02
2	Be 313.107†	1592364.8	1538646.2	501.00	µg/L	501.00	ppb	18:59:02
2	Ca 317.933Radial†	89792.3	84737.0	4965.2	µg/L	4965.2	ppb	18:58:15
2	Cd 226.502†	73051.4	70651.1	487.59	µg/L	487.59	ppb	18:59:02
2	Co 228.616†	36781.7	35702.2	489.13	µg/L	489.13	ppb	18:59:02
2	Cr 267.716†	59502.2	57310.0	492.11	µg/L	492.11	ppb	18:59:02
2	Cu 324.752†	119947.4	113426.4	494.60	µg/L	494.60	ppb	18:59:02
2	Fe 238.204 Radial†	77968.6	74000.8	4919.8	µg/L	4919.8	ppb	18:58:15
2	K 766.490 Radial†	14058.0	11908.0	4898.2	µg/L	4898.2	ppb	18:58:15
2	Mg 279.077 IEC†	13036.1	12205.0	5039.9	µg/L	5039.9	ppb	18:58:15
2	Mn 257.610†	373427.3	360594.9	492.52	µg/L	492.52	ppb	18:59:02
2	Mo 202.031†	15910.1	15421.9	487.26	µg/L	487.26	ppb	18:59:22
2	Na 589.592 Radial†	69792.3	64647.2	9887.5	µg/L	9887.5	ppb	18:58:15
2	Ni 231.604†	39642.4	38329.5	490.28	µg/L	490.28	ppb	18:59:02
2	P 214.914†	10490.2	10052.4	2398.9	µg/L	2398.9	ppb	18:59:22
2	Pb 220.353†	8461.2	8059.8	489.79	µg/L	489.79	ppb	18:59:22

2	S 181.975 Axial†	1332.4	1192.1	969.89 µg/L	969.89 ppb	18:59:22
2	Sb 206.836†	3845.4	3627.4	490.36 µg/L	490.36 ppb	18:59:22
2	Se 196.026†	1281.0	1226.3	487 µg/L	487 ppb	18:59:22
2	SiO2†	51762.5	48422.0	5271.6 µg/L	5271.6 ppb	18:59:02
2	Si 251.611†	154651.7	148694.0	2448.9 µg/L	2448.9 ppb	18:59:02
2	Sn 189.927†	7107.0	6862.3	489.51 µg/L	489.51 ppb	18:59:22
2	Sr 421.552†	226773.0	215840.0	505.83 µg/L	505.83 ppb	18:58:13
2	Ti 334.940†	500715.6	482980.0	491.85 µg/L	491.85 ppb	18:59:02
2	Tl 190.801†	3643.2	3639.1	495.88 µg/L	495.88 ppb	18:59:22
2	U 409.014†	7329.7	7558.5	497.20 µg/L	497.20 ppb	18:59:02
2	V 292.402†	92631.5	89036.3	500.12 µg/L	500.12 ppb	18:59:02
2	Zn 213.857†	80666.5	77447.4	483.65 µg/L	483.65 ppb	18:59:02
3	Sc 361.383	1731636.7	1731636.7	103.52 %		18:59:25
3	Sc RADIAL	154205.4	154205.4	106 %		18:58:20
3	Y 371.029	1052626.8	1052626.8	102.94 %		18:59:25
3	Ag 328.068†	128532.9	121196.7	498.02 µg/L	498.02 ppb	18:59:25
3	Al 396.153Radial†	24950.8	23615.3	5132.4 µg/L	5132.4 ppb	18:58:20
3	As 188.979†	1233.7	1206.0	511.11 µg/L	511.11 ppb	18:59:45
3	B 249.677†	33475.9	28982.3	484.88 µg/L	484.88 ppb	18:59:25
3	Ba 233.527†	112293.7	108651.6	496.76 µg/L	496.76 ppb	18:59:25
3	Be 313.107†	1590952.1	1537532.1	500.63 µg/L	500.63 ppb	18:59:25
3	Ca 317.933Radial†	90838.5	85244.0	4994.9 µg/L	4994.9 ppb	18:58:20
3	Cd 226.502†	73036.3	70648.1	487.56 µg/L	487.56 ppb	18:59:25
3	Co 228.616†	36829.8	35754.4	489.84 µg/L	489.84 ppb	18:59:25
3	Cr 267.716†	59440.0	57259.2	491.68 µg/L	491.68 ppb	18:59:25
3	Cu 324.752†	119916.0	113414.9	494.56 µg/L	494.56 ppb	18:59:25
3	Fe 238.204 Radial†	78885.0	74448.4	4949.6 µg/L	4949.6 ppb	18:58:20
3	K 766.490 Radial†	14076.3	11849.9	4874.3 µg/L	4874.3 ppb	18:58:20
3	Mg 279.077 IEC†	13322.3	12405.5	5122.6 µg/L	5122.6 ppb	18:58:20
3	Mn 257.610†	373424.5	360651.0	492.59 µg/L	492.59 ppb	18:59:25
3	Mo 202.031†	15880.4	15395.8	486.44 µg/L	486.44 ppb	18:59:45
3	Na 589.592 Radial†	70305.8	64758.0	9904.5 µg/L	9904.5 ppb	18:58:20
3	Ni 231.604†	39803.4	38491.3	492.35 µg/L	492.35 ppb	18:59:25
3	P 214.914†	10482.3	10046.4	2397.5 µg/L	2397.5 ppb	18:59:45
3	Pb 220.353†	8408.9	8010.6	486.81 µg/L	486.81 ppb	18:59:45
3	S 181.975 Axial†	1326.3	1186.4	965.31 µg/L	965.31 ppb	18:59:45
3	Sb 206.836†	3839.9	3622.7	489.73 µg/L	489.73 ppb	18:59:45
3	Se 196.026†	1268.7	1214.6	483 µg/L	483 ppb	18:59:45
3	SiO2†	51614.7	48287.3	5257.0 µg/L	5257.0 ppb	18:59:25
3	Si 251.611†	154566.1	148635.7	2448.0 µg/L	2448.0 ppb	18:59:25
3	Sn 189.927†	7092.3	6849.2	488.58 µg/L	488.58 ppb	18:59:45
3	Sr 421.552†	224060.1	212058.6	496.97 µg/L	496.97 ppb	18:58:17
3	Ti 334.940†	500694.3	483038.2	491.90 µg/L	491.90 ppb	18:59:25
3	Tl 190.801†	3646.3	3642.7	496.35 µg/L	496.35 ppb	18:59:45
3	U 409.014†	7327.6	7557.6	497.15 µg/L	497.15 ppb	18:59:25
3	V 292.402†	92621.5	89041.2	500.13 µg/L	500.13 ppb	18:59:25
3	Zn 213.857†	80736.0	77527.2	484.14 µg/L	484.14 ppb	18:59:25

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1735242.1	103.73	%	0.359				0.35%
Sc RADIAL	154018.4	106	%	0.4				0.40%
Y 371.029	1054928.9	103.16	%	0.351				0.34%
Ag 328.068†	121239.6	498.20	µg/L	0.276	498.20	ppb	0.276	0.06%
QC value within limits for Ag 328.068 Recovery = 99.64%								
Al 396.153Radial†	23471.7	5101.0	µg/L	29.08	5101.0	ppb	29.08	0.57%
QC value within limits for Al 396.153Radial Recovery = 102.02%								
As 188.979†	1195.7	506.81	µg/L	4.846	506.81	ppb	4.846	0.96%
QC value within limits for As 188.979 Recovery = 101.36%								
B 249.677†	28895.0	483.41	µg/L	1.273	483.41	ppb	1.273	0.26%
QC value within limits for B 249.677 Recovery = 96.68%								
Ba 233.527†	108741.2	497.17	µg/L	0.357	497.17	ppb	0.357	0.07%
QC value within limits for Ba 233.527 Recovery = 99.43%								
Be 313.107†	1539239.2	501.19	µg/L	0.673	501.19	ppb	0.673	0.13%
QC value within limits for Be 313.107 Recovery = 100.24%								
Ca 317.933Radial†	84831.1	4970.7	µg/L	21.96	4970.7	ppb	21.96	0.44%
QC value within limits for Ca 317.933Radial Recovery = 99.41%								
Cd 226.502†	70679.3	487.78	µg/L	0.358	487.78	ppb	0.358	0.07%
QC value within limits for Cd 226.502 Recovery = 97.56%								

Co 228.616†	35756.6	489.87 µg/L	0.760	489.87 ppb	0.760	0.16%
QC value within limits for Co 228.616 Recovery = 97.97%						
Cr 267.716†	57335.3	492.33 µg/L	0.783	492.33 ppb	0.783	0.16%
QC value within limits for Cr 267.716 Recovery = 98.47%						
Cu 324.752†	113519.3	495.01 µg/L	0.740	495.01 ppb	0.740	0.15%
QC value within limits for Cu 324.752 Recovery = 99.00%						
Fe 238.204 Radial†	74032.1	4921.9 µg/L	26.70	4921.9 ppb	26.70	0.54%
QC value within limits for Fe 238.204 Radial Recovery = 98.44%						
K 766.490 Radial†	11891.9	4891.6 µg/L	15.12	4891.6 ppb	15.12	0.31%
QC value within limits for K 766.490 Radial Recovery = 97.83%						
Mg 279.077 IEC†	12287.8	5074.1 µg/L	43.14	5074.1 ppb	43.14	0.85%
QC value within limits for Mg 279.077 IEC Recovery = 101.48%						
Mn 257.610†	360776.1	492.77 µg/L	0.365	492.77 ppb	0.365	0.07%
QC value within limits for Mn 257.610 Recovery = 98.55%						
Mo 202.031†	15386.1	486.13 µg/L	1.313	486.13 ppb	1.313	0.27%
QC value within limits for Mo 202.031 Recovery = 97.23%						
Na 589.592 Radial†	64626.7	9884.4 µg/L	21.84	9884.4 ppb	21.84	0.22%
QC value within limits for Na 589.592 Radial Recovery = 98.84%						
Ni 231.604†	38419.1	491.43 µg/L	1.053	491.43 ppb	1.053	0.21%
QC value within limits for Ni 231.604 Recovery = 98.29%						
P 214.914†	10037.5	2395.4 µg/L	4.95	2395.4 ppb	4.95	0.21%
QC value within limits for P 214.914 Recovery = 95.81%						
Pb 220.353†	8019.5	487.34 µg/L	2.227	487.34 ppb	2.227	0.46%
QC value within limits for Pb 220.353 Recovery = 97.47%						
S 181.975 Axial†	1183.1	962.65 µg/L	8.881	962.65 ppb	8.881	0.92%
QC value within limits for S 181.975 Axial Recovery = 96.26%						
Sb 206.836†	3622.2	489.63 µg/L	0.781	489.63 ppb	0.781	0.16%
QC value within limits for Sb 206.836 Recovery = 97.93%						
Se 196.026†	1216.4	483 µg/L	3.6	483 ppb	3.6	0.75%
QC value within limits for Se 196.026 Recovery = 96.66%						
SiO2†	48320.2	5260.6 µg/L	9.78	5260.6 ppb	9.78	0.19%
QC value within limits for SiO2 Recovery = 98.37%						
Si 251.611†	148753.7	2449.9 µg/L	2.62	2449.9 ppb	2.62	0.11%
QC value within limits for Si 251.611 Recovery = 98.00%						
Sn 189.927†	6838.6	487.83 µg/L	2.157	487.83 ppb	2.157	0.44%
QC value within limits for Sn 189.927 Recovery = 97.57%						
Sr 421.552†	213804.8	501.06 µg/L	4.470	501.06 ppb	4.470	0.89%
QC value within limits for Sr 421.552 Recovery = 100.21%						
Ti 334.940†	483487.2	492.36 µg/L	0.845	492.36 ppb	0.845	0.17%
QC value within limits for Ti 334.940 Recovery = 98.47%						
Tl 190.801†	3628.3	494.42 µg/L	2.943	494.42 ppb	2.943	0.60%
QC value within limits for Tl 190.801 Recovery = 98.88%						
U 409.014†	7564.0	497.54 µg/L	0.636	497.54 ppb	0.636	0.13%
QC value within limits for U 409.014 Recovery = 99.51%						
V 292.402†	89023.2	500.03 µg/L	0.157	500.03 ppb	0.157	0.03%
QC value within limits for V 292.402 Recovery = 100.01%						
Zn 213.857†	77506.0	484.01 µg/L	0.318	484.01 ppb	0.318	0.07%
QC value within limits for Zn 213.857 Recovery = 96.80%						

All analyte(s) passed QC.

Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/29/2010 18:59:54
Data Type: Reprocessed on 3/29/2010 19:14:44
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1743930.9	1743930.9	104.25	%			19:01:45
1	Sc RADIAL	157207.9	157207.9	108	%			19:00:23
1	Y 371.029	1072817.8	1072817.8	104.91	%			19:01:45
1	Ag 328.068†	2785.5	-295.2	-1.1824	µg/L	-1.1824	ppb	19:01:47
1	Al 396.153Radial†	-35.9	-1.4	-0.3269	µg/L	-0.3269	ppb	19:00:43
1	As 188.979†	-9.7	4.9	2.0592	µg/L	2.0592	ppb	19:02:07
1	B 249.677†	3169.2	-315.8	-5.3028	µg/L	-5.3028	ppb	19:02:07
1	Ba 233.527†	-172.8	9.3	0.0423	µg/L	0.0423	ppb	19:02:07
1	Be 313.107†	-580.2	103.6	0.0392	µg/L	0.0392	ppb	19:01:47
1	Ca 317.933Radial†	703.1	35.6	2.0888	µg/L	2.0888	ppb	19:00:43
1	Cd 226.502†	-117.2	-18.0	-0.1248	µg/L	-0.1248	ppb	19:02:07
1	Co 228.616†	-175.0	8.7	0.1195	µg/L	0.1195	ppb	19:02:07
1	Cr 267.716†	174.7	7.4	0.0489	µg/L	0.0489	ppb	19:02:07
1	Cu 324.752†	2833.3	292.9	1.2883	µg/L	1.2883	ppb	19:01:47
1	Fe 238.204 Radial†	147.5	23.5	1.5605	µg/L	1.5605	ppb	19:00:43
1	K 766.490 Radial†	1652.9	77.5	31.907	µg/L	31.907	ppb	19:00:23
1	Mg 279.077 IEC†	179.9	-19.9	-8.1726	µg/L	-8.1726	ppb	19:00:43
1	Mn 257.610†	174.5	87.4	0.1197	µg/L	0.1197	ppb	19:02:07
1	Mo 202.031†	-38.4	18.4	0.5797	µg/L	0.5797	ppb	19:02:07
1	Na 589.592 Radial†	1931.7	96.3	14.699	µg/L	14.699	ppb	19:00:23
1	Ni 231.604†	-49.3	-6.4	-0.0822	µg/L	-0.0822	ppb	19:02:07
1	P 214.914†	78.3	-4.5	-1.0824	µg/L	-1.0824	ppb	19:02:07
1	Pb 220.353†	116.5	-0.7	-0.0551	µg/L	-0.0551	ppb	19:02:07
1	S 181.975 Axial†	92.5	-6.1	-4.9234	µg/L	-4.9234	ppb	19:02:07
1	Sb 206.836†	87.4	-2.8	-0.3729	µg/L	-0.3729	ppb	19:02:07
1	Se 196.026†	21.5	9.7	3.85	µg/L	3.85	ppb	19:02:07
1	SiO2†	1662.9	22.2	2.3983	µg/L	2.3983	ppb	19:02:07
1	Si 251.611†	781.9	73.6	1.2037	µg/L	1.2037	ppb	19:02:07
1	Sn 189.927†	15.0	12.4	0.8828	µg/L	0.8828	ppb	19:02:07
1	Sr 421.552†	-145.8	142.8	0.3347	µg/L	0.3347	ppb	19:00:23
1	Ti 334.940†	822.4	152.5	0.1487	µg/L	0.1487	ppb	19:01:47
1	Tl 190.801†	-112.5	12.4	1.6651	µg/L	1.6651	ppb	19:02:07
1	U 409.014†	-191.3	295.6	18.231	µg/L	18.231	ppb	19:01:47
1	V 292.402†	340.4	-105.3	-0.5658	µg/L	-0.5658	ppb	19:01:47
1	Zn 213.857†	528.4	42.4	0.2666	µg/L	0.2666	ppb	19:02:07
2	Sc 361.383	1749880.6	1749880.6	104.61	%			19:02:09
2	Sc RADIAL	154607.9	154607.9	106	%			19:00:45
2	Y 371.029	1075429.4	1075429.4	105.17	%			19:02:09
2	Ag 328.068†	2854.9	-238.0	-0.9266	µg/L	-0.9266	ppb	19:02:11
2	Al 396.153Radial†	-53.8	-18.9	-4.1894	µg/L	-4.1894	ppb	19:01:05
2	As 188.979†	-8.5	6.1	2.5641	µg/L	2.5641	ppb	19:02:31
2	B 249.677†	3184.7	-311.3	-5.2277	µg/L	-5.2277	ppb	19:02:31
2	Ba 233.527†	-166.1	16.2	0.0743	µg/L	0.0743	ppb	19:02:31
2	Be 313.107†	-429.5	249.5	0.0921	µg/L	0.0921	ppb	19:02:11
2	Ca 317.933Radial†	674.2	19.4	1.1395	µg/L	1.1395	ppb	19:01:05
2	Cd 226.502†	-92.3	6.1	0.0422	µg/L	0.0422	ppb	19:02:31
2	Co 228.616†	-147.4	35.7	0.4889	µg/L	0.4889	ppb	19:02:31
2	Cr 267.716†	146.6	-20.1	-0.2010	µg/L	-0.2010	ppb	19:02:31
2	Cu 324.752†	2740.1	194.5	0.8753	µg/L	0.8753	ppb	19:02:11
2	Fe 238.204 Radial†	152.9	30.9	2.0532	µg/L	2.0532	ppb	19:01:05
2	K 766.490 Radial†	1696.1	144.0	59.261	µg/L	59.261	ppb	19:00:45
2	Mg 279.077 IEC†	164.9	-31.2	-12.828	µg/L	-12.828	ppb	19:01:05
2	Mn 257.610†	159.3	72.2	0.0992	µg/L	0.0992	ppb	19:02:31
2	Mo 202.031†	-10.4	45.2	1.4272	µg/L	1.4272	ppb	19:02:31
2	Na 589.592 Radial†	1913.7	109.4	16.687	µg/L	16.687	ppb	19:00:45
2	Ni 231.604†	-34.9	7.5	0.0960	µg/L	0.0960	ppb	19:02:31
2	P 214.914†	88.9	5.5	1.2769	µg/L	1.2769	ppb	19:02:31
2	Pb 220.353†	116.9	-0.7	-0.0641	µg/L	-0.0641	ppb	19:02:31

2	S 181.975 Axial†	98.1	-1.0	-0.8273 µg/L	-0.8273 ppb	19:02:31
2	Sb 206.836†	79.8	-10.4	-1.3806 µg/L	-1.3806 ppb	19:02:31
2	Se 196.026†	23.1	11.2	4.46 µg/L	4.46 ppb	19:02:31
2	SiO2†	1662.3	16.2	1.7388 µg/L	1.7388 ppb	19:02:31
2	Si 251.611†	771.7	61.4	0.9975 µg/L	0.9975 ppb	19:02:31
2	Sn 189.927†	-2.4	-4.3	-0.3060 µg/L	-0.3060 ppb	19:02:31
2	Sr 421.552†	-168.4	119.2	0.2795 µg/L	0.2795 ppb	19:00:45
2	Ti 334.940†	843.2	169.7	0.1595 µg/L	0.1595 ppb	19:02:11
2	Tl 190.801†	-115.5	9.9	1.3206 µg/L	1.3206 ppb	19:02:31
2	U 409.014†	109.4	583.7	36.043 µg/L	36.043 ppb	19:02:11
2	V 292.402†	368.0	-80.0	-0.4063 µg/L	-0.4063 ppb	19:02:11
2	Zn 213.857†	532.3	44.4	0.2783 µg/L	0.2783 ppb	19:02:31
3	Sc 361.383	1734424.8	1734424.8	103.69 %		19:02:33
3	Sc RADIAL	152171.1	152171.1	104 %		19:01:07
3	Y 371.029	1067156.7	1067156.7	104.36 %		19:02:33
3	Ag 328.068†	2902.9	-167.4	-0.6806 µg/L	-0.6806 ppb	19:02:36
3	Al 396.153Radial†	-58.9	-24.5	-5.3555 µg/L	-5.3555 ppb	19:01:27
3	As 188.979†	-18.7	-3.8	-1.5762 µg/L	-1.5762 ppb	19:02:56
3	B 249.677†	3166.5	-301.7	-5.0666 µg/L	-5.0666 ppb	19:02:56
3	Ba 233.527†	-187.7	-6.0	-0.0277 µg/L	-0.0277 ppb	19:02:56
3	Be 313.107†	-333.0	339.0	0.1115 µg/L	0.1115 ppb	19:02:36
3	Ca 317.933Radial†	709.2	63.1	3.6954 µg/L	3.6954 ppb	19:01:27
3	Cd 226.502†	-99.5	-1.5	-0.0105 µg/L	-0.0105 ppb	19:02:56
3	Co 228.616†	-170.8	11.9	0.1624 µg/L	0.1624 ppb	19:02:56
3	Cr 267.716†	184.7	17.9	0.1506 µg/L	0.1506 ppb	19:02:56
3	Cu 324.752†	2715.6	194.2	0.8472 µg/L	0.8472 ppb	19:02:36
3	Fe 238.204 Radial†	137.1	18.1	1.2007 µg/L	1.2007 ppb	19:01:27
3	K 766.490 Radial†	1528.8	9.4	3.8507 µg/L	3.8507 ppb	19:01:07
3	Mg 279.077 IEC†	173.3	-20.7	-8.5238 µg/L	-8.5238 ppb	19:01:27
3	Mn 257.610†	141.1	56.1	0.0769 µg/L	0.0769 ppb	19:02:56
3	Mo 202.031†	-52.8	4.2	0.1336 µg/L	0.1336 ppb	19:02:56
3	Na 589.592 Radial†	1839.9	67.6	10.341 µg/L	10.341 ppb	19:01:07
3	Ni 231.604†	-39.3	3.0	0.0386 µg/L	0.0386 ppb	19:02:56
3	P 214.914†	57.3	-24.3	-5.8246 µg/L	-5.8246 ppb	19:02:56
3	Pb 220.353†	120.4	3.6	0.2179 µg/L	0.2179 ppb	19:02:56
3	S 181.975 Axial†	88.1	-9.8	-7.9574 µg/L	-7.9574 ppb	19:02:56
3	Sb 206.836†	87.1	-2.6	-0.3549 µg/L	-0.3549 ppb	19:02:56
3	Se 196.026†	3.8	-7.2	-2.85 µg/L	-2.85 ppb	19:02:56
3	SiO2†	1649.9	18.4	1.9980 µg/L	1.9980 ppb	19:02:56
3	Si 251.611†	767.7	64.1	1.0530 µg/L	1.0530 ppb	19:02:56
3	Sn 189.927†	11.8	9.4	0.6667 µg/L	0.6667 ppb	19:02:56
3	Sr 421.552†	-198.5	87.9	0.2060 µg/L	0.2060 ppb	19:01:07
3	Ti 334.940†	650.8	-8.7	-0.0097 µg/L	-0.0097 ppb	19:02:36
3	Tl 190.801†	-110.3	13.9	1.8642 µg/L	1.8642 ppb	19:02:56
3	U 409.014†	-434.4	60.1	3.6852 µg/L	3.6852 ppb	19:02:36
3	V 292.402†	355.5	-88.9	-0.4890 µg/L	-0.4890 ppb	19:02:36
3	Zn 213.857†	538.0	54.5	0.3420 µg/L	0.3420 ppb	19:02:56

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1742745.4	104.18	%	0.466				0.45%
Sc RADIAL	154662.3	106	%	1.7				1.63%
Y 371.029	1071801.3	104.81	%	0.414				0.39%
Ag 328.068†	-233.5	-0.9298	µg/L	0.25091	-0.9298	ppb	0.25091	26.98%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-14.9	-3.2906	µg/L	2.63203	-3.2906	ppb	2.63203	79.99%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.4	1.0157	µg/L	2.25883	1.0157	ppb	2.25883	222.39%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-309.6	-5.1990	µg/L	0.12069	-5.1990	ppb	0.12069	2.32%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.5	0.0297	µg/L	0.05216	0.0297	ppb	0.05216	175.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	230.7	0.0809	µg/L	0.03739	0.0809	ppb	0.03739	46.19%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	39.4	2.3079	µg/L	1.29199	2.3079	ppb	1.29199	55.98%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-4.5	-0.0310	µg/L	0.08537	-0.0310	ppb	0.08537	275.14%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	18.8	0.2569 µg/L	0.20203	0.2569 ppb	0.20203	78.63%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	1.7	-0.0005 µg/L	0.18092	-0.0005 ppb	0.18092	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	227.2	1.0036 µg/L	0.24693	1.0036 ppb	0.24693	24.60%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	24.1	1.6048 µg/L	0.42799	1.6048 ppb	0.42799	26.67%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	76.9	31.673 µg/L	27.7059	31.673 ppb	27.7059	87.48%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-23.9	-9.8414 µg/L	2.59218	-9.8414 ppb	2.59218	26.34%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	71.9	0.0986 µg/L	0.02141	0.0986 ppb	0.02141	21.70%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	22.6	0.7135 µg/L	0.65711	0.7135 ppb	0.65711	92.10%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	91.1	13.909 µg/L	3.2461	13.909 ppb	3.2461	23.34%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	1.4	0.0175 µg/L	0.09096	0.0175 ppb	0.09096	520.03%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-7.8	-1.8767 µg/L	3.61681	-1.8767 ppb	3.61681	192.72%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	0.8	0.0329 µg/L	0.16029	0.0329 ppb	0.16029	486.83%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-5.6	-4.5694 µg/L	3.57820	-4.5694 ppb	3.57820	78.31%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-5.3	-0.7028 µg/L	0.58704	-0.7028 ppb	0.58704	83.53%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	4.6	1.82 µg/L	4.054	1.82 ppb	4.054	222.54%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	19.0	2.0451 µg/L	0.33227	2.0451 ppb	0.33227	16.25%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	66.3	1.0847 µg/L	0.10673	1.0847 ppb	0.10673	9.84%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	5.8	0.4145 µg/L	0.63329	0.4145 ppb	0.63329	152.78%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	116.6	0.2734 µg/L	0.06458	0.2734 ppb	0.06458	23.62%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	104.5	0.0995 µg/L	0.09469	0.0995 ppb	0.09469	95.16%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	12.1	1.6167 µg/L	0.27502	1.6167 ppb	0.27502	17.01%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	313.1	19.320 µg/L	16.2065	19.320 ppb	16.2065	83.89%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-91.4	-0.4870 µg/L	0.07980	-0.4870 ppb	0.07980	16.39%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	47.1	0.2956 µg/L	0.04054	0.2956 ppb	0.04054	13.71%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/29/2010 19:31:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	154889.6	154889.6	106	%			19:31:56
1	Al 396.153Radial†	25248.9	23791.6	5171.1	µg/L	5171.1	ppb	19:31:56
1	Ca 317.933Radial†	90787.7	84816.9	4969.9	µg/L	4969.9	ppb	19:31:56
1	Fe 238.204 Radial†	79020.5	74246.6	4936.2	µg/L	4936.2	ppb	19:31:56
1	K 766.490 Radial†	14072.9	11787.9	4848.7	µg/L	4848.7	ppb	19:31:56
1	Mg 279.077 IEC†	13305.1	12333.7	5092.8	µg/L	5092.8	ppb	19:31:56
1	Na 589.592 Radial†	70517.8	64663.9	9890.1	µg/L	9890.1	ppb	19:31:56
1	Sr 421.552†	229051.2	215819.7	505.79	µg/L	505.79	ppb	19:31:54
1	Sc 361.383	1743822.4	1743822.4	104.25	%			19:32:23
1	Y 371.029	1059163.2	1059163.2	103.58	%			19:32:23
1	Ag 328.068†	128580.1	120374.3	494.64	µg/L	494.64	ppb	19:32:23
1	As 188.979†	1249.3	1212.6	513.82	µg/L	513.82	ppb	19:32:43
1	B 249.677†	33313.2	28600.3	478.47	µg/L	478.47	ppb	19:32:23
1	Ba 233.527†	113123.6	108689.7	496.93	µg/L	496.93	ppb	19:32:23
1	Be 313.107†	1610699.9	1545735.8	503.30	µg/L	503.30	ppb	19:32:23
1	Cd 226.502†	72730.5	69861.7	482.13	µg/L	482.13	ppb	19:32:23
1	Co 228.616†	36860.0	35534.8	486.84	µg/L	486.84	ppb	19:32:23
1	Cr 267.716†	59413.7	56832.8	488.02	µg/L	488.02	ppb	19:32:23
1	Cu 324.752†	120074.9	112757.8	491.69	µg/L	491.69	ppb	19:32:23
1	Mn 257.610†	374470.1	359133.2	490.52	µg/L	490.52	ppb	19:32:23
1	Mo 202.031†	15834.2	15244.3	481.66	µg/L	481.66	ppb	19:32:43
1	Ni 231.604†	39808.6	38227.6	488.98	µg/L	488.98	ppb	19:32:23
1	P 214.914†	10378.9	9876.5	2356.8	µg/L	2356.8	ppb	19:32:43
1	Pb 220.353†	8316.1	7864.8	477.97	µg/L	477.97	ppb	19:32:43
1	S 181.975 Axial†	1303.7	1155.8	940.47	µg/L	940.47	ppb	19:32:43
1	Sb 206.836†	3839.6	3596.5	486.17	µg/L	486.17	ppb	19:32:43
1	Se 196.026†	1266.7	1204.2	478	µg/L	478	ppb	19:32:43
1	SiO2†	51618.1	47942.2	5219.4	µg/L	5219.4	ppb	19:32:23
1	Si 251.611†	154593.2	147618.3	2431.2	µg/L	2431.2	ppb	19:32:23
1	Sn 189.927†	7080.7	6790.2	484.38	µg/L	484.38	ppb	19:32:43
1	Ti 334.940†	502894.8	481769.2	490.61	µg/L	490.61	ppb	19:32:23
1	Tl 190.801†	3593.0	3566.9	486.15	µg/L	486.15	ppb	19:32:43
1	U 409.014†	7303.3	7484.9	492.46	µg/L	492.46	ppb	19:32:23
1	V 292.402†	92682.1	88474.1	496.92	µg/L	496.92	ppb	19:32:23
1	Zn 213.857†	80453.5	76711.2	479.02	µg/L	479.02	ppb	19:32:23
2	Sc RADIAL	155203.4	155203.4	106	%			19:32:01
2	Al 396.153Radial†	25234.3	23729.9	5157.5	µg/L	5157.5	ppb	19:32:01
2	Ca 317.933Radial†	90949.0	84795.6	4968.7	µg/L	4968.7	ppb	19:32:01
2	Fe 238.204 Radial†	79090.7	74162.2	4930.6	µg/L	4930.6	ppb	19:32:01
2	K 766.490 Radial†	13942.4	11638.6	4787.3	µg/L	4787.3	ppb	19:32:01
2	Mg 279.077 IEC†	13250.9	12257.5	5061.5	µg/L	5061.5	ppb	19:32:01
2	Na 589.592 Radial†	70292.0	64317.7	9837.2	µg/L	9837.2	ppb	19:32:01
2	Sr 421.552†	228066.3	214459.1	502.60	µg/L	502.60	ppb	19:31:59
2	Sc 361.383	1737215.7	1737215.7	103.85	%			19:32:47
2	Y 371.029	1054931.1	1054931.1	103.16	%			19:32:47
2	Ag 328.068†	128483.5	120750.5	496.17	µg/L	496.17	ppb	19:32:47
2	As 188.979†	1256.3	1223.9	518.55	µg/L	518.55	ppb	19:33:07
2	B 249.677†	33149.8	28564.4	477.87	µg/L	477.87	ppb	19:32:47
2	Ba 233.527†	112832.9	108822.5	497.54	µg/L	497.54	ppb	19:32:47
2	Be 313.107†	1606762.7	1547820.7	503.98	µg/L	503.98	ppb	19:32:47
2	Cd 226.502†	72368.9	69778.8	481.56	µg/L	481.56	ppb	19:32:47
2	Co 228.616†	36711.4	35526.2	486.72	µg/L	486.72	ppb	19:32:47
2	Cr 267.716†	59192.4	56836.4	488.05	µg/L	488.05	ppb	19:32:47
2	Cu 324.752†	119958.6	113083.9	493.10	µg/L	493.10	ppb	19:32:47
2	Mn 257.610†	372915.3	359002.2	490.34	µg/L	490.34	ppb	19:32:47
2	Mo 202.031†	15840.2	15307.8	483.66	µg/L	483.66	ppb	19:33:07
2	Ni 231.604†	39651.1	38221.1	488.89	µg/L	488.89	ppb	19:32:47
2	P 214.914†	10418.1	9952.1	2374.9	µg/L	2374.9	ppb	19:33:07
2	Pb 220.353†	8335.8	7914.1	480.97	µg/L	480.97	ppb	19:33:07

2	S 181.975 Axial†	1310.0	1166.6	949.21 µg/L	949.21 ppb	19:33:07
2	Sb 206.836†	3818.2	3589.9	485.30 µg/L	485.30 ppb	19:33:07
2	Se 196.026†	1256.0	1198.5	476 µg/L	476 ppb	19:33:07
2	SiO2†	51436.2	47955.4	5220.8 µg/L	5220.8 ppb	19:32:47
2	Si 251.611†	154237.0	147839.3	2434.9 µg/L	2434.9 ppb	19:32:47
2	Sn 189.927†	7075.7	6811.2	485.88 µg/L	485.88 ppb	19:33:07
2	Ti 334.940†	501670.2	482424.6	491.29 µg/L	491.29 ppb	19:32:47
2	Tl 190.801†	3598.0	3584.8	488.57 µg/L	488.57 ppb	19:33:07
2	U 409.014†	7114.9	7330.1	482.93 µg/L	482.93 ppb	19:32:47
2	V 292.402†	92447.3	88586.2	497.56 µg/L	497.56 ppb	19:32:47
2	Zn 213.857†	80237.4	76796.6	479.56 µg/L	479.56 ppb	19:32:47
3	Sc RADIAL	152343.2	152343.2	105 %		19:32:05
3	Al 396.153Radial†	24790.2	23749.9	5162.0 µg/L	5162.0 ppb	19:32:05
3	Ca 317.933Radial†	88711.7	84258.7	4937.2 µg/L	4937.2 ppb	19:32:05
3	Fe 238.204 Radial†	77301.6	73844.9	4909.5 µg/L	4909.5 ppb	19:32:05
3	K 766.490 Radial†	13851.3	11797.3	4852.6 µg/L	4852.6 ppb	19:32:05
3	Mg 279.077 IEC†	12897.2	12152.7	5018.2 µg/L	5018.2 ppb	19:32:05
3	Na 589.592 Radial†	69172.5	64486.0	9862.9 µg/L	9862.9 ppb	19:32:05
3	Sr 421.552†	226674.9	217149.0	508.90 µg/L	508.90 ppb	19:32:03
3	Sc 361.383	1739184.0	1739184.0	103.97 %		19:33:10
3	Y 371.029	1056341.4	1056341.4	103.30 %		19:33:10
3	Ag 328.068†	128938.9	121048.4	497.41 µg/L	497.41 ppb	19:33:10
3	As 188.979†	1242.3	1209.1	512.38 µg/L	512.38 ppb	19:33:30
3	B 249.677†	33322.5	28694.4	480.05 µg/L	480.05 ppb	19:33:10
3	Ba 233.527†	113432.0	109275.8	499.61 µg/L	499.61 ppb	19:33:10
3	Be 313.107†	1612377.9	1551470.5	505.17 µg/L	505.17 ppb	19:33:10
3	Cd 226.502†	72852.6	70165.2	484.23 µg/L	484.23 ppb	19:33:10
3	Co 228.616†	36901.2	35668.8	488.67 µg/L	488.67 ppb	19:33:10
3	Cr 267.716†	59397.9	56969.5	489.19 µg/L	489.19 ppb	19:33:10
3	Cu 324.752†	120225.9	113210.3	493.66 µg/L	493.66 ppb	19:33:10
3	Mn 257.610†	374839.5	360446.6	492.32 µg/L	492.32 ppb	19:33:10
3	Mo 202.031†	15729.4	15184.0	479.75 µg/L	479.75 ppb	19:33:30
3	Ni 231.604†	40031.5	38543.8	493.02 µg/L	493.02 ppb	19:33:10
3	P 214.914†	10307.1	9834.0	2346.7 µg/L	2346.7 ppb	19:33:30
3	Pb 220.353†	8288.5	7859.6	477.65 µg/L	477.65 ppb	19:33:30
3	S 181.975 Axial†	1283.8	1140.0	927.63 µg/L	927.63 ppb	19:33:30
3	Sb 206.836†	3807.3	3575.3	483.25 µg/L	483.25 ppb	19:33:30
3	Se 196.026†	1249.7	1191.1	473 µg/L	473 ppb	19:33:30
3	SiO2†	51607.6	48064.2	5232.9 µg/L	5232.9 ppb	19:33:10
3	Si 251.611†	155270.1	148664.8	2448.6 µg/L	2448.6 ppb	19:33:10
3	Sn 189.927†	7010.2	6740.5	480.86 µg/L	480.86 ppb	19:33:30
3	Ti 334.940†	504064.8	484181.1	493.08 µg/L	493.08 ppb	19:33:10
3	Tl 190.801†	3573.6	3557.4	484.91 µg/L	484.91 ppb	19:33:30
3	U 409.014†	7322.0	7521.5	494.86 µg/L	494.86 ppb	19:33:10
3	V 292.402†	92839.2	88862.3	499.06 µg/L	499.06 ppb	19:33:10
3	Zn 213.857†	80753.8	77205.9	482.11 µg/L	482.11 ppb	19:33:10

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1740074.0	104.02	%	0.203				0.19%
Sc RADIAL	154145.4	106	%	1.1				1.02%
Y 371.029	1056811.9	103.35	%	0.211				0.20%
Ag 328.068†	120724.4	496.07	µg/L	1.385	496.07	ppb	1.385	0.28%
QC value within limits for Ag 328.068 Recovery = 99.21%								
Al 396.153Radial†	23757.1	5163.5	µg/L	6.91	5163.5	ppb	6.91	0.13%
QC value within limits for Al 396.153Radial Recovery = 103.27%								
As 188.979†	1215.2	514.92	µg/L	3.230	514.92	ppb	3.230	0.63%
QC value within limits for As 188.979 Recovery = 102.98%								
B 249.677†	28619.7	478.80	µg/L	1.123	478.80	ppb	1.123	0.23%
QC value within limits for B 249.677 Recovery = 95.76%								
Ba 233.527†	108929.3	498.02	µg/L	1.404	498.02	ppb	1.404	0.28%
QC value within limits for Ba 233.527 Recovery = 99.60%								
Be 313.107†	1548342.3	504.15	µg/L	0.946	504.15	ppb	0.946	0.19%
QC value within limits for Be 313.107 Recovery = 100.83%								
Ca 317.933Radial†	84623.7	4958.6	µg/L	18.54	4958.6	ppb	18.54	0.37%
QC value within limits for Ca 317.933Radial Recovery = 99.17%								
Cd 226.502†	69935.2	482.64	µg/L	1.407	482.64	ppb	1.407	0.29%
QC value within limits for Cd 226.502 Recovery = 96.53%								
Co 228.616†	35576.6	487.41	µg/L	1.097	487.41	ppb	1.097	0.23%

QC value within limits for Co 228.616 Recovery = 97.48%

Cr 267.716†	56879.6	488.42 µg/L	0.666	488.42 ppb	0.666	0.14%
QC value within limits for Cr 267.716 Recovery = 97.68%						
Cu 324.752†	113017.4	492.82 µg/L	1.012	492.82 ppb	1.012	0.21%
QC value within limits for Cu 324.752 Recovery = 98.56%						
Fe 238.204 Radial†	74084.6	4925.4 µg/L	14.08	4925.4 ppb	14.08	0.29%
QC value within limits for Fe 238.204 Radial Recovery = 98.51%						
K 766.490 Radial†	11741.2	4829.6 µg/L	36.64	4829.6 ppb	36.64	0.76%
QC value within limits for K 766.490 Radial Recovery = 96.59%						
Mg 279.077 IEC†	12248.0	5057.5 µg/L	37.48	5057.5 ppb	37.48	0.74%
QC value within limits for Mg 279.077 IEC Recovery = 101.15%						
Mn 257.610†	359527.3	491.06 µg/L	1.093	491.06 ppb	1.093	0.22%
QC value within limits for Mn 257.610 Recovery = 98.21%						
Mo 202.031†	15245.4	481.69 µg/L	1.954	481.69 ppb	1.954	0.41%
QC value within limits for Mo 202.031 Recovery = 96.34%						
Na 589.592 Radial†	64489.2	9863.4 µg/L	26.47	9863.4 ppb	26.47	0.27%
QC value within limits for Na 589.592 Radial Recovery = 98.63%						
Ni 231.604†	38330.9	490.30 µg/L	2.360	490.30 ppb	2.360	0.48%
QC value within limits for Ni 231.604 Recovery = 98.06%						
P 214.914†	9887.5	2359.5 µg/L	14.32	2359.5 ppb	14.32	0.61%
QC value within limits for P 214.914 Recovery = 94.38%						
Pb 220.353†	7879.5	478.86 µg/L	1.831	478.86 ppb	1.831	0.38%
QC value within limits for Pb 220.353 Recovery = 95.77%						
S 181.975 Axial†	1154.1	939.11 µg/L	10.857	939.11 ppb	10.857	1.16%
QC value within limits for S 181.975 Axial Recovery = 93.91%						
Sb 206.836†	3587.2	484.91 µg/L	1.496	484.91 ppb	1.496	0.31%
QC value within limits for Sb 206.836 Recovery = 96.98%						
Se 196.026†	1197.9	476 µg/L	2.6	476 ppb	2.6	0.55%
QC value within limits for Se 196.026 Recovery = 95.20%						
SiO2†	47987.3	5224.4 µg/L	7.40	5224.4 ppb	7.40	0.14%
QC value within limits for SiO2 Recovery = 97.70%						
Si 251.611†	148040.8	2438.2 µg/L	9.16	2438.2 ppb	9.16	0.38%
QC value within limits for Si 251.611 Recovery = 97.53%						
Sn 189.927†	6780.7	483.70 µg/L	2.578	483.70 ppb	2.578	0.53%
QC value within limits for Sn 189.927 Recovery = 96.74%						
Sr 421.552†	215809.3	505.76 µg/L	3.152	505.76 ppb	3.152	0.62%
QC value within limits for Sr 421.552 Recovery = 101.15%						
Ti 334.940†	482791.6	491.66 µg/L	1.273	491.66 ppb	1.273	0.26%
QC value within limits for Ti 334.940 Recovery = 98.33%						
Tl 190.801†	3569.7	486.55 µg/L	1.860	486.55 ppb	1.860	0.38%
QC value within limits for Tl 190.801 Recovery = 97.31%						
U 409.014†	7445.5	490.08 µg/L	6.310	490.08 ppb	6.310	1.29%
QC value within limits for U 409.014 Recovery = 98.02%						
V 292.402†	88640.9	497.85 µg/L	1.100	497.85 ppb	1.100	0.22%
QC value within limits for V 292.402 Recovery = 99.57%						
Zn 213.857†	76904.5	480.23 µg/L	1.651	480.23 ppb	1.651	0.34%
QC value within limits for Zn 213.857 Recovery = 96.05%						

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/29/2010 19:33:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	154440.8	154440.8	106	%			19:34:06
1	Al 396.153Radial†	-43.3	-9.0	-2.0043	µg/L	-2.0043	ppb	19:34:26
1	Ca 317.933Radial†	696.6	41.2	2.4138	µg/L	2.4138	ppb	19:34:26
1	Fe 238.204 Radial†	166.8	44.1	2.9352	µg/L	2.9352	ppb	19:34:26
1	K 766.490 Radial†	1613.3	67.6	27.814	µg/L	27.814	ppb	19:34:06
1	Mg 279.077 IEC†	157.8	-37.7	-15.541	µg/L	-15.541	ppb	19:34:26
1	Na 589.592 Radial†	1722.8	-68.9	-10.561	µg/L	-10.561	ppb	19:34:06
1	Sr 421.552†	-120.8	163.9	0.3842	µg/L	0.3842	ppb	19:34:06
1	Sc 361.383	1731581.1	1731581.1	103.52	%			19:35:14
1	Y 371.029	1065562.9	1065562.9	104.20	%			19:35:14
1	Ag 328.068†	3216.9	140.6	0.5847	µg/L	0.5847	ppb	19:35:16
1	As 188.979†	-11.7	2.9	1.2300	µg/L	1.2300	ppb	19:35:36
1	B 249.677†	3120.0	-341.7	-5.7362	µg/L	-5.7362	ppb	19:35:36
1	Ba 233.527†	-175.6	5.4	0.0247	µg/L	0.0247	ppb	19:35:36
1	Be 313.107†	-246.2	422.2	0.1424	µg/L	0.1424	ppb	19:35:16
1	Cd 226.502†	-69.1	27.7	0.1908	µg/L	0.1908	ppb	19:35:36
1	Co 228.616†	-181.3	1.5	0.0198	µg/L	0.0198	ppb	19:35:36
1	Cr 267.716†	175.8	9.6	0.0693	µg/L	0.0693	ppb	19:35:36
1	Cu 324.752†	2669.4	153.9	0.6825	µg/L	0.6825	ppb	19:35:16
1	Mn 257.610†	196.9	110.2	0.1512	µg/L	0.1512	ppb	19:35:36
1	Mo 202.031†	-29.9	26.3	0.8305	µg/L	0.8305	ppb	19:35:36
1	Ni 231.604†	-61.5	-18.5	-0.2372	µg/L	-0.2372	ppb	19:35:36
1	P 214.914†	55.3	-26.1	-6.2662	µg/L	-6.2662	ppb	19:35:36
1	Pb 220.353†	115.1	-1.2	-0.0837	µg/L	-0.0837	ppb	19:35:36
1	S 181.975 Axial†	87.6	-10.2	-8.2246	µg/L	-8.2246	ppb	19:35:36
1	Sb 206.836†	73.1	-16.1	-2.1571	µg/L	-2.1571	ppb	19:35:36
1	Se 196.026†	13.4	2.0	0.826	µg/L	0.826	ppb	19:35:36
1	SiO2†	1671.5	41.8	4.5433	µg/L	4.5433	ppb	19:35:36
1	Si 251.611†	796.8	93.3	1.5290	µg/L	1.5290	ppb	19:35:36
1	Sn 189.927†	8.8	6.4	0.4582	µg/L	0.4582	ppb	19:35:36
1	Ti 334.940†	627.3	-30.4	-0.0364	µg/L	-0.0364	ppb	19:35:16
1	Tl 190.801†	-118.4	5.9	0.7913	µg/L	0.7913	ppb	19:35:36
1	U 409.014†	-222.3	264.4	16.308	µg/L	16.308	ppb	19:35:16
1	V 292.402†	354.1	-89.7	-0.4781	µg/L	-0.4781	ppb	19:35:16
1	Zn 213.857†	527.0	44.7	0.2818	µg/L	0.2818	ppb	19:35:36
2	Sc RADIAL	154279.9	154279.9	106	%			19:34:28
2	Al 396.153Radial†	-70.9	-35.1	-7.7094	µg/L	-7.7094	ppb	19:34:48
2	Ca 317.933Radial†	709.7	54.3	3.1826	µg/L	3.1826	ppb	19:34:48
2	Fe 238.204 Radial†	178.3	55.2	3.6708	µg/L	3.6708	ppb	19:34:48
2	K 766.490 Radial†	1463.8	-72.1	-29.690	µg/L	-29.690	ppb	19:34:28
2	Mg 279.077 IEC†	161.8	-33.8	-13.912	µg/L	-13.912	ppb	19:34:48
2	Na 589.592 Radial†	1747.5	-43.7	-6.6675	µg/L	-6.6675	ppb	19:34:28
2	Sr 421.552†	-216.0	73.9	0.1732	µg/L	0.1732	ppb	19:34:28
2	Sc 361.383	1751103.4	1751103.4	104.68	%			19:35:38
2	Y 371.029	1076583.0	1076583.0	105.28	%			19:35:38
2	Ag 328.068†	2689.9	-397.5	-1.6314	µg/L	-1.6314	ppb	19:35:40
2	As 188.979†	-19.4	-4.3	-1.7955	µg/L	-1.7955	ppb	19:36:00
2	B 249.677†	3164.1	-333.1	-5.5927	µg/L	-5.5927	ppb	19:36:00
2	Ba 233.527†	-177.8	5.3	0.0236	µg/L	0.0236	ppb	19:36:00
2	Be 313.107†	-520.5	162.9	0.0516	µg/L	0.0516	ppb	19:35:40
2	Cd 226.502†	-104.5	-5.4	-0.0378	µg/L	-0.0378	ppb	19:36:00
2	Co 228.616†	-170.5	13.7	0.1872	µg/L	0.1872	ppb	19:36:00
2	Cr 267.716†	176.6	8.5	0.0762	µg/L	0.0762	ppb	19:36:00
2	Cu 324.752†	2448.1	-86.2	-0.3785	µg/L	-0.3785	ppb	19:35:40
2	Mn 257.610†	240.0	149.3	0.2045	µg/L	0.2045	ppb	19:36:00
2	Mo 202.031†	-29.0	27.5	0.8664	µg/L	0.8664	ppb	19:36:00
2	Ni 231.604†	-48.2	-5.1	-0.0655	µg/L	-0.0655	ppb	19:36:00
2	P 214.914†	58.0	-24.2	-5.7906	µg/L	-5.7906	ppb	19:36:00
2	Pb 220.353†	124.4	6.4	0.3918	µg/L	0.3918	ppb	19:36:00

2	S 181.975 Axial†	90.4	-8.5	-6.8756 µg/L	-6.8756 ppb	19:36:00
2	Sb 206.836†	78.1	-12.0	-1.6140 µg/L	-1.6140 ppb	19:36:00
2	Se 196.026†	15.0	3.5	1.36 µg/L	1.36 ppb	19:36:00
2	SiO2†	1656.1	9.2	0.9709 µg/L	0.9709 ppb	19:36:00
2	Si 251.611†	759.0	48.7	0.7903 µg/L	0.7903 ppb	19:36:00
2	Sn 189.927†	8.2	5.8	0.4148 µg/L	0.4148 ppb	19:36:00
2	Ti 334.940†	745.1	75.4	0.0800 µg/L	0.0800 ppb	19:35:40
2	Tl 190.801†	-111.6	13.7	1.8304 µg/L	1.8304 ppb	19:36:00
2	U 409.014†	-582.4	-77.2	-4.8304 µg/L	-4.8304 ppb	19:35:40
2	V 292.402†	254.3	-188.9	-1.0423 µg/L	-1.0423 ppb	19:35:40
2	Zn 213.857†	524.9	37.0	0.2333 µg/L	0.2333 ppb	19:36:00
3	Sc RADIAL	154300.7	154300.7	106 %		19:34:50
3	Al 396.153Radial†	-22.9	10.3	2.2225 µg/L	2.2225 ppb	19:35:10
3	Ca 317.933Radial†	702.8	47.7	2.7963 µg/L	2.7963 ppb	19:35:10
3	Fe 238.204 Radial†	157.6	35.6	2.3638 µg/L	2.3638 ppb	19:35:10
3	K 766.490 Radial†	1363.4	-167.1	-68.805 µg/L	-68.805 ppb	19:34:50
3	Mg 279.077 IEC†	165.1	-30.7	-12.669 µg/L	-12.669 ppb	19:35:10
3	Na 589.592 Radial†	1617.5	-166.8	-25.467 µg/L	-25.467 ppb	19:34:50
3	Sr 421.552†	-166.5	120.7	0.2829 µg/L	0.2829 ppb	19:34:50
3	Sc 361.383	1756722.7	1756722.7	105.02 %		19:36:02
3	Y 371.029	1079825.4	1079825.4	105.60 %		19:36:02
3	Ag 328.068†	3226.0	104.8	0.4137 µg/L	0.4137 ppb	19:36:04
3	As 188.979†	-24.9	-9.5	-3.9669 µg/L	-3.9669 ppb	19:36:25
3	B 249.677†	3162.1	-344.7	-5.7874 µg/L	-5.7874 ppb	19:36:25
3	Ba 233.527†	-158.1	24.5	0.1116 µg/L	0.1116 ppb	19:36:25
3	Be 313.107†	-509.5	174.9	0.0572 µg/L	0.0572 ppb	19:36:04
3	Cd 226.502†	-104.2	-4.8	-0.0337 µg/L	-0.0337 ppb	19:36:25
3	Co 228.616†	-161.9	22.4	0.3068 µg/L	0.3068 ppb	19:36:25
3	Cr 267.716†	163.5	-4.5	-0.0399 µg/L	-0.0399 ppb	19:36:25
3	Cu 324.752†	2579.5	31.3	0.1372 µg/L	0.1372 ppb	19:36:04
3	Mn 257.610†	210.9	120.8	0.1656 µg/L	0.1656 ppb	19:36:25
3	Mo 202.031†	-42.5	14.8	0.4652 µg/L	0.4652 ppb	19:36:25
3	Ni 231.604†	-54.2	-10.7	-0.1372 µg/L	-0.1372 ppb	19:36:25
3	P 214.914†	63.9	-18.7	-4.4865 µg/L	-4.4865 ppb	19:36:25
3	Pb 220.353†	88.7	-28.0	-1.6935 µg/L	-1.6935 ppb	19:36:25
3	S 181.975 Axial†	84.6	-14.3	-11.562 µg/L	-11.562 ppb	19:36:25
3	Sb 206.836†	89.1	-1.8	-0.2346 µg/L	-0.2346 ppb	19:36:25
3	Se 196.026†	11.7	0.2	0.100 µg/L	0.100 ppb	19:36:25
3	SiO2†	1684.0	30.6	3.3325 µg/L	3.3325 ppb	19:36:25
3	Si 251.611†	773.1	59.7	0.9802 µg/L	0.9802 ppb	19:36:25
3	Sn 189.927†	5.3	3.0	0.2161 µg/L	0.2161 ppb	19:36:25
3	Ti 334.940†	867.2	189.4	0.1939 µg/L	0.1939 ppb	19:36:04
3	Tl 190.801†	-113.0	12.7	1.7012 µg/L	1.7012 ppb	19:36:25
3	U 409.014†	-487.5	14.9	0.8641 µg/L	0.8641 ppb	19:36:04
3	V 292.402†	257.1	-187.1	-1.0329 µg/L	-1.0329 ppb	19:36:04
3	Zn 213.857†	501.2	12.8	0.0813 µg/L	0.0813 ppb	19:36:25

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1746469.1	104.41	%	0.789				0.76%
Sc RADIAL	154340.5	106	%	0.1				0.06%
Y 371.029	1073990.4	105.03	%	0.731				0.70%
Ag 328.068†	-50.7	-0.2110	µg/L	1.23303	-0.2110	ppb	1.23303	584.39%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-11.3	-2.4971	µg/L	4.98426	-2.4971	ppb	4.98426	199.60%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.6	-1.5108	µg/L	2.61013	-1.5108	ppb	2.61013	172.77%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-339.8	-5.7054	µg/L	0.10093	-5.7054	ppb	0.10093	1.77%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.7	0.0533	µg/L	0.05049	0.0533	ppb	0.05049	94.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	253.3	0.0837	µg/L	0.05087	0.0837	ppb	0.05087	60.76%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	47.7	2.7975	µg/L	0.38440	2.7975	ppb	0.38440	13.74%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	5.8	0.0397	µg/L	0.13082	0.0397	ppb	0.13082	329.26%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	12.5	0.1713	µg/L	0.14419	0.1713	ppb	0.14419	84.18%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                4.5      0.0352 µg/L       0.06512      0.0352 ppb       0.06512 185.02%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               33.0      0.1470 µg/L       0.53058      0.1470 ppb       0.53058 360.82%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         45.0      2.9899 µg/L       0.65521      2.9899 ppb       0.65521  21.91%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -57.2     -23.560 µg/L       48.6004     -23.560 ppb       48.6004 206.28%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -34.1     -14.041 µg/L        1.4406     -14.041 ppb        1.4406  10.26%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               126.8      0.1738 µg/L       0.02760      0.1738 ppb       0.02760  15.88%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                22.8      0.7207 µg/L       0.22201      0.7207 ppb       0.22201  30.81%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -93.1     -14.232 µg/L        9.9226     -14.232 ppb        9.9226  69.72%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -11.5      -0.1466 µg/L       0.08623      -0.1466 ppb       0.08623  58.80%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -23.0      -5.5144 µg/L       0.92145      -5.5144 ppb       0.92145  16.71%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -7.6      -0.4618 µg/L       1.09284      -0.4618 ppb       1.09284 236.66%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -11.0      -8.8875 µg/L       2.41268      -8.8875 ppb       2.41268  27.15%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -10.0      -1.3353 µg/L       0.99108      -1.3353 ppb       0.99108  74.22%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 1.9       0.763 µg/L        0.6334       0.763 ppb        0.6334  83.06%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     27.2       2.9489 µg/L       1.81680      2.9489 ppb       1.81680  61.61%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               67.2       1.0998 µg/L       0.38363      1.0998 ppb       0.38363  34.88%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                5.1       0.3630 µg/L       0.12911      0.3630 ppb       0.12911  35.56%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               119.5      0.2801 µg/L       0.10556      0.2801 ppb       0.10556  37.69%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                78.1      0.0792 µg/L       0.11512      0.0792 ppb       0.11512 145.40%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                10.8      1.4410 µg/L       0.56631      1.4410 ppb       0.56631  39.30%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 67.4      4.1140 µg/L      10.93772      4.1140 ppb      10.93772 265.87%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -155.2      -0.8511 µg/L       0.32304     -0.8511 ppb       0.32304  37.96%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               31.5       0.1988 µg/L       0.10458      0.1988 ppb       0.10458  52.60%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 18
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/29/2010 19:52:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	155882.7	155882.7	107	%			19:53:21
1	Al 396.153Radial†	25404.5	23785.7	5169.7	µg/L	5169.7	ppb	19:53:21
1	Ca 317.933Radial†	90923.1	84399.2	4945.4	µg/L	4945.4	ppb	19:53:21
1	Fe 238.204 Radial†	79031.3	73782.9	4905.3	µg/L	4905.3	ppb	19:53:21
1	K 766.490 Radial†	14120.7	11748.2	4832.4	µg/L	4832.4	ppb	19:53:21
1	Mg 279.077 IEC†	13276.7	12227.4	5049.1	µg/L	5049.1	ppb	19:53:21
1	Na 589.592 Radial†	70685.1	64397.5	9849.3	µg/L	9849.3	ppb	19:53:21
1	Sr 421.552†	229627.1	214985.0	503.83	µg/L	503.83	ppb	19:53:19
1	Sc 361.383	1753609.4	1753609.4	104.83	%			19:53:33
1	Y 371.029	1065335.0	1065335.0	104.18	%			19:53:33
1	Ag 328.068†	129859.6	120906.6	496.82	µg/L	496.82	ppb	19:53:33
1	As 188.979†	1259.2	1215.4	515.01	µg/L	515.01	ppb	19:53:54
1	B 249.677†	33439.0	28541.9	477.50	µg/L	477.50	ppb	19:53:33
1	Ba 233.527†	114213.7	109124.0	498.92	µg/L	498.92	ppb	19:53:33
1	Be 313.107†	1623855.4	1549661.7	504.58	µg/L	504.58	ppb	19:53:33
1	Cd 226.502†	73102.1	69826.8	481.89	µg/L	481.89	ppb	19:53:33
1	Co 228.616†	36982.2	35454.0	485.73	µg/L	485.73	ppb	19:53:33
1	Cr 267.716†	59867.3	56947.4	489.01	µg/L	489.01	ppb	19:53:33
1	Cu 324.752†	121039.4	113035.1	492.88	µg/L	492.88	ppb	19:53:33
1	Mn 257.610†	376767.1	359319.5	490.78	µg/L	490.78	ppb	19:53:33
1	Mo 202.031†	15963.8	15283.1	482.88	µg/L	482.88	ppb	19:53:54
1	Ni 231.604†	39977.6	38175.7	488.31	µg/L	488.31	ppb	19:53:33
1	P 214.914†	10457.3	9895.7	2361.5	µg/L	2361.5	ppb	19:53:54
1	Pb 220.353†	8391.8	7892.5	479.66	µg/L	479.66	ppb	19:53:54
1	S 181.975 Axial†	1293.9	1139.4	927.23	µg/L	927.23	ppb	19:53:54
1	Sb 206.836†	3874.2	3609.0	487.86	µg/L	487.86	ppb	19:53:54
1	Se 196.026†	1272.9	1203.3	478	µg/L	478	ppb	19:53:54
1	SiO2†	51967.3	47999.0	5225.6	µg/L	5225.6	ppb	19:53:33
1	Si 251.611†	156115.9	148243.1	2441.5	µg/L	2441.5	ppb	19:53:33
1	Sn 189.927†	7141.4	6810.1	485.80	µg/L	485.80	ppb	19:53:54
1	Ti 334.940†	507174.4	483159.2	492.04	µg/L	492.04	ppb	19:53:33
1	Tl 190.801†	3640.2	3592.7	489.65	µg/L	489.65	ppb	19:53:54
1	U 409.014†	7175.3	7323.6	482.62	µg/L	482.62	ppb	19:53:33
1	V 292.402†	93601.0	88854.5	499.04	µg/L	499.04	ppb	19:53:33
1	Zn 213.857†	81005.3	76806.8	479.63	µg/L	479.63	ppb	19:53:33
2	Sc RADIAL	156189.6	156189.6	107	%			19:53:25
2	Al 396.153Radial†	25453.6	23784.9	5169.5	µg/L	5169.5	ppb	19:53:25
2	Ca 317.933Radial†	91189.7	84480.9	4950.2	µg/L	4950.2	ppb	19:53:25
2	Fe 238.204 Radial†	79453.6	74031.8	4921.9	µg/L	4921.9	ppb	19:53:25
2	K 766.490 Radial†	14048.5	11654.9	4794.0	µg/L	4794.0	ppb	19:53:25
2	Mg 279.077 IEC†	13352.4	12273.6	5068.1	µg/L	5068.1	ppb	19:53:25
2	Na 589.592 Radial†	70950.0	64514.9	9867.3	µg/L	9867.3	ppb	19:53:25
2	Sr 421.552†	232352.0	217106.1	508.80	µg/L	508.80	ppb	19:53:23
2	Sc 361.383	1749571.1	1749571.1	104.59	%			19:53:57
2	Y 371.029	1062777.0	1062777.0	103.93	%			19:53:57
2	Ag 328.068†	129030.1	120399.3	494.76	µg/L	494.76	ppb	19:53:57
2	As 188.979†	1277.4	1235.6	523.42	µg/L	523.42	ppb	19:54:17
2	B 249.677†	33289.1	28472.2	476.33	µg/L	476.33	ppb	19:53:57
2	Ba 233.527†	113708.3	108892.2	497.86	µg/L	497.86	ppb	19:53:57
2	Be 313.107†	1621134.0	1550635.2	504.90	µg/L	504.90	ppb	19:53:57
2	Cd 226.502†	72772.0	69672.1	480.82	µg/L	480.82	ppb	19:53:57
2	Co 228.616†	36900.7	35457.5	485.78	µg/L	485.78	ppb	19:53:57
2	Cr 267.716†	59600.3	56824.0	487.94	µg/L	487.94	ppb	19:53:57
2	Cu 324.752†	120397.9	112688.2	491.39	µg/L	491.39	ppb	19:53:57
2	Mn 257.610†	375323.1	358768.5	490.02	µg/L	490.02	ppb	19:53:57
2	Mo 202.031†	15936.5	15292.2	483.17	µg/L	483.17	ppb	19:54:17
2	Ni 231.604†	39772.4	38067.5	486.93	µg/L	486.93	ppb	19:53:57
2	P 214.914†	10473.9	9934.6	2370.8	µg/L	2370.8	ppb	19:54:17
2	Pb 220.353†	8398.2	7917.1	481.14	µg/L	481.14	ppb	19:54:17

2	S 181.975 Axial†	1310.8	1158.5	942.63 µg/L	942.63 ppb	19:54:17
2	Sb 206.836†	3846.2	3590.8	485.41 µg/L	485.41 ppb	19:54:17
2	Se 196.026†	1265.1	1198.6	476 µg/L	476 ppb	19:54:17
2	SiO2†	51895.6	48044.8	5230.6 µg/L	5230.6 ppb	19:53:57
2	Si 251.611†	155321.7	147827.6	2434.7 µg/L	2434.7 ppb	19:53:57
2	Sn 189.927†	7131.0	6815.9	486.21 µg/L	486.21 ppb	19:54:17
2	Ti 334.940†	504709.9	481919.6	490.77 µg/L	490.77 ppb	19:53:57
2	Tl 190.801†	3621.3	3582.7	488.28 µg/L	488.28 ppb	19:54:17
2	U 409.014†	7284.6	7443.9	490.00 µg/L	490.00 ppb	19:53:57
2	V 292.402†	93209.2	88686.0	498.11 µg/L	498.11 ppb	19:53:57
2	Zn 213.857†	80533.7	76534.3	477.93 µg/L	477.93 ppb	19:53:57
3	Sc RADIAL	155078.4	155078.4	106 %		19:53:29
3	Al 396.153Radial†	25069.2	23593.8	5127.8 µg/L	5127.8 ppb	19:53:29
3	Ca 317.933Radial†	90380.5	84330.2	4941.4 µg/L	4941.4 ppb	19:53:29
3	Fe 238.204 Radial†	78812.3	73960.4	4917.1 µg/L	4917.1 ppb	19:53:29
3	K 766.490 Radial†	14162.7	11856.1	4876.9 µg/L	4876.9 ppb	19:53:29
3	Mg 279.077 IEC†	13255.0	12271.4	5067.2 µg/L	5067.2 ppb	19:53:29
3	Na 589.592 Radial†	70378.5	64452.3	9857.7 µg/L	9857.7 ppb	19:53:29
3	Sr 421.552†	229789.0	216250.9	506.80 µg/L	506.80 ppb	19:53:27
3	Sc 361.383	1754221.5	1754221.5	104.87 %		19:54:20
3	Y 371.029	1065517.6	1065517.6	104.20 %		19:54:20
3	Ag 328.068†	129249.8	120281.8	494.30 µg/L	494.30 ppb	19:54:20
3	As 188.979†	1278.2	1233.1	522.37 µg/L	522.37 ppb	19:54:40
3	B 249.677†	33485.8	28575.4	478.06 µg/L	478.06 ppb	19:54:20
3	Ba 233.527†	113649.5	108547.9	496.28 µg/L	496.28 ppb	19:54:20
3	Be 313.107†	1620552.1	1545971.4	503.38 µg/L	503.38 ppb	19:54:20
3	Cd 226.502†	72839.4	69552.0	479.99 µg/L	479.99 ppb	19:54:20
3	Co 228.616†	36967.6	35427.9	485.37 µg/L	485.37 ppb	19:54:20
3	Cr 267.716†	59675.2	56744.3	487.25 µg/L	487.25 ppb	19:54:20
3	Cu 324.752†	120775.4	112743.0	491.64 µg/L	491.64 ppb	19:54:20
3	Mn 257.610†	375706.0	358182.3	489.22 µg/L	489.22 ppb	19:54:20
3	Mo 202.031†	15964.1	15278.1	482.72 µg/L	482.72 ppb	19:54:40
3	Ni 231.604†	39857.9	38048.2	486.68 µg/L	486.68 ppb	19:54:20
3	P 214.914†	10507.5	9940.1	2372.1 µg/L	2372.1 ppb	19:54:40
3	Pb 220.353†	8449.2	7944.5	482.78 µg/L	482.78 ppb	19:54:40
3	S 181.975 Axial†	1329.7	1173.2	954.54 µg/L	954.54 ppb	19:54:40
3	Sb 206.836†	3845.9	3580.7	484.06 µg/L	484.06 ppb	19:54:40
3	Se 196.026†	1261.3	1191.8	474 µg/L	474 ppb	19:54:40
3	SiO2†	51759.5	47783.5	5202.0 µg/L	5202.0 ppb	19:54:20
3	Si 251.611†	155480.2	147585.0	2430.6 µg/L	2430.6 ppb	19:54:20
3	Sn 189.927†	7188.1	6852.4	488.80 µg/L	488.80 ppb	19:54:40
3	Ti 334.940†	505136.1	481046.7	489.87 µg/L	489.87 ppb	19:54:20
3	Tl 190.801†	3646.0	3597.0	490.19 µg/L	490.19 ppb	19:54:40
3	U 409.014†	7585.0	7711.9	506.54 µg/L	506.54 ppb	19:54:20
3	V 292.402†	93415.0	88646.0	497.89 µg/L	497.89 ppb	19:54:20
3	Zn 213.857†	80914.4	76693.2	478.93 µg/L	478.93 ppb	19:54:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1752467.3	104.76	%	0.151				0.14%
Sc RADIAL	155716.9	107	%	0.4				0.37%
Y 371.029	1064543.2	104.10	%	0.150				0.14%
Ag 328.068†	120529.2	495.29	µg/L	1.342	495.29	ppb	1.342	0.27%
QC value within limits for Ag 328.068 Recovery = 99.06%								
Al 396.153Radial†	23721.5	5155.7	µg/L	24.12	5155.7	ppb	24.12	0.47%
QC value within limits for Al 396.153Radial Recovery = 103.11%								
As 188.979†	1228.0	520.27	µg/L	4.583	520.27	ppb	4.583	0.88%
QC value within limits for As 188.979 Recovery = 104.05%								
B 249.677†	28529.8	477.29	µg/L	0.884	477.29	ppb	0.884	0.19%
QC value within limits for B 249.677 Recovery = 95.46%								
Ba 233.527†	108854.7	497.68	µg/L	1.325	497.68	ppb	1.325	0.27%
QC value within limits for Ba 233.527 Recovery = 99.54%								
Be 313.107†	1548756.1	504.29	µg/L	0.798	504.29	ppb	0.798	0.16%
QC value within limits for Be 313.107 Recovery = 100.86%								
Ca 317.933Radial†	84403.4	4945.7	µg/L	4.42	4945.7	ppb	4.42	0.09%
QC value within limits for Ca 317.933Radial Recovery = 98.91%								
Cd 226.502†	69683.6	480.90	µg/L	0.952	480.90	ppb	0.952	0.20%
QC value within limits for Cd 226.502 Recovery = 96.18%								
Co 228.616†	35446.5	485.63	µg/L	0.223	485.63	ppb	0.223	0.05%

QC value within limits for Co 228.616 Recovery = 97.13%

Cr 267.716†	56838.6	488.07 µg/L	0.888	488.07 ppb	0.888	0.18%
QC value within limits for Cr 267.716 Recovery = 97.61%						
Cu 324.752†	112822.1	491.97 µg/L	0.803	491.97 ppb	0.803	0.16%
QC value within limits for Cu 324.752 Recovery = 98.39%						
Fe 238.204 Radial†	73925.1	4914.8 µg/L	8.52	4914.8 ppb	8.52	0.17%
QC value within limits for Fe 238.204 Radial Recovery = 98.30%						
K 766.490 Radial†	11753.1	4834.4 µg/L	41.46	4834.4 ppb	41.46	0.86%
QC value within limits for K 766.490 Radial Recovery = 96.69%						
Mg 279.077 IEC†	12257.5	5061.5 µg/L	10.75	5061.5 ppb	10.75	0.21%
QC value within limits for Mg 279.077 IEC Recovery = 101.23%						
Mn 257.610†	358756.8	490.01 µg/L	0.777	490.01 ppb	0.777	0.16%
QC value within limits for Mn 257.610 Recovery = 98.00%						
Mo 202.031†	15284.5	482.92 µg/L	0.226	482.92 ppb	0.226	0.05%
QC value within limits for Mo 202.031 Recovery = 96.58%						
Na 589.592 Radial†	64454.9	9858.1 µg/L	9.01	9858.1 ppb	9.01	0.09%
QC value within limits for Na 589.592 Radial Recovery = 98.58%						
Ni 231.604†	38097.1	487.31 µg/L	0.879	487.31 ppb	0.879	0.18%
QC value within limits for Ni 231.604 Recovery = 97.46%						
P 214.914†	9923.5	2368.1 µg/L	5.81	2368.1 ppb	5.81	0.25%
QC value within limits for P 214.914 Recovery = 94.72%						
Pb 220.353†	7918.0	481.20 µg/L	1.563	481.20 ppb	1.563	0.32%
QC value within limits for Pb 220.353 Recovery = 96.24%						
S 181.975 Axial†	1157.0	941.47 µg/L	13.693	941.47 ppb	13.693	1.45%
QC value within limits for S 181.975 Axial Recovery = 94.15%						
Sb 206.836†	3593.5	485.78 µg/L	1.923	485.78 ppb	1.923	0.40%
QC value within limits for Sb 206.836 Recovery = 97.16%						
Se 196.026†	1197.9	476 µg/L	2.3	476 ppb	2.3	0.48%
QC value within limits for Se 196.026 Recovery = 95.20%						
SiO2†	47942.4	5219.4 µg/L	15.27	5219.4 ppb	15.27	0.29%
QC value within limits for SiO2 Recovery = 97.60%						
Si 251.611†	147885.2	2435.6 µg/L	5.51	2435.6 ppb	5.51	0.23%
QC value within limits for Si 251.611 Recovery = 97.42%						
Sn 189.927†	6826.1	486.94 µg/L	1.623	486.94 ppb	1.623	0.33%
QC value within limits for Sn 189.927 Recovery = 97.39%						
Sr 421.552†	216114.0	506.48 µg/L	2.501	506.48 ppb	2.501	0.49%
QC value within limits for Sr 421.552 Recovery = 101.30%						
Ti 334.940†	482041.8	490.89 µg/L	1.088	490.89 ppb	1.088	0.22%
QC value within limits for Ti 334.940 Recovery = 98.18%						
Tl 190.801†	3590.8	489.38 µg/L	0.983	489.38 ppb	0.983	0.20%
QC value within limits for Tl 190.801 Recovery = 97.88%						
U 409.014†	7493.2	493.05 µg/L	12.247	493.05 ppb	12.247	2.48%
QC value within limits for U 409.014 Recovery = 98.61%						
V 292.402†	88728.8	498.35 µg/L	0.611	498.35 ppb	0.611	0.12%
QC value within limits for V 292.402 Recovery = 99.67%						
Zn 213.857†	76678.1	478.83 µg/L	0.858	478.83 ppb	0.858	0.18%
QC value within limits for Zn 213.857 Recovery = 95.77%						

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/29/2010 19:54:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	157224.0	157224.0	108	%			19:55:16
1	Al 396.153Radial†	-32.4	1.9	0.3819	µg/L	0.3819	ppb	19:55:36
1	Ca 317.933Radial†	709.9	41.9	2.4560	µg/L	2.4560	ppb	19:55:36
1	Fe 238.204 Radial†	168.7	43.1	2.8662	µg/L	2.8662	ppb	19:55:36
1	K 766.490 Radial†	1483.0	-80.2	-33.015	µg/L	-33.015	ppb	19:55:16
1	Mg 279.077 IEC†	179.6	-20.2	-8.3135	µg/L	-8.3135	ppb	19:55:36
1	Na 589.592 Radial†	1705.0	-114.1	-17.428	µg/L	-17.428	ppb	19:55:16
1	Sr 421.552†	-122.3	164.6	0.3859	µg/L	0.3859	ppb	19:55:16
1	Sc 361.383	1744373.3	1744373.3	104.28	%			19:56:24
1	Y 371.029	1071958.2	1071958.2	104.83	%			19:56:24
1	Ag 328.068†	3041.9	-50.0	-0.2039	µg/L	-0.2039	ppb	19:56:26
1	As 188.979†	-16.7	-1.8	-0.7391	µg/L	-0.7391	ppb	19:56:46
1	B 249.677†	3115.7	-367.9	-6.1751	µg/L	-6.1751	ppb	19:56:46
1	Ba 233.527†	-172.9	9.3	0.0420	µg/L	0.0420	ppb	19:56:46
1	Be 313.107†	-510.3	170.7	0.0584	µg/L	0.0584	ppb	19:56:26
1	Cd 226.502†	-91.2	6.9	0.0476	µg/L	0.0476	ppb	19:56:46
1	Co 228.616†	-200.7	-15.9	-0.2172	µg/L	-0.2172	ppb	19:56:46
1	Cr 267.716†	193.2	25.0	0.2074	µg/L	0.2074	ppb	19:56:46
1	Cu 324.752†	2573.6	43.1	0.1952	µg/L	0.1952	ppb	19:56:26
1	Mn 257.610†	146.1	60.1	0.0824	µg/L	0.0824	ppb	19:56:46
1	Mo 202.031†	-38.9	17.9	0.5656	µg/L	0.5656	ppb	19:56:46
1	Ni 231.604†	-15.8	25.7	0.3290	µg/L	0.3290	ppb	19:56:46
1	P 214.914†	40.8	-40.5	-9.7010	µg/L	-9.7010	ppb	19:56:46
1	Pb 220.353†	105.0	-11.7	-0.7153	µg/L	-0.7153	ppb	19:56:46
1	S 181.975 Axial†	80.4	-17.8	-14.383	µg/L	-14.383	ppb	19:56:46
1	Sb 206.836†	78.7	-11.2	-1.5082	µg/L	-1.5082	ppb	19:56:46
1	Se 196.026†	26.3	14.3	5.65	µg/L	5.65	ppb	19:56:46
1	SiO2†	1648.2	7.7	0.8224	µg/L	0.8224	ppb	19:56:46
1	Si 251.611†	791.8	83.0	1.3617	µg/L	1.3617	ppb	19:56:46
1	Sn 189.927†	7.8	5.5	0.3882	µg/L	0.3882	ppb	19:56:46
1	Ti 334.940†	798.2	129.1	0.1285	µg/L	0.1285	ppb	19:56:26
1	Tl 190.801†	-105.6	19.0	2.5510	µg/L	2.5510	ppb	19:56:46
1	U 409.014†	-340.6	152.4	9.3589	µg/L	9.3589	ppb	19:56:26
1	V 292.402†	251.4	-190.7	-1.0454	µg/L	-1.0454	ppb	19:56:26
1	Zn 213.857†	524.6	38.6	0.2408	µg/L	0.2408	ppb	19:56:46
2	Sc RADIAL	153604.9	153604.9	105	%			19:55:38
2	Al 396.153Radial†	-40.7	-6.7	-1.5003	µg/L	-1.5003	ppb	19:55:58
2	Ca 317.933Radial†	698.2	46.3	2.7145	µg/L	2.7145	ppb	19:55:58
2	Fe 238.204 Radial†	160.1	38.6	2.5686	µg/L	2.5686	ppb	19:55:58
2	K 766.490 Radial†	1640.2	101.4	41.741	µg/L	41.741	ppb	19:55:38
2	Mg 279.077 IEC†	170.0	-25.4	-10.448	µg/L	-10.448	ppb	19:55:58
2	Na 589.592 Radial†	1652.3	-126.9	-19.447	µg/L	-19.447	ppb	19:55:38
2	Sr 421.552†	-170.5	116.2	0.2723	µg/L	0.2723	ppb	19:55:38
2	Sc 361.383	1769862.2	1769862.2	105.80	%			19:56:48
2	Y 371.029	1086957.3	1086957.3	106.30	%			19:56:48
2	Ag 328.068†	3055.4	-79.2	-0.3279	µg/L	-0.3279	ppb	19:56:50
2	As 188.979†	-3.9	10.5	4.3943	µg/L	4.3943	ppb	19:57:10
2	B 249.677†	3116.6	-410.1	-6.8860	µg/L	-6.8860	ppb	19:57:10
2	Ba 233.527†	-159.5	24.3	0.1105	µg/L	0.1105	ppb	19:57:10
2	Be 313.107†	-578.9	112.9	0.0378	µg/L	0.0378	ppb	19:56:50
2	Cd 226.502†	-100.7	-0.8	-0.0060	µg/L	-0.0060	ppb	19:57:10
2	Co 228.616†	-154.1	30.9	0.4233	µg/L	0.4233	ppb	19:57:10
2	Cr 267.716†	158.7	-10.2	-0.0909	µg/L	-0.0909	ppb	19:57:10
2	Cu 324.752†	2676.8	105.1	0.4602	µg/L	0.4602	ppb	19:56:50
2	Mn 257.610†	145.1	57.2	0.0785	µg/L	0.0785	ppb	19:57:10
2	Mo 202.031†	-36.1	21.0	0.6639	µg/L	0.6639	ppb	19:57:10
2	Ni 231.604†	-68.7	-24.1	-0.3078	µg/L	-0.3078	ppb	19:57:10
2	P 214.914†	59.6	-23.2	-5.5807	µg/L	-5.5807	ppb	19:57:10
2	Pb 220.353†	97.2	-20.5	-1.2440	µg/L	-1.2440	ppb	19:57:10

2	S 181.975 Axial†	84.9	-14.6	-11.787 µg/L	-11.787 ppb	19:57:10
2	Sb 206.836†	96.3	4.4	0.6052 µg/L	0.6052 ppb	19:57:10
2	Se 196.026†	0.8	-10.2	-4.02 µg/L	-4.02 ppb	19:57:10
2	SiO2†	1672.2	7.6	0.8120 µg/L	0.8120 ppb	19:57:10
2	Si 251.611†	794.7	74.7	1.2254 µg/L	1.2254 ppb	19:57:10
2	Sn 189.927†	4.2	1.9	0.1385 µg/L	0.1385 ppb	19:57:10
2	Ti 334.940†	903.8	217.9	0.2217 µg/L	0.2217 ppb	19:56:50
2	Tl 190.801†	-111.2	15.2	2.0307 µg/L	2.0307 ppb	19:57:10
2	U 409.014†	-447.5	56.1	3.4153 µg/L	3.4153 ppb	19:56:50
2	V 292.402†	287.1	-160.5	-0.8820 µg/L	-0.8820 ppb	19:56:50
2	Zn 213.857†	515.3	22.6	0.1440 µg/L	0.1440 ppb	19:57:10
3	Sc RADIAL	153703.8	153703.8	105 %		19:56:00
3	Al 396.153Radial†	-49.3	-14.8	-3.2844 µg/L	-3.2844 ppb	19:56:20
3	Ca 317.933Radial†	710.1	57.2	3.3512 µg/L	3.3512 ppb	19:56:20
3	Fe 238.204 Radial†	142.7	22.1	1.4665 µg/L	1.4665 ppb	19:56:20
3	K 766.490 Radial†	1683.5	141.5	58.243 µg/L	58.243 ppb	19:56:00
3	Mg 279.077 IEC†	155.1	-39.6	-16.319 µg/L	-16.319 ppb	19:56:20
3	Na 589.592 Radial†	1574.2	-202.0	-30.955 µg/L	-30.955 ppb	19:56:00
3	Sr 421.552†	-284.4	8.3	0.0193 µg/L	0.0193 ppb	19:56:00
3	Sc 361.383	1752547.4	1752547.4	104.77 %		19:57:12
3	Y 371.029	1077428.7	1077428.7	105.36 %		19:57:12
3	Ag 328.068†	3055.4	-50.7	-0.2129 µg/L	-0.2129 ppb	19:57:14
3	As 188.979†	-12.7	2.2	0.9041 µg/L	0.9041 ppb	19:57:35
3	B 249.677†	3085.6	-410.5	-6.8921 µg/L	-6.8921 ppb	19:57:35
3	Ba 233.527†	-169.6	13.1	0.0597 µg/L	0.0597 ppb	19:57:35
3	Be 313.107†	-482.0	200.1	0.0664 µg/L	0.0664 ppb	19:57:14
3	Cd 226.502†	-116.9	-17.2	-0.1188 µg/L	-0.1188 ppb	19:57:35
3	Co 228.616†	-195.4	-9.9	-0.1357 µg/L	-0.1357 ppb	19:57:35
3	Cr 267.716†	143.5	-23.2	-0.2031 µg/L	-0.2031 ppb	19:57:35
3	Cu 324.752†	2562.2	20.7	0.0929 µg/L	0.0929 ppb	19:57:14
3	Mn 257.610†	158.6	71.4	0.0982 µg/L	0.0982 ppb	19:57:35
3	Mo 202.031†	-25.3	31.1	0.9808 µg/L	0.9808 ppb	19:57:35
3	Ni 231.604†	-42.1	0.8	0.0099 µg/L	0.0099 ppb	19:57:35
3	P 214.914†	71.3	-11.5	-2.7700 µg/L	-2.7700 ppb	19:57:35
3	Pb 220.353†	104.0	-13.2	-0.8002 µg/L	-0.8002 ppb	19:57:35
3	S 181.975 Axial†	83.8	-14.8	-11.977 µg/L	-11.977 ppb	19:57:35
3	Sb 206.836†	75.3	-14.7	-1.9710 µg/L	-1.9710 ppb	19:57:35
3	Se 196.026†	23.6	11.6	4.60 µg/L	4.60 ppb	19:57:35
3	SiO2†	1653.5	5.4	0.5590 µg/L	0.5590 ppb	19:57:35
3	Si 251.611†	763.9	52.8	0.8589 µg/L	0.8589 ppb	19:57:35
3	Sn 189.927†	2.7	0.5	0.0386 µg/L	0.0386 ppb	19:57:35
3	Ti 334.940†	894.4	217.4	0.2215 µg/L	0.2215 ppb	19:57:14
3	Tl 190.801†	-118.7	7.0	0.9364 µg/L	0.9364 ppb	19:57:35
3	U 409.014†	-431.7	67.1	4.0863 µg/L	4.0863 ppb	19:57:14
3	V 292.402†	259.2	-184.4	-1.0115 µg/L	-1.0115 ppb	19:57:14
3	Zn 213.857†	491.0	4.2	0.0263 µg/L	0.0263 ppb	19:57:35

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1755594.3	104.95	%	0.778				0.74%
Sc RADIAL	154844.2	106	%	1.4				1.33%
Y 371.029	1078781.4	105.50	%	0.742				0.70%
Ag 328.068†	-60.0	-0.2482	µg/L	0.06913	-0.2482	ppb	0.06913	27.85%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-6.6	-1.4676	µg/L	1.83335	-1.4676	ppb	1.83335	124.92%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.6	1.5198	µg/L	2.62149	1.5198	ppb	2.62149	172.49%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-396.2	-6.6511	µg/L	0.41221	-6.6511	ppb	0.41221	6.20%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	15.6	0.0707	µg/L	0.03556	0.0707	ppb	0.03556	50.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	161.2	0.0542	µg/L	0.01474	0.0542	ppb	0.01474	27.20%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	48.5	2.8406	µg/L	0.46071	2.8406	ppb	0.46071	16.22%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-3.7	-0.0257	µg/L	0.08491	-0.0257	ppb	0.08491	330.30%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	1.7	0.0235	µg/L	0.34867	0.0235	ppb	0.34867	>999.9%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -2.8     -0.0289 µg/L       0.21215     -0.0289 ppb       0.21215 734.89%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              56.3      0.2495 µg/L       0.18957      0.2495 ppb       0.18957  75.99%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       34.6      2.3004 µg/L       0.73735      2.3004 ppb       0.73735  32.05%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        54.2      22.323 µg/L       48.6295      22.323 ppb       48.6295 217.84%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†         -28.4     -11.693 µg/L        4.1454     -11.693 ppb        4.1454  35.45%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              62.9      0.0864 µg/L       0.01044      0.0864 ppb       0.01044  12.09%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              23.4      0.7368 µg/L       0.21697      0.7368 ppb       0.21697  29.45%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -147.6     -22.610 µg/L        7.2970     -22.610 ppb        7.2970  32.27%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               0.8      0.0104 µg/L       0.31844      0.0104 ppb       0.31844 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -25.1     -6.0172 µg/L       3.48607     -6.0172 ppb       3.48607  57.93%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -15.2     -0.9198 µg/L       0.28391     -0.9198 ppb       0.28391  30.87%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†        -15.7     -12.716 µg/L        1.4469     -12.716 ppb        1.4469  11.38%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -7.2     -0.9580 µg/L       1.37341     -0.9580 ppb       1.37341 143.36%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               5.2        2.08 µg/L         5.305        2.08 ppb         5.305 255.01%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     6.9      0.7311 µg/L       0.14916      0.7311 ppb       0.14916  20.40%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              70.1      1.1487 µg/L       0.26000      1.1487 ppb       0.26000  22.64%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.6      0.1884 µg/L       0.18007      0.1884 ppb       0.18007  95.55%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              96.4      0.2258 µg/L       0.18764      0.2258 ppb       0.18764  83.09%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             188.1      0.1905 µg/L       0.05374      0.1905 ppb       0.05374  28.21%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              13.7      1.8394 µg/L       0.82412      1.8394 ppb       0.82412  44.80%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               91.9      5.6202 µg/L       3.25513      5.6202 ppb       3.25513  57.92%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             -178.5     -0.9796 µg/L       0.08622     -0.9796 ppb       0.08622   8.80%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              21.8      0.1370 µg/L       0.10743      0.1370 ppb       0.10743  78.42%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 28
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/29/2010 20:14:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	158830.4	158830.4	109	%			20:15:13
1	Al 396.153Radial†	25834.9	23739.9	5159.6	µg/L	5159.6	ppb	20:15:13
1	Ca 317.933Radial†	92141.6	83939.6	4918.5	µg/L	4918.5	ppb	20:15:13
1	Fe 238.204 Radial†	80227.4	73509.2	4887.1	µg/L	4887.1	ppb	20:15:13
1	K 766.490 Radial†	14250.9	11622.7	4780.8	µg/L	4780.8	ppb	20:15:13
1	Mg 279.077 IEC†	13509.5	12210.6	5042.2	µg/L	5042.2	ppb	20:15:13
1	Na 589.592 Radial†	71473.6	63894.6	9772.4	µg/L	9772.4	ppb	20:15:13
1	Sr 421.552†	233067.3	214157.3	501.89	µg/L	501.89	ppb	20:15:11
1	Sc 361.383	1758890.2	1758890.2	105.15	%			20:15:40
1	Y 371.029	1068006.2	1068006.2	104.44	%			20:15:40
1	Ag 328.068†	130795.7	121424.9	498.97	µg/L	498.97	ppb	20:15:40
1	As 188.979†	1305.1	1255.5	531.78	µg/L	531.78	ppb	20:16:00
1	B 249.677†	33757.2	28748.7	480.95	µg/L	480.95	ppb	20:15:40
1	Ba 233.527†	115387.0	109912.7	502.52	µg/L	502.52	ppb	20:15:40
1	Be 313.107†	1647211.3	1567223.6	510.30	µg/L	510.30	ppb	20:15:40
1	Cd 226.502†	73776.2	70258.5	484.88	µg/L	484.88	ppb	20:15:40
1	Co 228.616†	37405.4	35750.6	489.80	µg/L	489.80	ppb	20:15:40
1	Cr 267.716†	60425.3	57306.6	492.09	µg/L	492.09	ppb	20:15:40
1	Cu 324.752†	122063.0	113661.9	495.62	µg/L	495.62	ppb	20:15:40
1	Mn 257.610†	380412.8	361707.7	494.04	µg/L	494.04	ppb	20:15:40
1	Mo 202.031†	16080.3	15348.2	484.94	µg/L	484.94	ppb	20:16:00
1	Ni 231.604†	40320.7	38387.5	491.02	µg/L	491.02	ppb	20:15:40
1	P 214.914†	10614.3	10015.1	2390.0	µg/L	2390.0	ppb	20:16:00
1	Pb 220.353†	8478.6	7951.1	483.21	µg/L	483.21	ppb	20:16:00
1	S 181.975 Axial†	1339.7	1179.2	959.49	µg/L	959.49	ppb	20:16:00
1	Sb 206.836†	3893.5	3616.2	488.83	µg/L	488.83	ppb	20:16:00
1	Se 196.026†	1283.0	1209.3	480	µg/L	480	ppb	20:16:00
1	SiO2†	52444.4	48303.9	5258.8	µg/L	5258.8	ppb	20:15:40
1	Si 251.611†	157396.1	149013.5	2454.2	µg/L	2454.2	ppb	20:15:40
1	Sn 189.927†	7240.5	6884.0	491.06	µg/L	491.06	ppb	20:16:00
1	Ti 334.940†	511382.1	485708.4	494.63	µg/L	494.63	ppb	20:15:40
1	Tl 190.801†	3660.5	3601.6	490.88	µg/L	490.88	ppb	20:16:00
1	U 409.014†	7375.4	7493.4	493.30	µg/L	493.30	ppb	20:15:40
1	V 292.402†	94413.5	89359.2	501.88	µg/L	501.88	ppb	20:15:40
1	Zn 213.857†	81706.6	77241.8	482.36	µg/L	482.36	ppb	20:15:40
2	Sc RADIAL	157495.3	157495.3	108	%			20:15:18
2	Al 396.153Radial†	25706.5	23822.0	5177.5	µg/L	5177.5	ppb	20:15:18
2	Ca 317.933Radial†	91510.6	84072.4	4926.3	µg/L	4926.3	ppb	20:15:18
2	Fe 238.204 Radial†	79745.5	73687.3	4899.0	µg/L	4899.0	ppb	20:15:18
2	K 766.490 Radial†	14109.0	11602.1	4772.3	µg/L	4772.3	ppb	20:15:18
2	Mg 279.077 IEC†	13430.6	12242.7	5055.5	µg/L	5055.5	ppb	20:15:18
2	Na 589.592 Radial†	70962.0	63977.1	9785.1	µg/L	9785.1	ppb	20:15:18
2	Sr 421.552†	232192.9	215161.2	504.24	µg/L	504.24	ppb	20:15:16
2	Sc 361.383	1762035.0	1762035.0	105.34	%			20:16:04
2	Y 371.029	1068713.1	1068713.1	104.51	%			20:16:04
2	Ag 328.068†	130782.3	121190.1	498.00	µg/L	498.00	ppb	20:16:04
2	As 188.979†	1306.9	1255.0	531.56	µg/L	531.56	ppb	20:16:24
2	B 249.677†	33992.4	28914.7	483.74	µg/L	483.74	ppb	20:16:04
2	Ba 233.527†	115511.3	109834.8	502.16	µg/L	502.16	ppb	20:16:04
2	Be 313.107†	1645684.7	1562978.3	508.91	µg/L	508.91	ppb	20:16:04
2	Cd 226.502†	74022.3	70366.9	485.63	µg/L	485.63	ppb	20:16:04
2	Co 228.616†	37443.2	35723.0	489.42	µg/L	489.42	ppb	20:16:04
2	Cr 267.716†	60364.6	57146.4	490.71	µg/L	490.71	ppb	20:16:04
2	Cu 324.752†	122082.7	113473.4	494.80	µg/L	494.80	ppb	20:16:04
2	Mn 257.610†	380150.5	360813.0	492.82	µg/L	492.82	ppb	20:16:04
2	Mo 202.031†	16156.3	15393.1	486.35	µg/L	486.35	ppb	20:16:24
2	Ni 231.604†	40290.4	38290.3	489.78	µg/L	489.78	ppb	20:16:04
2	P 214.914†	10621.1	10003.5	2387.2	µg/L	2387.2	ppb	20:16:24
2	Pb 220.353†	8535.7	7990.8	485.62	µg/L	485.62	ppb	20:16:24

2	S 181.975 Axial†	1326.2	1164.2	947.33 µg/L	947.33 ppb	20:16:24
2	Sb 206.836†	3900.6	3616.4	488.88 µg/L	488.88 ppb	20:16:24
2	Se 196.026†	1284.8	1208.8	480 µg/L	480 ppb	20:16:24
2	SiO2†	52491.8	48259.9	5253.9 µg/L	5253.9 ppb	20:16:04
2	Si 251.611†	157382.7	148733.6	2449.6 µg/L	2449.6 ppb	20:16:04
2	Sn 189.927†	7227.9	6859.8	489.33 µg/L	489.33 ppb	20:16:24
2	Ti 334.940†	511020.6	484497.1	493.40 µg/L	493.40 ppb	20:16:04
2	Tl 190.801†	3689.6	3623.0	493.72 µg/L	493.72 ppb	20:16:24
2	U 409.014†	7356.3	7462.8	491.32 µg/L	491.32 ppb	20:16:04
2	V 292.402†	94327.3	89117.0	500.55 µg/L	500.55 ppb	20:16:04
2	Zn 213.857†	81870.2	77258.4	482.47 µg/L	482.47 ppb	20:16:04
3	Sc RADIAL	156537.6	156537.6	107 %		20:15:22
3	Al 396.153Radial†	25645.9	23911.1	5196.9 µg/L	5196.9 ppb	20:15:22
3	Ca 317.933Radial†	91188.8	84290.9	4939.1 µg/L	4939.1 ppb	20:15:22
3	Fe 238.204 Radial†	79529.7	73937.9	4915.6 µg/L	4915.6 ppb	20:15:22
3	K 766.490 Radial†	14092.0	11666.3	4798.7 µg/L	4798.7 ppb	20:15:22
3	Mg 279.077 IEC†	13237.8	12139.2	5012.8 µg/L	5012.8 ppb	20:15:22
3	Na 589.592 Radial†	70964.3	64381.0	9846.9 µg/L	9846.9 ppb	20:15:22
3	Sr 421.552†	233615.3	217800.3	510.43 µg/L	510.43 ppb	20:15:20
3	Sc 361.383	1760601.0	1760601.0	105.25 %		20:16:27
3	Y 371.029	1068160.3	1068160.3	104.46 %		20:16:27
3	Ag 328.068†	130523.2	121045.1	497.39 µg/L	497.39 ppb	20:16:27
3	As 188.979†	1312.2	1261.0	534.08 µg/L	534.08 ppb	20:16:47
3	B 249.677†	33684.6	28648.5	479.28 µg/L	479.28 ppb	20:16:27
3	Ba 233.527†	115155.8	109586.4	501.03 µg/L	501.03 ppb	20:16:27
3	Be 313.107†	1645527.7	1564101.6	509.28 µg/L	509.28 ppb	20:16:27
3	Cd 226.502†	73929.1	70335.6	485.41 µg/L	485.41 ppb	20:16:27
3	Co 228.616†	37338.0	35652.0	488.45 µg/L	488.45 ppb	20:16:27
3	Cr 267.716†	60447.8	57272.2	491.80 µg/L	491.80 ppb	20:16:27
3	Cu 324.752†	121740.8	113243.0	493.79 µg/L	493.79 ppb	20:16:27
3	Mn 257.610†	379672.2	360652.5	492.60 µg/L	492.60 ppb	20:16:27
3	Mo 202.031†	16168.3	15416.9	487.10 µg/L	487.10 ppb	20:16:47
3	Ni 231.604†	40268.9	38301.0	489.91 µg/L	489.91 ppb	20:16:27
3	P 214.914†	10675.3	10063.2	2401.6 µg/L	2401.6 ppb	20:16:47
3	Pb 220.353†	8520.4	7982.9	485.15 µg/L	485.15 ppb	20:16:47
3	S 181.975 Axial†	1321.3	1160.6	944.41 µg/L	944.41 ppb	20:16:47
3	Sb 206.836†	3929.7	3647.1	493.02 µg/L	493.02 ppb	20:16:47
3	Se 196.026†	1275.2	1200.7	477 µg/L	477 ppb	20:16:47
3	SiO2†	52357.5	48172.8	5244.4 µg/L	5244.4 ppb	20:16:27
3	Si 251.611†	157210.8	148692.0	2448.9 µg/L	2448.9 ppb	20:16:27
3	Sn 189.927†	7259.6	6895.4	491.87 µg/L	491.87 ppb	20:16:47
3	Ti 334.940†	509954.6	483879.4	492.77 µg/L	492.77 ppb	20:16:27
3	Tl 190.801†	3695.1	3631.0	494.80 µg/L	494.80 ppb	20:16:47
3	U 409.014†	7240.3	7358.2	484.82 µg/L	484.82 ppb	20:16:27
3	V 292.402†	94156.3	89027.6	500.06 µg/L	500.06 ppb	20:16:27
3	Zn 213.857†	81777.8	77234.0	482.31 µg/L	482.31 ppb	20:16:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1760508.7	105.24	%	0.094				0.09%
Sc RADIAL	157621.1	108	%	0.8				0.73%
Y 371.029	1068293.2	104.47	%	0.036				0.03%
Ag 328.068†	121220.0	498.12	µg/L	0.794	498.12	ppb	0.794	0.16%
QC value within limits for Ag 328.068 Recovery = 99.62%								
Al 396.153Radial†	23824.3	5178.0	µg/L	18.65	5178.0	ppb	18.65	0.36%
QC value within limits for Al 396.153Radial Recovery = 103.56%								
As 188.979†	1257.1	532.47	µg/L	1.398	532.47	ppb	1.398	0.26%
QC value within limits for As 188.979 Recovery = 106.49%								
B 249.677†	28770.7	481.32	µg/L	2.255	481.32	ppb	2.255	0.47%
QC value within limits for B 249.677 Recovery = 96.26%								
Ba 233.527†	109778.0	501.91	µg/L	0.779	501.91	ppb	0.779	0.16%
QC value within limits for Ba 233.527 Recovery = 100.38%								
Be 313.107†	1564767.8	509.50	µg/L	0.717	509.50	ppb	0.717	0.14%
QC value within limits for Be 313.107 Recovery = 101.90%								
Ca 317.933Radial†	84101.0	4928.0	µg/L	10.39	4928.0	ppb	10.39	0.21%
QC value within limits for Ca 317.933Radial Recovery = 98.56%								
Cd 226.502†	70320.3	485.30	µg/L	0.384	485.30	ppb	0.384	0.08%
QC value within limits for Cd 226.502 Recovery = 97.06%								
Co 228.616†	35708.6	489.22	µg/L	0.698	489.22	ppb	0.698	0.14%

QC value within limits for Co 228.616 Recovery = 97.84%

Cr 267.716†	57241.7	491.53 µg/L	0.725	491.53 ppb	0.725	0.15%
QC value within limits for Cr 267.716 Recovery = 98.31%						
Cu 324.752†	113459.4	494.74 µg/L	0.914	494.74 ppb	0.914	0.18%
QC value within limits for Cu 324.752 Recovery = 98.95%						
Fe 238.204 Radial†	73711.5	4900.6 µg/L	14.32	4900.6 ppb	14.32	0.29%
QC value within limits for Fe 238.204 Radial Recovery = 98.01%						
K 766.490 Radial†	11630.4	4783.9 µg/L	13.48	4783.9 ppb	13.48	0.28%
QC value within limits for K 766.490 Radial Recovery = 95.68%						
Mg 279.077 IEC†	12197.5	5036.8 µg/L	21.85	5036.8 ppb	21.85	0.43%
QC value within limits for Mg 279.077 IEC Recovery = 100.74%						
Mn 257.610†	361057.7	493.15 µg/L	0.777	493.15 ppb	0.777	0.16%
QC value within limits for Mn 257.610 Recovery = 98.63%						
Mo 202.031†	15386.1	486.13 µg/L	1.101	486.13 ppb	1.101	0.23%
QC value within limits for Mo 202.031 Recovery = 97.23%						
Na 589.592 Radial†	64084.3	9801.5 µg/L	39.82	9801.5 ppb	39.82	0.41%
QC value within limits for Na 589.592 Radial Recovery = 98.01%						
Ni 231.604†	38326.3	490.24 µg/L	0.682	490.24 ppb	0.682	0.14%
QC value within limits for Ni 231.604 Recovery = 98.05%						
P 214.914†	10027.2	2392.9 µg/L	7.59	2392.9 ppb	7.59	0.32%
QC value within limits for P 214.914 Recovery = 95.72%						
Pb 220.353†	7974.9	484.66 µg/L	1.279	484.66 ppb	1.279	0.26%
QC value within limits for Pb 220.353 Recovery = 96.93%						
S 181.975 Axial†	1168.0	950.41 µg/L	8.003	950.41 ppb	8.003	0.84%
QC value within limits for S 181.975 Axial Recovery = 95.04%						
Sb 206.836†	3626.6	490.24 µg/L	2.403	490.24 ppb	2.403	0.49%
QC value within limits for Sb 206.836 Recovery = 98.05%						
Se 196.026†	1206.3	479 µg/L	1.9	479 ppb	1.9	0.40%
QC value within limits for Se 196.026 Recovery = 95.86%						
SiO2†	48245.5	5252.4 µg/L	7.33	5252.4 ppb	7.33	0.14%
QC value within limits for SiO2 Recovery = 98.22%						
Si 251.611†	148813.1	2450.9 µg/L	2.90	2450.9 ppb	2.90	0.12%
QC value within limits for Si 251.611 Recovery = 98.04%						
Sn 189.927†	6879.7	490.75 µg/L	1.293	490.75 ppb	1.293	0.26%
QC value within limits for Sn 189.927 Recovery = 98.15%						
Sr 421.552†	215706.3	505.52 µg/L	4.410	505.52 ppb	4.410	0.87%
QC value within limits for Sr 421.552 Recovery = 101.10%						
Ti 334.940†	484695.0	493.60 µg/L	0.946	493.60 ppb	0.946	0.19%
QC value within limits for Ti 334.940 Recovery = 98.72%						
Tl 190.801†	3618.5	493.13 µg/L	2.027	493.13 ppb	2.027	0.41%
QC value within limits for Tl 190.801 Recovery = 98.63%						
U 409.014†	7438.1	489.81 µg/L	4.433	489.81 ppb	4.433	0.91%
QC value within limits for U 409.014 Recovery = 97.96%						
V 292.402†	89167.9	500.83 µg/L	0.945	500.83 ppb	0.945	0.19%
QC value within limits for V 292.402 Recovery = 100.17%						
Zn 213.857†	77244.7	482.38 µg/L	0.080	482.38 ppb	0.080	0.02%
QC value within limits for Zn 213.857 Recovery = 96.48%						

All analyte(s) passed QC.

Sequence No.: 29
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/29/2010 20:16:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	158157.7	158157.7	109	%			20:17:23
1	Al 396.153Radial†	-63.6	-26.8	-5.8638	µg/L	-5.8638	ppb	20:17:43
1	Ca 317.933Radial†	734.1	60.4	3.5365	µg/L	3.5365	ppb	20:17:43
1	Fe 238.204 Radial†	186.1	58.3	3.8728	µg/L	3.8728	ppb	20:17:43
1	K 766.490 Radial†	1649.8	65.4	26.926	µg/L	26.926	ppb	20:17:23
1	Mg 279.077 IEC†	176.6	-23.9	-9.8603	µg/L	-9.8603	ppb	20:17:43
1	Na 589.592 Radial†	1600.7	-219.6	-33.624	µg/L	-33.624	ppb	20:17:23
1	Sr 421.552†	-113.7	173.2	0.4058	µg/L	0.4058	ppb	20:17:23
1	Sc 361.383	1797162.4	1797162.4	107.44	%			20:18:45
1	Y 371.029	1101535.0	1101535.0	107.72	%			20:18:45
1	Ag 328.068†	3189.5	1.7	0.0181	µg/L	0.0181	ppb	20:18:47
1	As 188.979†	-18.7	-3.2	-1.3282	µg/L	-1.3282	ppb	20:19:07
1	B 249.677†	3164.5	-410.2	-6.8868	µg/L	-6.8868	ppb	20:19:07
1	Ba 233.527†	-166.3	20.3	0.0925	µg/L	0.0925	ppb	20:19:07
1	Be 313.107†	-796.9	-81.6	-0.0232	µg/L	-0.0232	ppb	20:18:47
1	Cd 226.502†	-88.5	12.1	0.0830	µg/L	0.0830	ppb	20:19:07
1	Co 228.616†	-182.6	6.7	0.0913	µg/L	0.0913	ppb	20:19:07
1	Cr 267.716†	146.8	-23.6	-0.2111	µg/L	-0.2111	ppb	20:19:07
1	Cu 324.752†	2533.1	-67.1	-0.2822	µg/L	-0.2822	ppb	20:18:47
1	Mn 257.610†	189.2	96.1	0.1316	µg/L	0.1316	ppb	20:19:07
1	Mo 202.031†	-43.6	14.6	0.4617	µg/L	0.4617	ppb	20:19:07
1	Ni 231.604†	-36.3	7.1	0.0912	µg/L	0.0912	ppb	20:19:07
1	P 214.914†	33.9	-48.0	-11.496	µg/L	-11.496	ppb	20:19:07
1	Pb 220.353†	106.6	-13.2	-0.8080	µg/L	-0.8080	ppb	20:19:07
1	S 181.975 Axial†	94.0	-7.3	-5.9118	µg/L	-5.9118	ppb	20:19:07
1	Sb 206.836†	77.5	-14.5	-1.9423	µg/L	-1.9423	ppb	20:19:07
1	Se 196.026†	26.1	13.3	5.29	µg/L	5.29	ppb	20:19:07
1	SiO2†	1703.2	12.4	1.3407	µg/L	1.3407	ppb	20:19:07
1	Si 251.611†	757.0	28.3	0.4592	µg/L	0.4592	ppb	20:19:07
1	Sn 189.927†	6.4	3.9	0.2796	µg/L	0.2796	ppb	20:19:07
1	Ti 334.940†	1092.2	380.2	0.3841	µg/L	0.3841	ppb	20:18:47
1	Tl 190.801†	-110.1	17.8	2.3981	µg/L	2.3981	ppb	20:19:07
1	U 409.014†	-322.2	179.2	11.064	µg/L	11.064	ppb	20:18:47
1	V 292.402†	429.3	-32.2	-0.1685	µg/L	-0.1685	ppb	20:18:47
1	Zn 213.857†	497.4	-1.5	-0.0099	µg/L	-0.0099	ppb	20:19:07
2	Sc RADIAL	155691.2	155691.2	107	%			20:17:45
2	Al 396.153Radial†	-30.3	3.5	0.7196	µg/L	0.7196	ppb	20:18:05
2	Ca 317.933Radial†	713.2	51.5	3.0148	µg/L	3.0148	ppb	20:18:05
2	Fe 238.204 Radial†	162.5	38.8	2.5826	µg/L	2.5826	ppb	20:18:05
2	K 766.490 Radial†	1523.5	-28.7	-11.809	µg/L	-11.809	ppb	20:17:45
2	Mg 279.077 IEC†	195.4	-3.7	-1.5189	µg/L	-1.5189	ppb	20:18:05
2	Na 589.592 Radial†	1538.6	-254.3	-38.906	µg/L	-38.906	ppb	20:17:45
2	Sr 421.552†	-172.2	116.8	0.2737	µg/L	0.2737	ppb	20:17:45
2	Sc 361.383	1776190.8	1776190.8	106.18	%			20:19:09
2	Y 371.029	1089581.5	1089581.5	106.55	%			20:19:09
2	Ag 328.068†	3209.2	55.3	0.2233	µg/L	0.2233	ppb	20:19:11
2	As 188.979†	-18.8	-3.4	-1.4319	µg/L	-1.4319	ppb	20:19:31
2	B 249.677†	3163.9	-376.0	-6.3128	µg/L	-6.3128	ppb	20:19:31
2	Ba 233.527†	-158.5	25.8	0.1177	µg/L	0.1177	ppb	20:19:31
2	Be 313.107†	-622.2	74.1	0.0253	µg/L	0.0253	ppb	20:19:11
2	Cd 226.502†	-71.9	26.7	0.1839	µg/L	0.1839	ppb	20:19:31
2	Co 228.616†	-183.6	3.7	0.0500	µg/L	0.0500	ppb	20:19:31
2	Cr 267.716†	166.1	-3.8	-0.0355	µg/L	-0.0355	ppb	20:19:31
2	Cu 324.752†	2626.6	48.8	0.2155	µg/L	0.2155	ppb	20:19:11
2	Mn 257.610†	203.0	111.2	0.1519	µg/L	0.1519	ppb	20:19:31
2	Mo 202.031†	-29.4	27.5	0.8686	µg/L	0.8686	ppb	20:19:31
2	Ni 231.604†	-58.1	-13.8	-0.1766	µg/L	-0.1766	ppb	20:19:31
2	P 214.914†	38.3	-43.5	-10.438	µg/L	-10.438	ppb	20:19:31
2	Pb 220.353†	142.1	21.4	1.2928	µg/L	1.2928	ppb	20:19:31

2	S 181.975 Axial†	84.7	-15.1	-12.191 µg/L	-12.191 ppb	20:19:31
2	Sb 206.836†	90.2	-1.7	-0.2231 µg/L	-0.2231 ppb	20:19:31
2	Se 196.026†	16.7	4.8	1.90 µg/L	1.90 ppb	20:19:31
2	SiO2†	1687.5	16.4	1.7745 µg/L	1.7745 ppb	20:19:31
2	Si 251.611†	744.1	24.4	0.3950 µg/L	0.3950 ppb	20:19:31
2	Sn 189.927†	-5.5	-7.2	-0.5152 µg/L	-0.5152 ppb	20:19:31
2	Ti 334.940†	590.2	-80.5	-0.0834 µg/L	-0.0834 ppb	20:19:11
2	Tl 190.801†	-116.1	11.0	1.4736 µg/L	1.4736 ppb	20:19:31
2	U 409.014†	-444.6	60.4	3.7028 µg/L	3.7028 ppb	20:19:11
2	V 292.402†	365.2	-87.9	-0.4766 µg/L	-0.4766 ppb	20:19:11
2	Zn 213.857†	508.8	14.8	0.0938 µg/L	0.0938 ppb	20:19:31
3	Sc RADIAL	155889.7	155889.7	107 %		20:18:07
3	Al 396.153Radial†	-21.6	11.7	2.4989 µg/L	2.4989 ppb	20:18:27
3	Ca 317.933Radial†	710.6	48.2	2.8268 µg/L	2.8268 ppb	20:18:27
3	Fe 238.204 Radial†	176.6	51.8	3.4464 µg/L	3.4464 ppb	20:18:27
3	K 766.490 Radial†	1522.8	-31.2	-12.835 µg/L	-12.835 ppb	20:18:07
3	Mg 279.077 IEC†	169.6	-28.1	-11.582 µg/L	-11.582 ppb	20:18:27
3	Na 589.592 Radial†	1514.3	-278.9	-42.658 µg/L	-42.658 ppb	20:18:07
3	Sr 421.552†	-115.2	170.3	0.3991 µg/L	0.3991 ppb	20:18:07
3	Sc 361.383	1775735.1	1775735.1	106.16 %		20:19:33
3	Y 371.029	1090212.1	1090212.1	106.61 %		20:19:33
3	Ag 328.068†	3310.5	151.5	0.6044 µg/L	0.6044 ppb	20:19:35
3	As 188.979†	-18.3	-3.0	-1.2478 µg/L	-1.2478 ppb	20:19:55
3	B 249.677†	3162.1	-376.9	-6.3290 µg/L	-6.3290 ppb	20:19:55
3	Ba 233.527†	-165.4	19.2	0.0872 µg/L	0.0872 ppb	20:19:55
3	Be 313.107†	-659.6	38.8	0.0140 µg/L	0.0140 ppb	20:19:35
3	Cd 226.502†	-97.0	3.1	0.0206 µg/L	0.0206 ppb	20:19:55
3	Co 228.616†	-161.6	24.4	0.3340 µg/L	0.3340 ppb	20:19:55
3	Cr 267.716†	177.4	6.9	0.0553 µg/L	0.0553 ppb	20:19:55
3	Cu 324.752†	2774.4	188.7	0.8244 µg/L	0.8244 ppb	20:19:35
3	Mn 257.610†	182.4	91.8	0.1259 µg/L	0.1259 ppb	20:19:55
3	Mo 202.031†	-25.4	31.3	0.9879 µg/L	0.9879 ppb	20:19:55
3	Ni 231.604†	-68.5	-23.6	-0.3019 µg/L	-0.3019 ppb	20:19:55
3	P 214.914†	51.6	-31.0	-7.4391 µg/L	-7.4391 ppb	20:19:55
3	Pb 220.353†	84.6	-32.7	-1.9844 µg/L	-1.9844 ppb	20:19:55
3	S 181.975 Axial†	85.3	-14.4	-11.697 µg/L	-11.697 ppb	20:19:55
3	Sb 206.836†	54.5	-35.3	-4.7507 µg/L	-4.7507 ppb	20:19:55
3	Se 196.026†	0.8	-10.1	-4.01 µg/L	-4.01 ppb	20:19:55
3	SiO2†	1675.1	5.1	0.5352 µg/L	0.5352 ppb	20:19:55
3	Si 251.611†	757.0	36.7	0.5978 µg/L	0.5978 ppb	20:19:55
3	Sn 189.927†	-6.1	-7.8	-0.5522 µg/L	-0.5522 ppb	20:19:55
3	Ti 334.940†	761.4	80.9	0.0816 µg/L	0.0816 ppb	20:19:35
3	Tl 190.801†	-108.3	18.3	2.4419 µg/L	2.4419 ppb	20:19:55
3	U 409.014†	-429.2	74.8	4.5456 µg/L	4.5456 ppb	20:19:35
3	V 292.402†	201.6	-241.9	-1.3288 µg/L	-1.3288 ppb	20:19:35
3	Zn 213.857†	514.6	20.3	0.1291 µg/L	0.1291 ppb	20:19:55

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1783029.4	106.59	%	0.732				0.69%
Sc RADIAL	156579.5	107	%	0.9				0.88%
Y 371.029	1093776.2	106.96	%	0.658				0.61%
Ag 328.068†	69.5	0.2819	µg/L	0.29754	0.2819	ppb	0.29754	105.55%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-3.9	-0.8818	µg/L	4.40531	-0.8818	ppb	4.40531	499.59%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.2	-1.3360	µg/L	0.09228	-1.3360	ppb	0.09228	6.91%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-387.7	-6.5095	µg/L	0.32684	-6.5095	ppb	0.32684	5.02%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	21.7	0.0991	µg/L	0.01628	0.0991	ppb	0.01628	16.43%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	10.4	0.0053	µg/L	0.02537	0.0053	ppb	0.02537	474.55%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	53.3	3.1261	µg/L	0.36770	3.1261	ppb	0.36770	11.76%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	13.9	0.0958	µg/L	0.08241	0.0958	ppb	0.08241	85.99%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	11.6	0.1584	µg/L	0.15343	0.1584	ppb	0.15343	96.85%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -6.8     -0.0638 µg/L       0.13543     -0.0638 ppb       0.13543 212.32%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              56.8      0.2526 µg/L       0.55423      0.2526 ppb       0.55423 219.45%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       49.6      3.3006 µg/L       0.65736      3.3006 ppb       0.65736  19.92%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         1.8      0.7609 µg/L      22.66551      0.7609 ppb      22.66551 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†         -18.6     -7.6537 µg/L       5.38218     -7.6537 ppb       5.38218  70.32%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              99.7      0.1365 µg/L       0.01367      0.1365 ppb       0.01367  10.02%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              24.5      0.7728 µg/L       0.27588      0.7728 ppb       0.27588  35.70%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -250.9     -38.396 µg/L        4.5384     -38.396 ppb        4.5384  11.82%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -10.1      -0.1291 µg/L       0.20080      -0.1291 ppb       0.20080 155.54%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -40.8      -9.7910 µg/L       2.10426      -9.7910 ppb       2.10426  21.49%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -8.2      -0.4998 µg/L       1.66019      -0.4998 ppb       1.66019 332.15%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†        -12.3      -9.9332 µg/L       3.49134      -9.9332 ppb       3.49134  35.15%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†             -17.2      -2.3053 µg/L       2.28550      -2.3053 ppb       2.28550  99.14%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               2.7        1.06 µg/L         4.705        1.06 ppb         4.705 444.44%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    11.3      1.2168 µg/L       0.62889      1.2168 ppb       0.62889  51.68%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              29.8      0.4840 µg/L       0.10365      0.4840 ppb       0.10365  21.42%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -3.7      -0.2626 µg/L       0.46990      -0.2626 ppb       0.46990 178.94%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             153.4      0.3595 µg/L       0.07442      0.3595 ppb       0.07442  20.70%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             126.9      0.1275 µg/L       0.23711      0.1275 ppb       0.23711 186.03%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              15.7      2.1045 µg/L       0.54683      2.1045 ppb       0.54683  25.98%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              104.8      6.4375 µg/L       4.02889      6.4375 ppb       4.02889  62.58%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             -120.7     -0.6580 µg/L       0.60105     -0.6580 ppb       0.60105  91.35%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              11.2      0.0710 µg/L       0.07224      0.0710 ppb       0.07224 101.73%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 30
Sample ID: 1202056866|959109|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 324
Date Collected: 3/29/2010 20:20:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202056866|959109|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	157385.0	157385.0	108	%			20:20:36
1	Al 396.153Radial†	-8.0	24.5	5.2915	µg/L	5.2915	ppb	20:20:56
1	Ca 317.933Radial†	774.9	101.4	5.9420	µg/L	5.9420	ppb	20:20:56
1	Fe 238.204 Radial†	341.8	203.3	13.514	µg/L	13.514	ppb	20:20:56
1	K 766.490 Radial†	1553.3	-16.5	-6.7715	µg/L	-6.7715	ppb	20:20:36
1	Mg 279.077 IEC†	180.5	-19.5	-8.0285	µg/L	-8.0285	ppb	20:20:56
1	Na 589.592 Radial†	1691.6	-128.1	-19.598	µg/L	-19.598	ppb	20:20:36
1	Sr 421.552†	-265.1	32.4	0.0760	µg/L	0.0760	ppb	20:20:36
1	Sc 361.383	1783162.4	1783162.4	106.60	%			20:21:44
1	Y 371.029	1090137.4	1090137.4	106.61	%			20:21:44
1	Ag 328.068†	3204.3	38.9	0.1558	µg/L	0.1558	ppb	20:21:46
1	As 188.979†	-17.8	-2.5	-1.0360	µg/L	-1.0360	ppb	20:22:06
1	B 249.677†	3164.6	-387.0	-6.4973	µg/L	-6.4973	ppb	20:22:06
1	Ba 233.527†	-159.8	25.1	0.1140	µg/L	0.1140	ppb	20:22:06
1	Be 313.107†	-580.4	115.7	0.0421	µg/L	0.0421	ppb	20:21:46
1	Cd 226.502†	-94.8	5.4	0.0362	µg/L	0.0362	ppb	20:22:06
1	Co 228.616†	-176.8	10.8	0.1470	µg/L	0.1470	ppb	20:22:06
1	Cr 267.716†	187.9	16.0	0.1257	µg/L	0.1257	ppb	20:22:06
1	Cu 324.752†	2760.8	165.0	0.7312	µg/L	0.7312	ppb	20:21:46
1	Mn 257.610†	325.9	225.7	0.3088	µg/L	0.3088	ppb	20:22:06
1	Mo 202.031†	-21.1	35.5	1.1191	µg/L	1.1191	ppb	20:22:06
1	Ni 231.604†	-23.9	18.5	0.2370	µg/L	0.2370	ppb	20:22:06
1	P 214.914†	62.2	-21.2	-5.1165	µg/L	-5.1165	ppb	20:22:06
1	Pb 220.353†	101.0	-17.7	-1.0785	µg/L	-1.0785	ppb	20:22:06
1	S 181.975 Axial†	90.7	-9.7	-7.8623	µg/L	-7.8623	ppb	20:22:06
1	Sb 206.836†	91.1	-1.2	-0.1533	µg/L	-0.1533	ppb	20:22:06
1	Se 196.026†	12.9	1.2	0.488	µg/L	0.488	ppb	20:22:06
1	SiO2†	2242.9	531.2	58.039	µg/L	58.039	ppb	20:22:06
1	Si 251.611†	2337.2	1516.1	25.060	µg/L	25.060	ppb	20:21:46
1	Sn 189.927†	-11.2	-12.5	-0.8874	µg/L	-0.8874	ppb	20:22:06
1	Ti 334.940†	903.9	211.6	0.2105	µg/L	0.2105	ppb	20:21:46
1	Tl 190.801†	-117.8	9.8	1.3040	µg/L	1.3040	ppb	20:22:06
1	U 409.014†	-258.2	236.9	14.541	µg/L	14.541	ppb	20:21:46
1	V 292.402†	139.7	-300.8	-1.6489	µg/L	-1.6489	ppb	20:21:46
1	Zn 213.857†	738.3	228.2	1.4332	µg/L	1.4332	ppb	20:22:06
2	Sc RADIAL	155647.0	155647.0	107	%			20:20:58
2	Al 396.153Radial†	15.0	46.0	9.9857	µg/L	9.9857	ppb	20:21:18
2	Ca 317.933Radial†	761.3	96.7	5.6672	µg/L	5.6672	ppb	20:21:18
2	Fe 238.204 Radial†	356.1	220.2	14.640	µg/L	14.640	ppb	20:21:18
2	K 766.490 Radial†	1463.9	-84.1	-34.625	µg/L	-34.625	ppb	20:20:58
2	Mg 279.077 IEC†	178.0	-20.0	-8.2469	µg/L	-8.2469	ppb	20:21:18
2	Na 589.592 Radial†	1599.1	-197.2	-30.149	µg/L	-30.149	ppb	20:20:58
2	Sr 421.552†	-225.1	67.2	0.1574	µg/L	0.1574	ppb	20:20:58
2	Sc 361.383	1790615.6	1790615.6	107.04	%			20:22:08
2	Y 371.029	1094058.1	1094058.1	106.99	%			20:22:08
2	Ag 328.068†	2882.1	-274.6	-1.1165	µg/L	-1.1165	ppb	20:22:10
2	As 188.979†	-23.8	-8.0	-3.3419	µg/L	-3.3419	ppb	20:22:30
2	B 249.677†	3170.7	-393.7	-6.6092	µg/L	-6.6092	ppb	20:22:30
2	Ba 233.527†	-149.1	35.8	0.1633	µg/L	0.1633	ppb	20:22:30
2	Be 313.107†	-636.6	65.4	0.0225	µg/L	0.0225	ppb	20:22:10
2	Cd 226.502†	-106.9	-5.5	-0.0394	µg/L	-0.0394	ppb	20:22:30
2	Co 228.616†	-184.6	4.2	0.0566	µg/L	0.0566	ppb	20:22:30
2	Cr 267.716†	182.7	10.4	0.0865	µg/L	0.0865	ppb	20:22:30
2	Cu 324.752†	2788.4	180.0	0.7880	µg/L	0.7880	ppb	20:22:10
2	Mn 257.610†	293.6	194.3	0.2658	µg/L	0.2658	ppb	20:22:30
2	Mo 202.031†	-25.0	31.9	1.0065	µg/L	1.0065	ppb	20:22:30
2	Ni 231.604†	-50.4	-6.1	-0.0785	µg/L	-0.0785	ppb	20:22:30
2	P 214.914†	62.7	-21.0	-5.0455	µg/L	-5.0455	ppb	20:22:30
2	Pb 220.353†	93.3	-25.3	-1.5330	µg/L	-1.5330	ppb	20:22:30

2	S 181.975 Axial†	93.6	-7.4	-5.9985 µg/L	-5.9985 ppb	20:22:30
2	Sb 206.836†	96.5	3.5	0.4866 µg/L	0.4866 ppb	20:22:30
2	Se 196.026†	16.7	4.7	1.86 µg/L	1.86 ppb	20:22:30
2	SiO2†	2211.2	492.8	53.838 µg/L	53.838 ppb	20:22:30
2	Si 251.611†	2434.1	1597.5	26.401 µg/L	26.401 ppb	20:22:10
2	Sn 189.927†	3.9	1.6	0.1155 µg/L	0.1155 ppb	20:22:30
2	Ti 334.940†	941.0	242.7	0.2466 µg/L	0.2466 ppb	20:22:10
2	Tl 190.801†	-124.8	3.7	0.5008 µg/L	0.5008 ppb	20:22:30
2	U 409.014†	-441.6	66.6	4.0770 µg/L	4.0770 ppb	20:22:10
2	V 292.402†	348.4	-106.4	-0.5792 µg/L	-0.5792 ppb	20:22:10
2	Zn 213.857†	716.2	204.7	1.2870 µg/L	1.2870 ppb	20:22:30
3	Sc RADIAL	158974.7	158974.7	109 %		20:21:20
3	Al 396.153Radial†	-1.4	30.6	6.6425 µg/L	6.6425 ppb	20:21:40
3	Ca 317.933Radial†	783.6	102.3	5.9935 µg/L	5.9935 ppb	20:21:40
3	Fe 238.204 Radial†	319.3	179.5	11.934 µg/L	11.934 ppb	20:21:40
3	K 766.490 Radial†	1529.9	-52.3	-21.545 µg/L	-21.545 ppb	20:21:20
3	Mg 279.077 IEC†	194.1	-8.7	-3.5890 µg/L	-3.5890 ppb	20:21:40
3	Na 589.592 Radial†	1527.9	-293.9	-44.946 µg/L	-44.946 ppb	20:21:20
3	Sr 421.552†	-364.3	-56.0	-0.1313 µg/L	-0.1313 ppb	20:21:20
3	Sc 361.383	1783384.3	1783384.3	106.61 %		20:22:32
3	Y 371.029	1089400.3	1089400.3	106.53 %		20:22:32
3	Ag 328.068†	2929.4	-219.3	-0.8740 µg/L	-0.8740 ppb	20:22:34
3	As 188.979†	-11.8	3.2	1.3424 µg/L	1.3424 ppb	20:22:54
3	B 249.677†	3151.3	-399.8	-6.7127 µg/L	-6.7127 ppb	20:22:54
3	Ba 233.527†	-160.6	24.4	0.1114 µg/L	0.1114 ppb	20:22:54
3	Be 313.107†	-824.8	-113.5	-0.0328 µg/L	-0.0328 ppb	20:22:34
3	Cd 226.502†	-103.4	-2.6	-0.0190 µg/L	-0.0190 ppb	20:22:54
3	Co 228.616†	-185.0	3.0	0.0410 µg/L	0.0410 ppb	20:22:54
3	Cr 267.716†	190.4	18.4	0.1475 µg/L	0.1475 ppb	20:22:54
3	Cu 324.752†	2704.4	111.8	0.4992 µg/L	0.4992 ppb	20:22:34
3	Mn 257.610†	320.3	220.4	0.3013 µg/L	0.3013 ppb	20:22:54
3	Mo 202.031†	-34.7	22.7	0.7168 µg/L	0.7168 ppb	20:22:54
3	Ni 231.604†	-50.3	-6.2	-0.0797 µg/L	-0.0797 ppb	20:22:54
3	P 214.914†	55.7	-27.4	-6.5692 µg/L	-6.5692 ppb	20:22:54
3	Pb 220.353†	103.1	-15.7	-0.9620 µg/L	-0.9620 ppb	20:22:54
3	S 181.975 Axial†	93.9	-6.8	-5.4632 µg/L	-5.4632 ppb	20:22:54
3	Sb 206.836†	87.3	-4.8	-0.6378 µg/L	-0.6378 ppb	20:22:54
3	Se 196.026†	13.1	1.3	0.550 µg/L	0.550 ppb	20:22:54
3	SiO2†	2218.2	507.7	55.472 µg/L	55.472 ppb	20:22:54
3	Si 251.611†	2753.3	1906.2	31.507 µg/L	31.507 ppb	20:22:34
3	Sn 189.927†	6.0	3.6	0.2550 µg/L	0.2550 ppb	20:22:54
3	Ti 334.940†	833.5	145.5	0.1431 µg/L	0.1431 ppb	20:22:34
3	Tl 190.801†	-117.7	9.9	1.3317 µg/L	1.3317 ppb	20:22:54
3	U 409.014†	-273.0	223.0	13.778 µg/L	13.778 ppb	20:22:34
3	V 292.402†	449.7	-10.1	-0.0405 µg/L	-0.0405 ppb	20:22:34
3	Zn 213.857†	743.8	233.2	1.4674 µg/L	1.4674 ppb	20:22:54

Mean Data: 1202056866|959109|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1785720.7	106.75	%	0.254				0.24%
Sc RADIAL	157335.6	108	%	1.1				1.06%
Y 371.029	1091198.6	106.71	%	0.245				0.23%
Ag 328.068†	-151.7	-0.6116	µg/L	0.67552	-0.6116	ppb	0.67552	110.45%
Al 396.153Radial†	33.7	7.3066	µg/L	2.41656	7.3066	ppb	2.41656	33.07%
As 188.979†	-2.4	-1.0119	µg/L	2.34223	-1.0119	ppb	2.34223	231.48%
B 249.677†	-393.5	-6.6064	µg/L	0.10770	-6.6064	ppb	0.10770	1.63%
Ba 233.527†	28.4	0.1296	µg/L	0.02922	0.1296	ppb	0.02922	22.56%
Be 313.107†	22.5	0.0106	µg/L	0.03883	0.0106	ppb	0.03883	365.91%
Ca 317.933Radial†	100.1	5.8676	µg/L	0.17544	5.8676	ppb	0.17544	2.99%
Cd 226.502†	-0.9	-0.0074	µg/L	0.03912	-0.0074	ppb	0.03912	528.80%
Co 228.616†	6.0	0.0815	µg/L	0.05723	0.0815	ppb	0.05723	70.20%
Cr 267.716†	14.9	0.1199	µg/L	0.03092	0.1199	ppb	0.03092	25.79%
Cu 324.752†	152.3	0.6728	µg/L	0.15301	0.6728	ppb	0.15301	22.74%
Fe 238.204 Radial†	201.0	13.363	µg/L	1.3592	13.363	ppb	1.3592	10.17%
K 766.490 Radial†	-51.0	-20.981	µg/L	13.9354	-20.981	ppb	13.9354	66.42%
Mg 279.077 IEC†	-16.1	-6.6214	µg/L	2.62847	-6.6214	ppb	2.62847	39.70%
Mn 257.610†	213.5	0.2920	µg/L	0.02294	0.2920	ppb	0.02294	7.86%
Mo 202.031†	30.0	0.9475	µg/L	0.20755	0.9475	ppb	0.20755	21.91%
Na 589.592 Radial†	-206.4	-31.564	µg/L	12.7330	-31.564	ppb	12.7330	40.34%

Ni 231.604†	2.1	0.0262 µg/L	0.18248	0.0262 ppb	0.18248	695.36%
P 214.914†	-23.2	-5.5771 µg/L	0.85992	-5.5771 ppb	0.85992	15.42%
Pb 220.353†	-19.6	-1.1912 µg/L	0.30168	-1.1912 ppb	0.30168	25.33%
S 181.975 Axial†	-8.0	-6.4413 µg/L	1.25937	-6.4413 ppb	1.25937	19.55%
Sb 206.836†	-0.8	-0.1015 µg/L	0.56399	-0.1015 ppb	0.56399	555.80%
Se 196.026†	2.4	0.966 µg/L	0.7740	0.966 ppb	0.7740	80.16%
SiO2†	510.6	55.783 µg/L	2.1179	55.783 ppb	2.1179	3.80%
Si 251.611†	1673.3	27.656 µg/L	3.4020	27.656 ppb	3.4020	12.30%
Sn 189.927†	-2.4	-0.1723 µg/L	0.62320	-0.1723 ppb	0.62320	361.74%
Sr 421.552†	14.5	0.0340 µg/L	0.14885	0.0340 ppb	0.14885	437.55%
Ti 334.940†	199.9	0.2001 µg/L	0.05253	0.2001 ppb	0.05253	26.26%
Tl 190.801†	7.8	1.0455 µg/L	0.47191	1.0455 ppb	0.47191	45.14%
U 409.014†	175.5	10.799 µg/L	5.8338	10.799 ppb	5.8338	54.02%
V 292.402†	-139.1	-0.7562 µg/L	0.81870	-0.7562 ppb	0.81870	108.27%
Zn 213.857†	222.0	1.3959 µg/L	0.09583	1.3959 ppb	0.09583	6.87%

Sequence No.: 31
Sample ID: 1202056867|959109|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 325
Date Collected: 3/29/2010 20:23:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202056867|959109|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	156746.7	156746.7	108	%			20:23:34
1	Al 396.153Radial†	25702.1	23931.5	5201.5	µg/L	5201.5	ppb	20:23:34
1	Ca 317.933Radial†	91602.9	84562.6	4955.0	µg/L	4955.0	ppb	20:23:34
1	Fe 238.204 Radial†	79597.0	73901.7	4913.2	µg/L	4913.2	ppb	20:23:34
1	K 766.490 Radial†	14133.9	11687.7	4808.3	µg/L	4808.3	ppb	20:23:34
1	Mg 279.077 IEC†	13534.4	12398.6	5119.7	µg/L	5119.7	ppb	20:23:34
1	Na 589.592 Radial†	36426.8	32177.5	4919.3	µg/L	4919.3	ppb	20:23:34
1	Sr 421.552†	234639.2	218462.1	511.98	µg/L	511.98	ppb	20:23:32
1	Sc 361.383	1745938.4	1745938.4	104.37	%			20:24:00
1	Y 371.029	1058622.0	1058622.0	103.52	%			20:24:00
1	Ag 328.068†	125737.6	117501.5	483.07	µg/L	483.07	ppb	20:24:00
1	As 188.979†	1319.3	1278.2	541.29	µg/L	541.29	ppb	20:24:20
1	B 249.677†	33274.0	28524.0	477.21	µg/L	477.21	ppb	20:24:00
1	Ba 233.527†	115985.8	111300.4	508.86	µg/L	508.86	ppb	20:24:00
1	Be 313.107†	1634178.2	1566357.7	510.02	µg/L	510.02	ppb	20:24:00
1	Cd 226.502†	72655.8	69705.5	481.06	µg/L	481.06	ppb	20:24:00
1	Co 228.616†	36589.5	35232.8	482.71	µg/L	482.71	ppb	20:24:00
1	Cr 267.716†	60048.3	57371.8	492.64	µg/L	492.64	ppb	20:24:00
1	Cu 324.752†	123069.2	115487.1	503.55	µg/L	503.55	ppb	20:24:00
1	Mn 257.610†	377960.3	362041.8	494.49	µg/L	494.49	ppb	20:24:00
1	Mo 202.031†	15960.8	15347.2	484.91	µg/L	484.91	ppb	20:24:20
1	Ni 231.604†	40582.2	38922.5	497.86	µg/L	497.86	ppb	20:24:00
1	P 214.914†	2194.5	2022.9	476.04	µg/L	476.04	ppb	20:24:20
1	Pb 220.353†	8527.2	8057.5	489.65	µg/L	489.65	ppb	20:24:20
1	S 181.975 Axial†	6385.9	6023.5	4884.2	µg/L	4884.2	ppb	20:24:20
1	Sb 206.836†	3920.5	3669.6	496.03	µg/L	496.03	ppb	20:24:20
1	Se 196.026†	1269.3	1205.2	479	µg/L	479	ppb	20:24:20
1	SiO2†	100911.8	95110.2	10375	µg/L	10375	ppb	20:24:00
1	Si 251.611†	305933.1	292436.5	4825.7	µg/L	4825.7	ppb	20:24:00
1	Sn 189.927†	7294.1	6986.4	498.33	µg/L	498.33	ppb	20:24:20
1	Ti 334.940†	504616.8	482834.4	491.70	µg/L	491.70	ppb	20:24:00
1	Tl 190.801†	3720.9	3685.2	502.13	µg/L	502.13	ppb	20:24:20
1	U 409.014†	7346.5	7517.8	494.93	µg/L	494.93	ppb	20:24:00
1	V 292.402†	94142.3	89765.5	504.14	µg/L	504.14	ppb	20:24:00
1	Zn 213.857†	80129.2	76307.0	476.42	µg/L	476.42	ppb	20:24:00
2	Sc RADIAL	156995.7	156995.7	108	%			20:23:38
2	Al 396.153Radial†	25711.0	23901.9	5195.0	µg/L	5195.0	ppb	20:23:38
2	Ca 317.933Radial†	91646.4	84468.0	4949.5	µg/L	4949.5	ppb	20:23:38
2	Fe 238.204 Radial†	79851.1	74020.2	4921.1	µg/L	4921.1	ppb	20:23:38
2	K 766.490 Radial†	14251.0	11775.6	4844.5	µg/L	4844.5	ppb	20:23:38
2	Mg 279.077 IEC†	13539.7	12383.6	5113.5	µg/L	5113.5	ppb	20:23:38
2	Na 589.592 Radial†	36521.1	32211.4	4924.4	µg/L	4924.4	ppb	20:23:38
2	Sr 421.552†	232493.8	216124.4	506.50	µg/L	506.50	ppb	20:23:36
2	Sc 361.383	1745031.8	1745031.8	104.32	%			20:24:23
2	Y 371.029	1058014.3	1058014.3	103.47	%			20:24:23
2	Ag 328.068†	125573.2	117406.5	482.71	µg/L	482.71	ppb	20:24:23
2	As 188.979†	1314.2	1274.0	539.52	µg/L	539.52	ppb	20:24:43
2	B 249.677†	33315.4	28580.3	478.16	µg/L	478.16	ppb	20:24:23
2	Ba 233.527†	115639.2	111026.0	507.61	µg/L	507.61	ppb	20:24:23
2	Be 313.107†	1628518.8	1561746.1	508.52	µg/L	508.52	ppb	20:24:23
2	Cd 226.502†	72273.4	69375.2	478.78	µg/L	478.78	ppb	20:24:23
2	Co 228.616†	36323.3	34995.9	479.47	µg/L	479.47	ppb	20:24:23
2	Cr 267.716†	59881.6	57241.8	491.51	µg/L	491.51	ppb	20:24:23
2	Cu 324.752†	122554.8	115055.3	501.70	µg/L	501.70	ppb	20:24:23
2	Mn 257.610†	376730.4	361051.0	493.14	µg/L	493.14	ppb	20:24:23
2	Mo 202.031†	15922.5	15318.4	484.00	µg/L	484.00	ppb	20:24:43
2	Ni 231.604†	40247.2	38621.5	494.01	µg/L	494.01	ppb	20:24:23
2	P 214.914†	2196.8	2026.3	476.84	µg/L	476.84	ppb	20:24:43
2	Pb 220.353†	8465.1	8002.2	486.27	µg/L	486.27	ppb	20:24:43

2	S 181.975 Axial†	6356.7	5998.6	4864.1 µg/L	4864.1 ppb	20:24:43
2	Sb 206.836†	3895.9	3647.9	493.11 µg/L	493.11 ppb	20:24:43
2	Se 196.026†	1254.0	1191.2	473 µg/L	473 ppb	20:24:43
2	SiO2†	100322.8	94595.9	10318 µg/L	10318 ppb	20:24:23
2	Si 251.611†	304957.5	291653.6	4812.7 µg/L	4812.7 ppb	20:24:23
2	Sn 189.927†	7261.2	6958.5	496.35 µg/L	496.35 ppb	20:24:43
2	Ti 334.940†	502978.4	481515.0	490.34 µg/L	490.34 ppb	20:24:23
2	Tl 190.801†	3664.0	3632.6	495.07 µg/L	495.07 ppb	20:24:43
2	U 409.014†	7772.1	7929.4	520.33 µg/L	520.33 ppb	20:24:23
2	V 292.402†	93997.2	89673.2	503.63 µg/L	503.63 ppb	20:24:23
2	Zn 213.857†	79919.0	76145.3	475.42 µg/L	475.42 ppb	20:24:23
3	Sc RADIAL	156164.6	156164.6	107 %		20:23:42
3	Al 396.153Radial†	25652.1	23973.9	5210.9 µg/L	5210.9 ppb	20:23:42
3	Ca 317.933Radial†	91471.8	84757.8	4966.4 µg/L	4966.4 ppb	20:23:42
3	Fe 238.204 Radial†	79270.8	73873.1	4911.3 µg/L	4911.3 ppb	20:23:42
3	K 766.490 Radial†	13996.5	11608.5	4775.7 µg/L	4775.7 ppb	20:23:42
3	Mg 279.077 IEC†	13392.7	12313.2	5084.4 µg/L	5084.4 ppb	20:23:42
3	Na 589.592 Radial†	36448.6	32324.1	4941.8 µg/L	4941.8 ppb	20:23:42
3	Sr 421.552†	233466.4	218180.9	511.32 µg/L	511.32 ppb	20:23:40
3	Sc 361.383	1768031.6	1768031.6	105.69 %		20:24:46
3	Y 371.029	1071355.4	1071355.4	104.77 %		20:24:46
3	Ag 328.068†	126891.9	117088.2	481.41 µg/L	481.41 ppb	20:24:46
3	As 188.979†	1324.5	1267.4	536.73 µg/L	536.73 ppb	20:25:06
3	B 249.677†	33845.0	28665.8	479.59 µg/L	479.59 ppb	20:24:46
3	Ba 233.527†	117533.1	111375.8	509.20 µg/L	509.20 ppb	20:24:46
3	Be 313.107†	1650050.4	1561809.9	508.54 µg/L	508.54 ppb	20:24:46
3	Cd 226.502†	73684.3	69808.8	481.77 µg/L	481.77 ppb	20:24:46
3	Co 228.616†	36917.5	35105.1	480.97 µg/L	480.97 ppb	20:24:46
3	Cr 267.716†	60599.7	57174.5	490.94 µg/L	490.94 ppb	20:24:46
3	Cu 324.752†	124098.7	114987.7	501.39 µg/L	501.39 ppb	20:24:46
3	Mn 257.610†	382440.2	361755.2	494.10 µg/L	494.10 ppb	20:24:46
3	Mo 202.031†	16010.5	15203.1	480.36 µg/L	480.36 ppb	20:25:06
3	Ni 231.604†	40962.8	38796.7	496.25 µg/L	496.25 ppb	20:24:46
3	P 214.914†	2197.9	1999.9	470.55 µg/L	470.55 ppb	20:25:06
3	Pb 220.353†	8533.5	7961.3	483.80 µg/L	483.80 ppb	20:25:06
3	S 181.975 Axial†	6377.7	5939.3	4816.0 µg/L	4816.0 ppb	20:25:06
3	Sb 206.836†	3923.2	3625.2	489.99 µg/L	489.99 ppb	20:25:06
3	Se 196.026†	1265.0	1185.9	471 µg/L	471 ppb	20:25:06
3	SiO2†	101815.4	94757.0	10336 µg/L	10336 ppb	20:24:46
3	Si 251.611†	309448.3	292099.7	4820.2 µg/L	4820.2 ppb	20:24:46
3	Sn 189.927†	7309.3	6913.5	493.15 µg/L	493.15 ppb	20:25:06
3	Ti 334.940†	510228.3	482102.2	490.95 µg/L	490.95 ppb	20:24:46
3	Tl 190.801†	3713.6	3633.9	495.23 µg/L	495.23 ppb	20:25:06
3	U 409.014†	7645.0	7712.2	506.95 µg/L	506.95 ppb	20:24:46
3	V 292.402†	95349.8	89780.8	504.18 µg/L	504.18 ppb	20:24:46
3	Zn 213.857†	81367.2	76519.0	477.76 µg/L	477.76 ppb	20:24:46

Mean Data: 1202056867|959109|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1753000.6	104.80	%	0.779				0.74%
Sc RADIAL	156635.7	107	%	0.3				0.27%
Y 371.029	1062663.9	103.92	%	0.737				0.71%
Ag 328.068†	117332.1	482.40	µg/L	0.874	482.40	ppb	0.874	0.18%
Al 396.153Radial†	23935.8	5202.5	µg/L	8.00	5202.5	ppb	8.00	0.15%
As 188.979†	1273.2	539.18	µg/L	2.300	539.18	ppb	2.300	0.43%
B 249.677†	28590.0	478.32	µg/L	1.202	478.32	ppb	1.202	0.25%
Ba 233.527†	111234.1	508.56	µg/L	0.841	508.56	ppb	0.841	0.17%
Be 313.107†	1563304.6	509.03	µg/L	0.857	509.03	ppb	0.857	0.17%
Ca 317.933Radial†	84596.2	4957.0	µg/L	8.66	4957.0	ppb	8.66	0.17%
Cd 226.502†	69629.8	480.54	µg/L	1.565	480.54	ppb	1.565	0.33%
Co 228.616†	35111.2	481.05	µg/L	1.625	481.05	ppb	1.625	0.34%
Cr 267.716†	57262.7	491.70	µg/L	0.867	491.70	ppb	0.867	0.18%
Cu 324.752†	115176.7	502.21	µg/L	1.171	502.21	ppb	1.171	0.23%
Fe 238.204 Radial†	73931.7	4915.2	µg/L	5.18	4915.2	ppb	5.18	0.11%
K 766.490 Radial†	11690.6	4809.5	µg/L	34.41	4809.5	ppb	34.41	0.72%
Mg 279.077 IEC†	12365.1	5105.9	µg/L	18.85	5105.9	ppb	18.85	0.37%
Mn 257.610†	361616.0	493.91	µg/L	0.697	493.91	ppb	0.697	0.14%
Mo 202.031†	15289.6	483.09	µg/L	2.408	483.09	ppb	2.408	0.50%
Na 589.592 Radial†	32237.7	4928.5	µg/L	11.77	4928.5	ppb	11.77	0.24%

Ni 231.604†	38780.3	496.04 µg/L	1.934	496.04 ppb	1.934	0.39%
P 214.914†	2016.4	474.48 µg/L	3.422	474.48 ppb	3.422	0.72%
Pb 220.353†	8007.0	486.57 µg/L	2.935	486.57 ppb	2.935	0.60%
S 181.975 Axial†	5987.1	4854.7 µg/L	35.06	4854.7 ppb	35.06	0.72%
Sb 206.836†	3647.6	493.05 µg/L	3.022	493.05 ppb	3.022	0.61%
Se 196.026†	1194.1	475 µg/L	3.9	475 ppb	3.9	0.83%
SiO2†	94821.0	10343 µg/L	28.7	10343 ppb	28.7	0.28%
Si 251.611†	292063.3	4819.5 µg/L	6.49	4819.5 ppb	6.49	0.13%
Sn 189.927†	6952.8	495.94 µg/L	2.618	495.94 ppb	2.618	0.53%
Sr 421.552†	217589.1	509.93 µg/L	2.991	509.93 ppb	2.991	0.59%
Ti 334.940†	482150.5	490.99 µg/L	0.679	490.99 ppb	0.679	0.14%
Tl 190.801†	3650.6	497.48 µg/L	4.031	497.48 ppb	4.031	0.81%
U 409.014†	7719.8	507.40 µg/L	12.704	507.40 ppb	12.704	2.50%
V 292.402†	89739.8	503.98 µg/L	0.306	503.98 ppb	0.306	0.06%
Zn 213.857†	76323.8	476.53 µg/L	1.174	476.53 ppb	1.174	0.25%

Sequence No.: 33
Sample ID: 1202056868|959109|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 327
Date Collected: 3/29/2010 20:28:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202056868|959109|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	155950.8	155950.8	107	%			20:28:42
1	Al 396.153Radial†	22.6	53.0	11.525	µg/L	11.525	ppb	20:29:02
1	Ca 317.933Radial†	1181.2	487.8	28.583	µg/L	28.583	ppb	20:29:02
1	Fe 238.204 Radial†	335.6	200.4	13.323	µg/L	13.323	ppb	20:29:02
1	K 766.490 Radial†	1555.3	-1.4	-0.6101	µg/L	-0.6101	ppb	20:28:42
1	Mg 279.077 IEC†	178.1	-20.2	-8.3346	µg/L	-8.3346	ppb	20:29:02
1	Na 589.592 Radial†	2483.6	626.5	95.859	µg/L	95.859	ppb	20:28:42
1	Sr 421.552†	-192.1	98.4	0.2305	µg/L	0.2305	ppb	20:28:42
1	Sc 361.383	1760747.3	1760747.3	105.26	%			20:29:50
1	Y 371.029	1075796.3	1075796.3	105.20	%			20:29:50
1	Ag 328.068†	2884.0	-227.1	-0.9321	µg/L	-0.9321	ppb	20:29:52
1	As 188.979†	-10.8	4.0	1.6623	µg/L	1.6623	ppb	20:30:12
1	B 249.677†	4706.0	1115.2	18.723	µg/L	18.723	ppb	20:29:52
1	Ba 233.527†	-139.7	42.3	0.1929	µg/L	0.1929	ppb	20:30:12
1	Be 313.107†	-886.0	-181.6	-0.0594	µg/L	-0.0594	ppb	20:29:52
1	Cd 226.502†	-127.9	-27.1	-0.1886	µg/L	-0.1886	ppb	20:30:12
1	Co 228.616†	-191.5	-5.3	-0.0729	µg/L	-0.0729	ppb	20:30:12
1	Cr 267.716†	197.1	27.0	0.2327	µg/L	0.2327	ppb	20:30:12
1	Cu 324.752†	2755.3	192.8	0.8389	µg/L	0.8389	ppb	20:29:52
1	Mn 257.610†	429.0	327.6	0.4479	µg/L	0.4479	ppb	20:30:12
1	Mo 202.031†	-30.3	26.4	0.8330	µg/L	0.8330	ppb	20:30:12
1	Ni 231.604†	-62.3	-18.3	-0.2340	µg/L	-0.2340	ppb	20:30:12
1	P 214.914†	50.0	-32.1	-7.7135	µg/L	-7.7135	ppb	20:30:12
1	Pb 220.353†	119.6	1.2	0.0781	µg/L	0.0781	ppb	20:30:12
1	S 181.975 Axial†	125.4	24.3	19.694	µg/L	19.694	ppb	20:30:12
1	Sb 206.836†	83.8	-7.1	-0.9481	µg/L	-0.9481	ppb	20:30:12
1	Se 196.026†	1.0	-10.0	-3.96	µg/L	-3.96	ppb	20:30:12
1	SiO2†	36457.7	33063.3	3613.8	µg/L	3613.8	ppb	20:29:52
1	Si 251.611†	107867.9	101802.1	1683.3	µg/L	1683.3	ppb	20:29:52
1	Sn 189.927†	-5.9	-7.6	-0.5392	µg/L	-0.5392	ppb	20:30:12
1	Ti 334.940†	1128.2	435.5	0.4458	µg/L	0.4458	ppb	20:29:52
1	Tl 190.801†	-115.9	10.2	1.3758	µg/L	1.3758	ppb	20:30:12
1	U 409.014†	-521.9	-16.8	-1.0757	µg/L	-1.0757	ppb	20:29:52
1	V 292.402†	322.5	-125.5	-0.6895	µg/L	-0.6895	ppb	20:29:52
1	Zn 213.857†	711.3	211.4	1.3302	µg/L	1.3302	ppb	20:30:12
2	Sc RADIAL	157839.8	157839.8	108	%			20:29:04
2	Al 396.153Radial†	-1.9	30.1	6.5287	µg/L	6.5287	ppb	20:29:24
2	Ca 317.933Radial†	1125.6	423.3	24.801	µg/L	24.801	ppb	20:29:24
2	Fe 238.204 Radial†	332.6	193.9	12.890	µg/L	12.890	ppb	20:29:24
2	K 766.490 Radial†	1665.0	82.5	33.929	µg/L	33.929	ppb	20:29:04
2	Mg 279.077 IEC†	184.7	-16.1	-6.6459	µg/L	-6.6459	ppb	20:29:24
2	Na 589.592 Radial†	2619.9	724.6	110.84	µg/L	110.84	ppb	20:29:04
2	Sr 421.552†	-262.9	35.2	0.0823	µg/L	0.0823	ppb	20:29:04
2	Sc 361.383	1790165.6	1790165.6	107.02	%			20:30:14
2	Y 371.029	1093133.4	1093133.4	106.90	%			20:30:14
2	Ag 328.068†	3063.1	-104.8	-0.4306	µg/L	-0.4306	ppb	20:30:16
2	As 188.979†	-5.9	8.7	3.6605	µg/L	3.6605	ppb	20:30:36
2	B 249.677†	4663.8	1002.3	16.827	µg/L	16.827	ppb	20:30:16
2	Ba 233.527†	-155.2	30.0	0.1370	µg/L	0.1370	ppb	20:30:36
2	Be 313.107†	-476.7	214.6	0.0699	µg/L	0.0699	ppb	20:30:16
2	Cd 226.502†	-100.6	0.4	0.0012	µg/L	0.0012	ppb	20:30:36
2	Co 228.616†	-194.5	-5.1	-0.0705	µg/L	-0.0705	ppb	20:30:36
2	Cr 267.716†	200.1	26.8	0.2302	µg/L	0.2302	ppb	20:30:36
2	Cu 324.752†	2797.6	189.3	0.8243	µg/L	0.8243	ppb	20:30:16
2	Mn 257.610†	414.4	307.2	0.4201	µg/L	0.4201	ppb	20:30:36
2	Mo 202.031†	-32.6	24.8	0.7823	µg/L	0.7823	ppb	20:30:36
2	Ni 231.604†	-56.6	-12.0	-0.1531	µg/L	-0.1531	ppb	20:30:36
2	P 214.914†	72.1	-12.2	-2.9498	µg/L	-2.9498	ppb	20:30:36
2	Pb 220.353†	73.7	-43.5	-2.6348	µg/L	-2.6348	ppb	20:30:36

2	S 181.975 Axial†	120.2	17.5	14.209 µg/L	14.209 ppb	20:30:36
2	Sb 206.836†	86.2	-6.1	-0.8153 µg/L	-0.8153 ppb	20:30:36
2	Se 196.026†	-2.6	-13.4	-5.28 µg/L	-5.28 ppb	20:30:36
2	SiO2†	37358.0	33335.4	3643.6 µg/L	3643.6 ppb	20:30:16
2	Si 251.611†	110459.1	102539.3	1695.5 µg/L	1695.5 ppb	20:30:16
2	Sn 189.927†	-6.4	-8.0	-0.5675 µg/L	-0.5675 ppb	20:30:36
2	Ti 334.940†	1109.1	400.0	0.4090 µg/L	0.4090 ppb	20:30:16
2	Tl 190.801†	-125.2	3.3	0.4435 µg/L	0.4435 ppb	20:30:36
2	U 409.014†	-512.9	-0.2	-0.0331 µg/L	-0.0331 ppb	20:30:16
2	V 292.402†	390.0	-67.4	-0.3674 µg/L	-0.3674 ppb	20:30:16
2	Zn 213.857†	717.3	205.9	1.2953 µg/L	1.2953 ppb	20:30:36
3	Sc RADIAL	155985.4	155985.4	107 %		20:29:26
3	Al 396.153Radial†	10.1	41.3	8.9851 µg/L	8.9851 ppb	20:29:46
3	Ca 317.933Radial†	1140.2	449.2	26.324 µg/L	26.324 ppb	20:29:46
3	Fe 238.204 Radial†	310.8	177.1	11.776 µg/L	11.776 ppb	20:29:46
3	K 766.490 Radial†	1637.4	75.0	30.843 µg/L	30.843 ppb	20:29:26
3	Mg 279.077 IEC†	175.5	-22.7	-9.3351 µg/L	-9.3351 ppb	20:29:46
3	Na 589.592 Radial†	2562.9	700.1	107.09 µg/L	107.09 ppb	20:29:26
3	Sr 421.552†	-258.0	36.9	0.0863 µg/L	0.0863 ppb	20:29:26
3	Sc 361.383	1808598.8	1808598.8	108.12 %		20:30:38
3	Y 371.029	1103697.9	1103697.9	107.93 %		20:30:38
3	Ag 328.068†	3080.6	-117.8	-0.4590 µg/L	-0.4590 ppb	20:30:40
3	As 188.979†	-19.0	-3.3	-1.3666 µg/L	-1.3666 ppb	20:31:00
3	B 249.677†	4718.9	1008.8	16.936 µg/L	16.936 ppb	20:30:40
3	Ba 233.527†	-152.9	33.6	0.1530 µg/L	0.1530 ppb	20:31:00
3	Be 313.107†	-540.5	160.2	0.0593 µg/L	0.0593 ppb	20:30:40
3	Cd 226.502†	-106.7	-4.3	-0.0307 µg/L	-0.0307 ppb	20:31:00
3	Co 228.616†	-176.5	13.3	0.1820 µg/L	0.1820 ppb	20:31:00
3	Cr 267.716†	239.4	61.2	0.5073 µg/L	0.5073 ppb	20:31:00
3	Cu 324.752†	2700.0	72.3	0.3355 µg/L	0.3355 ppb	20:30:40
3	Mn 257.610†	418.0	306.6	0.4193 µg/L	0.4193 ppb	20:31:00
3	Mo 202.031†	-39.8	18.4	0.5817 µg/L	0.5817 ppb	20:31:00
3	Ni 231.604†	-55.6	-10.6	-0.1350 µg/L	-0.1350 ppb	20:31:00
3	P 214.914†	57.1	-26.7	-6.4170 µg/L	-6.4170 ppb	20:31:00
3	Pb 220.353†	84.1	-34.6	-2.1127 µg/L	-2.1127 ppb	20:31:00
3	S 181.975 Axial†	119.9	16.1	13.026 µg/L	13.026 ppb	20:31:00
3	Sb 206.836†	83.5	-9.4	-1.2705 µg/L	-1.2705 ppb	20:31:00
3	Se 196.026†	34.2	20.7	8.23 µg/L	8.23 ppb	20:31:00
3	SiO2†	37261.4	32890.3	3594.9 µg/L	3594.9 ppb	20:30:40
3	Si 251.611†	110421.6	101452.6	1677.5 µg/L	1677.5 ppb	20:30:40
3	Sn 189.927†	1.0	-1.1	-0.0762 µg/L	-0.0762 ppb	20:31:00
3	Ti 334.940†	1055.6	340.0	0.3383 µg/L	0.3383 ppb	20:30:40
3	Tl 190.801†	-133.9	-3.6	-0.4826 µg/L	-0.4826 ppb	20:31:00
3	U 409.014†	-106.3	380.8	23.486 µg/L	23.486 ppb	20:30:40
3	V 292.402†	316.3	-139.2	-0.7505 µg/L	-0.7505 ppb	20:30:40
3	Zn 213.857†	713.0	195.0	1.2271 µg/L	1.2271 ppb	20:31:00

Mean Data: 1202056868|959109|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1786503.9	106.80	%	1.443				1.35%
Sc RADIAL	156592.0	107	%	0.7				0.69%
Y 371.029	1090875.9	106.68	%	1.378				1.29%
Ag 328.068†	-149.9	-0.6072	µg/L	0.28174	-0.6072	ppb	0.28174	46.40%
Al 396.153Radial†	41.4	9.0128	µg/L	2.49807	9.0128	ppb	2.49807	27.72%
As 188.979†	3.1	1.3187	µg/L	2.53109	1.3187	ppb	2.53109	191.93%
B 249.677†	1042.1	17.495	µg/L	1.0647	17.495	ppb	1.0647	6.09%
Ba 233.527†	35.3	0.1610	µg/L	0.02882	0.1610	ppb	0.02882	17.90%
Be 313.107†	64.4	0.0232	µg/L	0.07179	0.0232	ppb	0.07179	309.06%
Ca 317.933Radial†	453.4	26.569	µg/L	1.9028	26.569	ppb	1.9028	7.16%
Cd 226.502†	-10.3	-0.0727	µg/L	0.10161	-0.0727	ppb	0.10161	139.72%
Co 228.616†	1.0	0.0129	µg/L	0.14648	0.0129	ppb	0.14648	>999.9%
Cr 267.716†	38.3	0.3234	µg/L	0.15925	0.3234	ppb	0.15925	49.24%
Cu 324.752†	151.5	0.6662	µg/L	0.28654	0.6662	ppb	0.28654	43.01%
Fe 238.204 Radial†	190.5	12.663	µg/L	0.7981	12.663	ppb	0.7981	6.30%
K 766.490 Radial†	52.0	21.387	µg/L	19.1126	21.387	ppb	19.1126	89.36%
Mg 279.077 IEC†	-19.7	-8.1052	µg/L	1.35921	-8.1052	ppb	1.35921	16.77%
Mn 257.610†	313.8	0.4291	µg/L	0.01628	0.4291	ppb	0.01628	3.79%
Mo 202.031†	23.2	0.7323	µg/L	0.13290	0.7323	ppb	0.13290	18.15%
Na 589.592 Radial†	683.7	104.60	µg/L	7.797	104.60	ppb	7.797	7.45%

Ni 231.604†	-13.6	-0.1740 µg/L	0.05275	-0.1740 ppb	0.05275	30.31%
P 214.914†	-23.7	-5.6934 µg/L	2.46290	-5.6934 ppb	2.46290	43.26%
Pb 220.353†	-25.6	-1.5564 µg/L	1.43946	-1.5564 ppb	1.43946	92.48%
S 181.975 Axial†	19.3	15.643 µg/L	3.5579	15.643 ppb	3.5579	22.74%
Sb 206.836†	-7.5	-1.0113 µg/L	0.23412	-1.0113 ppb	0.23412	23.15%
Se 196.026†	-0.9	-0.337 µg/L	7.4460	-0.337 ppb	7.4460	>999.9%
SiO2†	33096.3	3617.4 µg/L	24.53	3617.4 ppb	24.53	0.68%
Si 251.611†	101931.3	1685.4 µg/L	9.17	1685.4 ppb	9.17	0.54%
Sn 189.927†	-5.6	-0.3943 µg/L	0.27586	-0.3943 ppb	0.27586	69.96%
Sr 421.552†	56.8	0.1330 µg/L	0.08445	0.1330 ppb	0.08445	63.48%
Ti 334.940†	391.8	0.3977 µg/L	0.05461	0.3977 ppb	0.05461	13.73%
Tl 190.801†	3.3	0.4456 µg/L	0.92922	0.4456 ppb	0.92922	208.53%
U 409.014†	121.3	7.4590 µg/L	13.88940	7.4590 ppb	13.88940	186.21%
V 292.402†	-110.7	-0.6025 µg/L	0.20584	-0.6025 ppb	0.20584	34.17%
Zn 213.857†	204.1	1.2842 µg/L	0.05246	1.2842 ppb	0.05246	4.08%

Sequence No.: 34
Sample ID: 1202056869|959109|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 328
Date Collected: 3/29/2010 20:31:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202056869|959109|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	155173.2	155173.2	106	%			20:31:40
1	Al 396.153Radial†	25444.3	23931.7	5202.0	µg/L	5202.0	ppb	20:31:40
1	Ca 317.933Radial†	90784.5	84657.6	4960.6	µg/L	4960.6	ppb	20:31:40
1	Fe 238.204 Radial†	78628.2	73742.1	4902.6	µg/L	4902.6	ppb	20:31:40
1	K 766.490 Radial†	14184.1	11868.1	4882.5	µg/L	4882.5	ppb	20:31:40
1	Mg 279.077 IEC†	13252.1	12261.1	5062.7	µg/L	5062.7	ppb	20:31:40
1	Na 589.592 Radial†	37067.5	33122.8	5063.9	µg/L	5063.9	ppb	20:31:40
1	Sr 421.552†	227630.8	214091.5	501.74	µg/L	501.74	ppb	20:31:38
1	Sc 361.383	1761502.0	1761502.0	105.30	%			20:31:53
1	Y 371.029	1067002.4	1067002.4	104.34	%			20:31:53
1	Ag 328.068†	125554.4	116263.1	477.99	µg/L	477.99	ppb	20:31:53
1	As 188.979†	1318.7	1266.5	536.32	µg/L	536.32	ppb	20:32:13
1	B 249.677†	34862.3	29750.6	497.82	µg/L	497.82	ppb	20:31:53
1	Ba 233.527†	116159.4	110483.5	505.12	µg/L	505.12	ppb	20:31:53
1	Be 313.107†	1635678.5	1553948.8	505.97	µg/L	505.97	ppb	20:31:53
1	Cd 226.502†	72484.2	68927.6	475.69	µg/L	475.69	ppb	20:31:53
1	Co 228.616†	36563.5	34898.4	478.13	µg/L	478.13	ppb	20:31:53
1	Cr 267.716†	60102.4	56914.7	488.72	µg/L	488.72	ppb	20:31:53
1	Cu 324.752†	122861.2	114247.7	498.16	µg/L	498.16	ppb	20:31:53
1	Mn 257.610†	377210.3	358130.0	489.15	µg/L	489.15	ppb	20:31:53
1	Mo 202.031†	15727.8	14990.8	473.65	µg/L	473.65	ppb	20:32:13
1	Ni 231.604†	40361.4	38369.3	490.79	µg/L	490.79	ppb	20:31:53
1	P 214.914†	2170.4	1981.5	466.20	µg/L	466.20	ppb	20:32:13
1	Pb 220.353†	8431.7	7894.5	479.75	µg/L	479.75	ppb	20:32:13
1	S 181.975 Axial†	6297.0	5885.0	4771.9	µg/L	4771.9	ppb	20:32:13
1	Sb 206.836†	3844.4	3564.1	481.68	µg/L	481.68	ppb	20:32:13
1	Se 196.026†	1245.3	1171.7	466	µg/L	466	ppb	20:32:13
1	SiO2†	137768.6	129256.3	14107	µg/L	14107	ppb	20:31:53
1	Si 251.611†	420279.6	398433.6	6578.5	µg/L	6578.5	ppb	20:31:53
1	Sn 189.927†	7190.0	6825.8	486.90	µg/L	486.90	ppb	20:32:13
1	Ti 334.940†	504113.7	478085.0	486.86	µg/L	486.86	ppb	20:31:53
1	Tl 190.801†	3635.9	3573.0	487.00	µg/L	487.00	ppb	20:32:13
1	U 409.014†	7293.2	7404.9	487.70	µg/L	487.70	ppb	20:31:53
1	V 292.402†	94226.2	89048.2	500.03	µg/L	500.03	ppb	20:31:53
1	Zn 213.857†	79872.0	75384.4	470.66	µg/L	470.66	ppb	20:31:53
2	Sc RADIAL	156899.2	156899.2	108	%			20:31:44
2	Al 396.153Radial†	25617.4	23829.6	5179.6	µg/L	5179.6	ppb	20:31:44
2	Ca 317.933Radial†	90933.3	83857.8	4913.7	µg/L	4913.7	ppb	20:31:44
2	Fe 238.204 Radial†	78908.7	73190.4	4865.9	µg/L	4865.9	ppb	20:31:44
2	K 766.490 Radial†	14241.7	11775.1	4844.3	µg/L	4844.3	ppb	20:31:44
2	Mg 279.077 IEC†	13381.3	12244.2	5055.9	µg/L	5055.9	ppb	20:31:44
2	Na 589.592 Radial†	37010.1	32686.4	4997.1	µg/L	4997.1	ppb	20:31:44
2	Sr 421.552†	231155.0	215013.4	503.90	µg/L	503.90	ppb	20:31:42
2	Sc 361.383	1755110.4	1755110.4	104.92	%			20:32:16
2	Y 371.029	1062740.2	1062740.2	103.93	%			20:32:16
2	Ag 328.068†	124228.5	115433.7	474.58	µg/L	474.58	ppb	20:32:16
2	As 188.979†	1305.9	1258.9	533.08	µg/L	533.08	ppb	20:32:36
2	B 249.677†	34397.7	29428.3	492.43	µg/L	492.43	ppb	20:32:16
2	Ba 233.527†	114769.6	109560.5	500.91	µg/L	500.91	ppb	20:32:16
2	Be 313.107†	1612974.7	1537966.8	500.78	µg/L	500.78	ppb	20:32:16
2	Cd 226.502†	71427.6	68171.1	470.46	µg/L	470.46	ppb	20:32:16
2	Co 228.616†	35967.1	34456.4	472.08	µg/L	472.08	ppb	20:32:16
2	Cr 267.716†	59284.8	56343.4	483.81	µg/L	483.81	ppb	20:32:16
2	Cu 324.752†	121545.6	113418.8	494.55	µg/L	494.55	ppb	20:32:16
2	Mn 257.610†	372734.9	355169.1	485.10	µg/L	485.10	ppb	20:32:16
2	Mo 202.031†	15763.3	15079.0	476.44	µg/L	476.44	ppb	20:32:36
2	Ni 231.604†	39797.0	37971.0	485.69	µg/L	485.69	ppb	20:32:16
2	P 214.914†	2160.1	1979.2	465.69	µg/L	465.69	ppb	20:32:36
2	Pb 220.353†	8415.6	7908.4	480.58	µg/L	480.58	ppb	20:32:36

2	S 181.975 Axial†	6313.6	5922.6	4802.4 µg/L	4802.4 ppb	20:32:36
2	Sb 206.836†	3883.0	3614.2	488.54 µg/L	488.54 ppb	20:32:36
2	Se 196.026†	1227.9	1159.4	461 µg/L	461 ppb	20:32:36
2	SiO2†	136216.4	128253.3	13998 µg/L	13998 ppb	20:32:16
2	Si 251.611†	414914.9	394774.0	6518.0 µg/L	6518.0 ppb	20:32:16
2	Sn 189.927†	7187.1	6848.0	488.46 µg/L	488.46 ppb	20:32:36
2	Ti 334.940†	497936.6	473941.0	482.63 µg/L	482.63 ppb	20:32:16
2	Tl 190.801†	3627.1	3577.2	487.50 µg/L	487.50 ppb	20:32:36
2	U 409.014†	7469.7	7598.4	499.35 µg/L	499.35 ppb	20:32:16
2	V 292.402†	92923.6	88132.5	494.98 µg/L	494.98 ppb	20:32:16
2	Zn 213.857†	78672.7	74517.6	465.24 µg/L	465.24 ppb	20:32:16
3	Sc RADIAL	154673.6	154673.6	106 %		20:31:48
3	Al 396.153Radial†	25364.6	23933.8	5202.4 µg/L	5202.4 ppb	20:31:48
3	Ca 317.933Radial†	89849.9	84052.4	4925.1 µg/L	4925.1 ppb	20:31:48
3	Fe 238.204 Radial†	77863.0	73259.7	4870.6 µg/L	4870.6 ppb	20:31:48
3	K 766.490 Radial†	14036.5	11772.1	4843.0 µg/L	4843.0 ppb	20:31:48
3	Mg 279.077 IEC†	13183.2	12236.3	5052.6 µg/L	5052.6 ppb	20:31:48
3	Na 589.592 Radial†	36715.1	32903.2	5030.3 µg/L	5030.3 ppb	20:31:48
3	Sr 421.552†	229351.6	216403.8	507.15 µg/L	507.15 ppb	20:31:46
3	Sc 361.383	1749797.0	1749797.0	104.60 %		20:32:39
3	Y 371.029	1059994.9	1059994.9	103.66 %		20:32:39
3	Ag 328.068†	123685.5	115274.1	473.97 µg/L	473.97 ppb	20:32:39
3	As 188.979†	1305.1	1261.8	534.33 µg/L	534.33 ppb	20:32:59
3	B 249.677†	34390.8	29521.3	493.98 µg/L	493.98 ppb	20:32:39
3	Ba 233.527†	114376.9	109517.3	500.71 µg/L	500.71 ppb	20:32:39
3	Be 313.107†	1610890.2	1540642.2	501.65 µg/L	501.65 ppb	20:32:39
3	Cd 226.502†	71427.6	68377.9	471.89 µg/L	471.89 ppb	20:32:39
3	Co 228.616†	35913.1	34508.9	472.80 µg/L	472.80 ppb	20:32:39
3	Cr 267.716†	59176.2	56411.2	484.38 µg/L	484.38 ppb	20:32:39
3	Cu 324.752†	121092.5	113337.3	494.21 µg/L	494.21 ppb	20:32:39
3	Mn 257.610†	371785.9	355340.7	485.34 µg/L	485.34 ppb	20:32:39
3	Mo 202.031†	15659.5	15025.5	474.75 µg/L	474.75 ppb	20:32:59
3	Ni 231.604†	39667.9	37962.7	485.59 µg/L	485.59 ppb	20:32:39
3	P 214.914†	2173.7	1998.5	470.31 µg/L	470.31 ppb	20:32:59
3	Pb 220.353†	8340.4	7860.8	477.69 µg/L	477.69 ppb	20:32:59
3	S 181.975 Axial†	6267.6	5896.9	4781.6 µg/L	4781.6 ppb	20:32:59
3	Sb 206.836†	3843.7	3587.8	484.95 µg/L	484.95 ppb	20:32:59
3	Se 196.026†	1216.1	1151.7	458 µg/L	458 ppb	20:32:59
3	SiO2†	135757.7	128209.1	13993 µg/L	13993 ppb	20:32:39
3	Si 251.611†	413665.6	394780.5	6518.1 µg/L	6518.1 ppb	20:32:39
3	Sn 189.927†	7131.3	6815.4	486.15 µg/L	486.15 ppb	20:32:59
3	Ti 334.940†	496950.9	474439.8	483.14 µg/L	483.14 ppb	20:32:39
3	Tl 190.801†	3586.0	3548.5	483.66 µg/L	483.66 ppb	20:32:59
3	U 409.014†	7658.5	7800.5	511.91 µg/L	511.91 ppb	20:32:39
3	V 292.402†	92890.1	88369.4	496.28 µg/L	496.28 ppb	20:32:39
3	Zn 213.857†	78647.3	74721.0	466.52 µg/L	466.52 ppb	20:32:39

Mean Data: 1202056869|959109|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1755469.8	104.94	%	0.350				0.33%
Sc RADIAL	155582.0	107	%	0.8				0.75%
Y 371.029	1063245.8	103.98	%	0.345				0.33%
Ag 328.068†	115657.0	475.52	µg/L	2.168	475.52	ppb	2.168	0.46%
Al 396.153Radial†	23898.4	5194.7	µg/L	13.07	5194.7	ppb	13.07	0.25%
As 188.979†	1262.4	534.58	µg/L	1.631	534.58	ppb	1.631	0.31%
B 249.677†	29566.8	494.74	µg/L	2.773	494.74	ppb	2.773	0.56%
Ba 233.527†	109853.8	502.25	µg/L	2.494	502.25	ppb	2.494	0.50%
Be 313.107†	1544185.9	502.80	µg/L	2.784	502.80	ppb	2.784	0.55%
Ca 317.933Radial†	84189.3	4933.1	µg/L	24.44	4933.1	ppb	24.44	0.50%
Cd 226.502†	68492.2	472.68	µg/L	2.699	472.68	ppb	2.699	0.57%
Co 228.616†	34621.2	474.34	µg/L	3.308	474.34	ppb	3.308	0.70%
Cr 267.716†	56556.5	485.64	µg/L	2.690	485.64	ppb	2.690	0.55%
Cu 324.752†	113668.0	495.64	µg/L	2.186	495.64	ppb	2.186	0.44%
Fe 238.204 Radial†	73397.4	4879.7	µg/L	19.98	4879.7	ppb	19.98	0.41%
K 766.490 Radial†	11805.1	4856.6	µg/L	22.46	4856.6	ppb	22.46	0.46%
Mg 279.077 IEC†	12247.2	5057.1	µg/L	5.18	5057.1	ppb	5.18	0.10%
Mn 257.610†	356213.3	486.53	µg/L	2.271	486.53	ppb	2.271	0.47%
Mo 202.031†	15031.8	474.95	µg/L	1.401	474.95	ppb	1.401	0.30%
Na 589.592 Radial†	32904.1	5030.4	µg/L	33.36	5030.4	ppb	33.36	0.66%

Ni 231.604†	38101.0	487.36 µg/L	2.973	487.36 ppb	2.973	0.61%
P 214.914†	1986.4	467.40 µg/L	2.533	467.40 ppb	2.533	0.54%
Pb 220.353†	7887.9	479.34 µg/L	1.490	479.34 ppb	1.490	0.31%
S 181.975 Axial†	5901.5	4785.3 µg/L	15.57	4785.3 ppb	15.57	0.33%
Sb 206.836†	3588.7	485.06 µg/L	3.434	485.06 ppb	3.434	0.71%
Se 196.026†	1160.9	461 µg/L	4.0	461 ppb	4.0	0.87%
SiO2†	128572.9	14033 µg/L	64.8	14033 ppb	64.8	0.46%
Si 251.611†	395996.0	6538.2 µg/L	34.92	6538.2 ppb	34.92	0.53%
Sn 189.927†	6829.7	487.17 µg/L	1.180	487.17 ppb	1.180	0.24%
Sr 421.552†	215169.6	504.26 µg/L	2.728	504.26 ppb	2.728	0.54%
Ti 334.940†	475488.6	484.21 µg/L	2.310	484.21 ppb	2.310	0.48%
Tl 190.801†	3566.2	486.05 µg/L	2.089	486.05 ppb	2.089	0.43%
U 409.014†	7601.2	499.65 µg/L	12.109	499.65 ppb	12.109	2.42%
V 292.402†	88516.7	497.10 µg/L	2.623	497.10 ppb	2.623	0.53%
Zn 213.857†	74874.3	467.47 µg/L	2.831	467.47 ppb	2.831	0.61%

Sequence No.: 35
Sample ID: 1202056870|959109|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 329
Date Collected: 3/29/2010 20:33:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202056870|959109|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	157991.8	157991.8	108	%			20:33:37
1	Al 396.153Radial†	-48.0	-12.4	-2.7357	µg/L	-2.7357	ppb	20:33:57
1	Ca 317.933Radial†	854.0	171.7	10.059	µg/L	10.059	ppb	20:33:57
1	Fe 238.204 Radial†	231.5	100.2	6.6647	µg/L	6.6647	ppb	20:33:57
1	K 766.490 Radial†	1603.1	23.9	9.8525	µg/L	9.8525	ppb	20:33:37
1	Mg 279.077 IEC†	172.2	-27.8	-11.444	µg/L	-11.444	ppb	20:33:57
1	Na 589.592 Radial†	1691.9	-133.8	-20.487	µg/L	-20.487	ppb	20:33:37
1	Sr 421.552†	-116.8	170.2	0.3988	µg/L	0.3988	ppb	20:33:37
1	Sc 361.383	1767023.5	1767023.5	105.63	%			20:34:45
1	Y 371.029	1081596.6	1081596.6	105.77	%			20:34:45
1	Ag 328.068†	3032.9	-95.9	-0.3816	µg/L	-0.3816	ppb	20:34:47
1	As 188.979†	-29.7	-13.9	-5.7879	µg/L	-5.7879	ppb	20:35:07
1	B 249.677†	3478.3	-62.9	-1.0574	µg/L	-1.0574	ppb	20:35:07
1	Ba 233.527†	-166.2	17.7	0.0806	µg/L	0.0806	ppb	20:35:07
1	Be 313.107†	-429.4	253.6	0.0870	µg/L	0.0870	ppb	20:34:47
1	Cd 226.502†	-108.6	-8.4	-0.0587	µg/L	-0.0587	ppb	20:35:07
1	Co 228.616†	-174.4	11.5	0.1572	µg/L	0.1572	ppb	20:35:07
1	Cr 267.716†	162.4	-6.5	-0.0677	µg/L	-0.0677	ppb	20:35:07
1	Cu 324.752†	2781.7	208.5	0.9194	µg/L	0.9194	ppb	20:34:47
1	Mn 257.610†	238.1	145.4	0.1992	µg/L	0.1992	ppb	20:35:07
1	Mo 202.031†	-40.1	17.2	0.5430	µg/L	0.5430	ppb	20:35:07
1	Ni 231.604†	-43.1	0.1	0.0010	µg/L	0.0010	ppb	20:35:07
1	P 214.914†	39.0	-42.7	-10.248	µg/L	-10.248	ppb	20:35:07
1	Pb 220.353†	86.2	-30.9	-1.8797	µg/L	-1.8797	ppb	20:35:07
1	S 181.975 Axial†	93.6	-6.2	-5.0374	µg/L	-5.0374	ppb	20:35:07
1	Sb 206.836†	75.3	-15.4	-2.0713	µg/L	-2.0713	ppb	20:35:07
1	Se 196.026†	16.5	4.7	1.89	µg/L	1.89	ppb	20:35:07
1	SiO2†	8989.0	6936.7	758.18	µg/L	758.18	ppb	20:34:47
1	Si 251.611†	22783.7	20892.1	345.45	µg/L	345.45	ppb	20:34:47
1	Sn 189.927†	-8.1	-9.7	-0.6886	µg/L	-0.6886	ppb	20:35:07
1	Ti 334.940†	944.5	257.7	0.2580	µg/L	0.2580	ppb	20:34:47
1	Tl 190.801†	-107.1	18.9	2.5327	µg/L	2.5327	ppb	20:35:07
1	U 409.014†	-252.8	239.8	14.768	µg/L	14.768	ppb	20:34:47
1	V 292.402†	289.1	-158.2	-0.8633	µg/L	-0.8633	ppb	20:34:47
1	Zn 213.857†	611.9	114.8	0.7213	µg/L	0.7213	ppb	20:35:07
2	Sc RADIAL	157710.0	157710.0	108	%			20:33:59
2	Al 396.153Radial†	-49.6	-14.0	-3.0882	µg/L	-3.0882	ppb	20:34:19
2	Ca 317.933Radial†	860.5	179.1	10.493	µg/L	10.493	ppb	20:34:19
2	Fe 238.204 Radial†	244.9	113.0	7.5133	µg/L	7.5133	ppb	20:34:19
2	K 766.490 Radial†	1460.2	-105.5	-43.423	µg/L	-43.423	ppb	20:33:59
2	Mg 279.077 IEC†	176.8	-23.3	-9.5962	µg/L	-9.5962	ppb	20:34:19
2	Na 589.592 Radial†	1698.8	-124.7	-19.037	µg/L	-19.037	ppb	20:33:59
2	Sr 421.552†	-173.6	117.5	0.2754	µg/L	0.2754	ppb	20:33:59
2	Sc 361.383	1789131.0	1789131.0	106.96	%			20:35:09
2	Y 371.029	1094714.6	1094714.6	107.05	%			20:35:09
2	Ag 328.068†	3142.7	-28.7	-0.1196	µg/L	-0.1196	ppb	20:35:11
2	As 188.979†	-9.5	5.4	2.2489	µg/L	2.2489	ppb	20:35:31
2	B 249.677†	3452.5	-127.7	-2.1455	µg/L	-2.1455	ppb	20:35:31
2	Ba 233.527†	-189.5	-2.1	-0.0103	µg/L	-0.0103	ppb	20:35:31
2	Be 313.107†	-451.5	238.0	0.0807	µg/L	0.0807	ppb	20:35:11
2	Cd 226.502†	-74.9	24.4	0.1679	µg/L	0.1679	ppb	20:35:31
2	Co 228.616†	-163.0	24.2	0.3314	µg/L	0.3314	ppb	20:35:31
2	Cr 267.716†	159.7	-10.9	-0.1026	µg/L	-0.1026	ppb	20:35:31
2	Cu 324.752†	2679.7	80.5	0.3599	µg/L	0.3599	ppb	20:35:11
2	Mn 257.610†	248.2	152.0	0.2081	µg/L	0.2081	ppb	20:35:31
2	Mo 202.031†	-31.2	26.0	0.8209	µg/L	0.8209	ppb	20:35:31
2	Ni 231.604†	-35.3	7.9	0.1009	µg/L	0.1009	ppb	20:35:31
2	P 214.914†	53.0	-30.0	-7.2103	µg/L	-7.2103	ppb	20:35:31
2	Pb 220.353†	94.9	-23.7	-1.4404	µg/L	-1.4404	ppb	20:35:31

2	S 181.975 Axial†	100.8	-0.6	-0.5005 µg/L	-0.5005 ppb	20:35:31
2	Sb 206.836†	95.7	2.9	0.3965 µg/L	0.3965 ppb	20:35:31
2	Se 196.026†	20.0	7.8	3.10 µg/L	3.10 ppb	20:35:31
2	SiO2†	8961.6	6805.9	743.88 µg/L	743.88 ppb	20:35:11
2	Si 251.611†	23204.1	21018.6	347.53 µg/L	347.53 ppb	20:35:11
2	Sn 189.927†	-8.6	-10.0	-0.7125 µg/L	-0.7125 ppb	20:35:31
2	Ti 334.940†	805.3	116.5	0.1155 µg/L	0.1155 ppb	20:35:11
2	Tl 190.801†	-109.4	18.0	2.4093 µg/L	2.4093 ppb	20:35:31
2	U 409.014†	-326.2	174.1	10.682 µg/L	10.682 ppb	20:35:11
2	V 292.402†	206.2	-239.1	-1.3121 µg/L	-1.3121 ppb	20:35:11
2	Zn 213.857†	662.0	154.5	0.9709 µg/L	0.9709 ppb	20:35:31
3	Sc RADIAL	156329.8	156329.8	107 %		20:34:21
3	Al 396.153Radial†	-21.1	12.2	2.6224 µg/L	2.6224 ppb	20:34:41
3	Ca 317.933Radial†	855.0	181.0	10.603 µg/L	10.603 ppb	20:34:41
3	Fe 238.204 Radial†	238.4	109.0	7.2477 µg/L	7.2477 ppb	20:34:41
3	K 766.490 Radial†	1444.2	-108.5	-44.654 µg/L	-44.654 ppb	20:34:21
3	Mg 279.077 IEC†	187.2	-12.1	-4.9847 µg/L	-4.9847 ppb	20:34:41
3	Na 589.592 Radial†	1681.5	-127.0	-19.393 µg/L	-19.393 ppb	20:34:21
3	Sr 421.552†	-337.2	-36.4	-0.0854 µg/L	-0.0854 ppb	20:34:21
3	Sc 361.383	1763307.4	1763307.4	105.41 %		20:35:33
3	Y 371.029	1079799.3	1079799.3	105.60 %		20:35:33
3	Ag 328.068†	3157.2	28.0	0.1284 µg/L	0.1284 ppb	20:35:35
3	As 188.979†	-16.8	-1.7	-0.7072 µg/L	-0.7072 ppb	20:35:55
3	B 249.677†	3408.0	-122.6	-2.0595 µg/L	-2.0595 ppb	20:35:55
3	Ba 233.527†	-156.9	26.2	0.1191 µg/L	0.1191 ppb	20:35:55
3	Be 313.107†	-635.8	56.9	0.0267 µg/L	0.0267 ppb	20:35:35
3	Cd 226.502†	-93.6	5.6	0.0379 µg/L	0.0379 ppb	20:35:55
3	Co 228.616†	-166.9	18.2	0.2495 µg/L	0.2495 ppb	20:35:55
3	Cr 267.716†	167.0	-1.8	-0.0372 µg/L	-0.0372 ppb	20:35:55
3	Cu 324.752†	2620.4	61.0	0.2883 µg/L	0.2883 ppb	20:35:35
3	Mn 257.610†	281.4	187.0	0.2557 µg/L	0.2557 ppb	20:35:55
3	Mo 202.031†	-22.1	34.3	1.0814 µg/L	1.0814 ppb	20:35:55
3	Ni 231.604†	-42.2	0.9	0.0114 µg/L	0.0114 ppb	20:35:55
3	P 214.914†	47.8	-34.2	-8.2133 µg/L	-8.2133 ppb	20:35:55
3	Pb 220.353†	93.6	-23.6	-1.4459 µg/L	-1.4459 ppb	20:35:55
3	S 181.975 Axial†	96.2	-3.5	-2.8511 µg/L	-2.8511 ppb	20:35:55
3	Sb 206.836†	70.1	-20.2	-2.7063 µg/L	-2.7063 ppb	20:35:55
3	Se 196.026†	12.6	1.0	0.428 µg/L	0.428 ppb	20:35:55
3	SiO2†	8819.2	6793.6	742.51 µg/L	742.51 ppb	20:35:35
3	Si 251.611†	22832.6	20983.9	346.95 µg/L	346.95 ppb	20:35:35
3	Sn 189.927†	9.7	7.2	0.5106 µg/L	0.5106 ppb	20:35:55
3	Ti 334.940†	1035.3	345.8	0.3423 µg/L	0.3423 ppb	20:35:35
3	Tl 190.801†	-115.5	10.8	1.4385 µg/L	1.4385 ppb	20:35:55
3	U 409.014†	-45.2	436.2	26.866 µg/L	26.866 ppb	20:35:35
3	V 292.402†	167.7	-272.7	-1.4852 µg/L	-1.4852 ppb	20:35:35
3	Zn 213.857†	617.9	121.8	0.7658 µg/L	0.7658 ppb	20:35:55

Mean Data: 1202056870|959109|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1773154.0	106.00	%	0.835				0.79%
Sc RADIAL	157343.9	108	%	0.6				0.57%
Y 371.029	1085370.2	106.14	%	0.796				0.75%
Ag 328.068†	-32.2	-0.1243	µg/L	0.25504	-0.1243	ppb	0.25504	205.20%
Al 396.153Radial†	-4.7	-1.0672	µg/L	3.20015	-1.0672	ppb	3.20015	299.87%
As 188.979†	-3.4	-1.4154	µg/L	4.06495	-1.4154	ppb	4.06495	287.20%
B 249.677†	-104.4	-1.7541	µg/L	0.60492	-1.7541	ppb	0.60492	34.49%
Ba 233.527†	14.0	0.0631	µg/L	0.06644	0.0631	ppb	0.06644	105.24%
Be 313.107†	182.9	0.0648	µg/L	0.03318	0.0648	ppb	0.03318	51.19%
Ca 317.933Radial†	177.2	10.385	µg/L	0.2880	10.385	ppb	0.2880	2.77%
Cd 226.502†	7.2	0.0490	µg/L	0.11369	0.0490	ppb	0.11369	231.87%
Co 228.616†	18.0	0.2460	µg/L	0.08710	0.2460	ppb	0.08710	35.41%
Cr 267.716†	-6.4	-0.0691	µg/L	0.03271	-0.0691	ppb	0.03271	47.32%
Cu 324.752†	116.7	0.5225	µg/L	0.34551	0.5225	ppb	0.34551	66.12%
Fe 238.204 Radial†	107.4	7.1419	µg/L	0.43409	7.1419	ppb	0.43409	6.08%
K 766.490 Radial†	-63.3	-26.075	µg/L	31.1201	-26.075	ppb	31.1201	119.35%
Mg 279.077 IEC†	-21.1	-8.6750	µg/L	3.32671	-8.6750	ppb	3.32671	38.35%
Mn 257.610†	161.5	0.2210	µg/L	0.03037	0.2210	ppb	0.03037	13.74%
Mo 202.031†	25.8	0.8151	µg/L	0.26928	0.8151	ppb	0.26928	33.04%
Na 589.592 Radial†	-128.5	-19.639	µg/L	0.7556	-19.639	ppb	0.7556	3.85%

Ni 231.604†	3.0	0.0378 µg/L	0.05491	0.0378 ppb	0.05491	145.35%
P 214.914†	-35.6	-8.5571 µg/L	1.54759	-8.5571 ppb	1.54759	18.09%
Pb 220.353†	-26.0	-1.5887 µg/L	0.25207	-1.5887 ppb	0.25207	15.87%
S 181.975 Axial†	-3.5	-2.7963 µg/L	2.26896	-2.7963 ppb	2.26896	81.14%
Sb 206.836†	-10.9	-1.4604 µg/L	1.63913	-1.4604 ppb	1.63913	112.24%
Se 196.026†	4.5	1.80 µg/L	1.336	1.80 ppb	1.336	74.10%
SiO2†	6845.4	748.19 µg/L	8.682	748.19 ppb	8.682	1.16%
Si 251.611†	20964.9	346.64 µg/L	1.077	346.64 ppb	1.077	0.31%
Sn 189.927†	-4.2	-0.2968 µg/L	0.69935	-0.2968 ppb	0.69935	235.59%
Sr 421.552†	83.8	0.1963 µg/L	0.25162	0.1963 ppb	0.25162	128.20%
Ti 334.940†	240.0	0.2386 µg/L	0.11463	0.2386 ppb	0.11463	48.04%
Tl 190.801†	15.9	2.1268 µg/L	0.59929	2.1268 ppb	0.59929	28.18%
U 409.014†	283.4	17.439 µg/L	8.4162	17.439 ppb	8.4162	48.26%
V 292.402†	-223.3	-1.2202 µg/L	0.32097	-1.2202 ppb	0.32097	26.31%
Zn 213.857†	130.4	0.8193 µg/L	0.13310	0.8193 ppb	0.13310	16.24%

Sequence No.: 36
Sample ID: 248108001|959109|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 330
Date Collected: 3/29/2010 20:36:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248108001|959109|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	155371.7	155371.7	107	%			20:36:33
1	Al 396.153Radial†	84.3	110.9	24.189	µg/L	24.189	ppb	20:36:53
1	Ca 317.933Radial†	1108.5	423.7	24.828	µg/L	24.828	ppb	20:36:53
1	Fe 238.204 Radial†	442.8	302.1	20.086	µg/L	20.086	ppb	20:36:53
1	K 766.490 Radial†	1709.0	148.2	60.983	µg/L	60.983	ppb	20:36:33
1	Mg 279.077 IEC†	200.9	1.8	0.7515	µg/L	0.7515	ppb	20:36:53
1	Na 589.592 Radial†	2151.1	323.2	49.399	µg/L	49.399	ppb	20:36:33
1	Sr 421.552†	-188.5	101.2	0.2369	µg/L	0.2369	ppb	20:36:33
1	Sc 361.383	1783729.2	1783729.2	106.63	%			20:37:55
1	Y 371.029	1087548.4	1087548.4	106.35	%			20:37:55
1	Ag 328.068†	3165.9	1.9	-0.0030	µg/L	-0.0030	ppb	20:37:57
1	As 188.979†	-13.4	1.7	0.7131	µg/L	0.7131	ppb	20:38:17
1	B 249.677†	4680.6	1033.8	17.356	µg/L	17.356	ppb	20:37:57
1	Ba 233.527†	-43.4	134.4	0.6132	µg/L	0.6132	ppb	20:38:17
1	Be 313.107†	-624.0	75.0	0.0247	µg/L	0.0247	ppb	20:37:57
1	Cd 226.502†	-72.6	26.3	0.1798	µg/L	0.1798	ppb	20:38:17
1	Co 228.616†	-188.1	0.2	0.0020	µg/L	0.0020	ppb	20:38:17
1	Cr 267.716†	213.1	39.6	0.3396	µg/L	0.3396	ppb	20:38:17
1	Cu 324.752†	2792.0	193.5	0.8448	µg/L	0.8448	ppb	20:37:57
1	Mn 257.610†	428.7	322.1	0.4400	µg/L	0.4400	ppb	20:38:17
1	Mo 202.031†	-40.7	17.0	0.5386	µg/L	0.5386	ppb	20:38:17
1	Ni 231.604†	-38.3	5.0	0.0637	µg/L	0.0637	ppb	20:38:17
1	P 214.914†	66.8	-16.9	-4.0678	µg/L	-4.0678	ppb	20:38:17
1	Pb 220.353†	107.6	-11.6	-0.6982	µg/L	-0.6982	ppb	20:38:17
1	S 181.975 Axial†	119.7	17.4	14.140	µg/L	14.140	ppb	20:38:17
1	Sb 206.836†	88.5	-3.6	-0.4894	µg/L	-0.4894	ppb	20:38:17
1	Se 196.026†	23.9	11.5	4.56	µg/L	4.56	ppb	20:38:17
1	SiO2†	37677.2	33760.7	3690.1	µg/L	3690.1	ppb	20:37:57
1	Si 251.611†	111735.5	104108.8	1721.4	µg/L	1721.4	ppb	20:37:57
1	Sn 189.927†	2.1	-0.0	0.0016	µg/L	0.0016	ppb	20:38:17
1	Ti 334.940†	1276.9	561.2	0.5722	µg/L	0.5722	ppb	20:37:57
1	Tl 190.801†	-119.6	8.2	1.0939	µg/L	1.0939	ppb	20:38:17
1	U 409.014†	-491.1	18.5	1.0899	µg/L	1.0899	ppb	20:37:57
1	V 292.402†	277.2	-171.8	-0.9491	µg/L	-0.9491	ppb	20:37:57
1	Zn 213.857†	694.2	186.6	1.1720	µg/L	1.1720	ppb	20:38:17
2	Sc RADIAL	158470.5	158470.5	109	%			20:36:55
2	Al 396.153Radial†	66.1	92.6	20.196	µg/L	20.196	ppb	20:37:15
2	Ca 317.933Radial†	1063.9	362.3	21.230	µg/L	21.230	ppb	20:37:15
2	Fe 238.204 Radial†	469.1	318.2	21.156	µg/L	21.156	ppb	20:37:15
2	K 766.490 Radial†	1704.6	112.8	46.433	µg/L	46.433	ppb	20:36:55
2	Mg 279.077 IEC†	191.2	-10.8	-4.4539	µg/L	-4.4539	ppb	20:37:15
2	Na 589.592 Radial†	2108.5	244.5	37.377	µg/L	37.377	ppb	20:36:55
2	Sr 421.552†	-147.2	142.6	0.3340	µg/L	0.3340	ppb	20:36:55
2	Sc 361.383	1770400.3	1770400.3	105.84	%			20:38:19
2	Y 371.029	1081490.7	1081490.7	105.76	%			20:38:19
2	Ag 328.068†	3090.3	-47.1	-0.1697	µg/L	-0.1697	ppb	20:38:21
2	As 188.979†	-17.2	-2.0	-0.8231	µg/L	-0.8231	ppb	20:38:41
2	B 249.677†	4791.1	1171.2	19.663	µg/L	19.663	ppb	20:38:21
2	Ba 233.527†	-98.6	81.9	0.3737	µg/L	0.3737	ppb	20:38:41
2	Be 313.107†	-456.8	228.5	0.0810	µg/L	0.0810	ppb	20:38:21
2	Cd 226.502†	-90.7	8.7	0.0580	µg/L	0.0580	ppb	20:38:41
2	Co 228.616†	-187.3	-0.4	-0.0058	µg/L	-0.0058	ppb	20:38:41
2	Cr 267.716†	212.4	40.4	0.3306	µg/L	0.3306	ppb	20:38:41
2	Cu 324.752†	2704.9	130.9	0.5900	µg/L	0.5900	ppb	20:38:21
2	Mn 257.610†	467.0	361.2	0.4937	µg/L	0.4937	ppb	20:38:41
2	Mo 202.031†	-39.4	18.0	0.5675	µg/L	0.5675	ppb	20:38:41
2	Ni 231.604†	-56.2	-12.2	-0.1558	µg/L	-0.1558	ppb	20:38:41
2	P 214.914†	54.2	-28.3	-6.8069	µg/L	-6.8069	ppb	20:38:41
2	Pb 220.353†	101.4	-16.6	-1.0216	µg/L	-1.0216	ppb	20:38:41

2	S 181.975 Axial†	121.0	19.5	15.802 µg/L	15.802 ppb	20:38:41
2	Sb 206.836†	74.8	-16.0	-2.1575 µg/L	-2.1575 ppb	20:38:41
2	Se 196.026†	13.4	1.8	0.721 µg/L	0.721 ppb	20:38:41
2	SiO2†	38111.9	34437.4	3764.0 µg/L	3764.0 ppb	20:38:21
2	Si 251.611†	113071.1	106159.6	1755.3 µg/L	1755.3 ppb	20:38:21
2	Sn 189.927†	6.1	3.7	0.2672 µg/L	0.2672 ppb	20:38:41
2	Ti 334.940†	1370.0	658.1	0.6629 µg/L	0.6629 ppb	20:38:21
2	Tl 190.801†	-131.2	-3.6	-0.4822 µg/L	-0.4822 ppb	20:38:41
2	U 409.014†	-130.6	355.7	21.958 µg/L	21.958 ppb	20:38:21
2	V 292.402†	382.3	-70.6	-0.3736 µg/L	-0.3736 ppb	20:38:21
2	Zn 213.857†	713.0	209.3	1.3162 µg/L	1.3162 ppb	20:38:41
3	Sc RADIAL	156927.8	156927.8	108 %		20:37:17
3	Al 396.153Radial†	90.1	115.6	25.190 µg/L	25.190 ppb	20:37:37
3	Ca 317.933Radial†	1061.7	369.9	21.676 µg/L	21.676 ppb	20:37:37
3	Fe 238.204 Radial†	438.3	293.8	19.533 µg/L	19.533 ppb	20:37:37
3	K 766.490 Radial†	1805.6	222.0	91.375 µg/L	91.375 ppb	20:37:17
3	Mg 279.077 IEC†	190.4	-9.8	-4.0569 µg/L	-4.0569 ppb	20:37:37
3	Na 589.592 Radial†	2171.9	322.6	49.275 µg/L	49.275 ppb	20:37:17
3	Sr 421.552†	-81.2	202.6	0.4746 µg/L	0.4746 ppb	20:37:17
3	Sc 361.383	1774142.4	1774142.4	106.06 %		20:38:43
3	Y 371.029	1083558.8	1083558.8	105.96 %		20:38:43
3	Ag 328.068†	3008.4	-130.5	-0.5308 µg/L	-0.5308 ppb	20:38:45
3	As 188.979†	-7.5	7.2	3.0027 µg/L	3.0027 ppb	20:39:05
3	B 249.677†	4681.8	1058.6	17.772 µg/L	17.772 ppb	20:38:45
3	Ba 233.527†	-47.3	130.5	0.5961 µg/L	0.5961 ppb	20:39:05
3	Be 313.107†	-847.3	-138.7	-0.0456 µg/L	-0.0456 ppb	20:38:45
3	Cd 226.502†	-90.0	9.6	0.0642 µg/L	0.0642 ppb	20:39:05
3	Co 228.616†	-173.0	13.4	0.1837 µg/L	0.1837 ppb	20:39:05
3	Cr 267.716†	173.8	3.6	0.0330 µg/L	0.0330 ppb	20:39:05
3	Cu 324.752†	2698.8	119.8	0.5221 µg/L	0.5221 ppb	20:38:45
3	Mn 257.610†	463.5	357.0	0.4880 µg/L	0.4880 ppb	20:39:05
3	Mo 202.031†	-32.5	24.5	0.7749 µg/L	0.7749 ppb	20:39:05
3	Ni 231.604†	-31.6	11.1	0.1425 µg/L	0.1425 ppb	20:39:05
3	P 214.914†	68.4	-15.1	-3.6324 µg/L	-3.6324 ppb	20:39:05
3	Pb 220.353†	78.5	-38.4	-2.3207 µg/L	-2.3207 ppb	20:39:05
3	S 181.975 Axial†	114.8	13.4	10.847 µg/L	10.847 ppb	20:39:05
3	Sb 206.836†	87.7	-3.9	-0.5228 µg/L	-0.5228 ppb	20:39:05
3	Se 196.026†	16.2	4.3	1.71 µg/L	1.71 ppb	20:39:05
3	SiO2†	38086.0	34337.0	3753.0 µg/L	3753.0 ppb	20:38:45
3	Si 251.611†	112852.7	105728.3	1748.2 µg/L	1748.2 ppb	20:38:45
3	Sn 189.927†	-3.0	-4.9	-0.3445 µg/L	-0.3445 ppb	20:39:05
3	Ti 334.940†	1393.7	677.7	0.6926 µg/L	0.6926 ppb	20:38:45
3	Tl 190.801†	-128.6	-0.9	-0.1128 µg/L	-0.1128 ppb	20:39:05
3	U 409.014†	-535.4	-25.7	-1.5833 µg/L	-1.5833 ppb	20:38:45
3	V 292.402†	481.7	22.4	0.1274 µg/L	0.1274 ppb	20:38:45
3	Zn 213.857†	686.4	182.8	1.1480 µg/L	1.1480 ppb	20:39:05

Mean Data: 248108001|959109|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1776090.6	106.18	%	0.411				0.39%
Sc RADIAL	156923.3	108	%	1.1				0.99%
Y 371.029	1084199.3	106.03	%	0.301				0.28%
Ag 328.068†	-58.6	-0.2345	µg/L	0.26983	-0.2345	ppb	0.26983	115.06%
Al 396.153Radial†	106.4	23.192	µg/L	2.6421	23.192	ppb	2.6421	11.39%
As 188.979†	2.3	0.9643	µg/L	1.92521	0.9643	ppb	1.92521	199.66%
B 249.677†	1087.8	18.263	µg/L	1.2294	18.263	ppb	1.2294	6.73%
Ba 233.527†	115.6	0.5277	µg/L	0.13363	0.5277	ppb	0.13363	25.33%
Be 313.107†	54.9	0.0200	µg/L	0.06347	0.0200	ppb	0.06347	316.66%
Ca 317.933Radial†	385.3	22.578	µg/L	1.9614	22.578	ppb	1.9614	8.69%
Cd 226.502†	14.9	0.1007	µg/L	0.06862	0.1007	ppb	0.06862	68.17%
Co 228.616†	4.4	0.0600	µg/L	0.10720	0.0600	ppb	0.10720	178.77%
Cr 267.716†	27.9	0.2344	µg/L	0.17448	0.2344	ppb	0.17448	74.45%
Cu 324.752†	148.0	0.6523	µg/L	0.17014	0.6523	ppb	0.17014	26.08%
Fe 238.204 Radial†	304.7	20.259	µg/L	0.8251	20.259	ppb	0.8251	4.07%
K 766.490 Radial†	161.0	66.264	µg/L	22.9321	66.264	ppb	22.9321	34.61%
Mg 279.077 IEC†	-6.3	-2.5864	µg/L	2.89758	-2.5864	ppb	2.89758	112.03%
Mn 257.610†	346.8	0.4739	µg/L	0.02950	0.4739	ppb	0.02950	6.23%
Mo 202.031†	19.8	0.6270	µg/L	0.12891	0.6270	ppb	0.12891	20.56%
Na 589.592 Radial†	296.8	45.350	µg/L	6.9051	45.350	ppb	6.9051	15.23%

Ni 231.604†	1.3	0.0168	µg/L	0.15459	0.0168	ppb	0.15459 920.47%
P 214.914†	-20.1	-4.8357	µg/L	1.72093	-4.8357	ppb	1.72093 35.59%
Pb 220.353†	-22.2	-1.3468	µg/L	0.85874	-1.3468	ppb	0.85874 63.76%
S 181.975 Axial†	16.8	13.596	µg/L	2.5219	13.596	ppb	2.5219 18.55%
Sb 206.836†	-7.9	-1.0566	µg/L	0.95358	-1.0566	ppb	0.95358 90.25%
Se 196.026†	5.9	2.33	µg/L	1.991	2.33	ppb	1.991 85.43%
SiO2†	34178.4	3735.7	µg/L	39.92	3735.7	ppb	39.92 1.07%
Si 251.611†	105332.2	1741.6	µg/L	17.88	1741.6	ppb	17.88 1.03%
Sn 189.927†	-0.4	-0.0253	µg/L	0.30674	-0.0253	ppb	0.30674 >999.9%
Sr 421.552†	148.8	0.3485	µg/L	0.11953	0.3485	ppb	0.11953 34.30%
Ti 334.940†	632.3	0.6426	µg/L	0.06269	0.6426	ppb	0.06269 9.76%
Tl 190.801†	1.2	0.1663	µg/L	0.82427	0.1663	ppb	0.82427 495.67%
U 409.014†	116.2	7.1548	µg/L	12.88927	7.1548	ppb	12.88927 180.15%
V 292.402†	-73.4	-0.3985	µg/L	0.53867	-0.3985	ppb	0.53867 135.19%
Zn 213.857†	192.9	1.2121	µg/L	0.09097	1.2121	ppb	0.09097 7.50%

Sequence No.: 37
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/29/2010 20:39:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	158480.3	158480.3	109	%			20:39:46
1	Al 396.153Radial†	25899.3	23851.4	5184.2	µg/L	5184.2	ppb	20:39:46
1	Ca 317.933Radial†	91372.8	83419.3	4888.0	µg/L	4888.0	ppb	20:39:46
1	Fe 238.204 Radial†	79864.5	73338.0	4875.8	µg/L	4875.8	ppb	20:39:46
1	K 766.490 Radial†	13976.2	11398.9	4688.7	µg/L	4688.7	ppb	20:39:46
1	Mg 279.077 IEC†	13513.6	12241.7	5054.9	µg/L	5054.9	ppb	20:39:46
1	Na 589.592 Radial†	70984.5	63589.7	9725.9	µg/L	9725.9	ppb	20:39:46
1	Sr 421.552†	231158.4	212874.2	498.88	µg/L	498.88	ppb	20:39:44
1	Sc 361.383	1746203.9	1746203.9	104.39	%			20:40:13
1	Y 371.029	1060403.2	1060403.2	103.70	%			20:40:13
1	Ag 328.068†	129222.9	120821.9	496.49	µg/L	496.49	ppb	20:40:13
1	As 188.979†	1283.9	1244.1	526.99	µg/L	526.99	ppb	20:40:33
1	B 249.677†	33276.5	28521.6	477.15	µg/L	477.15	ppb	20:40:13
1	Ba 233.527†	114363.4	109729.4	501.68	µg/L	501.68	ppb	20:40:13
1	Be 313.107†	1632572.9	1564581.9	509.43	µg/L	509.43	ppb	20:40:13
1	Cd 226.502†	72628.8	69669.1	480.81	µg/L	480.81	ppb	20:40:13
1	Co 228.616†	36875.4	35501.3	486.39	µg/L	486.39	ppb	20:40:13
1	Cr 267.716†	59790.0	57115.6	490.45	µg/L	490.45	ppb	20:40:13
1	Cu 324.752†	120808.8	113303.8	494.05	µg/L	494.05	ppb	20:40:13
1	Mn 257.610†	375213.3	359355.3	490.82	µg/L	490.82	ppb	20:40:13
1	Mo 202.031†	15789.8	15181.1	479.66	µg/L	479.66	ppb	20:40:33
1	Ni 231.604†	39738.4	38108.3	487.45	µg/L	487.45	ppb	20:40:13
1	P 214.914†	10363.4	9848.0	2350.1	µg/L	2350.1	ppb	20:40:33
1	Pb 220.353†	8305.0	7843.4	476.67	µg/L	476.67	ppb	20:40:33
1	S 181.975 Axial†	1299.5	1150.0	935.75	µg/L	935.75	ppb	20:40:33
1	Sb 206.836†	3827.9	3580.3	483.91	µg/L	483.91	ppb	20:40:33
1	Se 196.026†	1246.7	1183.4	470	µg/L	470	ppb	20:40:33
1	SiO2†	51835.7	48083.1	5234.9	µg/L	5234.9	ppb	20:40:13
1	Si 251.611†	155248.2	148043.5	2438.3	µg/L	2438.3	ppb	20:40:13
1	Sn 189.927†	7083.7	6783.8	483.93	µg/L	483.93	ppb	20:40:33
1	Ti 334.940†	505298.5	483413.9	492.29	µg/L	492.29	ppb	20:40:13
1	Tl 190.801†	3587.5	3556.9	484.85	µg/L	484.85	ppb	20:40:33
1	U 409.014†	7184.1	7361.1	484.98	µg/L	484.98	ppb	20:40:13
1	V 292.402†	93312.1	88956.4	499.59	µg/L	499.59	ppb	20:40:13
1	Zn 213.857†	80758.5	76898.2	480.22	µg/L	480.22	ppb	20:40:13
2	Sc RADIAL	157839.6	157839.6	108	%			20:39:50
2	Al 396.153Radial†	25654.3	23721.9	5156.0	µg/L	5156.0	ppb	20:39:50
2	Ca 317.933Radial†	90857.8	83284.8	4880.1	µg/L	4880.1	ppb	20:39:50
2	Fe 238.204 Radial†	79351.6	73162.6	4864.1	µg/L	4864.1	ppb	20:39:50
2	K 766.490 Radial†	14108.1	11572.9	4760.3	µg/L	4760.3	ppb	20:39:50
2	Mg 279.077 IEC†	13317.1	12110.8	5000.9	µg/L	5000.9	ppb	20:39:50
2	Na 589.592 Radial†	70889.1	63766.6	9752.9	µg/L	9752.9	ppb	20:39:50
2	Sr 421.552†	232019.8	214532.6	502.77	µg/L	502.77	ppb	20:39:48
2	Sc 361.383	1748401.5	1748401.5	104.52	%			20:40:36
2	Y 371.029	1060574.0	1060574.0	103.72	%			20:40:36
2	Ag 328.068†	128320.4	119802.8	492.33	µg/L	492.33	ppb	20:40:36
2	As 188.979†	1300.9	1258.8	533.09	µg/L	533.09	ppb	20:40:56
2	B 249.677†	33199.5	28407.7	475.25	µg/L	475.25	ppb	20:40:36
2	Ba 233.527†	113312.8	108586.5	496.46	µg/L	496.46	ppb	20:40:36
2	Be 313.107†	1626044.8	1556370.4	506.76	µg/L	506.76	ppb	20:40:36
2	Cd 226.502†	71814.6	68802.6	474.82	µg/L	474.82	ppb	20:40:36
2	Co 228.616†	36702.1	35291.2	483.50	µg/L	483.50	ppb	20:40:36
2	Cr 267.716†	59191.4	56470.8	484.90	µg/L	484.90	ppb	20:40:36
2	Cu 324.752†	120253.9	112627.4	491.11	µg/L	491.11	ppb	20:40:36
2	Mn 257.610†	372516.4	356323.3	486.68	µg/L	486.68	ppb	20:40:36
2	Mo 202.031†	15750.8	15124.7	477.88	µg/L	477.88	ppb	20:40:56
2	Ni 231.604†	39612.3	37939.8	485.29	µg/L	485.29	ppb	20:40:36
2	P 214.914†	10343.5	9816.5	2342.6	µg/L	2342.6	ppb	20:40:56
2	Pb 220.353†	8312.4	7840.4	476.48	µg/L	476.48	ppb	20:40:56

2	S 181.975 Axial†	1287.8	1137.3	925.44 µg/L	925.44 ppb	20:40:56
2	Sb 206.836†	3843.7	3590.8	485.39 µg/L	485.39 ppb	20:40:56
2	Se 196.026†	1243.8	1179.1	469 µg/L	469 ppb	20:40:56
2	SiO2†	51279.8	47488.8	5170.0 µg/L	5170.0 ppb	20:40:36
2	Si 251.611†	154265.1	146916.0	2419.7 µg/L	2419.7 ppb	20:40:36
2	Sn 189.927†	7111.0	6801.4	485.17 µg/L	485.17 ppb	20:40:56
2	Ti 334.940†	501677.3	479340.9	488.14 µg/L	488.14 ppb	20:40:36
2	Tl 190.801†	3591.8	3556.8	484.78 µg/L	484.78 ppb	20:40:56
2	U 409.014†	7373.9	7534.0	495.49 µg/L	495.49 ppb	20:40:36
2	V 292.402†	92934.7	88483.0	496.93 µg/L	496.93 ppb	20:40:36
2	Zn 213.857†	80169.9	76237.8	476.08 µg/L	476.08 ppb	20:40:36
3	Sc RADIAL	156089.6	156089.6	107 %		20:39:54
3	Al 396.153Radial†	25631.8	23966.5	5209.3 µg/L	5209.3 ppb	20:39:54
3	Ca 317.933Radial†	90218.0	83628.1	4900.2 µg/L	4900.2 ppb	20:39:54
3	Fe 238.204 Radial†	78756.2	73428.1	4881.8 µg/L	4881.8 ppb	20:39:54
3	K 766.490 Radial†	13885.5	11511.0	4734.8 µg/L	4734.8 ppb	20:39:54
3	Mg 279.077 IEC†	13155.9	12098.2	4995.8 µg/L	4995.8 ppb	20:39:54
3	Na 589.592 Radial†	70406.1	64049.4	9796.2 µg/L	9796.2 ppb	20:39:54
3	Sr 421.552†	227678.4	212880.7	498.90 µg/L	498.90 ppb	20:39:52
3	Sc 361.383	1750051.7	1750051.7	104.62 %		20:40:59
3	Y 371.029	1061656.2	1061656.2	103.82 %		20:40:59
3	Ag 328.068†	129101.5	120433.7	494.92 µg/L	494.92 ppb	20:40:59
3	As 188.979†	1318.4	1274.5	539.66 µg/L	539.66 ppb	20:41:19
3	B 249.677†	33442.7	28610.3	478.64 µg/L	478.64 ppb	20:40:59
3	Ba 233.527†	114533.5	109651.1	501.32 µg/L	501.32 ppb	20:40:59
3	Be 313.107†	1637681.6	1566026.4	509.91 µg/L	509.91 ppb	20:40:59
3	Cd 226.502†	72370.3	69269.0	478.04 µg/L	478.04 ppb	20:40:59
3	Co 228.616†	36966.6	35510.9	486.52 µg/L	486.52 ppb	20:40:59
3	Cr 267.716†	59644.0	56850.1	488.16 µg/L	488.16 ppb	20:40:59
3	Cu 324.752†	121321.2	113539.1	495.08 µg/L	495.08 ppb	20:40:59
3	Mn 257.610†	375810.6	359135.9	490.53 µg/L	490.53 ppb	20:40:59
3	Mo 202.031†	15874.8	15229.0	481.17 µg/L	481.17 ppb	20:41:19
3	Ni 231.604†	39836.0	38117.9	487.57 µg/L	487.57 ppb	20:40:59
3	P 214.914†	10423.7	9883.8	2358.6 µg/L	2358.6 ppb	20:41:19
3	Pb 220.353†	8358.7	7877.1	478.72 µg/L	478.72 ppb	20:41:19
3	S 181.975 Axial†	1303.9	1151.5	936.96 µg/L	936.96 ppb	20:41:19
3	Sb 206.836†	3860.5	3603.4	487.09 µg/L	487.09 ppb	20:41:19
3	Se 196.026†	1260.6	1194.1	474 µg/L	474 ppb	20:41:19
3	SiO2†	51807.0	47946.5	5219.9 µg/L	5219.9 ppb	20:40:59
3	Si 251.611†	155533.5	147989.2	2437.4 µg/L	2437.4 ppb	20:40:59
3	Sn 189.927†	7141.0	6823.7	486.76 µg/L	486.76 ppb	20:41:19
3	Ti 334.940†	505758.7	482789.5	491.66 µg/L	491.66 ppb	20:40:59
3	Tl 190.801†	3621.3	3581.7	488.18 µg/L	488.18 ppb	20:41:19
3	U 409.014†	7328.7	7484.2	492.60 µg/L	492.60 ppb	20:40:59
3	V 292.402†	93571.4	89007.7	499.88 µg/L	499.88 ppb	20:40:59
3	Zn 213.857†	80716.3	76687.7	478.89 µg/L	478.89 ppb	20:40:59

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1748219.0	104.51	%	0.115				0.11%
Sc RADIAL	157469.8	108	%	0.8				0.79%
Y 371.029	1060877.8	103.75	%	0.066				0.06%
Ag 328.068†	120352.8	494.58	µg/L	2.097	494.58	ppb	2.097	0.42%
QC value within limits for Ag 328.068 Recovery = 98.92%								
Al 396.153Radial†	23846.6	5183.2	µg/L	26.63	5183.2	ppb	26.63	0.51%
QC value within limits for Al 396.153Radial Recovery = 103.66%								
As 188.979†	1259.1	533.25	µg/L	6.336	533.25	ppb	6.336	1.19%
QC value within limits for As 188.979 Recovery = 106.65%								
B 249.677†	28513.2	477.02	µg/L	1.699	477.02	ppb	1.699	0.36%
QC value within limits for B 249.677 Recovery = 95.40%								
Ba 233.527†	109322.4	499.82	µg/L	2.918	499.82	ppb	2.918	0.58%
QC value within limits for Ba 233.527 Recovery = 99.96%								
Be 313.107†	1562326.2	508.70	µg/L	1.694	508.70	ppb	1.694	0.33%
QC value within limits for Be 313.107 Recovery = 101.74%								
Ca 317.933Radial†	83444.1	4889.5	µg/L	10.13	4889.5	ppb	10.13	0.21%
QC value within limits for Ca 317.933Radial Recovery = 97.79%								
Cd 226.502†	69246.9	477.89	µg/L	2.994	477.89	ppb	2.994	0.63%
QC value within limits for Cd 226.502 Recovery = 95.58%								
Co 228.616†	35434.5	485.47	µg/L	1.703	485.47	ppb	1.703	0.35%

QC value within limits for Co 228.616 Recovery = 97.09%

Cr 267.716†	56812.2	487.84 µg/L	2.787	487.84 ppb	2.787	0.57%
QC value within limits for Cr 267.716 Recovery = 97.57%						
Cu 324.752†	113156.8	493.41 µg/L	2.057	493.41 ppb	2.057	0.42%
QC value within limits for Cu 324.752 Recovery = 98.68%						
Fe 238.204 Radial†	73309.6	4873.9 µg/L	8.98	4873.9 ppb	8.98	0.18%
QC value within limits for Fe 238.204 Radial Recovery = 97.48%						
K 766.490 Radial†	11494.3	4727.9 µg/L	36.31	4727.9 ppb	36.31	0.77%
QC value within limits for K 766.490 Radial Recovery = 94.56%						
Mg 279.077 IEC†	12150.2	5017.2 µg/L	32.78	5017.2 ppb	32.78	0.65%
QC value within limits for Mg 279.077 IEC Recovery = 100.34%						
Mn 257.610†	358271.5	489.35 µg/L	2.310	489.35 ppb	2.310	0.47%
QC value within limits for Mn 257.610 Recovery = 97.87%						
Mo 202.031†	15178.3	479.57 µg/L	1.650	479.57 ppb	1.650	0.34%
QC value within limits for Mo 202.031 Recovery = 95.91%						
Na 589.592 Radial†	63801.9	9758.3 µg/L	35.47	9758.3 ppb	35.47	0.36%
QC value within limits for Na 589.592 Radial Recovery = 97.58%						
Ni 231.604†	38055.3	486.77 µg/L	1.281	486.77 ppb	1.281	0.26%
QC value within limits for Ni 231.604 Recovery = 97.35%						
P 214.914†	9849.4	2350.4 µg/L	8.04	2350.4 ppb	8.04	0.34%
QC value within limits for P 214.914 Recovery = 94.02%						
Pb 220.353†	7853.6	477.29 µg/L	1.242	477.29 ppb	1.242	0.26%
QC value within limits for Pb 220.353 Recovery = 95.46%						
S 181.975 Axial†	1146.3	932.72 µg/L	6.328	932.72 ppb	6.328	0.68%
QC value within limits for S 181.975 Axial Recovery = 93.27%						
Sb 206.836†	3591.5	485.47 µg/L	1.590	485.47 ppb	1.590	0.33%
QC value within limits for Sb 206.836 Recovery = 97.09%						
Se 196.026†	1185.5	471 µg/L	3.0	471 ppb	3.0	0.65%
QC value within limits for Se 196.026 Recovery = 94.21%						
SiO2†	47839.5	5208.2 µg/L	33.99	5208.2 ppb	33.99	0.65%
QC value within limits for SiO2 Recovery = 97.40%						
Si 251.611†	147649.6	2431.8 µg/L	10.49	2431.8 ppb	10.49	0.43%
QC value within limits for Si 251.611 Recovery = 97.27%						
Sn 189.927†	6803.0	485.29 µg/L	1.421	485.29 ppb	1.421	0.29%
QC value within limits for Sn 189.927 Recovery = 97.06%						
Sr 421.552†	213429.2	500.18 µg/L	2.240	500.18 ppb	2.240	0.45%
QC value within limits for Sr 421.552 Recovery = 100.04%						
Ti 334.940†	481848.1	490.70 µg/L	2.236	490.70 ppb	2.236	0.46%
QC value within limits for Ti 334.940 Recovery = 98.14%						
Tl 190.801†	3565.2	485.94 µg/L	1.942	485.94 ppb	1.942	0.40%
QC value within limits for Tl 190.801 Recovery = 97.19%						
U 409.014†	7459.8	491.02 µg/L	5.432	491.02 ppb	5.432	1.11%
QC value within limits for U 409.014 Recovery = 98.20%						
V 292.402†	88815.7	498.80 µg/L	1.625	498.80 ppb	1.625	0.33%
QC value within limits for V 292.402 Recovery = 99.76%						
Zn 213.857†	76607.9	478.40 µg/L	2.115	478.40 ppb	2.115	0.44%
QC value within limits for Zn 213.857 Recovery = 95.68%						

All analyte(s) passed QC.

Sequence No.: 38
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/29/2010 20:41:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	159642.2	159642.2	110	%			20:41:56
1	Al 396.153Radial†	-31.9	2.8	0.5753	µg/L	0.5753	ppb	20:42:16
1	Ca 317.933Radial†	722.9	43.8	2.5682	µg/L	2.5682	ppb	20:42:16
1	Fe 238.204 Radial†	156.5	29.6	1.9698	µg/L	1.9698	ppb	20:42:16
1	K 766.490 Radial†	1376.5	-198.2	-81.588	µg/L	-81.588	ppb	20:41:56
1	Mg 279.077 IEC†	160.5	-40.1	-16.536	µg/L	-16.536	ppb	20:42:16
1	Na 589.592 Radial†	1426.6	-392.2	-59.938	µg/L	-59.938	ppb	20:41:56
1	Sr 421.552†	-236.3	62.2	0.1458	µg/L	0.1458	ppb	20:41:56
1	Sc 361.383	1761363.3	1761363.3	105.30	%			20:43:04
1	Y 371.029	1082249.7	1082249.7	105.84	%			20:43:04
1	Ag 328.068†	2961.0	-154.9	-0.6438	µg/L	-0.6438	ppb	20:43:06
1	As 188.979†	-17.6	-2.5	-1.0426	µg/L	-1.0426	ppb	20:43:26
1	B 249.677†	3116.7	-395.7	-6.6440	µg/L	-6.6440	ppb	20:43:26
1	Ba 233.527†	-177.6	6.4	0.0281	µg/L	0.0281	ppb	20:43:26
1	Be 313.107†	-787.6	-87.9	-0.0270	µg/L	-0.0270	ppb	20:43:06
1	Cd 226.502†	-97.6	1.7	0.0116	µg/L	0.0116	ppb	20:43:26
1	Co 228.616†	-177.8	7.8	0.1062	µg/L	0.1062	ppb	20:43:26
1	Cr 267.716†	140.3	-27.0	-0.2369	µg/L	-0.2369	ppb	20:43:26
1	Cu 324.752†	2779.8	215.1	0.9395	µg/L	0.9395	ppb	20:43:06
1	Mn 257.610†	177.4	88.5	0.1216	µg/L	0.1216	ppb	20:43:26
1	Mo 202.031†	-33.7	23.2	0.7311	µg/L	0.7311	ppb	20:43:26
1	Ni 231.604†	-52.7	-9.1	-0.1163	µg/L	-0.1163	ppb	20:43:26
1	P 214.914†	64.5	-18.3	-4.4052	µg/L	-4.4052	ppb	20:43:26
1	Pb 220.353†	118.6	0.2	0.0090	µg/L	0.0090	ppb	20:43:26
1	S 181.975 Axial†	91.5	-7.9	-6.4221	µg/L	-6.4221	ppb	20:43:26
1	Sb 206.836†	85.6	-5.4	-0.7134	µg/L	-0.7134	ppb	20:43:26
1	Se 196.026†	17.8	6.0	2.38	µg/L	2.38	ppb	20:43:26
1	SiO2†	1758.9	97.6	10.643	µg/L	10.643	ppb	20:43:26
1	Si 251.611†	831.5	113.3	1.8631	µg/L	1.8631	ppb	20:43:26
1	Sn 189.927†	4.0	1.8	0.1284	µg/L	0.1284	ppb	20:43:26
1	Ti 334.940†	1053.8	364.4	0.3709	µg/L	0.3709	ppb	20:43:06
1	Tl 190.801†	-105.5	20.1	2.6847	µg/L	2.6847	ppb	20:43:26
1	U 409.014†	-413.2	86.7	5.2550	µg/L	5.2550	ppb	20:43:06
1	V 292.402†	111.6	-325.8	-1.7979	µg/L	-1.7979	ppb	20:43:06
1	Zn 213.857†	508.2	18.2	0.1146	µg/L	0.1146	ppb	20:43:26
2	Sc RADIAL	156186.9	156186.9	107	%			20:42:18
2	Al 396.153Radial†	-15.2	17.7	3.8291	µg/L	3.8291	ppb	20:42:38
2	Ca 317.933Radial†	693.6	31.0	1.8191	µg/L	1.8191	ppb	20:42:38
2	Fe 238.204 Radial†	162.9	38.7	2.5747	µg/L	2.5747	ppb	20:42:38
2	K 766.490 Radial†	1472.5	-80.8	-33.270	µg/L	-33.270	ppb	20:42:18
2	Mg 279.077 IEC†	190.1	-9.2	-3.7954	µg/L	-3.7954	ppb	20:42:38
2	Na 589.592 Radial†	1486.0	-308.0	-47.099	µg/L	-47.099	ppb	20:42:18
2	Sr 421.552†	-366.4	-64.0	-0.1499	µg/L	-0.1499	ppb	20:42:18
2	Sc 361.383	1768341.2	1768341.2	105.71	%			20:43:28
2	Y 371.029	1086167.8	1086167.8	106.22	%			20:43:28
2	Ag 328.068†	2860.7	-260.9	-1.0681	µg/L	-1.0681	ppb	20:43:30
2	As 188.979†	-12.8	2.1	0.8941	µg/L	0.8941	ppb	20:43:50
2	B 249.677†	3095.0	-428.0	-7.1869	µg/L	-7.1869	ppb	20:43:50
2	Ba 233.527†	-192.4	-6.9	-0.0315	µg/L	-0.0315	ppb	20:43:50
2	Be 313.107†	-460.5	224.5	0.0719	µg/L	0.0719	ppb	20:43:30
2	Cd 226.502†	-94.7	4.9	0.0334	µg/L	0.0334	ppb	20:43:50
2	Co 228.616†	-140.7	43.5	0.5958	µg/L	0.5958	ppb	20:43:50
2	Cr 267.716†	149.4	-18.9	-0.1596	µg/L	-0.1596	ppb	20:43:50
2	Cu 324.752†	2666.0	97.1	0.4194	µg/L	0.4194	ppb	20:43:30
2	Mn 257.610†	165.4	76.4	0.1046	µg/L	0.1046	ppb	20:43:50
2	Mo 202.031†	-30.4	26.4	0.8348	µg/L	0.8348	ppb	20:43:50
2	Ni 231.604†	-24.5	17.7	0.2263	µg/L	0.2263	ppb	20:43:50
2	P 214.914†	45.9	-36.2	-8.6751	µg/L	-8.6751	ppb	20:43:50
2	Pb 220.353†	89.4	-27.9	-1.6824	µg/L	-1.6824	ppb	20:43:50

2	S 181.975 Axial†	94.2	-5.7	-4.6425 µg/L	-4.6425 ppb	20:43:50
2	Sb 206.836†	72.8	-17.8	-2.3809 µg/L	-2.3809 ppb	20:43:50
2	Se 196.026†	8.4	-3.0	-1.17 µg/L	-1.17 ppb	20:43:50
2	SiO2†	1693.5	29.1	3.1523 µg/L	3.1523 ppb	20:43:50
2	Si 251.611†	804.4	84.5	1.3841 µg/L	1.3841 ppb	20:43:50
2	Sn 189.927†	8.2	5.7	0.4069 µg/L	0.4069 ppb	20:43:50
2	Ti 334.940†	839.4	157.7	0.1627 µg/L	0.1627 ppb	20:43:30
2	Tl 190.801†	-101.0	24.8	3.3258 µg/L	3.3258 ppb	20:43:50
2	U 409.014†	-571.5	-61.5	-3.8245 µg/L	-3.8245 ppb	20:43:30
2	V 292.402†	384.6	-68.0	-0.3725 µg/L	-0.3725 ppb	20:43:30
2	Zn 213.857†	520.5	28.0	0.1740 µg/L	0.1740 ppb	20:43:50
3	Sc RADIAL	157025.4	157025.4	108 %		20:42:40
3	Al 396.153Radial†	-41.8	-6.9	-1.5626 µg/L	-1.5626 ppb	20:43:00
3	Ca 317.933Radial†	735.1	66.2	3.8771 µg/L	3.8771 ppb	20:43:00
3	Fe 238.204 Radial†	156.0	31.5	2.0942 µg/L	2.0942 ppb	20:43:00
3	K 766.490 Radial†	1504.7	-58.3	-23.989 µg/L	-23.989 ppb	20:42:40
3	Mg 279.077 IEC†	175.7	-23.6	-9.6897 µg/L	-9.6897 ppb	20:43:00
3	Na 589.592 Radial†	1490.0	-311.7	-47.668 µg/L	-47.668 ppb	20:42:40
3	Sr 421.552†	-200.3	92.1	0.2158 µg/L	0.2158 ppb	20:42:40
3	Sc 361.383	1802169.8	1802169.8	107.74 %		20:43:52
3	Y 371.029	1105477.1	1105477.1	108.11 %		20:43:52
3	Ag 328.068†	2995.0	-187.1	-0.7466 µg/L	-0.7466 ppb	20:43:54
3	As 188.979†	-15.0	0.3	0.1424 µg/L	0.1424 ppb	20:44:15
3	B 249.677†	3108.4	-470.5	-7.8995 µg/L	-7.8995 ppb	20:44:15
3	Ba 233.527†	-173.6	13.9	0.0633 µg/L	0.0633 ppb	20:44:15
3	Be 313.107†	-686.3	23.1	0.0136 µg/L	0.0136 ppb	20:43:54
3	Cd 226.502†	-87.9	12.8	0.0881 µg/L	0.0881 ppb	20:44:15
3	Co 228.616†	-169.8	19.0	0.2599 µg/L	0.2599 ppb	20:44:15
3	Cr 267.716†	170.2	-2.2	-0.0351 µg/L	-0.0351 ppb	20:44:15
3	Cu 324.752†	2724.0	103.6	0.4670 µg/L	0.4670 ppb	20:43:54
3	Mn 257.610†	180.6	87.6	0.1201 µg/L	0.1201 ppb	20:44:15
3	Mo 202.031†	-18.7	37.8	1.1943 µg/L	1.1943 ppb	20:44:15
3	Ni 231.604†	-67.6	-21.8	-0.2790 µg/L	-0.2790 ppb	20:44:15
3	P 214.914†	48.5	-34.6	-8.3057 µg/L	-8.3057 ppb	20:44:15
3	Pb 220.353†	111.7	-8.7	-0.5419 µg/L	-0.5419 ppb	20:44:15
3	S 181.975 Axial†	82.0	-18.7	-15.128 µg/L	-15.128 ppb	20:44:15
3	Sb 206.836†	86.7	-6.1	-0.8115 µg/L	-0.8115 ppb	20:44:15
3	Se 196.026†	20.9	8.5	3.37 µg/L	3.37 ppb	20:44:15
3	SiO2†	1699.8	4.9	0.5106 µg/L	0.5106 ppb	20:44:15
3	Si 251.611†	817.9	82.8	1.3569 µg/L	1.3569 ppb	20:44:15
3	Sn 189.927†	-7.0	-8.5	-0.6027 µg/L	-0.6027 ppb	20:44:15
3	Ti 334.940†	578.4	-99.5	-0.1088 µg/L	-0.1088 ppb	20:43:54
3	Tl 190.801†	-115.5	13.1	1.7476 µg/L	1.7476 ppb	20:44:15
3	U 409.014†	-166.7	324.4	19.989 µg/L	19.989 ppb	20:43:54
3	V 292.402†	270.2	-181.0	-0.9785 µg/L	-0.9785 ppb	20:43:54
3	Zn 213.857†	519.3	17.6	0.1119 µg/L	0.1119 ppb	20:44:15

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1777291.5	106.25	%	1.305				1.23%
Sc RADIAL	157618.2	108	%	1.2				1.14%
Y 371.029	1091298.2	106.72	%	1.216				1.14%
Ag 328.068†	-201.0	-0.8195	µg/L	0.22133	-0.8195	ppb	0.22133	27.01%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	4.5	0.9472	µg/L	2.71501	0.9472	ppb	2.71501	286.62%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.0	-0.0020	µg/L	0.97639	-0.0020	ppb	0.97639	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-431.4	-7.2435	µg/L	0.62967	-7.2435	ppb	0.62967	8.69%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.5	0.0200	µg/L	0.04797	0.0200	ppb	0.04797	240.04%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	53.2	0.0195	µg/L	0.04972	0.0195	ppb	0.04972	254.94%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	47.0	2.7548	µg/L	1.04159	2.7548	ppb	1.04159	37.81%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	6.5	0.0444	µg/L	0.03942	0.0444	ppb	0.03942	88.81%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	23.4	0.3206	µg/L	0.25038	0.3206	ppb	0.25038	78.09%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -16.1     -0.1439 µg/L       0.10181     -0.1439 ppb       0.10181  70.75%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              138.6      0.6086 µg/L       0.28751      0.6086 ppb       0.28751  47.24%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        33.3      2.2129 µg/L       0.31946      2.2129 ppb       0.31946  14.44%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -112.4     -46.282 µg/L       30.9255     -46.282 ppb       30.9255  66.82%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -24.3     -10.007 µg/L        6.3764     -10.007 ppb        6.3764  63.72%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               84.2      0.1154 µg/L       0.00942      0.1154 ppb       0.00942   8.16%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               29.2      0.9200 µg/L       0.24309      0.9200 ppb       0.24309  26.42%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -337.3     -51.568 µg/L        7.2542     -51.568 ppb        7.2542  14.07%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -4.4      -0.0563 µg/L       0.25791      -0.0563 ppb       0.25791 457.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -29.7      -7.1287 µg/L       2.36584      -7.1287 ppb       2.36584  33.19%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -12.1      -0.7384 µg/L       0.86263      -0.7384 ppb       0.86263 116.82%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -10.8      -8.7308 µg/L       5.61093      -8.7308 ppb       5.61093  64.27%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -9.7      -1.3019 µg/L       0.93572      -1.3019 ppb       0.93572  71.87%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                3.8        1.53 µg/L         2.391        1.53 ppb         2.391 156.61%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     43.9      4.7687 µg/L       5.25620      4.7687 ppb       5.25620 110.22%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               93.5      1.5347 µg/L       0.28470      1.5347 ppb       0.28470  18.55%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -0.3      -0.0225 µg/L       0.52147      -0.0225 ppb       0.52147 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               30.1      0.0706 µg/L       0.19411      0.0706 ppb       0.19411 275.10%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              140.8      0.1416 µg/L       0.24052      0.1416 ppb       0.24052 169.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               19.3      2.5860 µg/L       0.79369      2.5860 ppb       0.79369  30.69%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               116.5      7.1397 µg/L      12.01791      7.1397 ppb      12.01791 168.33%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -191.6     -1.0496 µg/L       0.71539     -1.0496 ppb       0.71539  68.16%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               21.3      0.1335 µg/L       0.03514      0.1335 ppb       0.03514  26.32%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Sunday, April 11, 2010 14:25:07
Sample Description:
Method File: C:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\100125\Sample.718
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	1476.9	1476.876	69.851	4.7
	Mg	24.0	20563.4	20563.391	243.887	1.2
	Co	58.9	60201.8	60201.792	593.479	1.0
	Rh	102.9	118302.4	118302.431	575.695	0.5
	In	114.9	144990.3	144990.303	1225.130	0.8
	Pb	208.0	62594.6	62594.639	440.991	0.7
⌈>	Ba	137.9	132866.7	132866.686	904.406	0.7
⌊	Ba++	69.0	2162.0	0.016	0.001	4.8
⌈>	Ce	139.9	160176.6	160176.628	1412.329	0.9
⌊	CeO	155.9	3192.0	0.020	0.000	1.4
	Bkgd	220.0	7.3	7.300	1.789	24.5

Current Optimization File Data

Current Value	Description
0.88	Nebulizer Gas Flow
4.25	Lens Voltage
1000.00	ICP RF Power
-1750.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	5.5	1447.7
Co	59	13	6.0	52914.8
In	115	13	6.8	126833.9

ICPMS #4 TUNING REPORT

File Name: 100411.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	602	2085	0.624
Be	9.0	9.0	2054	2075	0.628
Mg	24.0	24.0	5659	2110	0.557
Mg	25.0	25.0	5959	2125	0.584
Mg	26.0	26.0	6140	2110	0.602
Co	58.9	58.9	14170	2165	0.603
Rh	102.9	102.9	24875	2255	0.608
In	114.9	114.8	27768	2285	0.615
Ce	139.9	139.9	33849	2320	0.631
Pb	206.0	206.0	49939	2485	0.628
Pb	207.0	207.0	50101	2400	0.596
Pb	208.0	208.0	50448	2480	0.675
U	238.1	238.0	57686	2500	0.623

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Monday, April 12, 2010 02:43:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\Blank.550

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7		ug/L		30	
|	Be	9		ug/L		6	
|	B	11		ug/L		106	
|	Na	23		ug/L		11005	
|	Mg	24		ug/L		667	
|	Al	27		ug/L		667	
|	P	31		ug/L		2927	
|	K	39		ug/L		381369	
|	Ca	43		ug/L		201	
| >	Sc	45		ug/L		644697	
|	Ti	47		ug/L		173	
|	V	51		ug/L		20411	
|	Cr	52		ug/L		-11274	
|	Cr	53		ug/L		126123	
|	Mn	55		ug/L		733	
|	Fe	57		ug/L		5468	
|	Co	59		ug/L		148	
|	Ni	60		ug/L		69	
|	Cu	63		ug/L		2622	
⌊	Cu	65		ug/L		1333	
⌈	Zn	66		ug/L		1259	
|	Zn	67		ug/L		7250	
|	Zn	68		ug/L		1418	
| >	Ge	74		ug/L		260111	
|	As	75		ug/L		74	
|	Se	77		ug/L		5357	
|	Se	82		ug/L		30	
⌊	Kr	83		ug/L		58	
⌈	Sr	88		ug/L		181	
|	Y	89		ug/L		25	
|	Zr	90		ug/L		545	
|	Mo	98		ug/L		492	
|	Ag	107		ug/L		176	
|	Cd	111		ug/L		22	
|	Cd	114		ug/L		34	
| >	In	115		ug/L		163380	
|	Sn	120		ug/L		1034	
|	Sb	121		ug/L		688	
⌊	Sb	123		ug/L		540	
⌈	Ba	135		ug/L		22	
|	Ba	137		ug/L		31	
|	Ho	165		ug/L		10	
| >	Lu	175		ug/L		193728	
|	Tl	205		ug/L		1200	
|	Pb	208		ug/L		4306	
|	Th	232		ug/L		1376	
⌊	U	238		ug/L		597	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9998
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Monday, April 12, 2010 02:49:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\Standard 1.551

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.000**	**ug/L**	3.051	5935	0.009
	Be	9	**10.000**	**ug/L**	4.857	1595	0.002
	B	11	**20.000**	**ug/L**	1.032	2923	0.004
	Na	23	**1000.000**	**ug/L**	1.999	1740656	2.642
	Mg	24	**1000.000**	**ug/L**	8.623	1174149	1.795
	Al	27	**1000.000**	**ug/L**	3.071	1820390	2.781
	P	31	**1000.000**	**ug/L**	3.608	101079	0.150
	K	39	**1000.000**	**ug/L**	1.998	3185175	4.275
	Ca	43	**1000.000**	**ug/L**	4.116	6423	0.010
>	Sc	45		**ug/L**		654559	654559.347
	Ti	47	**10.000**	**ug/L**	4.296	3283	0.005
	V	51	**10.000**	**ug/L**	12.650	56767	0.055
	Cr	52	**10.000**	**ug/L**	3.946	19505	0.047
	Cr	53		**ug/L**		128000	-0.000
	Mn	55	**10.000**	**ug/L**	2.286	52707	0.079
	Fe	57	**1000.000**	**ug/L**	2.969	111440	0.162
	Co	59	**10.000**	**ug/L**	1.793	40361	0.061
	Ni	60	**10.000**	**ug/L**	1.788	8627	0.013
	Cu	63		**ug/L**		22243	0.030
	Cu	65	**10.000**	**ug/L**	2.163	10815	0.014
	Zn	66	**10.000**	**ug/L**	2.423	6694	0.021
	Zn	67		**ug/L**		8080	0.003
	Zn	68		**ug/L**		5377	0.015
>	Ge	74		**ug/L**		261149	261148.613
	As	75	**10.000**	**ug/L**	8.084	6208	0.023
	Se	77		**ug/L**		5552	0.001
	Se	82	**10.000**	**ug/L**	8.766	527	0.002
	Kr	83		**ug/L**		47	-0.000
	Sr	88	**10.000**	**ug/L**	1.355	90477	0.544
	Y	89		**ug/L**		27	0.000
	Zr	90	**10.000**	**ug/L**	2.578	48629	0.289
	Mo	98	**10.000**	**ug/L**	1.619	21857	0.129
	Ag	107	**10.000**	**ug/L**	1.159	34952	0.209
	Cd	111	**10.000**	**ug/L**	2.337	8067	0.048
	Cd	114		**ug/L**		18844	0.113
>	In	115		**ug/L**		166132	166132.045
	Sn	120	**10.000**	**ug/L**	2.971	36935	0.216
	Sb	121	**10.000**	**ug/L**	14.028	20495	0.119
	Sb	123		**ug/L**		15889	0.092
	Ba	135		**ug/L**		8654	0.044
	Ba	137	**10.000**	**ug/L**	1.519	14860	0.076
	Ho	165		**ug/L**		8	-0.000
>	Lu	175		**ug/L**		194979	194978.643
	Tl	205	**10.000**	**ug/L**	2.570	54419	0.273
	Pb	208	**10.000**	**ug/L**	1.852	108675	0.535
	Th	232	**10.000**	**ug/L**	5.297	98720	0.499
	U	238	**10.000**	**ug/L**	2.487	102344	0.522

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Monday, April 12, 2010 02:55:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\Standard 2.552

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**100.043**	**ug/L**	0.439	60123	0.094
|	Be	9	**100.016**	**ug/L**	1.767	15735	0.025
|	B	11	**199.993**	**ug/L**	2.069	27415	0.043
|	Na	23	**9998.559**	**ug/L**	6.984	16606589	26.045
|	Mg	24	**10004.944**	**ug/L**	7.452	12030390	18.889
|	Al	27	**9994.146**	**ug/L**	1.375	16728759	26.256
|	P	31	**10002.874**	**ug/L**	2.950	986658	1.544
|	K	39	**10006.213**	**ug/L**	7.965	29441031	45.615
|	Ca	43	**10001.291**	**ug/L**	1.812	61554	0.096
|>	Sc	45		**ug/L**		637156	637156.287
|	Ti	47	**100.044**	**ug/L**	2.048	31837	0.050
|	V	51	**100.133**	**ug/L**	3.174	425762	0.637
|	Cr	52	**100.017**	**ug/L**	2.105	295563	0.481
|	Cr	53		**ug/L**		135025	0.016
|	Mn	55	**100.009**	**ug/L**	0.471	511300	0.801
|	Fe	57	**10000.551**	**ug/L**	0.519	1042145	1.627
|	Co	59	**100.006**	**ug/L**	1.581	393820	0.618
|	Ni	60	**100.008**	**ug/L**	1.618	84080	0.132
|	Cu	63		**ug/L**		195407	0.303
⌊	Cu	65	**100.012**	**ug/L**	1.779	94538	0.146
⌈	Zn	66	**100.038**	**ug/L**	2.481	56600	0.216
|	Zn	67		**ug/L**		14629	0.029
|	Zn	68		**ug/L**		40772	0.154
|>	Ge	74		**ug/L**		256004	256003.543
|	As	75	**100.077**	**ug/L**	0.819	65273	0.255
|	Se	77		**ug/L**		8097	0.011
|	Se	82	**100.192**	**ug/L**	4.627	6065	0.024
⌊	Kr	83		**ug/L**		51	-0.000
⌈	Sr	88	**100.039**	**ug/L**	0.725	904536	5.660
|	Y	89		**ug/L**		111	0.001
|	Zr	90	**100.062**	**ug/L**	1.418	493543	3.086
|	Mo	98	**100.050**	**ug/L**	2.085	216739	1.354
|	Ag	107	**100.018**	**ug/L**	1.016	340746	2.132
|	Cd	111	**100.046**	**ug/L**	1.329	81144	0.508
|	Cd	114		**ug/L**		190957	1.195
|>	In	115		**ug/L**		159787	159786.951
|	Sn	120	**100.038**	**ug/L**	2.506	359769	2.245
|	Sb	121	**100.233**	**ug/L**	9.698	249424	1.557
⌊	Sb	123		**ug/L**		191456	1.195
⌈	Ba	135		**ug/L**		86191	0.451
|	Ba	137	**100.034**	**ug/L**	1.151	150414	0.787
|	Ho	165		**ug/L**		12	0.000
|>	Lu	175		**ug/L**		190991	190990.522
|	Tl	205	**100.015**	**ug/L**	1.434	530708	2.772
|	Pb	208	**100.000**	**ug/L**	1.919	1026701	5.354
|	Th	232	**100.079**	**ug/L**	0.786	1037671	5.426
⌊	U	238	**100.010**	**ug/L**	1.602	1007913	5.275

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
Sc	45					
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
In	115					
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
Lu	175					
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Monday, April 12, 2010 03:01:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\QC Std 1.553

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.295**	**ug/L**	1.620	31254	0.049
	Be	9	**51.774**	**ug/L**	1.574	8100	0.013
	B	11	**104.630**	**ug/L**	4.252	14304	0.022
	Na	23	**5284.399**	**ug/L**	1.908	8728570	13.765
	Mg	24	**5032.256**	**ug/L**	2.318	6019199	9.500
	Al	27	**5458.305**	**ug/L**	5.797	9080269	14.340
	P	31	**5042.371**	**ug/L**	1.568	495924	0.778
	K	39	**4840.904**	**ug/L**	7.678	14347844	22.068
	Ca	43	**4938.767**	**ug/L**	0.125	30322	0.048
>	Sc	45		**ug/L**		633444	633444.181
	Ti	47	**50.496**	**ug/L**	0.981	16061	0.025
	V	51	**52.167**	**ug/L**	3.233	230100	0.332
	Cr	52	**52.279**	**ug/L**	1.755	148300	0.252
	Cr	53		**ug/L**		118451	-0.009
	Mn	55	**53.290**	**ug/L**	1.211	271172	0.427
	Fe	57	**5007.240**	**ug/L**	2.835	521311	0.815
	Co	59	**51.068**	**ug/L**	2.686	199962	0.316
	Ni	60	**53.284**	**ug/L**	1.085	44568	0.070
	Cu	63		**ug/L**		103227	0.159
	Cu	65	**51.977**	**ug/L**	1.526	49475	0.076
	Zn	66	**50.976**	**ug/L**	1.360	29850	0.110
	Zn	67		**ug/L**		10442	0.012
	Zn	68		**ug/L**		22024	0.079
>	Ge	74		**ug/L**		259504	259503.868
	As	75	**51.099**	**ug/L**	1.198	33820	0.130
	Se	77		**ug/L**		6231	0.003
	Se	82	**52.015**	**ug/L**	5.531	3207	0.012
	Kr	83		**ug/L**		56	-0.000
	Sr	88	**50.999**	**ug/L**	0.504	466334	2.885
	Y	89		**ug/L**		39	0.000
	Zr	90	**49.508**	**ug/L**	2.996	247116	1.527
	Mo	98	**50.341**	**ug/L**	2.496	110503	0.681
	Ag	107	**51.627**	**ug/L**	2.782	177887	1.100
	Cd	111	**51.230**	**ug/L**	2.371	42017	0.260
	Cd	114		**ug/L**		98373	0.609
>	In	115		**ug/L**		161562	161562.371
	Sn	120	**50.250**	**ug/L**	2.579	183203	1.128
	Sb	121	**62.455**	**ug/L**	3.564	157343	0.970
	Sb	123		**ug/L**		121103	0.746
	Ba	135		**ug/L**		43786	0.227
	Ba	137	**49.487**	**ug/L**	1.900	75116	0.390
	Ho	165		**ug/L**		15	0.000
>	Lu	175		**ug/L**		192786	192785.530
	Tl	205	**49.958**	**ug/L**	1.568	268133	1.385
	Pb	208	**51.312**	**ug/L**	2.257	533798	2.747
	Th	232	**50.861**	**ug/L**	1.455	532958	2.758
	U	238	**53.818**	**ug/L**	2.203	547709	2.838

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	104.590				
	Be	9	103.549				
	B	11	104.630				
	Na	23	105.688				
	Mg	24	100.645				
	Al	27	108.085				
	P	31	100.847				
	K	39	96.818				
	Ca	43	98.775				
>	Sc	45			98.3		
	Ti	47	100.991				
	V	51	104.333				
	Cr	52	104.558				
	Cr	53					
	Mn	55	106.580				
	Fe	57	100.145				
	Co	59	102.135				
	Ni	60	106.568				
	Cu	63					
	Cu	65	103.953				
	Zn	66	101.952				
	Zn	67					
	Zn	68					
>	Ge	74			99.8		
	As	75	102.199				
	Se	77					
	Se	82	104.030				
	Kr	83					
	Sr	88	101.997				
	Y	89					
	Zr	90	99.015				
	Mo	98	100.683				
	Ag	107	103.254				
	Cd	111	102.461				
	Cd	114					
>	In	115			98.9		
	Sn	120	100.500				
	Sb	121	124.909				
	Sb	123					
	Ba	135					
	Ba	137	98.975				
	Ho	165					
>	Lu	175			99.5		
	Tl	205	99.915				
	Pb	208	102.623				
	Th	232	101.722				
	U	238	107.636				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 1	Sb	121ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Monday, April 12, 2010 03:08:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\QC Std 2.554

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.030**	**ug/L**	9.690	48	0.000
|	Be	9	**0.013**	**ug/L**	29.920	8	0.000
|	B	11	**1.862**	**ug/L**	15.533	362	0.000
|	Na	23	**-1.575**	**ug/L**	79.664	8336	-0.004
|	Mg	24	**1.650**	**ug/L**	29.230	2667	0.003
|	Al	27	**2.571**	**ug/L**	80.004	5001	0.007
|	P	31	**6.300**	**ug/L**	13.671	3545	0.001
|	K	39	**-4.920**	**ug/L**	149.211	365972	-0.022
|	Ca	43	**1.480**	**ug/L**	96.252	209	0.000
|>	Sc	45		**ug/L**		643091	643091.349
|	Ti	47	**0.043**	**ug/L**	212.623	186	0.000
|	V	51	**-1.289**	**ug/L**	31.094	15092	-0.008
|	Cr	52	**0.008**	**ug/L**	482.794	-11219	0.000
|	Cr	53		**ug/L**		122896	-0.005
|	Mn	55	**-0.001**	**ug/L**	496.489	724	-0.000
|	Fe	57	**2.296**	**ug/L**	85.205	5695	0.000
|	Co	59	**0.008**	**ug/L**	32.969	179	0.000
|	Ni	60	**0.012**	**ug/L**	117.899	80	0.000
|	Cu	63		**ug/L**		2753	0.000
⌊	Cu	65	**-0.063**	**ug/L**	153.288	1271	-0.000
⌈	Zn	66	**-0.055**	**ug/L**	37.738	1230	-0.000
|	Zn	67		**ug/L**		7100	-0.001
|	Zn	68		**ug/L**		1455	0.000
|>	Ge	74		**ug/L**		260464	260464.089
|	As	75	**0.142**	**ug/L**	195.892	167	0.000
|	Se	77		**ug/L**		5206	-0.001
|	Se	82	**1.677**	**ug/L**	19.930	133	0.000
⌊	Kr	83		**ug/L**		52	-0.000
⌈	Sr	88	**0.010**	**ug/L**	42.279	273	0.001
|	Y	89		**ug/L**		21	-0.000
|	Zr	90	**0.234**	**ug/L**	15.682	1714	0.007
|	Mo	98	**0.505**	**ug/L**	12.312	1599	0.007
|	Ag	107	**0.068**	**ug/L**	16.945	412	0.001
|	Cd	111	**0.002**	**ug/L**	813.349	23	0.000
|	Cd	114		**ug/L**		79	0.000
|>	In	115		**ug/L**		162474	162473.993
|	Sn	120	**0.143**	**ug/L**	9.388	1549	0.003
|	Sb	121	**2.377**	**ug/L**	15.275	6684	0.037
⌊	Sb	123		**ug/L**		5197	0.029
⌈	Ba	135		**ug/L**		29	0.000
|	Ba	137	**0.013**	**ug/L**	39.855	50	0.000
|	Ho	165		**ug/L**		8	-0.000
|>	Lu	175		**ug/L**		193703	193703.050
|	Tl	205	**0.252**	**ug/L**	31.990	2554	0.007
|	Pb	208	**0.014**	**ug/L**	65.656	4455	0.001
|	Th	232	**0.382**	**ug/L**	23.171	5390	0.021
⌊	U	238	**0.022**	**ug/L**	58.185	824	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45			99.8		
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74			100.1		
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115			99.4		
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175			100.0		
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 2	Mo	98	ICB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Monday, April 12, 2010 03:14:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\QC Std 3.555

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**12.092**	**ug/L**	3.179	7134	0.011
	Be	9	**0.545**	**ug/L**	10.831	89	0.000
	B	11	**17.874**	**ug/L**	0.561	2490	0.004
	Na	23	**324.310**	**ug/L**	14.215	537027	0.845
	Mg	24	**17.318**	**ug/L**	17.973	21016	0.033
	Al	27	**35.927**	**ug/L**	13.072	59458	0.094
	P	31	**54.701**	**ug/L**	4.501	8094	0.008
	K	39	**351.702**	**ug/L**	7.260	1367941	1.603
	Ca	43	**237.508**	**ug/L**	3.197	1619	0.002
>	Sc	45		**ug/L**		623258	623258.014
	Ti	47	**9.676**	**ug/L**	2.209	3163	0.005
	V	51	**10.385**	**ug/L**	4.501	60883	0.066
	Cr	52	**12.481**	**ug/L**	0.723	26545	0.060
	Cr	53		**ug/L**		104248	-0.028
	Mn	55	**6.177**	**ug/L**	1.561	31559	0.049
	Fe	57	**117.906**	**ug/L**	1.785	17243	0.019
	Co	59	**1.190**	**ug/L**	2.162	4724	0.007
	Ni	60	**2.424**	**ug/L**	2.223	2059	0.003
	Cu	63		**ug/L**		4310	0.003
	Cu	65	**0.920**	**ug/L**	13.308	2128	0.001
	Zn	66	**13.387**	**ug/L**	0.745	8577	0.029
	Zn	67		**ug/L**		6860	-0.001
	Zn	68		**ug/L**		6551	0.020
>	Ge	74		**ug/L**		253903	253902.525
	As	75	**5.344**	**ug/L**	14.596	3530	0.014
	Se	77		**ug/L**		4054	-0.005
	Se	82	**4.843**	**ug/L**	14.657	319	0.001
	Kr	83		**ug/L**		47	-0.000
	Sr	88	**11.935**	**ug/L**	0.956	107622	0.675
	Y	89		**ug/L**		19	-0.000
	Zr	90	**2.138**	**ug/L**	3.509	11021	0.066
	Mo	98	**0.648**	**ug/L**	3.093	1874	0.009
	Ag	107	**1.058**	**ug/L**	3.086	3758	0.023
	Cd	111	**1.190**	**ug/L**	4.891	983	0.006
	Cd	114		**ug/L**		2316	0.014
>	In	115		**ug/L**		159116	159116.444
	Sn	120	**5.660**	**ug/L**	0.405	21221	0.127
	Sb	121	**2.646**	**ug/L**	7.952	7208	0.041
	Sb	123		**ug/L**		5584	0.032
	Ba	135		**ug/L**		1967	0.010
	Ba	137	**2.325**	**ug/L**	1.416	3453	0.018
	Ho	165		**ug/L**		9	-0.000
>	Lu	175		**ug/L**		187029	187029.060
	Tl	205	**1.143**	**ug/L**	2.392	7085	0.032
	Pb	208	**2.316**	**ug/L**	1.549	27345	0.124
	Th	232	**1.141**	**ug/L**	2.913	12905	0.062
	U	238	**0.290**	**ug/L**	2.865	3435	0.015

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	120.918				
	Be	9	108.989				
	B	11	119.160				
	Na	23	129.724				
	Mg	24	115.455				
	Al	27	119.757				
	P	31	109.402				
	K	39	117.234				
	Ca	43	118.754				
>	Sc	45			96.7		
	Ti	47	96.756				
	V	51	103.849				
	Cr	52	124.814				
	Cr	53					
	Mn	55	123.546				
	Fe	57	117.906				
	Co	59	118.979				
	Ni	60	121.205				
	Cu	63					
	Cu	65	91.982				
	Zn	66	133.866				
	Zn	67					
	Zn	68					
>	Ge	74			97.6		
	As	75	106.888				
	Se	77					
	Se	82	96.865				
	Kr	83					
	Sr	88	119.347				
	Y	89					
	Zr	90	106.915				
	Mo	98	129.619				
	Ag	107	105.774				
	Cd	111	119.030				
	Cd	114					
>	In	115			97.4		
	Sn	120	113.206				
	Sb	121	88.208				
	Sb	123					
	Ba	135					
	Ba	137	116.245				
	Ho	165					
>	Lu	175			96.5		
	Tl	205	114.348				
	Pb	208	115.800				
	Th	232	114.134				
	U	238	144.898				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Zn	66	CRDL is out of limits
QC Std 3	U	238	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Monday, April 12, 2010 03:20:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\QC Std 4.556

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.104**	**ug/L**	43.708	92	0.000
	Be	9	**0.135**	**ug/L**	19.636	27	0.000
	B	11	**1.106**	**ug/L**	15.745	256	0.000
	Na	23	**96448.705**	**ug/L**	4.239	160325276	251.232
	Mg	24	**93854.896**	**ug/L**	2.143	113091539	177.190
	Al	27	**92569.880**	**ug/L**	2.132	155212821	243.196
	P	31	**89883.826**	**ug/L**	3.067	8857623	13.877
	K	39	**92229.964**	**ug/L**	2.230	268695995	420.444
	Ca	43	**94558.095**	**ug/L**	3.448	581225	0.911
>	Sc	45		**ug/L**		638350	638349.584
	Ti	47	**1564.928**	**ug/L**	1.470	496414	0.778
	V	51	**-1.084**	**ug/L**	117.800	15753	-0.007
	Cr	52	**2.343**	**ug/L**	0.348	-3962	0.011
	Cr	53		**ug/L**		116150	-0.014
	Mn	55	**5.810**	**ug/L**	1.855	30437	0.047
	Fe	57	**96382.179**	**ug/L**	3.090	10012270	15.682
	Co	59	**0.221**	**ug/L**	5.806	1017	0.001
	Ni	60	**3.297**	**ug/L**	5.866	2841	0.004
	Cu	63		**ug/L**		8204	0.009
	Cu	65	**3.191**	**ug/L**	5.911	4298	0.005
	Zn	66	**5.452**	**ug/L**	2.046	4245	0.012
	Zn	67		**ug/L**		8283	0.005
	Zn	68		**ug/L**		2553	0.005
>	Ge	74		**ug/L**		255306	255305.878
	As	75	**0.972**	**ug/L**	82.383	702	0.002
	Se	77		**ug/L**		6317	0.004
	Se	82	**0.600**	**ug/L**	102.228	66	0.000
	Kr	83		**ug/L**		147	0.000
	Sr	88	**2.893**	**ug/L**	2.580	25999	0.164
	Y	89		**ug/L**		257	0.001
	Zr	90	**0.867**	**ug/L**	40.756	4753	0.027
	Mo	98	**2048.514**	**ug/L**	1.785	4373026	27.713
	Ag	107	**0.106**	**ug/L**	6.000	528	0.002
	Cd	111	**0.235**	**ug/L**	75.167	209	0.001
	Cd	114		**ug/L**		4885	0.031
>	In	115		**ug/L**		157776	157776.284
	Sn	120	**1.185**	**ug/L**	3.018	5192	0.027
	Sb	121	**1.543**	**ug/L**	25.456	4449	0.024
	Sb	123		**ug/L**		3493	0.019
	Ba	135		**ug/L**		664	0.003
	Ba	137	**0.686**	**ug/L**	5.219	1080	0.005
	Ho	165		**ug/L**		3895	0.020
>	Lu	175		**ug/L**		194389	194388.596
	Tl	205	**-0.037**	**ug/L**	20.758	1004	-0.001
	Pb	208	**0.207**	**ug/L**	4.496	6476	0.011
	Th	232	**0.390**	**ug/L**	37.137	5482	0.021
	U	238	**-0.024**	**ug/L**	106.922	356	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23	96.449				
	Mg	24	93.855				
	Al	27	92.570				
	P	31	89.884				
	K	39	92.230				
	Ca	43	94.558				
>	Sc	45			99.0		
	Ti	47	78.246				
	V	51					
	Cr	52	71.012				
	Cr	53					
	Mn	55	100.174				
	Fe	57	96.382				
	Co	59	94.057				
	Ni	60	99.597				
	Cu	63					
	Cu	65	95.541				
	Zn	66	145.012				
	Zn	67					
	Zn	68					
>	Ge	74			98.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	97.750				
	Y	89					
	Zr	90					
	Mo	98	102.426				
	Ag	107					
	Cd	111	52.946				
	Cd	114					
>	In	115			96.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137	85.906				
	Ho	165					
>	Lu	175			100.3		
	Tl	205					
	Pb	208	109.531				
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Monday, April 12, 2010 03:26:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\QC Std 5.557

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**17.926**	**ug/L**	0.270	10900	0.017
	Be	9	**17.899**	**ug/L**	1.814	2847	0.004
	B	11	**17.969**	**ug/L**	2.873	2582	0.004
	Na	23	**99229.137**	**ug/L**	1.560	166286490	258.475
	Mg	24	**91729.458**	**ug/L**	2.978	111383208	173.178
	Al	27	**90157.485**	**ug/L**	4.608	152298026	236.858
	P	31	**90232.131**	**ug/L**	1.578	8962661	13.930
	K	39	**100068.116**	**ug/L**	5.956	293664971	456.176
	Ca	43	**94672.344**	**ug/L**	1.747	586606	0.912
>	Sc	45		**ug/L**		643236	643235.606
	Ti	47	**1597.247**	**ug/L**	2.850	510537	0.794
	V	51	**18.667**	**ug/L**	6.453	96664	0.119
	Cr	52	**21.852**	**ug/L**	3.906	56392	0.105
	Cr	53		**ug/L**		125355	-0.001
	Mn	55	**25.389**	**ug/L**	0.905	131579	0.203
	Fe	57	**97420.346**	**ug/L**	1.310	10200950	15.851
	Co	59	**19.164**	**ug/L**	2.849	76290	0.118
	Ni	60	**22.085**	**ug/L**	1.833	18797	0.029
	Cu	63		**ug/L**		44508	0.065
	Cu	65	**21.985**	**ug/L**	1.043	22019	0.032
	Zn	66	**22.617**	**ug/L**	2.452	13997	0.049
	Zn	67		**ug/L**		10070	0.011
	Zn	68		**ug/L**		9469	0.031
>	Ge	74		**ug/L**		260493	260493.142
	As	75	**19.783**	**ug/L**	6.566	13191	0.050
	Se	77		**ug/L**		7667	0.009
	Se	82	**20.733**	**ug/L**	4.100	1301	0.005
	Kr	83		**ug/L**		143	0.000
	Sr	88	**23.013**	**ug/L**	1.357	211807	1.302
	Y	89		**ug/L**		273	0.002
	Zr	90	**20.009**	**ug/L**	3.040	100805	0.617
	Mo	98	**2044.049**	**ug/L**	4.536	4493389	27.653
	Ag	107	**18.872**	**ug/L**	2.287	65541	0.402
	Cd	111	**18.952**	**ug/L**	4.475	15648	0.096
	Cd	114		**ug/L**		40425	0.249
>	In	115		**ug/L**		162558	162558.022
	Sn	120	**19.777**	**ug/L**	2.159	73169	0.444
	Sb	121	**21.342**	**ug/L**	6.872	54535	0.331
	Sb	123		**ug/L**		42004	0.255
	Ba	135		**ug/L**		17393	0.089
	Ba	137	**19.595**	**ug/L**	1.396	30272	0.154
	Ho	165		**ug/L**		4037	0.021
>	Lu	175		**ug/L**		196073	196073.033
	Tl	205	**17.701**	**ug/L**	0.937	97424	0.491
	Pb	208	**18.513**	**ug/L**	0.697	198700	0.991
	Th	232	**19.059**	**ug/L**	0.712	204004	1.033
	U	238	**19.999**	**ug/L**	1.272	207403	1.055

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	89.631				
	Be	9	89.497				
	B	11	89.847				
	Na	23	99.229				
	Mg	24	91.729				
	Al	27	90.157				
	P	31	90.232				
	K	39	100.068				
	Ca	43	94.672				
>	Sc	45			99.8		
	Ti	47	79.862				
	V	51	93.335				
	Cr	52	93.785				
	Cr	53					
	Mn	55	98.407				
	Fe	57	97.420				
	Co	59	94.706				
	Ni	60	94.744				
	Cu	63					
	Cu	65	94.195				
	Zn	66	95.189				
	Zn	67					
	Zn	68					
>	Ge	74			100.1		
	As	75	98.914				
	Se	77					
	Se	82	103.665				
	Kr	83					
	Sr	88	100.232				
	Y	89					
	Zr	90	100.046				
	Mo	98	102.202				
	Ag	107	94.361				
	Cd	111	92.703				
	Cd	114					
>	In	115			99.5		
	Sn	120	98.884				
	Sb	121	106.710				
	Sb	123					
	Ba	135					
	Ba	137	94.214				
	Ho	165					
>	Lu	175			101.2		
	Tl	205	88.504				
	Pb	208	91.698				
	Th	232	95.296				
	U	238	99.993				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, April 12, 2010 03:32:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\QC Std 6.558

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.592**	**ug/L**	1.555	30626	0.047
	Be	9	**49.022**	**ug/L**	3.029	7924	0.012
	B	11	**98.787**	**ug/L**	3.018	13962	0.021
	Na	23	**5255.300**	**ug/L**	3.106	8971235	13.689
	Mg	24	**5073.394**	**ug/L**	4.907	6267441	9.578
	Al	27	**5051.226**	**ug/L**	2.011	8684608	13.270
	P	31	**4917.974**	**ug/L**	1.255	499825	0.759
	K	39	**4861.454**	**ug/L**	1.967	14889382	22.162
	Ca	43	**4848.567**	**ug/L**	1.604	30757	0.047
>	Sc	45		**ug/L**		654444	654443.829
	Ti	47	**52.142**	**ug/L**	2.541	17127	0.026
	V	51	**50.453**	**ug/L**	4.440	230632	0.321
	Cr	52	**52.131**	**ug/L**	0.590	152781	0.251
	Cr	53		**ug/L**		121797	-0.009
	Mn	55	**52.888**	**ug/L**	1.546	278063	0.424
	Fe	57	**5088.821**	**ug/L**	2.129	547355	0.828
	Co	59	**51.613**	**ug/L**	1.504	208834	0.319
	Ni	60	**53.706**	**ug/L**	0.959	46411	0.071
	Cu	63		**ug/L**		109089	0.163
	Cu	65	**53.858**	**ug/L**	1.179	52919	0.079
	Zn	66	**51.795**	**ug/L**	2.776	31630	0.112
	Zn	67		**ug/L**		10913	0.012
	Zn	68		**ug/L**		23355	0.081
>	Ge	74		**ug/L**		270833	270832.765
	As	75	**50.293**	**ug/L**	0.456	34740	0.128
	Se	77		**ug/L**		6844	0.005
	Se	82	**49.302**	**ug/L**	2.574	3173	0.012
	Kr	83		**ug/L**		53	-0.000
	Sr	88	**50.962**	**ug/L**	1.769	479052	2.883
	Y	89		**ug/L**		42	0.000
	Zr	90	**49.253**	**ug/L**	2.767	252772	1.519
	Mo	98	**52.057**	**ug/L**	3.849	117441	0.704
	Ag	107	**51.732**	**ug/L**	0.923	183305	1.102
	Cd	111	**50.831**	**ug/L**	2.368	42864	0.258
	Cd	114		**ug/L**		100731	0.606
>	In	115		**ug/L**		166118	166118.400
	Sn	120	**49.632**	**ug/L**	1.852	186070	1.114
	Sb	121	**57.383**	**ug/L**	4.521	148680	0.891
	Sb	123		**ug/L**		114475	0.686
	Ba	135		**ug/L**		44954	0.232
	Ba	137	**50.492**	**ug/L**	1.834	76960	0.397
	Ho	165		**ug/L**		14	0.000
>	Lu	175		**ug/L**		193577	193577.415
	Tl	205	**50.309**	**ug/L**	1.524	271126	1.395
	Pb	208	**51.343**	**ug/L**	1.547	536368	2.749
	Th	232	**50.726**	**ug/L**	1.060	533760	2.750
	U	238	**54.028**	**ug/L**	1.100	552171	2.849

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	99.185				
	Be	9	98.044				
	B	11	98.787				
	Na	23	105.106				
	Mg	24	101.468				
	Al	27	100.024				
	P	31	98.359				
	K	39	97.229				
	Ca	43	96.971				
>	Sc	45			101.5		
	Ti	47	104.284				
	V	51	100.907				
	Cr	52	104.262				
	Cr	53					
	Mn	55	105.776				
	Fe	57	101.776				
	Co	59	103.227				
	Ni	60	107.412				
	Cu	63					
	Cu	65	107.716				
	Zn	66	103.590				
	Zn	67					
	Zn	68					
>	Ge	74			104.1		
	As	75	100.585				
	Se	77					
	Se	82	98.604				
	Kr	83					
	Sr	88	101.924				
	Y	89					
	Zr	90	98.506				
	Mo	98	104.115				
	Ag	107	103.463				
	Cd	111	101.662				
	Cd	114					
>	In	115			101.7		
	Sn	120	99.265				
	Sb	121	114.766				
	Sb	123					
	Ba	135					
	Ba	137	100.985				
	Ho	165					
>	Lu	175			99.9		
	Tl	205	100.617				
	Pb	208	102.686				
	Th	232	101.453				
	U	238	108.056				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Sb	121	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, April 12, 2010 03:38:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\QC Std 7.559

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.061**	**ug/L**	9.246	68	0.000
	Be	9	**0.015**	**ug/L**	95.491	8	0.000
	B	11	**1.025**	**ug/L**	31.807	255	0.000
	Na	23	**4.830**	**ug/L**	34.168	19680	0.013
	Mg	24	**3.971**	**ug/L**	94.869	5668	0.007
	Al	27	**4.002**	**ug/L**	35.500	7669	0.011
	P	31	**7.560**	**ug/L**	27.925	3786	0.001
	K	39	**-3.637**	**ug/L**	156.122	381367	-0.017
	Ca	43	**9.657**	**ug/L**	71.987	268	0.000
>	Sc	45		**ug/L**		663073	663072.553
	Ti	47	**0.584**	**ug/L**	6.487	370	0.000
	V	51	**-1.081**	**ug/L**	164.553	16380	-0.007
	Cr	52	**0.242**	**ug/L**	42.570	-10822	0.001
	Cr	53		**ug/L**		123785	-0.009
	Mn	55	**0.001**	**ug/L**	333.696	761	0.000
	Fe	57	**6.068**	**ug/L**	23.706	6279	0.001
	Co	59	**0.008**	**ug/L**	91.430	186	0.000
	Ni	60	**0.007**	**ug/L**	202.126	77	0.000
	Cu	63		**ug/L**		2695	-0.000
	Cu	65	**-0.028**	**ug/L**	99.092	1344	-0.000
	Zn	66	**-0.410**	**ug/L**	23.152	1059	-0.001
	Zn	67		**ug/L**		7077	-0.001
	Zn	68		**ug/L**		1239	-0.001
>	Ge	74		**ug/L**		267568	267567.613
	As	75	**1.207**	**ug/L**	49.169	899	0.003
	Se	77		**ug/L**		5882	0.001
	Se	82	**0.805**	**ug/L**	41.251	82	0.000
	Kr	83		**ug/L**		58	-0.000
	Sr	88	**0.009**	**ug/L**	25.050	263	0.000
	Y	89		**ug/L**		19	-0.000
	Zr	90	**0.134**	**ug/L**	20.539	1222	0.004
	Mo	98	**0.646**	**ug/L**	11.800	1925	0.009
	Ag	107	**0.043**	**ug/L**	27.991	327	0.001
	Cd	111	**-0.006**	**ug/L**	114.590	17	-0.000
	Cd	114		**ug/L**		56	0.000
>	In	115		**ug/L**		164037	164036.764
	Sn	120	**0.097**	**ug/L**	8.909	1393	0.002
	Sb	121	**1.242**	**ug/L**	18.014	3850	0.019
	Sb	123		**ug/L**		3075	0.015
	Ba	135		**ug/L**		32	0.000
	Ba	137	**0.010**	**ug/L**	85.996	47	0.000
	Ho	165		**ug/L**		10	-0.000
>	Lu	175		**ug/L**		196361	196360.616
	Tl	205	**0.124**	**ug/L**	26.657	1893	0.003
	Pb	208	**0.034**	**ug/L**	22.706	4727	0.002
	Th	232	**0.203**	**ug/L**	26.757	3559	0.011
	U	238	**0.033**	**ug/L**	44.914	948	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			102.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			102.9		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			100.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			101.4		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 7	Mo	98	CCB is out of limts (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Monday, April 12, 2010 03:44:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\QC Std 10.560

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**927.313**	**ug/L**	1.278	557826	0.874
	Be	9	**922.146**	**ug/L**	1.775	145235	0.228
	B	11	**0.474**	**ug/L**	11.019	169	0.000
	Na	23	**51598.467**	**ug/L**	5.107	85810104	134.405
	Mg	24	**46808.744**	**ug/L**	6.066	56374936	88.371
	Al	27	**48162.212**	**ug/L**	6.150	80703380	126.530
	P	31	**23434.550**	**ug/L**	2.523	2311066	3.618
	K	39	**47071.099**	**ug/L**	3.449	137329368	214.581
	Ca	43	**48493.935**	**ug/L**	1.746	298119	0.467
>	Sc	45		**ug/L**		638102	638101.544
	Ti	47	**36.866**	**ug/L**	0.561	11859	0.018
	V	51	**972.502**	**ug/L**	2.292	3965163	6.183
	Cr	52	**956.697**	**ug/L**	1.815	2926937	4.605
	Cr	53		**ug/L**		469482	0.540
	Mn	55	**953.528**	**ug/L**	1.124	4875974	7.640
	Fe	57	**48463.500**	**ug/L**	1.786	5036258	7.885
	Co	59	**932.764**	**ug/L**	2.441	3677005	5.763
	Ni	60	**926.039**	**ug/L**	2.526	779053	1.221
	Cu	63		**ug/L**		1762631	2.758
	Cu	65	**919.747**	**ug/L**	0.637	859933	1.346
	Zn	66	**2150.083**	**ug/L**	2.282	1196250	4.648
	Zn	67		**ug/L**		197960	0.742
	Zn	68		**ug/L**		860229	3.340
>	Ge	74		**ug/L**		257165	257165.003
	As	75	**928.629**	**ug/L**	0.652	607780	2.363
	Se	77		**ug/L**		27289	0.086
	Se	82	**487.321**	**ug/L**	0.379	29518	0.115
	Kr	83		**ug/L**		85	0.000
	Sr	88	**974.371**	**ug/L**	3.140	8749776	55.127
	Y	89		**ug/L**		263	0.002
	Zr	90	**491.383**	**ug/L**	2.706	2405499	15.152
	Mo	98	**1000.086**	**ug/L**	3.082	2147875	13.530
	Ag	107	**245.837**	**ug/L**	0.361	831778	5.239
	Cd	111	**948.438**	**ug/L**	1.211	763975	4.813
	Cd	114		**ug/L**		1749824	11.024
>	In	115		**ug/L**		158729	158728.630
	Sn	120	**966.554**	**ug/L**	2.314	3444352	21.694
	Sb	121	**311.858**	**ug/L**	1.357	769423	4.843
	Sb	123		**ug/L**		596219	3.753
	Ba	135		**ug/L**		831661	4.167
	Ba	137	**912.568**	**ug/L**	1.544	1433706	7.183
	Ho	165		**ug/L**		96	0.000
>	Lu	175		**ug/L**		199577	199577.070
	Tl	205	**453.029**	**ug/L**	0.758	2507600	12.558
	Pb	208	**4655.006**	**ug/L**	1.594	49745449	249.227
	Th	232	**2358.733**	**ug/L**	1.733	25525609	127.888
	U	238	**4997.893**	**ug/L**	1.507	52606827	263.595

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	92.731				
|	Be	9	92.215				
|	B	11					
|	Na	23	103.197				
|	Mg	24	93.617				
|	Al	27	96.324				
|	P	31	93.738				
|	K	39	94.142				
|	Ca	43	96.988				
|>	Sc	45			99.0		
|	Ti	47					
|	V	51	97.250				
|	Cr	52	95.670				
|	Cr	53					
|	Mn	55	95.353				
|	Fe	57	96.927				
|	Co	59	93.276				
|	Ni	60	92.604				
|	Cu	63					
⌊	Cu	65	91.975				
⌈	Zn	66	86.003				
|	Zn	67					
|	Zn	68					
|>	Ge	74			98.9		
|	As	75	92.863				
|	Se	77					
|	Se	82	97.464				
⌊	Kr	83					
⌈	Sr	88	97.437				
|	Y	89					
|	Zr	90	98.277				
|	Mo	98	100.009				
|	Ag	107	98.335				
|	Cd	111	94.844				
|	Cd	114					
|>	In	115			97.2		
|	Sn	120	96.655				
|	Sb	121	124.743				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	91.257				
|	Ho	165					
|>	Lu	175			103.0		
|	Tl	205	90.606				
|	Pb	208	93.100				
|	Th	232	94.349				
⌊	U	238	99.958				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Zn	66	LRS is out of limits (+/- 10%)
QC Std 10	Sb	121	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Monday, April 12, 2010 03:51:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\QC Std 11.561

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**50.281**	**ug/L**	0.388	31325	0.047
|	Be	9	**49.923**	**ug/L**	1.133	8142	0.012
|	B	11	**99.071**	**ug/L**	1.624	14127	0.021
|	Na	23	**5262.825**	**ug/L**	1.901	9061927	13.709
|	Mg	24	**5479.521**	**ug/L**	9.688	6830656	10.345
|	Al	27	**4937.453**	**ug/L**	2.473	8565056	12.971
|	P	31	**4902.983**	**ug/L**	1.219	502697	0.757
|	K	39	**5110.624**	**ug/L**	1.108	15771565	23.298
|	Ca	43	**4971.923**	**ug/L**	0.396	31813	0.048
|>	Sc	45		**ug/L**		660190	660190.110
|	Ti	47	**50.088**	**ug/L**	1.730	16606	0.025
|	V	51	**51.249**	**ug/L**	3.664	236055	0.326
|	Cr	52	**53.142**	**ug/L**	1.690	157338	0.256
|	Cr	53		**ug/L**		120832	-0.013
|	Mn	55	**53.603**	**ug/L**	1.917	284333	0.430
|	Fe	57	**5012.467**	**ug/L**	1.000	544027	0.816
|	Co	59	**51.398**	**ug/L**	1.452	209797	0.318
|	Ni	60	**53.972**	**ug/L**	2.027	47049	0.071
|	Cu	63		**ug/L**		109472	0.162
⌊	Cu	65	**53.257**	**ug/L**	0.502	52806	0.078
⌈	Zn	66	**51.496**	**ug/L**	2.455	31544	0.111
|	Zn	67		**ug/L**		10903	0.012
|	Zn	68		**ug/L**		23267	0.080
|>	Ge	74		**ug/L**		271556	271556.081
|	As	75	**52.836**	**ug/L**	0.892	36592	0.134
|	Se	77		**ug/L**		6719	0.004
|	Se	82	**54.296**	**ug/L**	4.039	3501	0.013
⌊	Kr	83		**ug/L**		53	-0.000
⌈	Sr	88	**51.716**	**ug/L**	1.399	488312	2.926
|	Y	89		**ug/L**		44	0.000
|	Zr	90	**52.085**	**ug/L**	4.805	268373	1.606
|	Mo	98	**52.431**	**ug/L**	3.757	118790	0.709
|	Ag	107	**51.756**	**ug/L**	1.435	184183	1.103
|	Cd	111	**52.082**	**ug/L**	2.664	44109	0.264
|	Cd	114		**ug/L**		103281	0.619
|>	In	115		**ug/L**		166853	166853.012
|	Sn	120	**51.674**	**ug/L**	2.448	194511	1.160
|	Sb	121	**57.659**	**ug/L**	4.589	150048	0.895
⌊	Sb	123		**ug/L**		115405	0.688
⌈	Ba	135		**ug/L**		45547	0.229
|	Ba	137	**50.585**	**ug/L**	1.753	79109	0.398
|	Ho	165		**ug/L**		9	-0.000
|>	Lu	175		**ug/L**		198599	198598.574
|	Tl	205	**50.834**	**ug/L**	1.645	281077	1.409
|	Pb	208	**52.404**	**ug/L**	1.413	561624	2.806
|	Th	232	**54.371**	**ug/L**	1.202	586846	2.948
⌊	U	238	**54.322**	**ug/L**	1.641	569608	2.865

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	100.562				
|	Be	9	99.845				
|	B	11	99.071				
|	Na	23	105.257				
|	Mg	24	109.590				
|	Al	27	97.771				
|	P	31	98.060				
|	K	39	102.212				
|	Ca	43	99.438				
|>	Sc	45			102.4		
|	Ti	47	100.175				
|	V	51	102.498				
|	Cr	52	106.284				
|	Cr	53					
|	Mn	55	107.206				
|	Fe	57	100.249				
|	Co	59	102.796				
|	Ni	60	107.945				
|	Cu	63					
⌊	Cu	65	106.513				
⌈	Zn	66	102.992				
|	Zn	67					
|	Zn	68					
|>	Ge	74			104.4		
|	As	75	105.672				
|	Se	77					
|	Se	82	108.592				
⌊	Kr	83					
⌈	Sr	88	103.433				
|	Y	89					
|	Zr	90	104.169				
|	Mo	98	104.862				
|	Ag	107	103.513				
|	Cd	111	104.165				
|	Cd	114					
|>	In	115			102.1		
|	Sn	120	103.349				
|	Sb	121	115.317				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	101.170				
|	Ho	165					
|>	Lu	175			102.5		
|	Tl	205	101.668				
|	Pb	208	104.808				
|	Th	232	108.741				
⌊	U	238	108.645				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Sb	121	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Monday, April 12, 2010 03:57:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\QC Std 12.562

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.106**	**ug/L**	30.845	100	0.000
	Be	9	**0.018**	**ug/L**	64.210	9	0.000
	B	11	**1.041**	**ug/L**	15.698	265	0.000
	Na	23	**4.686**	**ug/L**	75.280	20015	0.012
	Mg	24	**4.353**	**ug/L**	19.683	6335	0.008
	Al	27	**3.889**	**ug/L**	60.477	7669	0.010
	P	31	**2.577**	**ug/L**	69.782	3377	0.000
	K	39	**0.880**	**ug/L**	633.113	407402	0.004
	Ca	43	**7.240**	**ug/L**	24.333	261	0.000
>	Sc	45		**ug/L**		684008	684008.183
	Ti	47	**0.160**	**ug/L**	19.632	238	0.000
	V	51	**-1.276**	**ug/L**	110.481	16065	-0.008
	Cr	52	**0.442**	**ug/L**	11.535	-10504	0.002
	Cr	53		**ug/L**		124787	-0.013
	Mn	55	**0.026**	**ug/L**	26.601	919	0.000
	Fe	57	**1.571**	**ug/L**	154.676	5975	0.000
	Co	59	**0.040**	**ug/L**	20.317	326	0.000
	Ni	60	**0.039**	**ug/L**	29.603	109	0.000
	Cu	63		**ug/L**		2799	0.000
	Cu	65	**-0.092**	**ug/L**	88.529	1323	-0.000
	Zn	66	**-0.280**	**ug/L**	14.627	1182	-0.001
	Zn	67		**ug/L**		7551	-0.001
	Zn	68		**ug/L**		1443	-0.000
>	Ge	74		**ug/L**		279215	279215.269
	As	75	**0.576**	**ug/L**	42.343	490	0.001
	Se	77		**ug/L**		5750	-0.000
	Se	82	**2.231**	**ug/L**	10.212	179	0.001
	Kr	83		**ug/L**		61	-0.000
	Sr	88	**0.040**	**ug/L**	10.674	572	0.002
	Y	89		**ug/L**		21	-0.000
	Zr	90	**0.409**	**ug/L**	16.051	2729	0.013
	Mo	98	**0.888**	**ug/L**	7.891	2572	0.012
	Ag	107	**0.111**	**ug/L**	20.059	588	0.002
	Cd	111	**0.053**	**ug/L**	11.616	69	0.000
	Cd	114		**ug/L**		172	0.001
>	In	115		**ug/L**		171192	171191.715
	Sn	120	**0.414**	**ug/L**	7.981	2675	0.009
	Sb	121	**1.154**	**ug/L**	19.713	3786	0.018
	Sb	123		**ug/L**		2909	0.014
	Ba	135		**ug/L**		75	0.000
	Ba	137	**0.032**	**ug/L**	22.477	81	0.000
	Ho	165		**ug/L**		8	-0.000
>	Lu	175		**ug/L**		198223	198222.584
	Tl	205	**0.597**	**ug/L**	15.075	4505	0.017
	Pb	208	**0.341**	**ug/L**	7.117	8020	0.018
	Th	232	**0.835**	**ug/L**	13.697	10368	0.045
	U	238	**0.251**	**ug/L**	13.116	3230	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			106.1		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			107.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			104.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			102.3		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 12	Mo	98	CCB is out of limits (+/- PQL)
QC Std 12	U	238	CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1202056872
Sample Date/Time: Monday, April 12, 2010 04:03:24
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 959112|1|bcd1
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\1202056872.563

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.144**	**ug/L**	12.170	127	0.000
|	Be	9	**0.024**	**ug/L**	47.465	10	0.000
|	B	11	**0.646**	**ug/L**	11.407	212	0.000
|	Na	23	**12.449**	**ug/L**	9.262	34709	0.032
|	Mg	24	**1.980**	**ug/L**	60.334	3334	0.004
|	Al	27	**3.940**	**ug/L**	46.843	8003	0.010
|	P	31	**2.807**	**ug/L**	94.310	3482	0.000
|	K	39	**4.906**	**ug/L**	124.806	429703	0.022
|	Ca	43	**42.570**	**ug/L**	9.692	505	0.000
|>	Sc	45		**ug/L**		700502	700502.234
|	Ti	47	**0.659**	**ug/L**	10.251	417	0.000
|	V	51	**-0.627**	**ug/L**	395.800	19170	-0.004
|	Cr	52	**-5.241**	**ug/L**	10.083	-29897	-0.025
|	Cr	53		**ug/L**		345927	0.299
|	Mn	55	**0.242**	**ug/L**	5.101	2155	0.002
|	Fe	57	**12.836**	**ug/L**	10.541	7406	0.002
|	Co	59	**0.008**	**ug/L**	65.912	194	0.000
|	Ni	60	**0.029**	**ug/L**	51.539	102	0.000
|	Cu	63		**ug/L**		4478	0.002
⌊	Cu	65	**0.689**	**ug/L**	19.996	2152	0.001
⌈	Zn	66	**3.968**	**ug/L**	27.214	3880	0.009
|	Zn	67		**ug/L**		30421	0.077
|	Zn	68		**ug/L**		4296	0.009
|>	Ge	74		**ug/L**		289438	289438.482
|	As	75	**0.201**	**ug/L**	625.115	237	0.001
|	Se	77		**ug/L**		19595	0.047
|	Se	82	**1.361**	**ug/L**	31.244	126	0.000
⌊	Kr	83		**ug/L**		64	-0.000
⌈	Sr	88	**0.038**	**ug/L**	20.272	578	0.002
|	Y	89		**ug/L**		33	0.000
|	Zr	90	**0.402**	**ug/L**	15.740	2782	0.012
|	Mo	98	**0.595**	**ug/L**	4.559	1954	0.008
|	Ag	107	**0.047**	**ug/L**	22.882	369	0.001
|	Cd	111	**0.026**	**ug/L**	15.146	47	0.000
|	Cd	114		**ug/L**		119	0.000
|>	In	115		**ug/L**		176710	176709.743
|	Sn	120	**1.278**	**ug/L**	8.215	6187	0.029
|	Sb	121	**0.728**	**ug/L**	24.379	2744	0.011
⌊	Sb	123		**ug/L**		2109	0.009
⌈	Ba	135		**ug/L**		69	0.000
|	Ba	137	**0.044**	**ug/L**	14.291	102	0.000
|	Ho	165		**ug/L**		9	-0.000
|>	Lu	175		**ug/L**		199834	199833.745
|	Tl	205	**0.338**	**ug/L**	17.899	3105	0.009
|	Pb	208	**1.110**	**ug/L**	5.047	16318	0.059
|	Th	232	**0.592**	**ug/L**	14.269	7823	0.032
⌊	U	238	**0.095**	**ug/L**	10.877	1611	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			108.7		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			111.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			108.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			103.2		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202056873
Sample Date/Time: Monday, April 12, 2010 04:09:38
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 959112|1|bcd1
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\1202056873.564

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**47.437**	**ug/L**	0.939	31120	0.045
|	Be	9	**48.562**	**ug/L**	2.265	8339	0.012
|	B	11	**103.534**	**ug/L**	1.014	15540	0.022
|	Na	23	**1968.041**	**ug/L**	4.852	3576238	5.126
|	Mg	24	**1911.396**	**ug/L**	6.957	2509112	3.609
|	Al	27	**1926.582**	**ug/L**	6.333	3518248	5.061
|	P	31	**1868.379**	**ug/L**	0.129	203673	0.288
|	K	39	**1998.747**	**ug/L**	2.059	6745933	9.112
|	Ca	43	**2046.946**	**ug/L**	2.403	13917	0.020
|>	Sc	45		**ug/L**		695164	695164.170
|	Ti	47	**45.898**	**ug/L**	2.479	16039	0.023
|	V	51	**50.993**	**ug/L**	3.710	247360	0.324
|	Cr	52	**46.568**	**ug/L**	0.888	143662	0.224
|	Cr	53		**ug/L**		374813	0.344
|	Mn	55	**53.782**	**ug/L**	1.889	300344	0.431
|	Fe	57	**2121.865**	**ug/L**	1.423	245883	0.345
|	Co	59	**53.070**	**ug/L**	0.130	228101	0.328
|	Ni	60	**53.825**	**ug/L**	1.194	49408	0.071
|	Cu	63		**ug/L**		118286	0.166
⌊	Cu	65	**54.375**	**ug/L**	1.626	56737	0.080
⌈	Zn	66	**48.706**	**ug/L**	3.022	32004	0.105
|	Zn	67		**ug/L**		36860	0.099
|	Zn	68		**ug/L**		24546	0.079
|>	Ge	74		**ug/L**		290647	290646.962
|	As	75	**50.602**	**ug/L**	8.493	37502	0.129
|	Se	77		**ug/L**		22061	0.055
|	Se	82	**48.832**	**ug/L**	1.900	3374	0.011
⌊	Kr	83		**ug/L**		77	0.000
⌈	Sr	88	**49.778**	**ug/L**	2.151	504519	2.816
|	Y	89		**ug/L**		54	0.000
|	Zr	90	**48.628**	**ug/L**	1.705	269097	1.500
|	Mo	98	**50.242**	**ug/L**	1.086	122252	0.680
|	Ag	107	**51.337**	**ug/L**	1.035	196116	1.094
|	Cd	111	**48.182**	**ug/L**	1.577	43813	0.245
|	Cd	114		**ug/L**		102944	0.575
|>	In	115		**ug/L**		179071	179071.035
|	Sn	120	**49.003**	**ug/L**	1.390	198077	1.100
|	Sb	121	**59.775**	**ug/L**	0.767	166990	0.928
⌊	Sb	123		**ug/L**		128408	0.714
⌈	Ba	135		**ug/L**		45678	0.224
|	Ba	137	**49.095**	**ug/L**	0.294	78890	0.386
|	Ho	165		**ug/L**		17	0.000
|>	Lu	175		**ug/L**		204056	204056.313
|	Tl	205	**47.789**	**ug/L**	0.506	271579	1.325
|	Pb	208	**52.187**	**ug/L**	1.590	574669	2.794
|	Th	232	**51.609**	**ug/L**	1.924	572492	2.798
⌊	U	238	**54.936**	**ug/L**	2.300	591709	2.897

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45			107.8		
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74			111.7		
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115			109.6		
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175			105.3		
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248108001
Sample Date/Time: Monday, April 12, 2010 04:15:53
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959112|1|bcd1
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\248108001.565

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.229**	**ug/L**	9.386	185	0.000
	Be	9	**0.008**	**ug/L**	202.275	8	0.000
	B	11	**28.557**	**ug/L**	6.662	4443	0.006
	Na	23	**83.521**	**ug/L**	14.155	165628	0.218
	Mg	24	**9.192**	**ug/L**	3.220	13006	0.017
	Al	27	**26.743**	**ug/L**	13.343	50423	0.070
	P	31	**4.519**	**ug/L**	43.658	3704	0.001
	K	39	**72.884**	**ug/L**	4.442	653620	0.332
	Ca	43	**61.685**	**ug/L**	8.052	641	0.001
>	Sc	45		**ug/L**		707762	707761.519
	Ti	47	**1.334**	**ug/L**	6.069	659	0.001
	V	51	**1.533**	**ug/L**	63.086	29371	0.010
	Cr	52	**-3.954**	**ug/L**	8.323	-25824	-0.019
	Cr	53		**ug/L**		375294	0.335
	Mn	55	**0.531**	**ug/L**	0.718	3818	0.004
	Fe	57	**28.669**	**ug/L**	9.808	9299	0.005
	Co	59	**0.012**	**ug/L**	23.619	213	0.000
	Ni	60	**0.156**	**ug/L**	11.738	222	0.000
	Cu	63		**ug/L**		4856	0.003
	Cu	65	**0.874**	**ug/L**	11.084	2367	0.001
	Zn	66	**2.483**	**ug/L**	7.029	3003	0.005
	Zn	67		**ug/L**		32616	0.083
	Zn	68		**ug/L**		3766	0.007
>	Ge	74		**ug/L**		294262	294262.186
	As	75	**1.225**	**ug/L**	42.481	1006	0.003
	Se	77		**ug/L**		22157	0.055
	Se	82	**1.162**	**ug/L**	16.537	115	0.000
	Kr	83		**ug/L**		63	-0.000
	Sr	88	**0.157**	**ug/L**	1.925	1753	0.009
	Y	89		**ug/L**		195	0.001
	Zr	90	**0.372**	**ug/L**	17.764	2592	0.011
	Mo	98	**0.324**	**ug/L**	2.645	1296	0.004
	Ag	107	**0.039**	**ug/L**	24.263	333	0.001
	Cd	111	**0.023**	**ug/L**	107.936	44	0.000
	Cd	114		**ug/L**		96	0.000
>	In	115		**ug/L**		175115	175115.237
	Sn	120	**0.776**	**ug/L**	1.878	4159	0.017
	Sb	121	**0.184**	**ug/L**	2.332	1238	0.003
	Sb	123		**ug/L**		1004	0.002
	Ba	135		**ug/L**		482	0.002
	Ba	137	**0.501**	**ug/L**	5.816	817	0.004
	Ho	165		**ug/L**		16	0.000
>	Lu	175		**ug/L**		199044	199043.746
	Tl	205	**0.626**	**ug/L**	18.018	4688	0.017
	Pb	208	**0.851**	**ug/L**	2.410	13496	0.046
	Th	232	**0.632**	**ug/L**	29.239	8228	0.034
	U	238	**0.035**	**ug/L**	34.107	977	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			109.8		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			113.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			107.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			102.7		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, April 12, 2010 05:05:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\QC Std 6.573

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.807**	**ug/L**	0.772	30576	0.047
	Be	9	**49.214**	**ug/L**	3.101	7907	0.012
	B	11	**100.083**	**ug/L**	0.214	14062	0.021
	Na	23	**5216.555**	**ug/L**	3.695	8851128	13.588
	Mg	24	**5018.461**	**ug/L**	2.745	6163339	9.474
	Al	27	**4977.080**	**ug/L**	2.341	8508127	13.076
	P	31	**4827.331**	**ug/L**	1.539	487750	0.745
	K	39	**4923.194**	**ug/L**	3.536	14982550	22.443
	Ca	43	**4807.632**	**ug/L**	2.311	30315	0.046
>	Sc	45		**ug/L**		650556	650555.880
	Ti	47	**48.828**	**ug/L**	2.560	15954	0.024
	V	51	**50.823**	**ug/L**	5.859	230743	0.323
	Cr	52	**51.102**	**ug/L**	2.324	148619	0.246
	Cr	53		**ug/L**		133243	0.009
	Mn	55	**51.807**	**ug/L**	2.184	270763	0.415
	Fe	57	**4922.337**	**ug/L**	3.660	526405	0.801
	Co	59	**50.163**	**ug/L**	2.546	201740	0.310
	Ni	60	**52.646**	**ug/L**	2.991	45219	0.069
	Cu	63		**ug/L**		106822	0.160
	Cu	65	**52.665**	**ug/L**	1.370	51467	0.077
	Zn	66	**51.158**	**ug/L**	0.703	30435	0.111
	Zn	67		**ug/L**		11640	0.016
	Zn	68		**ug/L**		22331	0.079
>	Ge	74		**ug/L**		263670	263669.826
	As	75	**49.662**	**ug/L**	1.381	33396	0.126
	Se	77		**ug/L**		6861	0.005
	Se	82	**45.092**	**ug/L**	6.433	2828	0.011
	Kr	83		**ug/L**		56	-0.000
	Sr	88	**50.459**	**ug/L**	1.655	465513	2.855
	Y	89		**ug/L**		55	0.000
	Zr	90	**48.396**	**ug/L**	3.484	243744	1.492
	Mo	98	**48.849**	**ug/L**	2.834	108195	0.661
	Ag	107	**51.342**	**ug/L**	2.178	178514	1.094
	Cd	111	**50.418**	**ug/L**	1.882	41725	0.256
	Cd	114		**ug/L**		97125	0.596
>	In	115		**ug/L**		163029	163028.776
	Sn	120	**49.522**	**ug/L**	3.255	182181	1.112
	Sb	121	**54.526**	**ug/L**	4.869	138667	0.847
	Sb	123		**ug/L**		107791	0.658
	Ba	135		**ug/L**		43763	0.225
	Ba	137	**49.324**	**ug/L**	1.487	75408	0.388
	Ho	165		**ug/L**		13	0.000
>	Lu	175		**ug/L**		194149	194149.341
	Tl	205	**48.008**	**ug/L**	1.285	259566	1.331
	Pb	208	**50.697**	**ug/L**	0.790	531286	2.714
	Th	232	**49.529**	**ug/L**	2.342	522761	2.685
	U	238	**53.530**	**ug/L**	1.177	548709	2.823

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	99.613				
|	Be	9	98.428				
|	B	11	100.083				
|	Na	23	104.331				
|	Mg	24	100.369				
|	Al	27	98.556				
|	P	31	96.547				
|	K	39	98.464				
|	Ca	43	96.153				
|>	Sc	45			100.9		
|	Ti	47	97.656				
|	V	51	101.647				
|	Cr	52	102.204				
|	Cr	53					
|	Mn	55	103.614				
|	Fe	57	98.447				
|	Co	59	100.325				
|	Ni	60	105.292				
|	Cu	63					
⌊	Cu	65	105.330				
⌈	Zn	66	102.316				
|	Zn	67					
|	Zn	68					
|>	Ge	74			101.4		
|	As	75	99.324				
|	Se	77					
|	Se	82	90.184				
⌊	Kr	83					
⌈	Sr	88	100.918				
|	Y	89					
|	Zr	90	96.793				
|	Mo	98	97.699				
|	Ag	107	102.684				
|	Cd	111	100.836				
|	Cd	114					
|>	In	115			99.8		
|	Sn	120	99.044				
|	Sb	121	109.053				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	98.648				
|	Ho	165					
|>	Lu	175			100.2		
|	Tl	205	96.015				
|	Pb	208	101.395				
|	Th	232	99.058				
⌊	U	238	107.061				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, April 12, 2010 05:11:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\QC Std 7.574

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.015**	**ug/L**	73.906	37	0.000
	Be	9	**0.018**	**ug/L**	71.383	8	0.000
	B	11	**1.113**	**ug/L**	31.283	251	0.000
	Na	23	**3.520**	**ug/L**	64.005	16343	0.009
	Mg	24	**0.861**	**ug/L**	111.528	1667	0.002
	Al	27	**0.626**	**ug/L**	113.629	1667	0.002
	P	31	**5.295**	**ug/L**	64.947	3340	0.001
	K	39	**-3.257**	**ug/L**	243.352	359823	-0.015
	Ca	43	**7.954**	**ug/L**	74.235	242	0.000
>	Sc	45		**ug/L**		623723	623722.517
	Ti	47	**0.070**	**ug/L**	49.820	189	0.000
	V	51	**-0.577**	**ug/L**	131.908	17449	-0.004
	Cr	52	**-0.119**	**ug/L**	72.616	-11263	-0.001
	Cr	53		**ug/L**		128536	0.010
	Mn	55	**0.016**	**ug/L**	82.483	789	0.000
	Fe	57	**2.040**	**ug/L**	47.616	5497	0.000
	Co	59	**0.005**	**ug/L**	49.639	164	0.000
	Ni	60	**0.021**	**ug/L**	28.689	84	0.000
	Cu	63		**ug/L**		2312	-0.000
	Cu	65	**-0.252**	**ug/L**	46.900	1059	-0.000
	Zn	66	**-0.566**	**ug/L**	4.153	932	-0.001
	Zn	67		**ug/L**		7738	0.002
	Zn	68		**ug/L**		1250	-0.001
>	Ge	74		**ug/L**		257660	257659.924
	As	75	**0.952**	**ug/L**	86.590	696	0.002
	Se	77		**ug/L**		5918	0.002
	Se	82	**1.496**	**ug/L**	14.573	121	0.000
	Kr	83		**ug/L**		56	-0.000
	Sr	88	**0.010**	**ug/L**	50.491	261	0.001
	Y	89		**ug/L**		17	-0.000
	Zr	90	**0.335**	**ug/L**	17.985	2139	0.010
	Mo	98	**0.412**	**ug/L**	19.540	1345	0.006
	Ag	107	**0.042**	**ug/L**	28.426	311	0.001
	Cd	111	**0.000**	**ug/L**	2482.021	21	0.000
	Cd	114		**ug/L**		63	0.000
>	In	115		**ug/L**		156899	156899.262
	Sn	120	**0.122**	**ug/L**	27.708	1422	0.003
	Sb	121	**1.255**	**ug/L**	26.378	3712	0.019
	Sb	123		**ug/L**		2867	0.015
	Ba	135		**ug/L**		31	0.000
	Ba	137	**0.011**	**ug/L**	16.822	46	0.000
	Ho	165		**ug/L**		7	-0.000
>	Lu	175		**ug/L**		189202	189202.061
	Tl	205	**0.370**	**ug/L**	20.545	3110	0.010
	Pb	208	**0.019**	**ug/L**	56.827	4400	0.001
	Th	232	**0.441**	**ug/L**	25.314	5866	0.024
	U	238	**0.044**	**ug/L**	53.866	1024	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			96.7		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			99.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			96.0		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			97.7		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202056874
Sample Date/Time: Monday, April 12, 2010 05:24:14
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 959112|1|bcd1
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\1202056874.576

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.163**	**ug/L**	9.060	131	0.000
	Be	9	**-0.011**	**ug/L**	60.124	4	-0.000
	B	11	**29.717**	**ug/L**	0.980	4273	0.006
	Na	23	**143.901**	**ug/L**	1.645	256278	0.375
	Mg	24	**5.947**	**ug/L**	25.291	8002	0.011
	Al	27	**11.674**	**ug/L**	28.940	20682	0.031
	P	31	**1.213**	**ug/L**	210.233	3090	0.000
	K	39	**69.529**	**ug/L**	19.840	594503	0.317
	Ca	43	**65.872**	**ug/L**	6.895	619	0.001
>	Sc	45		**ug/L**		654020	654020.219
	Ti	47	**0.771**	**ug/L**	3.964	426	0.000
	V	51	**-0.394**	**ug/L**	955.459	19099	-0.003
	Cr	52	**-5.611**	**ug/L**	6.633	-29091	-0.027
	Cr	53		**ug/L**		388344	0.398
	Mn	55	**0.490**	**ug/L**	3.536	3310	0.004
	Fe	57	**13.263**	**ug/L**	4.708	6959	0.002
	Co	59	**-0.002**	**ug/L**	209.194	142	-0.000
	Ni	60	**0.048**	**ug/L**	26.985	112	0.000
	Cu	63		**ug/L**		3841	0.002
	Cu	65	**0.553**	**ug/L**	5.320	1881	0.001
	Zn	66	**1.340**	**ug/L**	11.538	2120	0.003
	Zn	67		**ug/L**		31279	0.086
	Zn	68		**ug/L**		3096	0.006
>	Ge	74		**ug/L**		273976	273976.097
	As	75	**-0.257**	**ug/L**	600.100	-99	-0.001
	Se	77		**ug/L**		25431	0.072
	Se	82	**-0.011**	**ug/L**	627.991	31	-0.000
	Kr	83		**ug/L**		63	0.000
	Sr	88	**0.094**	**ug/L**	7.249	1052	0.005
	Y	89		**ug/L**		148	0.001
	Zr	90	**0.055**	**ug/L**	19.588	822	0.002
	Mo	98	**0.012**	**ug/L**	120.393	521	0.000
	Ag	107	**-0.004**	**ug/L**	33.326	161	-0.000
	Cd	111	**-0.008**	**ug/L**	62.280	15	-0.000
	Cd	114		**ug/L**		23	-0.000
>	In	115		**ug/L**		163784	163784.255
	Sn	120	**0.370**	**ug/L**	7.424	2397	0.008
	Sb	121	**0.071**	**ug/L**	24.527	871	0.001
	Sb	123		**ug/L**		672	0.001
	Ba	135		**ug/L**		207	0.001
	Ba	137	**0.209**	**ug/L**	3.397	345	0.002
	Ho	165		**ug/L**		11	0.000
>	Lu	175		**ug/L**		191276	191276.071
	Tl	205	**-0.042**	**ug/L**	21.813	960	-0.001
	Pb	208	**0.631**	**ug/L**	10.302	10704	0.034
	Th	232	**-0.010**	**ug/L**	78.092	1254	-0.001
	U	238	**-0.037**	**ug/L**	22.681	217	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45			101.4		
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74			105.3		
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115			100.2		
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175			98.7		
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202056875
Sample Date/Time: Monday, April 12, 2010 05:30:27
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 959112|1|bcd1
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\1202056875.577

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**46.576**	**ug/L**	2.348	29450	0.044
	Be	9	**48.583**	**ug/L**	2.698	8040	0.012
	B	11	**129.597**	**ug/L**	2.850	18717	0.028
	Na	23	**2050.399**	**ug/L**	7.388	3588494	5.341
	Mg	24	**1859.937**	**ug/L**	14.140	2353582	3.511
	Al	27	**1813.940**	**ug/L**	7.969	3190903	4.766
	P	31	**1764.429**	**ug/L**	1.812	185542	0.272
	K	39	**2029.296**	**ug/L**	10.589	6588712	9.251
	Ca	43	**2041.905**	**ug/L**	2.550	13383	0.020
>	Sc	45		**ug/L**		670115	670115.239
	Ti	47	**45.960**	**ug/L**	2.185	15477	0.023
	V	51	**50.488**	**ug/L**	7.017	236143	0.321
	Cr	52	**46.128**	**ug/L**	2.249	137027	0.222
	Cr	53		**ug/L**		382213	0.375
	Mn	55	**51.922**	**ug/L**	0.689	279535	0.416
	Fe	57	**2051.668**	**ug/L**	3.789	229276	0.334
	Co	59	**50.261**	**ug/L**	3.219	208170	0.311
	Ni	60	**52.295**	**ug/L**	3.408	46258	0.069
	Cu	63		**ug/L**		111270	0.162
	Cu	65	**53.613**	**ug/L**	1.694	53945	0.078
	Zn	66	**47.285**	**ug/L**	1.235	29971	0.102
	Zn	67		**ug/L**		35550	0.099
	Zn	68		**ug/L**		23294	0.078
>	Ge	74		**ug/L**		279946	279945.776
	As	75	**76.038**	**ug/L**	2.875	54253	0.194
	Se	77		**ug/L**		22447	0.060
	Se	82	**18.808**	**ug/L**	4.559	1272	0.004
	Kr	83		**ug/L**		79	0.000
	Sr	88	**50.646**	**ug/L**	1.864	475658	2.865
	Y	89		**ug/L**		191	0.001
	Zr	90	**50.773**	**ug/L**	0.530	260384	1.566
	Mo	98	**50.124**	**ug/L**	1.962	113022	0.678
	Ag	107	**52.083**	**ug/L**	1.476	184371	1.110
	Cd	111	**9.941**	**ug/L**	2.766	8393	0.050
	Cd	114		**ug/L**		19535	0.118
>	In	115		**ug/L**		165966	165965.636
	Sn	120	**49.470**	**ug/L**	0.315	185334	1.110
	Sb	121	**245.922**	**ug/L**	0.959	634519	3.819
	Sb	123		**ug/L**		484668	2.917
	Ba	135		**ug/L**		43546	0.223
	Ba	137	**49.305**	**ug/L**	1.289	75732	0.388
	Ho	165		**ug/L**		103	0.000
>	Lu	175		**ug/L**		195069	195069.184
	Tl	205	**84.356**	**ug/L**	4.255	457429	2.338
	Pb	208	**41.487**	**ug/L**	1.425	437598	2.221
	Th	232	**51.956**	**ug/L**	2.455	550955	2.817
	U	238	**54.665**	**ug/L**	0.886	562992	2.883

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			103.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			107.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			101.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			100.7		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202056876
Sample Date/Time: Monday, April 12, 2010 05:36:41
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 959112|5|bcd1
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\1202056876.578

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.057**	**ug/L**	13.763	64	0.000
	Be	9	**0.019**	**ug/L**	135.259	9	0.000
	B	11	**4.705**	**ug/L**	6.437	750	0.001
	Na	23	**20.084**	**ug/L**	27.915	44404	0.052
	Mg	24	**2.759**	**ug/L**	28.811	4001	0.005
	Al	27	**2.779**	**ug/L**	11.564	5334	0.007
	P	31	**1.873**	**ug/L**	59.405	3090	0.000
	K	39	**2.018**	**ug/L**	156.933	384442	0.009
	Ca	43	**23.514**	**ug/L**	12.351	344	0.000
>	Sc	45		**ug/L**		639817	639817.135
	Ti	47	**0.233**	**ug/L**	8.448	245	0.000
	V	51	**-0.158**	**ug/L**	452.055	19635	-0.001
	Cr	52	**-0.930**	**ug/L**	15.590	-14050	-0.004
	Cr	53		**ug/L**		194517	0.108
	Mn	55	**0.130**	**ug/L**	7.403	1396	0.001
	Fe	57	**1.343**	**ug/L**	100.892	5566	0.000
	Co	59	**0.026**	**ug/L**	5.274	250	0.000
	Ni	60	**0.030**	**ug/L**	11.981	94	0.000
	Cu	63		**ug/L**		2285	-0.000
	Cu	65	**-0.255**	**ug/L**	7.267	1084	-0.000
	Zn	66	**-0.144**	**ug/L**	111.964	1186	-0.000
	Zn	67		**ug/L**		11711	0.017
	Zn	68		**ug/L**		1589	0.001
>	Ge	74		**ug/L**		261765	261764.795
	As	75	**0.901**	**ug/L**	40.481	676	0.002
	Se	77		**ug/L**		11146	0.022
	Se	82	**0.418**	**ug/L**	83.108	57	0.000
	Kr	83		**ug/L**		51	-0.000
	Sr	88	**0.043**	**ug/L**	9.811	573	0.002
	Y	89		**ug/L**		41	0.000
	Zr	90	**0.034**	**ug/L**	35.882	706	0.001
	Mo	98	**0.054**	**ug/L**	17.545	603	0.001
	Ag	107	**0.032**	**ug/L**	10.191	283	0.001
	Cd	111	**-0.006**	**ug/L**	134.627	17	-0.000
	Cd	114		**ug/L**		30	-0.000
>	In	115		**ug/L**		161127	161127.437
	Sn	120	**0.203**	**ug/L**	19.640	1755	0.005
	Sb	121	**0.059**	**ug/L**	53.057	827	0.001
	Sb	123		**ug/L**		649	0.001
	Ba	135		**ug/L**		81	0.000
	Ba	137	**0.075**	**ug/L**	8.815	143	0.001
	Ho	165		**ug/L**		9	-0.000
>	Lu	175		**ug/L**		192513	192513.157
	Tl	205	**2.680**	**ug/L**	12.956	15509	0.074
	Pb	208	**0.081**	**ug/L**	6.472	5116	0.004
	Th	232	**0.281**	**ug/L**	18.226	4304	0.015
	U	238	**0.012**	**ug/L**	190.932	715	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		99.2			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		100.6			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		98.6			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175		99.4			
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, April 12, 2010 05:42:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\QC Std 6.579

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.720**	**ug/L**	1.757	30736	0.049
	Be	9	**50.903**	**ug/L**	1.715	7919	0.013
	B	11	**99.402**	**ug/L**	1.099	13523	0.021
	Na	23	**5683.830**	**ug/L**	6.494	9331555	14.805
	Mg	24	**4766.103**	**ug/L**	2.714	5666856	8.998
	Al	27	**5113.478**	**ug/L**	3.764	8459736	13.434
	P	31	**4864.794**	**ug/L**	0.505	475881	0.751
	K	39	**4925.418**	**ug/L**	5.634	14519623	22.453
	Ca	43	**4849.215**	**ug/L**	1.453	29609	0.047
>	Sc	45		**ug/L**		629840	629839.788
	Ti	47	**49.411**	**ug/L**	2.449	15628	0.025
	V	51	**51.095**	**ug/L**	3.366	224538	0.325
	Cr	52	**51.563**	**ug/L**	1.471	145299	0.248
	Cr	53		**ug/L**		125730	0.004
	Mn	55	**52.023**	**ug/L**	1.914	263235	0.417
	Fe	57	**4909.381**	**ug/L**	1.235	508424	0.799
	Co	59	**50.172**	**ug/L**	2.477	195373	0.310
	Ni	60	**52.152**	**ug/L**	1.643	43377	0.069
	Cu	63		**ug/L**		103339	0.160
	Cu	65	**52.900**	**ug/L**	1.535	50044	0.077
	Zn	66	**51.383**	**ug/L**	3.220	29731	0.111
	Zn	67		**ug/L**		10948	0.015
	Zn	68		**ug/L**		21826	0.080
>	Ge	74		**ug/L**		256530	256530.478
	As	75	**50.277**	**ug/L**	3.169	32898	0.128
	Se	77		**ug/L**		6659	0.005
	Se	82	**46.676**	**ug/L**	0.991	2848	0.011
	Kr	83		**ug/L**		52	-0.000
	Sr	88	**50.513**	**ug/L**	1.869	455731	2.858
	Y	89		**ug/L**		37	0.000
	Zr	90	**47.917**	**ug/L**	1.419	236065	1.478
	Mo	98	**48.577**	**ug/L**	1.226	105249	0.657
	Ag	107	**50.757**	**ug/L**	2.517	172589	1.082
	Cd	111	**50.014**	**ug/L**	1.181	40483	0.254
	Cd	114		**ug/L**		95085	0.596
>	In	115		**ug/L**		159427	159426.925
	Sn	120	**48.990**	**ug/L**	1.789	176290	1.100
	Sb	121	**54.951**	**ug/L**	2.862	136753	0.853
	Sb	123		**ug/L**		104461	0.652
	Ba	135		**ug/L**		42677	0.221
	Ba	137	**48.751**	**ug/L**	2.080	73940	0.384
	Ho	165		**ug/L**		14	0.000
>	Lu	175		**ug/L**		192615	192614.780
	Tl	205	**48.237**	**ug/L**	0.359	258748	1.337
	Pb	208	**50.379**	**ug/L**	1.700	523786	2.697
	Th	232	**49.973**	**ug/L**	2.542	523249	2.709
	U	238	**53.198**	**ug/L**	1.145	541011	2.806

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	103.439				
|	Be	9	101.806				
|	B	11	99.402				
|	Na	23	113.677				
|	Mg	24	95.322				
|	Al	27	101.257				
|	P	31	97.296				
|	K	39	98.508				
|	Ca	43	96.984				
>	Sc	45			97.7		
|	Ti	47	98.823				
|	V	51	102.189				
|	Cr	52	103.126				
|	Cr	53					
|	Mn	55	104.047				
|	Fe	57	98.188				
|	Co	59	100.345				
|	Ni	60	104.304				
|	Cu	63					
⌊	Cu	65	105.800				
⌈	Zn	66	102.766				
|	Zn	67					
|	Zn	68					
>	Ge	74			98.6		
|	As	75	100.554				
|	Se	77					
|	Se	82	93.352				
⌊	Kr	83					
⌈	Sr	88	101.027				
|	Y	89					
|	Zr	90	95.834				
|	Mo	98	97.154				
|	Ag	107	101.515				
|	Cd	111	100.029				
|	Cd	114					
>	In	115			97.6		
|	Sn	120	97.981				
|	Sb	121	109.902				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	97.503				
|	Ho	165					
>	Lu	175			99.4		
|	Tl	205	96.474				
|	Pb	208	100.759				
|	Th	232	99.946				
⌊	U	238	106.397				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Na	23	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, April 12, 2010 05:49:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\100408\QC Std 7.580

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.016**	**ug/L**	70.693	38	0.000
	Be	9	**0.016**	**ug/L**	107.694	8	0.000
	B	11	**1.302**	**ug/L**	16.447	278	0.000
	Na	23	**-0.431**	**ug/L**	1267.292	10005	-0.001
	Mg	24	**1.700**	**ug/L**	57.325	2667	0.003
	Al	27	**1.222**	**ug/L**	57.324	2667	0.003
	P	31	**2.174**	**ug/L**	38.795	3064	0.000
	K	39	**-5.483**	**ug/L**	94.620	356054	-0.025
	Ca	43	**11.857**	**ug/L**	31.531	267	0.000
>	Sc	45		**ug/L**		628463	628462.563
	Ti	47	**0.088**	**ug/L**	154.404	196	0.000
	V	51	**-0.482**	**ug/L**	144.274	17973	-0.003
	Cr	52	**0.109**	**ug/L**	19.617	-10659	0.001
	Cr	53		**ug/L**		123875	0.001
	Mn	55	**0.006**	**ug/L**	174.065	744	0.000
	Fe	57	**1.135**	**ug/L**	163.202	5446	0.000
	Co	59	**0.009**	**ug/L**	30.186	179	0.000
	Ni	60	**0.019**	**ug/L**	112.743	83	0.000
	Cu	63		**ug/L**		1909	-0.001
	Cu	65	**-0.345**	**ug/L**	11.503	982	-0.001
	Zn	66	**-0.748**	**ug/L**	3.421	821	-0.002
	Zn	67		**ug/L**		7288	0.001
	Zn	68		**ug/L**		1137	-0.001
>	Ge	74		**ug/L**		254718	254717.757
	As	75	**0.131**	**ug/L**	370.804	156	0.000
	Se	77		**ug/L**		5725	0.002
	Se	82	**1.372**	**ug/L**	21.012	112	0.000
	Kr	83		**ug/L**		51	-0.000
	Sr	88	**0.009**	**ug/L**	43.594	259	0.001
	Y	89		**ug/L**		21	-0.000
	Zr	90	**0.233**	**ug/L**	17.927	1684	0.007
	Mo	98	**0.339**	**ug/L**	15.313	1216	0.005
	Ag	107	**0.041**	**ug/L**	15.479	311	0.001
	Cd	111	**0.005**	**ug/L**	249.476	25	0.000
	Cd	114		**ug/L**		68	0.000
>	In	115		**ug/L**		159918	159918.394
	Sn	120	**0.084**	**ug/L**	10.297	1313	0.002
	Sb	121	**1.242**	**ug/L**	24.611	3759	0.019
	Sb	123		**ug/L**		2966	0.015
	Ba	135		**ug/L**		30	0.000
	Ba	137	**0.015**	**ug/L**	38.536	53	0.000
	Ho	165		**ug/L**		12	0.000
>	Lu	175		**ug/L**		190007	190007.488
	Tl	205	**1.121**	**ug/L**	9.930	7077	0.031
	Pb	208	**-0.016**	**ug/L**	36.498	4057	-0.001
	Th	232	**0.429**	**ug/L**	24.961	5764	0.023
	U	238	**0.019**	**ug/L**	63.535	775	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9998
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	0.9997
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		97.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.1			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 7	Tl		205CCB is out of limts (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, April 13, 2010 11:33:12
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.1054
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	1541.9	1541.883	43.705	2.8
	Mg	24.0	38738.9	38738.859	434.290	1.1
	Co	58.9	63185.8	63185.831	373.250	0.6
	Rh	102.9	123622.6	123622.601	766.014	0.6
	In	114.9	178721.4	178721.441	1254.626	0.7
	Pb	208.0	214246.1	214246.105	2038.893	1.0
⌈>	Ba	137.9	169586.4	169586.427	957.403	0.6
⌊	Ba++	69.0	1987.6	0.012	0.000	2.3
⌈>	Ce	139.9	205613.0	205612.974	1509.978	0.7
⌊	CeO	155.9	4192.2	0.020	0.000	2.1
	Bkgd	220.0	19.8	19.800	2.564	13.0

Current Optimization File Data

Current Value	Description
0.86	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	7.0	3372.1
Co	59	21	7.8	60333.1
In	115	21	9.5	172853.8

ICPMS #5 Instrument Tuning Report

File Name: 100413.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	606	2072	0.540
Be	9.0	9.0	2061	2088	0.543
Mg	24.0	24.0	5699	2085	0.562
Mg	25.0	25.0	5939	2085	0.540
Mg	26.0	26.0	6187	2100	0.545
Co	58.9	59.0	14193	2125	0.528
Rh	102.9	102.9	24880	2180	0.530
In	114.9	114.9	27796	2200	0.535
Ce	139.9	139.9	33878	2220	0.547
Pb	206.0	206.0	49948	2305	0.522
Pb	207.0	207.0	50171	2240	0.593
Pb	208.0	208.0	50451	2280	0.636
U	238.1	238.0	57731	2295	0.641

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, April 13, 2010 11:45:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\Blank.001

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		185761	
	Sn	120		ug/L		601	
	Sb	121		ug/L		81	
	Sb	123		ug/L		67	
>	Lu	175		ug/L		392643	
	U	238		ug/L		76	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Simple Linear	
Sn	120	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Lu	175	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
>	Lu	175					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, April 13, 2010 11:47:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\Standard 1.002

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		182036	182035.964
|	Sn	120	**10.000**	ug/L	2.014	53910	0.293
|	Sb	121	**10.000**	ug/L	2.863	41462	0.227
⌊	Sb	123		ug/L		32322	0.177
⌈>	Lu	175		ug/L		382362	382362.256
⌊	U	238	**10.000**	ug/L	3.365	459323	1.201

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovi	Dilution % Dif	Duplicate Rel. % Difference
⌈>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, April 13, 2010 11:49:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\Standard 2.003

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		184236	184236.210
|	Sn	120	**99.964**	ug/L	2.074	521119	2.826
|	Sb	121	**100.049**	ug/L	1.558	440889	2.393
[	Sb	123		ug/L		342818	1.861
[>	Lu	175		ug/L		399772	399771.738
[	U	238	**99.900**	ug/L	1.081	4361704	10.910

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	In	115					
|	Sn	120					
|	Sb	121					
[	Sb	123					
[>	Lu	175					
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, April 13, 2010 11:52:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 1.004

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		184783	184782.938
|	Sn	120	**50.255**	ug/L	2.353	263015	1.421
|	Sb	121	**53.137**	ug/L	3.381	234778	1.271
[	Sb	123		ug/L		182858	0.989
[>	Lu	175		ug/L		396367	396366.712
[	U	238	**51.729**	ug/L	1.463	2238990	5.649

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	In	115		99.5			
|	Sn	120	100.511				
|	Sb	121	106.273				
[	Sb	123					
[>	Lu	175		100.9			
[	U	238	103.458				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, April 13, 2010 11:54:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 2.005

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		186749	186749.324
|	Sn	120	-0.014	ug/L	83.102	532	-0.000
|	Sb	121	0.344	ug/L	3.857	1616	0.008
[	Sb	123		ug/L		1273	0.006
[>	Lu	175		ug/L		394533	394532.622
[	U	238	0.005	ug/L	10.622	275	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	In	115		100.5			
|	Sn	120					
|	Sb	121					
[	Sb	123					
[>	Lu	175		100.5			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, April 13, 2010 11:57:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 3.006

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		187234	187233.558
|	Sn	120	**5.598**	ug/L	2.621	30227	0.158
|	Sb	121	**2.944**	ug/L	1.367	13265	0.070
[	Sb	123		ug/L		10433	0.055
[>	Lu	175		ug/L		396608	396607.555
[	U	238	**0.301**	ug/L	2.546	13096	0.033

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	In	115		100.8			
|	Sn	120	111.957				
|	Sb	121	98.142				
[	Sb	123					
[>	Lu	175		101.0			
[	U	238	150.304				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	U	238	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, April 13, 2010 11:59:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 4.007

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		163099	163099.298
|	Sn	120	**0.204**	ug/L	2.717	1469	0.006
|	Sb	121	**0.265**	ug/L	3.152	1103	0.006
[	Sb	123		ug/L		895	0.005
[>	Lu	175		ug/L		355401	355400.625
[	U	238	**0.002**	ug/L	19.302	147	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	In	115		87.8			
|	Sn	120					
|	Sb	121					
[	Sb	123					
[>	Lu	175		90.5			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, April 13, 2010 12:02:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 5.008

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		164246	164245.716
|	Sn	120	**20.117**	ug/L	2.678	93906	0.569
|	Sb	121	**20.261**	ug/L	2.170	79645	0.485
[	Sb	123		ug/L		62352	0.379
[>	Lu	175		ug/L		356670	356669.933
[	U	238	**21.126**	ug/L	0.769	822958	2.307

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	In	115		88.4			
|	Sn	120	100.587				
|	Sb	121	101.307				
[	Sb	123					
[>	Lu	175		90.8			
[	U	238	105.631				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, April 13, 2010 12:04:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 6.009

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		180800	180799.988
|	Sn	120	**49.813**	ug/L	3.483	255017	1.408
|	Sb	121	**52.557**	ug/L	3.494	227209	1.257
[	Sb	123		ug/L		178584	0.988
[>	Lu	175		ug/L		384201	384200.999
[	U	238	**52.168**	ug/L	0.479	2188900	5.697

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	In	115		97.3			
|	Sn	120	99.627				
|	Sb	121	105.114				
[	Sb	123					
[>	Lu	175		97.8			
[	U	238	104.336				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, April 13, 2010 12:07:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 7.010

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	In	115		ug/L		178005	178004.541
|	Sn	120	**-0.027**	ug/L	23.813	442	-0.001
|	Sb	121	**0.191**	ug/L	2.212	892	0.005
⌊	Sb	123		ug/L		687	0.004
⌈>	Lu	175		ug/L		382061	382060.614
⌊	U	238	**0.003**	ug/L	10.893	210	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovi	Dilution % Dil	Duplicate Rel. % Difference
⌈>	In	115		95.8			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		97.3			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, April 13, 2010 12:31:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 8.020

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		179880	179879.590
|	Sn	120	**50.183**	ug/L	0.622	255755	1.419
|	Sb	121	**52.882**	ug/L	0.671	227587	1.265
[	Sb	123		ug/L		177328	0.985
[>	Lu	175		ug/L		385933	385933.317
[	U	238	**51.782**	ug/L	2.522	2181888	5.655

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	In	115		96.8			
|	Sn	120	100.367				
|	Sb	121	105.764				
[	Sb	123					
[>	Lu	175		98.3			
[	U	238	103.564				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, April 13, 2010 12:34:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 9.021

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		180084	180084.005
	Sn	120	**-0.039**	ug/L	7.068	383	-0.001
	Sb	121	**0.142**	ug/L	4.782	688	0.003
	Sb	123		ug/L		548	0.003
>	Lu	175		ug/L		382471	382471.262
	U	238	**0.004**	ug/L	7.628	243	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % RecovDilution % DilDuplicate Rel. % Difference
>	In	115		96.9	
	Sn	120			
	Sb	121			
	Sb	123			
>	Lu	175		97.4	
	U	238			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, April 13, 2010 12:53:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 8.029

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		179439	179438.954
|	Sn	120	**49.856**	ug/L	1.546	253434	1.409
|	Sb	121	**52.280**	ug/L	2.701	224406	1.250
[	Sb	123		ug/L		175814	0.980
[>	Lu	175		ug/L		380571	380570.868
[	U	238	**51.864**	ug/L	1.091	2155752	5.664

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	In	115		96.6			
|	Sn	120	99.711				
|	Sb	121	104.560				
[	Sb	123					
[>	Lu	175		96.9			
[	U	238	103.728				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, April 13, 2010 12:56:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 9.030

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		178375	178374.506
|	Sn	120	-0.037	ug/L	13.537	393	-0.001
|	Sb	121	0.145	ug/L	3.498	696	0.003
[	Sb	123		ug/L		550	0.003
[>	Lu	175		ug/L		376824	376824.203
[	U	238	0.004	ug/L	28.193	240	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	In	115		96.0			
|	Sn	120					
|	Sb	121					
[	Sb	123					
[>	Lu	175		96.0			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, April 13, 2010 13:21:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 8.039

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		181343	181343.112
|	Sn	120	**49.625**	ug/L	1.270	254948	1.403
|	Sb	121	**51.369**	ug/L	0.964	222861	1.229
[	Sb	123		ug/L		175048	0.965
[>	Lu	175		ug/L		380870	380870.172
[	U	238	**51.061**	ug/L	0.982	2123878	5.576

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovi	Dilution % Di	Duplicate Rel. % Difference
[>	In	115		97.6			
|	Sn	120	99.251				
|	Sb	121	102.737				
[	Sb	123					
[>	Lu	175		97.0			
[	U	238	102.121				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, April 13, 2010 13:24:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 9.040

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		182593	182593.360
|	Sn	120	-0.048	ug/L	9.118	341	-0.001
|	Sb	121	0.142	ug/L	3.687	700	0.003
L	Sb	123		ug/L		534	0.003
[>	Lu	175		ug/L		384056	384055.625
L	U	238	0.004	ug/L	3.626	253	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	In	115		98.3			
|	Sn	120					
|	Sb	121					
L	Sb	123					
[>	Lu	175		97.8			
L	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, April 13, 2010 13:36:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 8.045

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		169071	169071.440
|	Sn	120	**49.887**	ug/L	2.022	238915	1.410
|	Sb	121	**52.708**	ug/L	3.274	213128	1.261
[	Sb	123		ug/L		164071	0.970
[>	Lu	175		ug/L		364393	364393.398
[	U	238	**49.365**	ug/L	2.181	1964182	5.391

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	In	115		91.0			
|	Sn	120	99.775				
|	Sb	121	105.416				
[	Sb	123					
[>	Lu	175		92.8			
[	U	238	98.730				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, April 13, 2010 13:39:15
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 9.046

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		179196	179196.267
|	Sn	120	-0.042	ug/L	10.523	368	-0.001
|	Sb	121	0.141	ug/L	7.956	681	0.003
[	Sb	123		ug/L		547	0.003
[>	Lu	175		ug/L		383407	383407.402
[	U	238	0.006	ug/L	16.687	322	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	In	115		96.5			
|	Sn	120					
|	Sb	121					
[	Sb	123					
[>	Lu	175		97.6			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056872
Sample Date/Time: Tuesday, April 13, 2010 13:41:44
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 959112|1|prb
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\1202056872.047

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		183873	183872.913
|	Sn	120	**0.022**	ug/L	42.356	708	0.001
|	Sb	121	**0.108**	ug/L	1.614	556	0.003
L	Sb	123		ug/L		434	0.002
[>	Lu	175		ug/L		375289	375288.864
L	U	238	**0.028**	ug/L	4.765	1211	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	In	115		99.0			
|	Sn	120					
|	Sb	121					
L	Sb	123					
[>	Lu	175		95.6			
L	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056873
Sample Date/Time: Tuesday, April 13, 2010 13:44:12
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 959112|1|prb
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\1202056873.048

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		185224	185224.369
|	Sn	120	**52.005**	ug/L	2.009	272834	1.470
|	Sb	121	**55.050**	ug/L	1.670	243921	1.317
[	Sb	123		ug/L		189522	1.023
[>	Lu	175		ug/L		394091	394090.713
[	U	238	**49.007**	ug/L	0.427	2109270	5.352

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	In	115		99.7			
|	Sn	120					
|	Sb	121					
[	Sb	123					
[>	Lu	175		100.4			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248108001
Sample Date/Time: Tuesday, April 13, 2010 13:46:40
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959112|1|prb
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\248108001.049

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		186605	186605.491
	Sn	120	**0.046**	ug/L	22.027	849	0.001
	Sb	121	**0.061**	ug/L	2.429	352	0.001
	Sb	123		ug/L		255	0.001
>	Lu	175		ug/L		382642	382642.254
	U	238	**0.031**	ug/L	6.228	1373	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	In	115		100.5			
	Sn	120					
	Sb	121					
	Sb	123					
>	Lu	175		97.5			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, April 13, 2010 13:59:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 8.054

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		178367	178366.510
	Sn	120	49.196	ug/L	3.624	248523	1.391
	Sb	121	52.090	ug/L	3.068	222216	1.246
	Sb	123		ug/L		172734	0.968
>	Lu	175		ug/L		382366	382366.019
	U	238	50.712	ug/L	2.659	2117499	5.538

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	In	115		96.0			
	Sn	120	98.392				
	Sb	121	104.180				
	Sb	123					
>	Lu	175		97.4			
	U	238	101.425				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, April 13, 2010 14:01:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 9.055

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		174808	174808.186
|	Sn	120	-0.044	ug/L	6.363	351	-0.001
|	Sb	121	0.149	ug/L	10.566	697	0.004
[	Sb	123		ug/L		526	0.003
[>	Lu	175		ug/L		371771	371770.735
[	U	238	0.005	ug/L	17.914	269	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovi	Dilution % Dif	Duplicate Rel. % Difference
[>	In	115		94.1			
|	Sn	120					
|	Sb	121					
[	Sb	123					
[>	Lu	175		94.7			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056874
Sample Date/Time: Tuesday, April 13, 2010 14:13:56
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 959112|1|prb
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\1202056874.060

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		183511	183510.515
|	Sn	120	0.010	ug/L	32.678	647	0.000
|	Sb	121	0.017	ug/L	23.197	153	0.000
L	Sb	123		ug/L		126	0.000
[>	Lu	175		ug/L		379926	379925.971
L	U	238	0.004	ug/L	4.595	245	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	In	115		98.8			
|	Sn	120					
|	Sb	121					
L	Sb	123					
[>	Lu	175		96.8			
L	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056875
Sample Date/Time: Tuesday, April 13, 2010 14:16:25
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 959112|1|prb
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\1202056875.061

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		184504	184503.801
	Sn	120	50.095	ug/L	2.882	261787	1.416
	Sb	121	206.325	ug/L	1.949	910385	4.935
	Sb	123		ug/L		727167	3.941
>	Lu	175		ug/L		378759	378758.586
	U	238	46.688	ug/L	3.219	1931244	5.099

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	In	115		99.3			
	Sn	120					
	Sb	121					
	Sb	123					
>	Lu	175		96.5			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056876
Sample Date/Time: Tuesday, April 13, 2010 14:18:54
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 959112|5|prb
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\1202056876.062

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		172777	172777.165
|	Sn	120	**0.108**	ug/L	4.382	1087	0.003
|	Sb	121	**0.133**	ug/L	3.068	624	0.003
[	Sb	123		ug/L		511	0.003
[>	Lu	175		ug/L		362453	362453.458
[	U	238	**0.029**	ug/L	2.132	1225	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	In	115		93.0			
|	Sn	120					
|	Sb	121					
[	Sb	123					
[>	Lu	175		92.3			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, April 13, 2010 14:21:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 6.063

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		176533	176532.965
	Sn	120	**49.140**	ug/L	2.871	245656	1.389
	Sb	121	**51.039**	ug/L	2.469	215473	1.221
	Sb	123		ug/L		169003	0.958
>	Lu	175		ug/L		378342	378341.641
	U	238	**49.947**	ug/L	1.379	2064193	5.455

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	In	115		95.0			
	Sn	120	98.280				
	Sb	121	102.078				
	Sb	123					
>	Lu	175		96.4			
	U	238	99.895				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, April 13, 2010 14:23:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb and u.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 7.064

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		170706	170705.939
	Sn	120	-0.042	ug/L	12.514	352	-0.001
	Sb	121	0.155	ug/L	2.783	706	0.004
	Sb	123		ug/L		561	0.003
>	Lu	175		ug/L		367949	367949.069
	U	238	0.006	ug/L	12.517	315	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
>	In	115		91.9			
	Sn	120					
	Sb	121					
	Sb	123					
>	Lu	175		93.7			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, April 13, 2010 15:12:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\Blank.090

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		350450	
	U	238		ug/L		325	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, April 13, 2010 15:14:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\Standard 1.091

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		357385	357385.496
[	U	238	10.000	ug/L	1.263	423309	1.183

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	Lu	175					
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, April 13, 2010 15:16:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\Standard 2.092

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		346400	346400.487
	U	238	99.956	ug/L	0.528	3924964	11.330

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, April 13, 2010 15:17:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 1.093

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		349311	349311.125
	U	238	49.627	ug/L	0.746	1965252	5.625

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		99.7			
	U	238	99.254				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, April 13, 2010 15:19:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 2.094

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		350872	350872.277
	U	238	0.012	ug/L	5.508	815	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		100.1			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, April 13, 2010 15:21:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 3.095

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		341237	341237.117
	U	238	0.216	ug/L	1.954	8686	0.025

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		97.4			
	U	238	108.183				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, April 13, 2010 15:22:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 4.096

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		321479	321479.366
	U	238	-0.002	ug/L	2.476	214	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		91.7			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, April 13, 2010 15:24:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 5.097

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		323412	323411.634
[	U	238	20.986	ug/L	1.639	769564	2.379

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		92.3			
[	U	238	104.932				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, April 13, 2010 15:26:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 6.098

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		344845	344845.355
[	U	238	49.309	ug/L	1.762	1927882	5.589

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	Lu	175		98.4			
[	U	238	98.617				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, April 13, 2010 15:27:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 7.099

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		345974	345974.197
	U	238	0.010	ug/L	12.917	706	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		98.7			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, April 13, 2010 15:44:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 8.109

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		341777	341777.190
	U	238	50.362	ug/L	1.286	1951226	5.709

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		97.5			
	U	238	100.723				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, April 13, 2010 15:45:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 9.110

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		349790	349789.814
	U	238	0.009	ug/L	2.899	693	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		99.8			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, April 13, 2010 15:59:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 8.118

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		351399	351399.441
	U	238	48.797	ug/L	2.328	1943686	5.531

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovi	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		100.3			
	U	238	97.594				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, April 13, 2010 16:00:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 9.119

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		348712	348712.118
	U	238	0.009	ug/L	8.140	686	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		99.5			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, April 13, 2010 16:14:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 8.127

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		343618	343618.256
	U	238	50.399	ug/L	1.318	1963281	5.713

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		98.1			
	U	238	100.798				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, April 13, 2010 16:15:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 9.128

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		351588	351587.835
	U	238	0.011	ug/L	7.475	771	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		100.3			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056872
Sample Date/Time: Tuesday, April 13, 2010 16:17:26
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 959112|1|prb
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\1202056872.129

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		360749	360749.021
	U	238	0.024	ug/L	1.128	1318	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovr	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		102.9			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056873
Sample Date/Time: Tuesday, April 13, 2010 16:19:05
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 959112|1|prb
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\1202056873.130

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		375936	375936.462
	U	238	44.852	ug/L	1.326	1911724	5.084

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		107.3			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248108001
Sample Date/Time: Tuesday, April 13, 2010 16:20:45
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959112|1|prb
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\248108001.131

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		363479	363478.658
	U	238	0.034	ug/L	1.313	1739	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovr	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		103.7			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, April 13, 2010 16:29:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 8.136

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		347316	347316.293
	U	238	49.452	ug/L	1.572	1947017	5.605

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		99.1			
	U	238	98.903				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, April 13, 2010 16:30:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 9.137

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		346483	346483.244
	U	238	0.010	ug/L	6.689	699	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		98.9			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056874
Sample Date/Time: Tuesday, April 13, 2010 16:39:06
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 959112|1|prb
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\1202056874.142

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		365467	365466.732
	U	238	-0.002	ug/L	15.135	237	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
>	Lu	175		104.3			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056875
Sample Date/Time: Tuesday, April 13, 2010 16:40:47
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 959112|1|prb
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\1202056875.143

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		371431	371431.303
	U	238	45.210	ug/L	1.440	1903928	5.125

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		106.0			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056876
Sample Date/Time: Tuesday, April 13, 2010 16:42:27
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 959112|5|prb
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\1202056876.144

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		353171	353171.163
	U	238	0.032	ug/L	0.569	1622	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		100.8			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, April 13, 2010 16:44:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 6.145

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		351138	351137.585
	U	238	48.819	ug/L	1.491	1943227	5.534

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		100.2			
	U	238	97.638				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, April 13, 2010 16:45:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 7.146

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		352560	352559.902
	U	238	0.011	ug/L	14.005	774	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		100.6			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Analysis Begun

Logged In Analyst: Administrator
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: S10

Sample Information File: C:\data-AA\Administrator\Sample Information\030210W1.SIF
Batch ID:
Results Data Set: 030210W3
Results Library: C:\data-AA\Administrator\Results\Results.mdb

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calib Blank
Date Collected: 3/2/2010 08:26:33
Analyst:
Data Type: Original

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0006	0.0027	0.0006	08:27:33	Yes
2		[0.00]	0.0006	0.0025	0.0006	08:28:08	Yes
Mean:		[0.00]	0.0006				
SD:		0.00	0.0000				
%RSD:		0.00	8.04				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 2
Sample ID: S0.2
Date Collected: 3/2/2010 08:28:26
Analyst:
Data Type: Original

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0021	0.0131	0.0027	08:29:27	Yes
2		[0.2]	0.0021	0.0122	0.0028	08:30:02	Yes
Mean:		[0.2]	0.0021				
SD:		0.0	0.0000				
%RSD:		0.0	0.35				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01068 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 3
Sample ID: S0.5
Date Collected: 3/2/2010 08:30:21
Analyst:
Data Type: Original

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0054	0.0299	0.0060	08:31:22	Yes
2		[0.5]	0.0055	0.0282	0.0061	08:31:57	Yes
Mean:		[0.5]	0.0055				
SD:		0.0	0.0001				
%RSD:		0.0	1.42				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999936 Slope: 0.01097 Intercept: -0.00002

Sequence No.: 4
Autosampler Location: 4
Sample ID: S2.0
Date Collected: 3/2/2010 08:32:17
Analyst:
Data Type: Original

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[2.0]	0.0209	0.1041	0.0215	08:33:18	Yes
2	[2.0]	0.0206	0.1004	0.0212	08:33:53	Yes
Mean:	[2.0]	0.0207				
SD:	0.0	0.0002				
%RSD:	0.0	0.90				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999896 Slope: 0.01034 Intercept: 0.00011

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 3/2/2010 08:34:13**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0520	0.2558	0.0526	08:35:15	Yes
2		[5.0]	0.0500	0.2379	0.0506	08:35:49	Yes
Mean:		[5.0]	0.0510				
SD:		0.0	0.0014				
%RSD:		0.0	2.77				

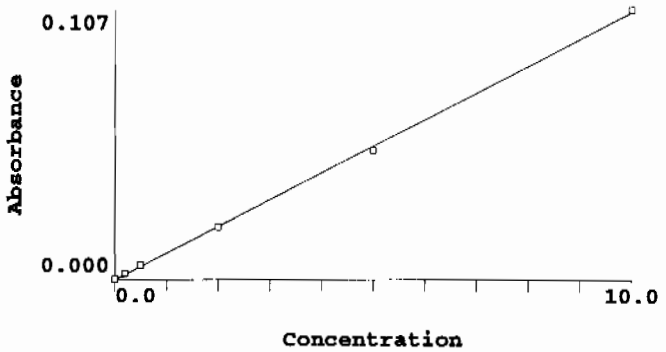
Standard number 4 applied. [5.0]
Correlation Coef.: 0.999965 Slope: 0.01018 Intercept: 0.00020

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 3/2/2010 08:36:10**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1058	0.5210	0.1064	08:37:10	Yes
2		[10.0]	0.1077	0.5459	0.1083	08:37:45	Yes
Mean:		[10.0]	0.1068				
SD:		0.0	0.0014				
%RSD:		0.0	1.27				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999746 Slope: 0.01062 Intercept: -0.00030



Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	0.028	0.00	8.0
S0.2	0.0021	0.2	0.229	0.00	0.4
S0.5	0.0055	0.5	0.544	0.00	1.4
S2.0	0.0207	2.0	1.982	0.00	0.9
S5.0	0.0510	5.0	4.832	0.00	2.8
S10.0	0.1068	10.0	10.085	0.00	1.3

Correlation Coef.: 0.999746 Slope: 0.01062 Intercept: -0.00030

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 3/2/2010 08:38:04**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.221	5.221	0.0551	0.2819	0.0557	08:39:05	Yes
2	5.176	5.176	0.0547	0.2755	0.0553	08:39:40	Yes
Mean:	5.199	5.199	0.0549				
SD:	0.032	0.032	0.0003				
%RSD:	0.612	0.612	0.61				

QC value within limits for Hg 253.7 Recovery = 103.98%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 3/2/2010 08:40:00**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.031	0.031	0.0000	0.0024	0.0006	08:41:01	Yes
2	0.039	0.039	0.0001	0.0036	0.0007	08:41:36	Yes
Mean:	0.035	0.035	0.0001				
SD:	0.006	0.006	0.0001				
%RSD:	15.89	15.89	82.13				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 11**
Sample ID: CRDL **Date Collected: 3/2/2010 08:41:56**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.234	0.234	0.0022	0.0142	0.0028	08:42:57	Yes
2	0.245	0.245	0.0023	0.0156	0.0029	08:43:32	Yes
Mean:	0.240	0.240	0.0022				
SD:	0.008	0.008	0.0001				
%RSD:	3.187	3.187	3.61				

QC value within limits for Hg 253.7 Recovery = 119.76%
All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/2/2010 08:43:52**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.182	5.182	0.0547	0.2774	0.0553	08:44:52	Yes
2	5.128	5.128	0.0542	0.2734	0.0548	08:45:27	Yes
Mean:	5.155	5.155	0.0544				
SD:	0.038	0.038	0.0004				
%RSD:	0.738	0.738	0.74				

QC value within limits for Hg 253.7 Recovery = 103.11%
All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 3/2/2010 08:45:46**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.012	0.012	-0.0002	-0.0000	0.0004	08:46:47	Yes
2	0.012	0.012	-0.0002	-0.0001	0.0004	08:47:22	Yes
Mean:	0.012	0.012	-0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	0.848	0.848	0.63				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12 Autosampler Location: 12
Sample ID: 1202055823|958575|1 Date Collected: 3/2/2010 08:47:41
Analyst: JXL Data Type: Original

Replicate Data: 1202055823|958575|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.012	0.012	-0.0002	-0.0000	0.0004	08:48:43	Yes
2	0.016	0.016	-0.0001	0.0004	0.0005	08:49:17	Yes
Mean:	0.014	0.014	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	18.17	18.17	19.03				

Sequence No.: 13 Autosampler Location: 13
Sample ID: 1202055824|958575|1 Date Collected: 3/2/2010 08:49:38
Analyst: JXL Data Type: Original

Replicate Data: 1202055824|958575|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.127	2.127	0.0223	0.1129	0.0229	08:50:40	Yes
2	2.104	2.104	0.0220	0.1110	0.0227	08:51:14	Yes
Mean:	2.116	2.116	0.0222				
SD:	0.016	0.016	0.0002				
%RSD:	0.778	0.778	0.79				

Sequence No.: 14 Autosampler Location: 14
Sample ID: 247037001|958575|1 Date Collected: 3/2/2010 08:51:35
Analyst: JXL Data Type: Original

Replicate Data: 247037001|958575|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.028	0.028	-0.0000	0.0025	0.0006	08:52:35	Yes
2	0.045	0.045	0.0002	0.0048	0.0008	08:53:11	Yes
Mean:	0.037	0.037	0.0001				
SD:	0.012	0.012	0.0001				
%RSD:	34.19	34.19	145.41				

Sequence No.: 15 Autosampler Location: 15
Sample ID: 1202055825|958575|1 Date Collected: 3/2/2010 08:53:30
Analyst: JXL Data Type: Original

Replicate Data: 1202055825|958575|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.019	0.019	-0.0001	0.0021	0.0005	08:54:30	Yes
2	0.028	0.028	-0.0000	0.0030	0.0006	08:55:05	Yes
Mean:	0.024	0.024	-0.0000				
SD:	0.006	0.006	0.0001				

1	0.032	0.032	0.0000	0.0035	0.0007	09:04:04	Yes
2	0.032	0.032	0.0000	0.0030	0.0007	09:04:39	Yes
Mean:	0.032	0.032	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.786	0.786	6.22				

Sequence No.: 21 **Autosampler Location: 21**
Sample ID: 247042004|958575|1 **Date Collected: 3/2/2010 09:04:58**
Analyst: JXL **Data Type: Original**

Replicate Data: 247042004|958575|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.028	0.028	0.0000	0.0031	0.0006	09:05:59	Yes
2	0.030	0.030	0.0000	0.0036	0.0006	09:06:34	Yes
Mean:	0.029	0.029	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	4.826	4.826	93.90				

Sequence No.: 22 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/2/2010 09:06:54**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.128	5.128	0.0541	0.2768	0.0548	09:07:54	Yes
2	5.127	5.127	0.0541	0.2755	0.0547	09:08:29	Yes
Mean:	5.128	5.128	0.0541				
SD:	0.001	0.001	0.0000				
%RSD:	0.015	0.015	0.02				

QC value within limits for Hg 253.7 Recovery = 102.55%
All analyte(s) passed QC.

Sequence No.: 23 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 3/2/2010 09:08:48**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.032	0.032	0.0000	0.0035	0.0007	09:09:49	Yes
2	0.037	0.037	0.0001	0.0040	0.0007	09:10:24	Yes
Mean:	0.035	0.035	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	10.44	10.44	53.94				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: 247042005|958575|1 **Date Collected: 3/2/2010 09:10:43**
Analyst: JXL **Data Type: Original**

Replicate Data: 247042005|958575|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.029	0.029	0.0000	0.0033	0.0006	09:11:44	Yes
2	0.033	0.033	0.0001	0.0036	0.0007	09:12:19	Yes
Mean:	0.031	0.031	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	8.235	8.235	83.29				

SD:	0.003	0.003	0.0000
%RSD:	9.252	9.252	154.88

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: 1202055830|958578|1 **Date Collected: 3/2/2010 09:22:19**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202055830|958578|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.029	0.029	0.0000	0.0034	0.0006	09:23:19	Yes
2	0.026	0.026	-0.0000	0.0025	0.0006	09:23:54	Yes
Mean:	0.027	0.027	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	7.825	7.825	359.08				

Sequence No.: 31 **Autosampler Location: 29**
Sample ID: 1202055831|958578|1 **Date Collected: 3/2/2010 09:24:13**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202055831|958578|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.105	2.105	0.0221	0.1147	0.0227	09:25:14	Yes
2	2.105	2.105	0.0221	0.1146	0.0227	09:25:49	Yes
Mean:	2.105	2.105	0.0221				
SD:	0.000	0.000	0.0000				
%RSD:	0.010	0.010	0.01				

Sequence No.: 32 **Autosampler Location: 30**
Sample ID: 1202055832|958278|5 **Date Collected: 3/2/2010 09:26:08**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202055832|958278|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.026	0.026	-0.0000	0.0028	0.0006	09:27:08	Yes
2	0.025	0.025	-0.0000	0.0026	0.0006	09:27:43	Yes
Mean:	0.025	0.025	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	3.125	3.125	27.93				

Sequence No.: 33 **Autosampler Location: 31**
Sample ID: 247036002|958578|1 **Date Collected: 3/2/2010 09:28:02**
Analyst: JXL **Data Type: Original**

Replicate Data: 247036002|958578|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.023	0.023	-0.0001	0.0026	0.0006	09:29:03	Yes
2	0.029	0.029	0.0000	0.0031	0.0006	09:29:38	Yes
Mean:	0.026	0.026	-0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	16.58	16.58	246.20				

Sequence No.: 34 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/2/2010 09:29:57**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.092	5.092	0.0538	0.2718	0.0544	09:30:58	Yes
2	5.019	5.019	0.0530	0.2655	0.0536	09:31:32	Yes
Mean:	5.056	5.056	0.0534				
SD:	0.051	0.051	0.0005				
%RSD:	1.013	1.013	1.02				

QC value within limits for Hg 253.7 Recovery = 101.11%
All analyte(s) passed QC.

Sequence No.: 35 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 3/2/2010 09:31:51**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.048	0.048	0.0002	0.0039	0.0008	09:32:52	Yes
2	0.033	0.033	0.0001	0.0029	0.0007	09:33:27	Yes
Mean:	0.040	0.040	0.0001				
SD:	0.010	0.010	0.0001				
%RSD:	25.10	25.10	81.63				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36 **Autosampler Location: 32**
Sample ID: 247036003|958578|1 **Date Collected: 3/2/2010 09:33:47**
Analyst: JXL **Data Type: Original**

Replicate Data: 247036003|958578|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.026	0.026	-0.0000	0.0027	0.0006	09:34:48	Yes
2	0.029	0.029	0.0000	0.0030	0.0006	09:35:23	Yes
Mean:	0.028	0.028	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	8.511	8.511	602.34				

Sequence No.: 37 **Autosampler Location: 33**
Sample ID: 247036004|958578|1 **Date Collected: 3/2/2010 09:35:42**
Analyst: JXL **Data Type: Original**

Replicate Data: 247036004|958578|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.023	0.023	-0.0000	0.0024	0.0006	09:36:43	Yes
2	0.037	0.037	0.0001	0.0036	0.0007	09:37:18	Yes
Mean:	0.030	0.030	0.0000				
SD:	0.009	0.009	0.0001				
%RSD:	31.23	31.23	437.06				

Sequence No.: 38 **Autosampler Location: 34**
Sample ID: 247036005|958578|1 **Date Collected: 3/2/2010 09:37:38**
Analyst: JXL **Data Type: Original**

Replicate Data: 247036005|958578|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.027	0.027	-0.0000	0.0029	0.0006	09:38:39	Yes
2	0.025	0.025	-0.0000	0.0028	0.0006	09:39:14	Yes
Mean:	0.026	0.026	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	4.570	4.570	52.14				

Mean:	0.029	0.029	0.0000
SD:	0.004	0.004	0.0000
%RSD:	15.71	15.71	746.11

Sequence No.: 44 **Autosampler Location: 40**
Sample ID: 1202055833|958581|1 **Date Collected: 3/2/2010 09:49:16**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202055833|958581|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.021	0.021	-0.0001	0.0024	0.0005	09:50:17	Yes
2	0.029	0.029	0.0000	0.0030	0.0006	09:50:51	Yes
Mean:	0.025	0.025	-0.0000				
SD:	0.005	0.005	0.0001				
%RSD:	21.51	21.51	171.71				

Sequence No.: 45 **Autosampler Location: 41**
Sample ID: 1202055834|958581|1 **Date Collected: 3/2/2010 09:51:11**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202055834|958581|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.186	2.186	0.0229	0.1196	0.0235	09:52:12	Yes
2	2.183	2.183	0.0229	0.1194	0.0235	09:52:47	Yes
Mean:	2.184	2.184	0.0229				
SD:	0.003	0.003	0.0000				
%RSD:	0.123	0.123	0.12				

Sequence No.: 46 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/2/2010 09:53:06**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.016	5.016	0.0530	0.2735	0.0536	09:54:06	Yes
2	5.018	5.018	0.0530	0.2717	0.0536	09:54:41	Yes
Mean:	5.017	5.017	0.0530				
SD:	0.001	0.001	0.0000				
%RSD:	0.023	0.023	0.02				

QC value within limits for Hg 253.7 Recovery = 100.34%
All analyte(s) passed QC.

Sequence No.: 47 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 3/2/2010 09:55:00**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.035	0.035	0.0001	0.0033	0.0007	09:56:01	Yes
2	0.032	0.032	0.0000	0.0031	0.0007	09:56:36	Yes
Mean:	0.034	0.034	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.467	5.467	32.35				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 48 **Autosampler Location: 42**
Sample ID: 247817001|958581|1 **Date Collected: 3/2/2010 09:56:55**

2	0.038	0.038	0.0001	0.0037	0.0007	10:15:55	Yes
Mean:	0.037	0.037	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	4.045	4.045	16.44				

Sequence No.: 58 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/2/2010 10:16:14**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.001	5.001	0.0528	0.2739	0.0534	10:17:15	Yes
2	4.992	4.992	0.0527	0.2715	0.0533	10:17:50	Yes
Mean:	4.997	4.997	0.0528				
SD:	0.006	0.006	0.0001				
%RSD:	0.126	0.126	0.13				

QC value within limits for Hg 253.7 Recovery = 99.93%
All analyte(s) passed QC.

Sequence No.: 59 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 3/2/2010 10:18:09**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.031	0.031	0.0000	0.0030	0.0006	10:19:09	Yes
2	0.033	0.033	0.0001	0.0032	0.0007	10:19:45	Yes
Mean:	0.032	0.032	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	5.084	5.084	37.73				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60 **Autosampler Location: 52**
Sample ID: 1202055843|958587|1 **Date Collected: 3/2/2010 10:20:04**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202055843|958587|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.028	0.028	-0.0000	0.0029	0.0006	10:21:05	Yes
2	0.032	0.032	0.0000	0.0035	0.0007	10:21:41	Yes
Mean:	0.030	0.030	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	11.19	11.19	167.05				

Sequence No.: 61 **Autosampler Location: 53**
Sample ID: 1202055844|958587|1 **Date Collected: 3/2/2010 10:22:00**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202055844|958587|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.176	2.176	0.0228	0.1196	0.0234	10:23:01	Yes
2	2.169	2.169	0.0227	0.1186	0.0233	10:23:36	Yes
Mean:	2.173	2.173	0.0228				
SD:	0.005	0.005	0.0001				
%RSD:	0.228	0.228	0.23				

Sequence No.: 62 **Autosampler Location: 54**

%RSD: 3.709 3.709 11.51

Sequence No.: 67 **Autosampler Location: 59**
Sample ID: 248044003|958587|1 **Date Collected: 3/2/2010 10:33:34**
Analyst: JXL **Data Type: Original**

Replicate Data: 248044003|958587|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.037	0.037	0.0001	0.0035	0.0007	10:34:36	Yes
2	0.042	0.042	0.0001	0.0036	0.0008	10:35:11	Yes
Mean:	0.039	0.039	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	8.563	8.563	29.80				

Sequence No.: 68 **Autosampler Location: 60**
Sample ID: 248044004|958587|1 **Date Collected: 3/2/2010 10:35:31**
Analyst: JXL **Data Type: Original**

Replicate Data: 248044004|958587|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.037	0.037	0.0001	0.0035	0.0007	10:36:32	Yes
2	0.037	0.037	0.0001	0.0031	0.0007	10:37:07	Yes
Mean:	0.037	0.037	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.860	0.860	3.53				

Sequence No.: 69 **Autosampler Location: 61**
Sample ID: 248044005|958587|1 **Date Collected: 3/2/2010 10:37:27**
Analyst: JXL **Data Type: Original**

Replicate Data: 248044005|958587|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.026	0.026	-0.0000	0.0028	0.0006	10:38:29	Yes
2	0.029	0.029	0.0000	0.0030	0.0006	10:39:04	Yes
Mean:	0.027	0.027	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	7.669	7.669	260.52				

Sequence No.: 70 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/2/2010 10:39:24**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.079	5.079	0.0536	0.2761	0.0542	10:40:25	Yes
2	5.044	5.044	0.0533	0.2727	0.0539	10:41:00	Yes
Mean:	5.061	5.061	0.0534				
SD:	0.025	0.025	0.0003				
%RSD:	0.487	0.487	0.49				

QC value within limits for Hg 253.7 Recovery = 101.22%
All analyte(s) passed QC.

Sequence No.: 71 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 3/2/2010 10:41:19**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.032	0.032	0.0000	0.0028	0.0006	10:42:20	Yes
2	0.037	0.037	0.0001	0.0037	0.0007	10:42:55	Yes
Mean:	0.034	0.034	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	10.27	10.27	56.74				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72 **Autosampler Location: 62**
Sample ID: 248044006|958587|1 **Date Collected: 3/2/2010 10:43:14**
Analyst: JXL **Data Type: Original**

Replicate Data: 248044006|958587|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.035	0.035	0.0001	0.0032	0.0007	10:44:16	Yes
2	0.041	0.041	0.0001	0.0037	0.0007	10:44:51	Yes
Mean:	0.038	0.038	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	10.62	10.62	40.88				

Sequence No.: 73 **Autosampler Location: 63**
Sample ID: 248127002|958587|1 **Date Collected: 3/2/2010 10:45:11**
Analyst: JXL **Data Type: Original**

Replicate Data: 248127002|958587|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.049	0.049	0.0002	0.0042	0.0008	10:46:12	Yes
2	0.049	0.049	0.0002	0.0038	0.0008	10:46:47	Yes
Mean:	0.049	0.049	0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	0.072	0.072	0.17				

Sequence No.: 74 **Autosampler Location: 64**
Sample ID: 248168006|958587|1 **Date Collected: 3/2/2010 10:47:07**
Analyst: JXL **Data Type: Original**

Replicate Data: 248168006|958587|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.032	0.032	0.0000	0.0032	0.0006	10:48:08	Yes
2	0.039	0.039	0.0001	0.0038	0.0007	10:48:43	Yes
Mean:	0.035	0.035	0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	15.15	15.15	72.49				

Sequence No.: 75 **Autosampler Location: 65**
Sample ID: 248169004|958587|1 **Date Collected: 3/2/2010 10:49:03**
Analyst: JXL **Data Type: Original**

Replicate Data: 248169004|958587|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.039	0.039	0.0001	0.0037	0.0007	10:50:04	Yes
2	0.041	0.041	0.0001	0.0036	0.0008	10:50:39	Yes
Mean:	0.040	0.040	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.561	3.561	11.62				

Replicate Data: 1202055863|958593|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	26.95	26.95	0.2859	1.4918	0.2865	10:59:45	Yes
	Sample concentration is greater than that of the highest standard.						
2	26.74	26.74	0.2836	1.4832	0.2842	11:00:20	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	26.85	26.85	0.2847				
SD:	0.150	0.150	0.0016				
%RSD:	0.559	0.559	0.56				

Sample concentration is greater than that of the highest standard.

Sequence No.: 81 **Autosampler Location: 71**
Sample ID: 1202055864|958593|5 **Date Collected: 3/2/2010 11:00:40**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202055864|958593|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.495	5.495	0.0580	0.2982	0.0586	11:01:41	Yes
2	5.466	5.466	0.0577	0.2966	0.0583	11:02:16	Yes
Mean:	5.480	5.480	0.0579				
SD:	0.020	0.020	0.0002				
%RSD:	0.371	0.371	0.37				

Sequence No.: 82 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/2/2010 11:02:36**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.006	5.006	0.0528	0.2714	0.0535	11:03:37	Yes
2	5.022	5.022	0.0530	0.2712	0.0536	11:04:12	Yes
Mean:	5.014	5.014	0.0529				
SD:	0.011	0.011	0.0001				
%RSD:	0.227	0.227	0.23				

QC value within limits for Hg 253.7 Recovery = 100.27%
All analyte(s) passed QC.

Sequence No.: 83 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 3/2/2010 11:04:31**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.033	0.033	0.0001	0.0031	0.0007	11:05:31	Yes
2	0.048	0.048	0.0002	0.0040	0.0008	11:06:06	Yes
Mean:	0.040	0.040	0.0001				
SD:	0.010	0.010	0.0001				
%RSD:	26.02	26.02	85.60				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 84 **Autosampler Location: 72**
Sample ID: 247958002|958593|1 **Date Collected: 3/2/2010 11:06:25**
Analyst: JXL **Data Type: Original**

Replicate Data: 247958002|958593|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.063	0.063	0.0004	0.0052	0.0010	11:07:27	Yes

2	0.068	0.068	0.0004	0.0049	0.0010	11:08:02	Yes
Mean:	0.066	0.066	0.0004				
SD:	0.004	0.004	0.0000				
%RSD:	5.695	5.695	9.90				

Sequence No.: 85 **Autosampler Location: 73**
Sample ID: 247958003|958593|1 **Date Collected: 3/2/2010 11:08:22**
Analyst: JXL **Data Type: Original**

Replicate Data: 247958003|958593|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	14.14	14.14	0.1498	0.7668	0.1504	11:09:24	Yes
	Sample concentration is greater than that of the highest standard.						
2	14.18	14.18	0.1503	0.7699	0.1509	11:09:59	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	14.16	14.16	0.1501				
SD:	0.029	0.029	0.0003				
%RSD:	0.202	0.202	0.20				
	Sample concentration is greater than that of the highest standard.						

Sequence No.: 86 **Autosampler Location: 74**
Sample ID: 247958004|958593|1 **Date Collected: 3/2/2010 11:10:19**
Analyst: JXL **Data Type: Original**

Replicate Data: 247958004|958593|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.261	0.261	0.0025	0.0153	0.0031	11:11:21	Yes
2	0.275	0.275	0.0026	0.0162	0.0032	11:11:56	Yes
Mean:	0.268	0.268	0.0026				
SD:	0.010	0.010	0.0001				
%RSD:	3.710	3.710	4.14				

Sequence No.: 87 **Autosampler Location: 75**
Sample ID: 247958005|958593|1 **Date Collected: 3/2/2010 11:12:16**
Analyst: JXL **Data Type: Original**

Replicate Data: 247958005|958593|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.159	0.159	0.0014	0.0102	0.0020	11:13:17	Yes
2	0.170	0.170	0.0015	0.0105	0.0021	11:13:52	Yes
Mean:	0.165	0.165	0.0015				
SD:	0.007	0.007	0.0001				
%RSD:	4.420	4.420	5.32				

Sequence No.: 88 **Autosampler Location: 76**
Sample ID: 1202056573|958951|1 **Date Collected: 3/2/2010 11:14:12**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202056573|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.033	0.033	0.0000	0.0033	0.0007	11:15:13	Yes
2	0.046	0.046	0.0002	0.0042	0.0008	11:15:48	Yes
Mean:	0.040	0.040	0.0001				
SD:	0.010	0.010	0.0001				
%RSD:	24.87	24.87	84.85				

Sequence No.: 89 **Autosampler Location: 77**
Sample ID: 1202056574|958951|1 **Date Collected: 3/2/2010 11:16:08**

Analyst: JXL Data Type: Original

Replicate Data: 1202056574|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.200	2.200	0.0231	0.1197	0.0237	11:17:10	Yes
2	2.209	2.209	0.0232	0.1196	0.0238	11:17:45	Yes
Mean:	2.205	2.205	0.0231				
SD:	0.006	0.006	0.0001				
%RSD:	0.267	0.267	0.27				

Sequence No.: 90 Autosampler Location: 78
Sample ID: 247997001|958951|1 Date Collected: 3/2/2010 11:18:05
Analyst: JXL Data Type: Original

Replicate Data: 247997001|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.033	0.033	0.0001	0.0032	0.0007	11:19:06	Yes
2	0.041	0.041	0.0001	0.0035	0.0007	11:19:41	Yes
Mean:	0.037	0.037	0.0001				
SD:	0.006	0.006	0.0001				
%RSD:	15.81	15.81	65.70				

Sequence No.: 91 Autosampler Location: 79
Sample ID: 248001001|958951|1 Date Collected: 3/2/2010 11:20:01
Analyst: JXL Data Type: Original

Replicate Data: 248001001|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.033	0.033	0.0001	0.0032	0.0007	11:21:03	Yes
2	0.041	0.041	0.0001	0.0038	0.0008	11:21:38	Yes
Mean:	0.037	0.037	0.0001				
SD:	0.006	0.006	0.0001				
%RSD:	15.33	15.33	60.50				

Sequence No.: 92 Autosampler Location: 80
Sample ID: 248010001|958951|1 Date Collected: 3/2/2010 11:21:58
Analyst: JXL Data Type: Original

Replicate Data: 248010001|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.034	0.034	0.0001	0.0037	0.0007	11:22:59	Yes
2	0.035	0.035	0.0001	0.0034	0.0007	11:23:34	Yes
Mean:	0.035	0.035	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.747	3.747	19.55				

Sequence No.: 93 Autosampler Location: 81
Sample ID: 248010002|958951|1 Date Collected: 3/2/2010 11:23:54
Analyst: JXL Data Type: Original

Replicate Data: 248010002|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.039	0.039	0.0001	0.0041	0.0007	11:24:55	Yes
2	0.036	0.036	0.0001	0.0033	0.0007	11:25:30	Yes
Mean:	0.038	0.038	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.841	5.841	22.77				

Sequence No.: 94 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/2/2010 11:25:50**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.218	5.218	0.0551	0.2817	0.0557	11:26:50	Yes
2	5.211	5.211	0.0550	0.2791	0.0556	11:27:25	Yes
Mean:	5.214	5.214	0.0551				
SD:	0.005	0.005	0.0001				
%RSD:	0.095	0.095	0.10				

QC value within limits for Hg 253.7 Recovery = 104.29%
All analyte(s) passed QC.

Sequence No.: 95 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 3/2/2010 11:27:44**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.029	0.029	0.0000	0.0027	0.0006	11:28:45	Yes
2	0.038	0.038	0.0001	0.0032	0.0007	11:29:20	Yes
Mean:	0.033	0.033	0.0001				
SD:	0.006	0.006	0.0001				
%RSD:	19.42	19.42	124.89				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96 **Autosampler Location: 82**
Sample ID: 248026001|958951|1 **Date Collected: 3/2/2010 11:29:40**
Analyst: JXL **Data Type: Original**

Replicate Data: 248026001|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.036	0.036	0.0001	0.0035	0.0007	11:30:41	Yes
2	0.037	0.037	0.0001	0.0031	0.0007	11:31:16	Yes
Mean:	0.036	0.036	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.939	1.939	8.63				

Sequence No.: 97 **Autosampler Location: 83**
Sample ID: 248032001|958951|1 **Date Collected: 3/2/2010 11:31:36**
Analyst: JXL **Data Type: Original**

Replicate Data: 248032001|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.028	0.028	-0.0000	0.0029	0.0006	11:32:37	Yes
2	0.031	0.031	0.0000	0.0032	0.0006	11:33:12	Yes
Mean:	0.030	0.030	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	8.573	8.573	152.05				

Sequence No.: 98 **Autosampler Location: 84**
Sample ID: 248034001|958951|1 **Date Collected: 3/2/2010 11:33:32**
Analyst: JXL **Data Type: Original**

Sample ID: 248046002|958951|1 Date Collected: 3/2/2010 11:43:16
Analyst: JXL Data Type: Original

Replicate Data: 248046002|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.025	0.025	-0.0000	0.0028	0.0006	11:44:17	Yes
2	0.031	0.031	0.0000	0.0032	0.0006	11:44:52	Yes
Mean:	0.028	0.028	-0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	15.25	15.25	>999.9%				

Sequence No.: 104 Autosampler Location: 90
Sample ID: 248053001|958951|1 Date Collected: 3/2/2010 11:45:12
Analyst: JXL Data Type: Original

Replicate Data: 248053001|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.028	0.028	0.0000	0.0030	0.0006	11:46:14	Yes
2	0.031	0.031	0.0000	0.0030	0.0006	11:46:49	Yes
Mean:	0.029	0.029	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	5.471	5.471	107.18				

Sequence No.: 105 Autosampler Location: 91
Sample ID: 248053002|958951|1 Date Collected: 3/2/2010 11:47:10
Analyst: JXL Data Type: Original

Replicate Data: 248053002|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.026	0.026	-0.0000	0.0027	0.0006	11:48:11	Yes
2	0.028	0.028	0.0000	0.0029	0.0006	11:48:46	Yes
Mean:	0.027	0.027	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	5.952	5.952	162.46				

Sequence No.: 106 Autosampler Location: 7
Sample ID: CCV Date Collected: 3/2/2010 11:49:06
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.948	4.948	0.0522	0.2686	0.0529	11:50:06	Yes
2	4.918	4.918	0.0519	0.2653	0.0525	11:50:41	Yes
Mean:	4.933	4.933	0.0521				
SD:	0.021	0.021	0.0002				
%RSD:	0.435	0.435	0.44				

QC value within limits for Hg 253.7 Recovery = 98.67%
All analyte(s) passed QC.

Sequence No.: 107 Autosampler Location: 8
Sample ID: CCB Date Collected: 3/2/2010 11:51:00
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.024	0.024	-0.0000	0.0025	0.0006	11:52:01	Yes
2	0.032	0.032	0.0000	0.0029	0.0007	11:52:36	Yes

Mean:	0.028	0.028	-0.0000
SD:	0.006	0.006	0.0001
%RSD:	20.56	20.56	>999.9%

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 108 **Autosampler Location: 92**
Sample ID: 248053003|958951|1 **Date Collected: 3/2/2010 11:52:55**
Analyst: JXL **Data Type: Original**

Replicate Data: 248053003|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.030	0.030	0.0000	0.0032	0.0006	11:53:57	Yes
2	0.035	0.035	0.0001	0.0036	0.0007	11:54:31	Yes
Mean:	0.032	0.032	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	11.99	11.99	88.45				

Sequence No.: 109 **Autosampler Location: 93**
Sample ID: 248108001|958951|1 **Date Collected: 3/2/2010 11:54:52**
Analyst: JXL **Data Type: Original**

Replicate Data: 248108001|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.026	0.026	-0.0000	0.0030	0.0006	11:55:53	Yes
2	0.030	0.030	0.0000	0.0033	0.0006	11:56:28	Yes
Mean:	0.028	0.028	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	9.111	9.111	>999.9%				

Sequence No.: 110 **Autosampler Location: 94**
Sample ID: 248117001|958951|1 **Date Collected: 3/2/2010 11:56:48**
Analyst: JXL **Data Type: Original**

Replicate Data: 248117001|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.023	0.023	-0.0000	0.0025	0.0006	11:57:50	Yes
2	0.031	0.031	0.0000	0.0032	0.0006	11:58:25	Yes
Mean:	0.027	0.027	-0.0000				
SD:	0.005	0.005	0.0001				
%RSD:	19.43	19.43	681.10				

Sequence No.: 111 **Autosampler Location: 95**
Sample ID: 248145001|958951|1 **Date Collected: 3/2/2010 11:58:45**
Analyst: JXL **Data Type: Original**

Replicate Data: 248145001|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.029	0.029	0.0000	0.0032	0.0006	11:59:46	Yes
2	0.027	0.027	-0.0000	0.0029	0.0006	12:00:21	Yes
Mean:	0.028	0.028	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	4.334	4.334	287.89				

Sequence No.: 112 **Autosampler Location: 96**
Sample ID: 1202056575|958951|1 **Date Collected: 3/2/2010 12:00:41**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202056575|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.024	0.024	-0.0000	0.0028	0.0006	12:01:43	Yes
2	0.032	0.032	0.0000	0.0030	0.0007	12:02:19	Yes
Mean:	0.028	0.028	-0.0000				
SD:	0.006	0.006	0.0001				
%RSD:	20.52	20.52	>999.9%				

Sequence No.: 113 Autosampler Location: 97
Sample ID: 1202056576|958951|1 Date Collected: 3/2/2010 12:02:39
Analyst: JXL Data Type: Original

Replicate Data: 1202056576|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.290	2.290	0.0240	0.1266	0.0246	12:03:41	Yes
2	2.255	2.255	0.0236	0.1250	0.0243	12:04:16	Yes
Mean:	2.273	2.273	0.0238				
SD:	0.024	0.024	0.0003				
%RSD:	1.063	1.063	1.08				

Sequence No.: 114 Autosampler Location: 98
Sample ID: 1202056577|958951|5 Date Collected: 3/2/2010 12:04:36
Analyst: JXL Data Type: Original

Replicate Data: 1202056577|958951|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.030	0.030	0.0000	0.0032	0.0006	12:05:38	Yes
2	0.032	0.032	0.0000	0.0031	0.0006	12:06:13	Yes
Mean:	0.031	0.031	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	4.606	4.606	53.00				

Sequence No.: 115 Autosampler Location: 99
Sample ID: 1202056608|958969|1 Date Collected: 3/2/2010 12:06:33
Analyst: JXL Data Type: Original

Replicate Data: 1202056608|958969|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.025	0.025	-0.0000	0.0030	0.0006	12:07:35	Yes
2	0.023	0.023	-0.0000	0.0027	0.0006	12:08:10	Yes
Mean:	0.024	0.024	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	4.800	4.800	32.24				

Sequence No.: 116 Autosampler Location: 100
Sample ID: 1202056609|958969|1 Date Collected: 3/2/2010 12:08:30
Analyst: JXL Data Type: Original

Replicate Data: 1202056609|958969|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.265	2.265	0.0237	0.1245	0.0244	12:09:32	Yes
2	2.262	2.262	0.0237	0.1229	0.0243	12:10:08	Yes
Mean:	2.263	2.263	0.0237				
SD:	0.002	0.002	0.0000				
%RSD:	0.077	0.077	0.08				

Sequence No.: 117 Autosampler Location: 101
Sample ID: 248162001|958969|1 Date Collected: 3/2/2010 12:10:28
Analyst: JXL Data Type: Original

Replicate Data: 248162001|958969|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.027	0.027	-0.0000	0.0030	0.0006	12:11:30	Yes
2	0.030	0.030	0.0000	0.0030	0.0006	12:12:05	Yes
Mean:	0.028	0.028	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	5.485	5.485	294.70				

Sequence No.: 118 Autosampler Location: 7
Sample ID: CCV Date Collected: 3/2/2010 12:12:25
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.004	5.004	0.0528	0.2717	0.0534	12:13:26	Yes
2	5.010	5.010	0.0529	0.2692	0.0535	12:14:01	Yes
Mean:	5.007	5.007	0.0529				
SD:	0.004	0.004	0.0000				
%RSD:	0.080	0.080	0.08				

QC value within limits for Hg 253.7 Recovery = 100.14%
All analyte(s) passed QC.

Sequence No.: 119 Autosampler Location: 8
Sample ID: CCB Date Collected: 3/2/2010 12:14:20
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.030	0.030	0.0000	0.0031	0.0006	12:15:21	Yes
2	0.038	0.038	0.0001	0.0035	0.0007	12:15:56	Yes
Mean:	0.034	0.034	0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	15.64	15.64	89.85				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 120 Autosampler Location: 102
Sample ID: 248162002|958969|1 Date Collected: 3/2/2010 12:16:15
Analyst: JXL Data Type: Original

Replicate Data: 248162002|958969|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.024	0.024	-0.0000	0.0026	0.0006	12:17:17	Yes
2	0.032	0.032	0.0000	0.0031	0.0006	12:17:52	Yes
Mean:	0.028	0.028	-0.0000				
SD:	0.005	0.005	0.0001				
%RSD:	18.16	18.16	>999.9%				

Sequence No.: 121 Autosampler Location: 103
Sample ID: 248162003|958969|1 Date Collected: 3/2/2010 12:18:12
Analyst: JXL Data Type: Original

Replicate Data: 248162003|958969|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

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: **959108.0** Verified by: _____

Analyst: Francena Armstrong

Method: SW846 3005A

Lab SOP: GL-MA-E-006 REV# 9

Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202056867	Metals Spike Mix I	UI100205-01	.25	mL
LCS	1202056867	Metals Spike Mix II	UI100205-06	.25	mL
MS	1202056869	Metals Spike Mix I	UI100205-01	.25	mL
MS	1202056869	Metals Spike Mix II	UI100205-06	.25	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202056866 MB	04-MAR-2010 14:00:00	Water	50	50	1	<2
1202056867 LCS	04-MAR-2010 14:00:00	Water	50	50	1	<2
248108001	04-MAR-2010 14:00:00	Water	50	50	1	<2
248117001	04-MAR-2010 14:00:00	Water	50	50	1	<2
248162001	04-MAR-2010 14:00:00	Water	50	50	1	<2
248162002	04-MAR-2010 14:00:00	Water	50	50	1	<2
248162003	04-MAR-2010 14:00:00	Water	50	50	1	<2
248162004	04-MAR-2010 14:00:00	Water	50	50	1	<2
248172001	04-MAR-2010 14:00:00	Water	50	50	1	<2
248173001	04-MAR-2010 14:00:00	Water	50	50	1	<2
248199001	04-MAR-2010 14:00:00	Water	50	50	1	<2
1202056868 DUP (248199001)	04-MAR-2010 14:00:00	Water	50	50	1	<2
1202056869 MS (248199001)	04-MAR-2010 14:00:00	Water	50	50	1	<2
1202056870 SDILT (248199001)	04-MAR-2010 14:00:00	Water	50	50	1	<2

Reagent/Solvent Lot ID	Description	Amount
1277916	HYDROCHLORIC ACID	2.5 mL
1277919	Nitric Acid CONC.	1 mL

Comments:

Prep Logbook

Acid Digestion of Total Recoverable or Dissolved Metals in Surface and Groundwater Samples for Analysis by ICP or ICP-MS

Batch ID: **959110.0** Verified by: _____

Analyst: Francena Armstrong

Method: SW846 3005A

Lab SOP: GL-MA-E-006 REV# 9

Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202056873	ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).	UI100205-A	.5	mL
LCS	1202056873	MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).	UI100205-B	.5	mL
MS	1202056875	ICP-MS DOE liquid Spike Solution A	UI090930-A	.5	mL
MS	1202056875	ICP-MS DOE Liquid Spike Solution B	UI090930-B	.5	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202056872 MB	04-MAR-2010 14:00:00	Water	50	50	1	<2
1202056873 LCS	04-MAR-2010 14:00:00	Water	50	50	1	<2
248108001	04-MAR-2010 14:00:00	Water	50	50	1	<2
248117001	04-MAR-2010 14:00:00	Water	50	50	1	<2
248162001	04-MAR-2010 14:00:00	Water	50	50	1	<2
248162002	04-MAR-2010 14:00:00	Water	50	50	1	<2
248162003	04-MAR-2010 14:00:00	Water	50	50	1	<2
248162004	04-MAR-2010 14:00:00	Water	50	50	1	<2
248172001	04-MAR-2010 14:00:00	Water	50	50	1	<2
248173001	04-MAR-2010 14:00:00	Water	50	50	1	<2
248199001	04-MAR-2010 14:00:00	Water	50	50	1	<2
1202056874 DUP (248199001)	04-MAR-2010 14:00:00	Water	50	50	1	<2
1202056875 MS (248199001)	04-MAR-2010 14:00:00	Water	50	50	1	<2
1202056876 SDILT (248199001)	04-MAR-2010 14:00:00	Water	50	50	1	<2

Reagent/Solvent Lot ID	Description	Amount
1277916	HYDROCHLORIC ACID	2.5 mL
1277919	Nitric Acid CONC.	1 mL

Comments:

Prep Logbook

Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Batch ID: **958949.0** Verified by: _____
Analyst: Tara Griffin
Method: SW846 7470A Prep
Lab SOP: GL-MA-E-010 REV# 23
Instrument: No analytical instrument

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202056574	Mercury working intermediate standard for LCS/MS	WHG100301-13	.2	mL
MS	1202056576	Mercury working intermediate standard for LCS/MS	WHG100301-13	.2	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202056573 MB	01-MAR-2010 12:20:00	Water	20	20	1	<2
1202056574 LCS	01-MAR-2010 12:20:00	Water	20	20	1	<2
247997001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248001001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248010001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248010002	01-MAR-2010 12:20:00	Water	20	20	1	<2
248032001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248034001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248038001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248038002	01-MAR-2010 12:20:00	Water	20	20	1	<2
248039001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248046001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248046002	01-MAR-2010 12:20:00	Water	20	20	1	<2
248053001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248053002	01-MAR-2010 12:20:00	Water	20	20	1	<2
248053003	01-MAR-2010 12:20:00	Water	20	20	1	<2
248108001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248117001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248145001	01-MAR-2010 12:20:00	Water	20	20	1	<2
1202056575 DUP (248145001)	01-MAR-2010 12:20:00	Water	20	20	1	<2
1202056576 MS (248145001)	01-MAR-2010 12:20:00	Water	20	20	1	<2
1202056577 SDILT (248145001)	01-MAR-2010 12:20:00	Water	20	20	1	<2

Reagent/Solvent Lot ID	Description	Amount
I176183	Sulfuric Acid, Concentrated	1 mL
I255532-C	Hg reducing agent	1 mL
I274391-1	NITRIC ACID	.5 mL

Comments:
Digestion Start Date: 01-MAR-10 12:20
Digestion End Date: 01-MAR-10 14:20

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%IN5%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 S **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: 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

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 Carnello **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 :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: 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: OSI
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 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: UI100310-49.11 **Opened:** 29-MAR-10 **Amount :** 100 ml
Name: Trace ICP ICSAB **Received:** 12-MAR-10 **Catalog Number :** 160066-04
Type: Source Material **Expires:** 30-MAR-10 **Lot Number :** 1019142
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Inteferent Check Standard AB
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Antimony	500 ug/L
Arsenic	500 ug/L	Barium	500 ug/L
Beryllium	250 ug/L	Boron	500 ug/L
Cadmium	500 ug/L	Calcium	500000 ug/L
Chromium	500 ug/L	Cobalt	500 ug/L
Copper	500 ug/L	Iron	200000 ug/L
Lead	500 ug/L	Magnesium	500000 ug/L
Manganese	500 ug/L	Molybdenum	500 ug/L
Nickel	500 ug/L	Phosphorous	2500 ug/L
Potassium	5000 ug/L	Selenium	2500 ug/L
Silica	10696.5 ug/L	Silicon	5000 ug/L
Silver	250 ug/L	Sodium	5000 ug/L

Analyte	Concentration	Analyte	Concentration
Strontium	500 ug/L	Sulfur	2500 ug/L
Thallium	500 ug/L	Tin	500 ug/L
Titanium	500 ug/L	Uranium	500 ug/L
Vanadium	500 ug/L	Zinc	500 ug/L

Serial ID: 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		

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

Standard Logbook

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: UI100318-11 **Opened:** 18-MAR-10 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 18-MAR-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 15-APR-10 **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: UI100325-40 **Opened:** 25-MAR-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-MAR-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 25-MAR-11 **Lot Number :** 1019348
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L

Analyte	Concentration	Analyte	Concentration
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI100325-41 **Opened:** 25-MAR-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-MAR-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 25-MAR-11 **Lot Number :** 1019348
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: 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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI100405-60 **Opened:** 05-APR-10 **Amount :** .5 mL
Name: ICPMS High Range Standar **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 Standar **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: UMS100226-01 **Opened:** 26-FEB-10 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 26-FEB-10 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 26-FEB-11 **Lot Number :** 21-104JB
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: UMS100226-02 **Opened:** 26-FEB-10 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 26-FEB-10 **Lot Number :** 21-103JB
Type: Source Material **Expires:** 26-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
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS100226-03 **Opened:** 26-FEB-10 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 26-FEB-10 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 26-FEB-11 **Lot Number :** 21-102JB
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		

Standard Logbook

Serial ID: IHG100301-01 **Opened:** 01-MAR-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 01-MAR-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 02-MAR-10 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG100301-02 **Opened:** 01-MAR-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 01-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Intermediate **Expires:** 02-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: WHG100301-01a **Opened:** 01-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 01-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 08-MAR-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100301-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG100301-02 **Opened:** 01-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 01-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 08-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.
IHG100301-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Standard Logbook

Serial ID: WHG100301-03 **Opened:** 01-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 01-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 08-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.
IHG100301-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG100301-04 **Opened:** 01-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 01-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 08-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.
IHG100301-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100301-05 **Opened:** 01-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 01-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 08-MAR-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100301-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG100301-06 **Opened:** 01-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 01-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 08-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.
IHG100301-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Standard Logbook

Serial ID: WHG100301-13 **Opened:** 01-MAR-10 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 01-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 08-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: WI100329-42 **Opened:** 29-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 30-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1293083
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.
WI100329-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100329-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100329-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100329-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100329-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100329-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100329-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100329-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100329-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100329-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100329-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100329-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100329-43 **Opened:** 29-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 30-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1293083
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
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WI100329-44 **Opened:** 29-MAR-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 30-MAR-10 **Solvent :** 3%HCL and 1 %HNO3-1293083
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Serial ID: WI100329-45 **Opened:** 29-MAR-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 30-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1293083
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: WI100329-46 **Opened:** 29-MAR-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 30-MAR-10 **Solvent :** 3%HCL AND 1%HNO3-1293083
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100329-47 **Opened:** 29-MAR-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 30-MAR-10 **Solvent :** 3%HCL &1%HNO3-1293083
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100411-04 **Opened:** 11-APR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 11-APR-10 **Balance Id :** 4025216
Type: Working **Expires:** 12-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1296562
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
UMS100226-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100411-04A **Opened:** 11-APR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 11-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 12-APR-10 **Solvent :** 2%HNO3/1%HCl - 1296562
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100411-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100411-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100411-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100411-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100411-05 **Opened:** 11-APR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 11-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 12-APR-10 **Solvent :** 2%HNO3/1%HCl - 1296562
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
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

Standard Logbook

Serial ID: WMS100411-06 **Opened:** 11-APR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 11-APR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 12-APR-10 **Solvent :** 2%HNO3/1%HCl - 1296562
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Serial ID: WMS100411-07 **Opened:** 11-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 11-APR-10 **Lot Number :** 1010773
Type: Working **Expires:** 12-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1296562
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100411-08 **Opened:** 11-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 11-APR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 12-APR-10 **Solvent :** 2%HNO3/1%HCl - 1296562
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WMS100411-70 **Opened:** 11-APR-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 11-APR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 12-APR-10 **Solvent :** 2%HNO3/1%HCl - 1296562
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100413-04 **Opened:** 13-APR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 13-APR-10 **Balance Id :** 4025216
Type: Working **Expires:** 14-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1300209
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
UMS100226-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100413-04A **Opened:** 13-APR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 13-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 14-APR-10 **Solvent :** 2%HNO3/1%HCl - 1300209
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100413-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100413-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100413-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100413-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100413-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100413-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100413-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100413-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100413-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100413-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100413-05 **Opened:** 13-APR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 13-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 14-APR-10 **Solvent :** 2%HNO3/1%HCl - 1300209
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
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100413-06 **Opened:** 13-APR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 13-APR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 14-APR-10 **Solvent :** 2%HNO3/1%HCl - 1300209
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100413-07 **Opened:** 13-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 13-APR-10 **Lot Number :** 1010773
Type: Working **Expires:** 14-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1300209
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100413-08 **Opened:** 13-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 13-APR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 14-APR-10 **Solvent :** 2%HNO3/1%HCl - 1300209
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
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

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1176183 **Opened:** 24-AUG-09 **Lot Number :** H20001
Name: B-H2SO4-MER **Received:** 24-AUG-09
Type: Reagent/Solvent **Expires:** 24-AUG-10
Employee: Tara Griffin
Supplier: Mallinckrodt
Description: Sulfuric Acid, Concentrated
Comments: None

Standard Logbook

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: Hydroxlyamine 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.	Aliquot	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

Serial ID: 1274397-C **Opened:** 24-FEB-10 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 24-FEB-10
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

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: 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: 1277919 **Opened:** 02-MAR-10 **Lot Number :** J 04043 L
Name: I-HNO3 **Received:** 02-MAR-10
Type: Reagent/Solvent **Expires:** 02-MAR-11
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
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: 1293083 **Opened:** 29-MAR-10 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 29-MAR-10 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 04-APR-10 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL

Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1296562 **Opened:** 05-APR-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 05-APR-10
Type: Reagent/Solvent **Expires:** 12-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

Serial ID: 1300209 **Opened:** 12-APR-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 12-APR-10
Type: Reagent/Solvent **Expires:** 19-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 10-2090-1

Sample Analysis

Sample ID	Client ID
248110001	RE15-10-8404
248110002	RE15-10-8396
248110003	RE15-10-8393
248110004	RE15-10-8395
248110005	RE15-10-8398
248110006	RE15-10-8394
248110007	RE15-10-8399
248110008	RE15-10-8397
1202056877	Method Blank (MB) **ICP**
1202056882	Laboratory Control Sample (LCS)
1202056879	248110001(RE15-10-8404L) Serial Dilution (SD)
1202056878	248110001(RE15-10-8404D) Sample Duplicate (DUP)
1202056880	248110001(RE15-10-8404S) Matrix Spike (MS)
1202056881	248110001(RE15-10-8404SD) Matrix Spike Duplicate (MSD)
1202056883	Method Blank (MB) **ICP-MS**
1202056888	Laboratory Control Sample (LCS)
1202056885	248110001(RE15-10-8404L) Serial Dilution (SD)
1202056884	248110001(RE15-10-8404D) Sample Duplicate (DUP)
1202056886	248110001(RE15-10-8404S) Matrix Spike (MS)
1202056887	248110001(RE15-10-8404SD) Matrix Spike Duplicate (MSD)

1202056179	Method Blank (MB) **CVAA**
1202056180	Laboratory Control Sample (LCS)
1202056183	248068001(RE11-10-1786L) Serial Dilution (SD)
1202056181	248068001(RE11-10-1786D) Sample Duplicate (DUP)
1202056182	248068001(RE11-10-1786S) Matrix Spike (MS)
1202056184	248068001(RE11-10-1786SD) Matrix Spike Duplicate (MSD)

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

Method/Analysis Information

Analytical Batch:	959114, 959116 and 958757
Prep Batch :	959113, 959115 and 958755
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 7300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens

voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

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

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

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

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

Laboratory Control Sample (LCS) Recovery
The 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: 248110001 (RE15-10-8404) and 248068001 (RE11-10-1786).

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

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

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

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

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: 810028 and 811428. 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 Parson **Date:** 3/31/10

Sample Data Summary

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2090-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248110001 **BASIS:** Dry Weight **DATE COLLECTED** 22-FEB-10

CLIENT ID: RE15-10-8404 **LEVEL:** Low **DATE RECEIVED** 26-FEB-10

MATRIX: SOIL **%SOLIDS:** 90.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11200000	ug/Kg		7040	20700	20700	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-36-0	Antimony	1040	ug/Kg	UN	342	1040	1040	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-38-2	Arsenic	1.74	mg/kg		0.207	1.03	1.03	2	MS	RMJ	03/24/10 16:55	100323-2	959116
7440-39-3	Barium	167000	ug/Kg		104	518	518	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-41-7	Beryllium	1.02	mg/kg		0.0207	0.103	0.103	2	MS	RMJ	03/24/10 16:55	100323-2	959116
7440-43-9	Cadmium	518	ug/Kg	U	104	518	518	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-70-2	Calcium	3220000	ug/Kg		8290	25900	25900	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-47-3	Chromium	9850	ug/Kg		155	518	518	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-48-4	Cobalt	5200	ug/Kg		155	518	518	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-50-8	Copper	6500	ug/Kg		311	1040	1040	1	P	HSC	03/29/10 22:50	032910C-1	959114
7439-89-6	Iron	14500000	ug/Kg		8290	25900	25900	1	P	HSC	03/29/10 22:50	032910C-1	959114
7439-92-1	Lead	9820	ug/Kg		259	1040	1040	1	P	HSC	03/29/10 22:50	032910C-1	959114
7439-95-4	Magnesium	2240000	ug/Kg		8810	31100	31100	1	P	HSC	03/29/10 22:50	032910C-1	959114
7439-96-5	Manganese	300000	ug/Kg	*	207	1040	1040	1	P	HSC	03/29/10 22:50	032910C-1	959114
7439-97-6	Mercury	16.3	ug/kg		4.4	12.9	12.9	1	AV	JXL1	03/10/10 12:03	031010S1-4	958757
7440-02-0	Nickel	7.48	mg/kg		0.103	0.414	0.414	2	MS	RMJ	03/24/10 16:55	100323-2	959116
7440-09-7	Potassium	1790000	ug/Kg	N	6630	25900	25900	1	P	HSC	03/29/10 22:50	032910C-1	959114
7782-49-2	Selenium	1.03	mg/kg	UN	0.517	1.03	1.03	2	MS	RMJ	03/24/10 16:55	100323-2	959116
7440-22-4	Silver	518	ug/Kg	U	104	518	518	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-23-5	Sodium	546000	ug/Kg		7250	25900	25900	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-28-0	Thallium	0.185	mg/kg	J	0.062	0.207	0.207	2	MS	RMJ	03/24/10 16:55	100323-2	959116
7440-61-1	Uranium	4.07	mg/kg		0.0136	0.0414	0.0414	2	MS	RMJ	03/26/10 00:44	100325-3	959116
7440-62-2	Vanadium	21500	ug/Kg		104	518	518	1	P	HSC	03/29/10 22:50	032910C-1	959114
7440-66-6	Zinc	29900	ug/Kg		342	1040	1040	1	P	HSC	03/29/10 22:50	032910C-1	959114

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958757	958755	SW846 7471A Prep	0.512	g	30	mL	03/10/10	LXH2
959114	959113	SW846 3050B	0.533	g	50	mL	03/09/10	AXG2
959116	959115	SW846 3050B	0.534	g	50	mL	03/03/10	BXA1

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2090-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248110002 **BASIS:** Dry Weight **DATE COLLECTED** 22-FEB-10

CLIENT ID: RE15-10-8396 **LEVEL:** Low **DATE RECEIVED** 26-FEB-10

MATRIX: SOIL **%SOLIDS:** 91.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11000000	ug/Kg		6990	20500	20500	1	P	HSC	03/29/10 23:04	032910C-1	959114
7440-36-0	Antimony	1030	ug/Kg	UN	339	1030	1030	1	P	HSC	03/29/10 23:04	032910C-1	959114
7440-38-2	Arsenic	1.82	mg/kg		0.218	1.09	1.09	2	MS	RMJ	03/24/10 17:15	100323-2	959116
7440-39-3	Barium	164000	ug/Kg		103	514	514	1	P	HSC	03/29/10 23:04	032910C-1	959114
7440-41-7	Beryllium	1.03	mg/kg		0.0218	0.109	0.109	2	MS	RMJ	03/24/10 17:15	100323-2	959116
7440-43-9	Cadmium	514	ug/Kg	U	103	514	514	1	P	HSC	03/29/10 23:04	032910C-1	959114
7440-70-2	Calcium	3100000	ug/Kg		8220	25700	25700	1	P	HSC	03/29/10 23:04	032910C-1	959114
7440-47-3	Chromium	9990	ug/Kg		154	514	514	1	P	HSC	03/29/10 23:04	032910C-1	959114
7440-48-4	Cobalt	4890	ug/Kg		154	514	514	1	P	HSC	03/29/10 23:04	032910C-1	959114
7440-50-8	Copper	6260	ug/Kg		308	1030	1030	1	P	HSC	03/29/10 23:04	032910C-1	959114
7439-89-6	Iron	13200000	ug/Kg		8220	25700	25700	1	P	HSC	03/29/10 23:04	032910C-1	959114
7439-92-1	Lead	9210	ug/Kg		257	1030	1030	1	P	HSC	03/29/10 23:04	032910C-1	959114
7439-95-4	Magnesium	1980000	ug/Kg		8730	30800	30800	1	P	HSC	03/29/10 23:04	032910C-1	959114
7439-96-5	Manganese	310000	ug/Kg	*	205	1030	1030	1	P	HSC	03/29/10 23:04	032910C-1	959114
7439-97-6	Mercury	13.2	ug/kg		3.77	11.1	11.1	1	AV	JXL1	03/10/10 12:04	031010S1-4	958757
7440-02-0	Nickel	7.79	mg/kg		0.109	0.435	0.435	2	MS	RMJ	03/24/10 17:15	100323-2	959116
7440-09-7	Potassium	1590000	ug/Kg	N	6580	25700	25700	1	P	HSC	03/29/10 23:04	032910C-1	959114
7782-49-2	Selenium	1.09	mg/kg	UN	0.544	1.09	1.09	2	MS	RMJ	03/24/10 17:15	100323-2	959116
7440-22-4	Silver	514	ug/Kg	U	103	514	514	1	P	HSC	03/29/10 23:04	032910C-1	959114
7440-23-5	Sodium	523000	ug/Kg		7190	25700	25700	1	P	HSC	03/29/10 23:04	032910C-1	959114
7440-28-0	Thallium	0.220	mg/kg		0.0653	0.218	0.218	2	MS	RMJ	03/24/10 17:15	100323-2	959116
7440-61-1	Uranium	3.91	mg/kg		0.0144	0.0435	0.0435	2	MS	RMJ	03/26/10 00:59	100325-3	959116
7440-62-2	Vanadium	19800	ug/Kg		103	514	514	1	P	HSC	03/29/10 23:04	032910C-1	959114
7440-66-6	Zinc	27900	ug/Kg		339	1030	1030	1	P	HSC	03/29/10 23:04	032910C-1	959114

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958757	958755	SW846 7471A Prep	0.593	g	30	mL	03/10/10	LXH2
959114	959113	SW846 3050B	0.533	g	50	mL	03/09/10	AXG2
959116	959115	SW846 3050B	0.503	g	50	mL	03/03/10	BXA1

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2090-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248110003 **BASIS:** Dry Weight **DATE COLLECTED** 22-FEB-10

CLIENT ID: RE15-10-8393 **LEVEL:** Low **DATE RECEIVED** 26-FEB-10

MATRIX: SOIL **%SOLIDS:** 80

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5620000	ug/Kg		7520	22100	22100	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-36-0	Antimony	1110	ug/Kg	UN	365	1110	1110	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-38-2	Arsenic	1.18	mg/kg	J	0.245	1.23	1.23	2	MS	RMJ	03/24/10 17:19	100323-2	959116
7440-39-3	Barium	70900	ug/Kg		111	553	553	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-41-7	Beryllium	0.590	mg/kg		0.0245	0.123	0.123	2	MS	RMJ	03/24/10 17:19	100323-2	959116
7440-43-9	Cadmium	553	ug/Kg	U	111	553	553	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-70-2	Calcium	1900000	ug/Kg		8850	27700	27700	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-47-3	Chromium	36100	ug/Kg		166	553	553	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-48-4	Cobalt	2550	ug/Kg		166	553	553	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-50-8	Copper	3400	ug/Kg		332	1110	1110	1	P	HSC	03/29/10 23:06	032910C-1	959114
7439-89-6	Iron	12900000	ug/Kg		8850	27700	27700	1	P	HSC	03/29/10 23:06	032910C-1	959114
7439-92-1	Lead	3350	ug/Kg		277	1110	1110	1	P	HSC	03/29/10 23:06	032910C-1	959114
7439-95-4	Magnesium	1120000	ug/Kg		9400	33200	33200	1	P	HSC	03/29/10 23:06	032910C-1	959114
7439-96-5	Manganese	254000	ug/Kg	*	221	1110	1110	1	P	HSC	03/29/10 23:06	032910C-1	959114
7439-97-6	Mercury	14.5	ug/kg		4.9	14.4	14.4	1	AV	JXL1	03/10/10 13:10	031010S1-4	958757
7440-02-0	Nickel	7.31	mg/kg		0.123	0.49	0.49	2	MS	RMJ	03/24/10 17:19	100323-2	959116
7440-09-7	Potassium	880000	ug/Kg	N	7080	27700	27700	1	P	HSC	03/29/10 23:06	032910C-1	959114
7782-49-2	Selenium	1.23	mg/kg	UN	0.613	1.23	1.23	2	MS	RMJ	03/24/10 17:19	100323-2	959116
7440-22-4	Silver	553	ug/Kg	U	111	553	553	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-23-5	Sodium	409000	ug/Kg		7740	27700	27700	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-28-0	Thallium	0.10	mg/kg	J	0.0735	0.245	0.245	2	MS	RMJ	03/24/10 17:19	100323-2	959116
7440-61-1	Uranium	0.847	mg/kg		0.0162	0.049	0.049	2	MS	RMJ	03/26/10 01:08	100325-3	959116
7440-62-2	Vanadium	9590	ug/Kg		111	553	553	1	P	HSC	03/29/10 23:06	032910C-1	959114
7440-66-6	Zinc	31300	ug/Kg		365	1110	1110	1	P	HSC	03/29/10 23:06	032910C-1	959114

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958757	958755	SW846 7471A Prep	0.521	g	30	mL	03/10/10	LXH2
959114	959113	SW846 3050B	0.566	g	50	mL	03/09/10	AXG2
959116	959115	SW846 3050B	0.511	g	50	mL	03/03/10	BXA1

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2090-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248110004 **BASIS:** Dry Weight **DATE COLLECTED** 22-FEB-10

CLIENT ID: RE15-10-8395 **LEVEL:** Low **DATE RECEIVED** 26-FEB-10

MATRIX: SOIL **%SOLIDS:** 95.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3400000	ug/Kg		6750	19800	19800	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-36-0	Antimony	992	ug/Kg	UN	328	992	992	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-38-2	Arsenic	0.661	mg/kg	J	0.184	0.919	0.919	2	MS	RMJ	03/24/10 17:23	100323-2	959116
7440-39-3	Barium	39100	ug/Kg		99.2	496	496	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-41-7	Beryllium	0.538	mg/kg		0.0184	0.0919	0.0919	2	MS	RMJ	03/24/10 17:23	100323-2	959116
7440-43-9	Cadmium	496	ug/Kg	U	99.2	496	496	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-70-2	Calcium	1040000	ug/Kg		7940	24800	24800	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-47-3	Chromium	18600	ug/Kg		149	496	496	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-48-4	Cobalt	1850	ug/Kg		149	496	496	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-50-8	Copper	2510	ug/Kg		298	992	992	1	P	HSC	03/29/10 23:08	032910C-1	959114
7439-89-6	Iron	12000000	ug/Kg		7940	24800	24800	1	P	HSC	03/29/10 23:08	032910C-1	959114
7439-92-1	Lead	2640	ug/Kg		248	992	992	1	P	HSC	03/29/10 23:08	032910C-1	959114
7439-95-4	Magnesium	1320000	ug/Kg		8440	29800	29800	1	P	HSC	03/29/10 23:08	032910C-1	959114
7439-96-5	Manganese	250000	ug/Kg	*	198	992	992	1	P	HSC	03/29/10 23:08	032910C-1	959114
7439-97-6	Mercury	11.9	ug/kg	U	4.05	11.9	11.9	1	AV	JXL1	03/10/10 13:12	031010S1-4	958757
7440-02-0	Nickel	4.65	mg/kg		0.0919	0.368	0.368	2	MS	RMJ	03/24/10 17:23	100323-2	959116
7440-09-7	Potassium	1200000	ug/Kg	N	6350	24800	24800	1	P	HSC	03/29/10 23:08	032910C-1	959114
7782-49-2	Selenium	0.919	mg/kg	UN	0.46	0.919	0.919	2	MS	RMJ	03/24/10 17:23	100323-2	959116
7440-22-4	Silver	496	ug/Kg	U	99.2	496	496	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-23-5	Sodium	1020000	ug/Kg		6950	24800	24800	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-28-0	Thallium	0.0693	mg/kg	J	0.0552	0.184	0.184	2	MS	RMJ	03/24/10 17:23	100323-2	959116
7440-61-1	Uranium	0.507	mg/kg		0.0121	0.0368	0.0368	2	MS	RMJ	03/26/10 01:11	100325-3	959116
7440-62-2	Vanadium	7350	ug/Kg		99.2	496	496	1	P	HSC	03/29/10 23:08	032910C-1	959114
7440-66-6	Zinc	39400	ug/Kg		328	992	992	1	P	HSC	03/29/10 23:08	032910C-1	959114

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958757	958755	SW846 7471A Prep	0.527	g	30	mL	03/10/10	LXH2
959114	959113	SW846 3050B	0.527	g	50	mL	03/09/10	AXG2
959116	959115	SW846 3050B	0.569	g	50	mL	03/03/10	BXA1

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10–2090–1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248110005 **BASIS:** Dry Weight **DATE COLLECTED** 22–FEB–10

CLIENT ID: RE15–10–8398 **LEVEL:** Low **DATE RECEIVED** 26–FEB–10

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429–90–5	Aluminum	11500000	ug/Kg		7320	21500	21500	1	P	HSC	03/29/10 23:11	032910C–1	959114
7440–36–0	Antimony	1080	ug/Kg	UN	355	1080	1080	1	P	HSC	03/29/10 23:11	032910C–1	959114
7440–38–2	Arsenic	1.86	mg/kg		0.221	1.11	1.11	2	MS	RMJ	03/24/10 17:35	100323–2	959116
7440–39–3	Barium	148000	ug/Kg		108	538	538	1	P	HSC	03/29/10 23:11	032910C–1	959114
7440–41–7	Beryllium	1	mg/kg		0.0221	0.111	0.111	2	MS	RMJ	03/24/10 17:35	100323–2	959116
7440–43–9	Cadmium	538	ug/Kg	U	108	538	538	1	P	HSC	03/29/10 23:11	032910C–1	959114
7440–70–2	Calcium	3190000	ug/Kg		8610	26900	26900	1	P	HSC	03/29/10 23:11	032910C–1	959114
7440–47–3	Chromium	12700	ug/Kg		161	538	538	1	P	HSC	03/29/10 23:11	032910C–1	959114
7440–48–4	Cobalt	5750	ug/Kg		161	538	538	1	P	HSC	03/29/10 23:11	032910C–1	959114
7440–50–8	Copper	6650	ug/Kg		323	1080	1080	1	P	HSC	03/29/10 23:11	032910C–1	959114
7439–89–6	Iron	16200000	ug/Kg		8610	26900	26900	1	P	HSC	03/29/10 23:11	032910C–1	959114
7439–92–1	Lead	9240	ug/Kg		269	1080	1080	1	P	HSC	03/29/10 23:11	032910C–1	959114
7439–95–4	Magnesium	2170000	ug/Kg		9150	32300	32300	1	P	HSC	03/29/10 23:11	032910C–1	959114
7439–96–5	Manganese	283000	ug/Kg	*	215	1080	1080	1	P	HSC	03/29/10 23:11	032910C–1	959114
7439–97–6	Mercury	8.2	ug/kg	J	4.2	12.4	12.4	1	AV	JXL1	03/10/10 13:14	031010S1–4	958757
7440–02–0	Nickel	7.67	mg/kg		0.111	0.442	0.442	2	MS	RMJ	03/24/10 17:35	100323–2	959116
7440–09–7	Potassium	1780000	ug/Kg	N	6890	26900	26900	1	P	HSC	03/29/10 23:11	032910C–1	959114
7782–49–2	Selenium	1.11	mg/kg	UN	0.553	1.11	1.11	2	MS	RMJ	03/24/10 17:35	100323–2	959116
7440–22–4	Silver	121	ug/Kg	J	108	538	538	1	P	HSC	03/29/10 23:11	032910C–1	959114
7440–23–5	Sodium	293000	ug/Kg		7530	26900	26900	1	P	HSC	03/29/10 23:11	032910C–1	959114
7440–28–0	Thallium	0.206	mg/kg	J	0.0663	0.221	0.221	2	MS	RMJ	03/24/10 17:35	100323–2	959116
7440–61–1	Uranium	4.06	mg/kg		0.0146	0.0442	0.0442	2	MS	RMJ	03/26/10 01:15	100325–3	959116
7440–62–2	Vanadium	21000	ug/Kg		108	538	538	1	P	HSC	03/29/10 23:11	032910C–1	959114
7440–66–6	Zinc	28600	ug/Kg		355	1080	1080	1	P	HSC	03/29/10 23:11	032910C–1	959114

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958757	958755	SW846 7471A Prep	0.557	g	30	mL	03/10/10	LXH2
959114	959113	SW846 3050B	0.533	g	50	mL	03/09/10	AXG2
959116	959115	SW846 3050B	0.519	g	50	mL	03/03/10	BXA1

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2090-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248110006 **BASIS:** Dry Weight **DATE COLLECTED** 22-FEB-10

CLIENT ID: RE15-10-8394 **LEVEL:** Low **DATE RECEIVED** 26-FEB-10

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6720000	ug/Kg		7420	21800	21800	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-36-0	Antimony	1090	ug/Kg	UN	360	1090	1090	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-38-2	Arsenic	1.34	mg/kg		0.215	1.08	1.08	2	MS	RMJ	03/24/10 17:39	100323-2	959116
7440-39-3	Barium	110000	ug/Kg		109	546	546	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-41-7	Beryllium	0.824	mg/kg		0.0215	0.108	0.108	2	MS	RMJ	03/24/10 17:39	100323-2	959116
7440-43-9	Cadmium	546	ug/Kg	U	109	546	546	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-70-2	Calcium	1440000	ug/Kg		8730	27300	27300	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-47-3	Chromium	14600	ug/Kg		164	546	546	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-48-4	Cobalt	2920	ug/Kg		164	546	546	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-50-8	Copper	4810	ug/Kg		327	1090	1090	1	P	HSC	03/29/10 23:13	032910C-1	959114
7439-89-6	Iron	13400000	ug/Kg		8730	27300	27300	1	P	HSC	03/29/10 23:13	032910C-1	959114
7439-92-1	Lead	4440	ug/Kg		273	1090	1090	1	P	HSC	03/29/10 23:13	032910C-1	959114
7439-95-4	Magnesium	1310000	ug/Kg		9280	32700	32700	1	P	HSC	03/29/10 23:13	032910C-1	959114
7439-96-5	Manganese	195000	ug/Kg	*	218	1090	1090	1	P	HSC	03/29/10 23:13	032910C-1	959114
7439-97-6	Mercury	14.7	ug/kg		4.47	13.1	13.1	1	AV	JXL1	03/10/10 13:16	031010S1-4	958757
7440-02-0	Nickel	6.02	mg/kg		0.108	0.431	0.431	2	MS	RMJ	03/24/10 17:39	100323-2	959116
7440-09-7	Potassium	1050000	ug/Kg	N	6980	27300	27300	1	P	HSC	03/29/10 23:13	032910C-1	959114
7782-49-2	Selenium	1.08	mg/kg	UN	0.538	1.08	1.08	2	MS	RMJ	03/24/10 17:39	100323-2	959116
7440-22-4	Silver	546	ug/Kg	U	109	546	546	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-23-5	Sodium	808000	ug/Kg		7640	27300	27300	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-28-0	Thallium	0.107	mg/kg	J	0.0646	0.215	0.215	2	MS	RMJ	03/24/10 17:39	100323-2	959116
7440-61-1	Uranium	1.12	mg/kg		0.0142	0.0431	0.0431	2	MS	RMJ	03/26/10 01:18	100325-3	959116
7440-62-2	Vanadium	11500	ug/Kg		109	546	546	1	P	HSC	03/29/10 23:13	032910C-1	959114
7440-66-6	Zinc	30200	ug/Kg		360	1090	1090	1	P	HSC	03/29/10 23:13	032910C-1	959114

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958757	958755	SW846 7471A Prep	0.509	g	30	mL	03/10/10	LXH2
959114	959113	SW846 3050B	0.511	g	50	mL	03/09/10	AXG2
959116	959115	SW846 3050B	0.518	g	50	mL	03/03/10	BXA1

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2090-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248110007 **BASIS:** Dry Weight **DATE COLLECTED** 22-FEB-10

CLIENT ID: RE15-10-8399 **LEVEL:** Low **DATE RECEIVED** 26-FEB-10

MATRIX: SOIL **%SOLIDS:** 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11000000	ug/Kg		7470	22000	22000	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-36-0	Antimony	1100	ug/Kg	UN	363	1100	1100	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-38-2	Arsenic	1.36	mg/kg		0.224	1.12	1.12	2	MS	RMJ	03/24/10 17:43	100323-2	959116
7440-39-3	Barium	110000	ug/Kg		110	550	550	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-41-7	Beryllium	0.748	mg/kg		0.0224	0.112	0.112	2	MS	RMJ	03/24/10 17:43	100323-2	959116
7440-43-9	Cadmium	550	ug/Kg	U	110	550	550	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-70-2	Calcium	3130000	ug/Kg		8790	27500	27500	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-47-3	Chromium	23000	ug/Kg		165	550	550	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-48-4	Cobalt	3780	ug/Kg		165	550	550	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-50-8	Copper	5760	ug/Kg		330	1100	1100	1	P	HSC	03/29/10 23:15	032910C-1	959114
7439-89-6	Iron	15100000	ug/Kg		8790	27500	27500	1	P	HSC	03/29/10 23:15	032910C-1	959114
7439-92-1	Lead	7030	ug/Kg		275	1100	1100	1	P	HSC	03/29/10 23:15	032910C-1	959114
7439-95-4	Magnesium	1970000	ug/Kg		9340	33000	33000	1	P	HSC	03/29/10 23:15	032910C-1	959114
7439-96-5	Manganese	240000	ug/Kg	*	220	1100	1100	1	P	HSC	03/29/10 23:15	032910C-1	959114
7439-97-6	Mercury	12.7	ug/kg		4.14	12.2	12.2	1	AV	JXL1	03/10/10 13:18	031010S1-4	958757
7440-02-0	Nickel	6.98	mg/kg		0.112	0.448	0.448	2	MS	RMJ	03/24/10 17:43	100323-2	959116
7440-09-7	Potassium	1510000	ug/Kg	N	7030	27500	27500	1	P	HSC	03/29/10 23:15	032910C-1	959114
7782-49-2	Selenium	1.12	mg/kg	UN	0.56	1.12	1.12	2	MS	RMJ	03/24/10 17:43	100323-2	959116
7440-22-4	Silver	550	ug/Kg	U	110	550	550	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-23-5	Sodium	404000	ug/Kg		7690	27500	27500	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-28-0	Thallium	0.187	mg/kg	J	0.0673	0.224	0.224	2	MS	RMJ	03/24/10 17:43	100323-2	959116
7440-61-1	Uranium	1.79	mg/kg		0.0148	0.0448	0.0448	2	MS	RMJ	03/26/10 01:21	100325-3	959116
7440-62-2	Vanadium	15600	ug/Kg		110	550	550	1	P	HSC	03/29/10 23:15	032910C-1	959114
7440-66-6	Zinc	34100	ug/Kg		363	1100	1100	1	P	HSC	03/29/10 23:15	032910C-1	959114

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958757	958755	SW846 7471A Prep	0.558	g	30	mL	03/10/10	LXH2
959114	959113	SW846 3050B	0.515	g	50	mL	03/09/10	AXG2
959116	959115	SW846 3050B	0.505	g	50	mL	03/03/10	BXA1

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10–2090–1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248110008 **BASIS:** Dry Weight **DATE COLLECTED** 22–FEB–10

CLIENT ID: RE15–10–8397 **LEVEL:** Low **DATE RECEIVED** 26–FEB–10

MATRIX: SOIL **%SOLIDS:** 93.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429–90–5	Aluminum	9050000	ug/Kg		6760	19900	19900	1	P	HSC	03/29/10 23:17	032910C–1	959114
7440–36–0	Antimony	994	ug/Kg	UN	328	994	994	1	P	HSC	03/29/10 23:17	032910C–1	959114
7440–38–2	Arsenic	2	mg/kg		0.202	1.01	1.01	2	MS	RMJ	03/24/10 17:47	100323–2	959116
7440–39–3	Barium	121000	ug/Kg		99.4	497	497	1	P	HSC	03/29/10 23:17	032910C–1	959114
7440–41–7	Beryllium	1.08	mg/kg		0.0202	0.101	0.101	2	MS	RMJ	03/24/10 17:47	100323–2	959116
7440–43–9	Cadmium	497	ug/Kg	U	99.4	497	497	1	P	HSC	03/29/10 23:17	032910C–1	959114
7440–70–2	Calcium	45400000	ug/Kg		7950	24800	24800	1	P	HSC	03/29/10 23:17	032910C–1	959114
7440–47–3	Chromium	12100	ug/Kg		149	497	497	1	P	HSC	03/29/10 23:17	032910C–1	959114
7440–48–4	Cobalt	3610	ug/Kg		149	497	497	1	P	HSC	03/29/10 23:17	032910C–1	959114
7440–50–8	Copper	6230	ug/Kg		298	994	994	1	P	HSC	03/29/10 23:17	032910C–1	959114
7439–89–6	Iron	12700000	ug/Kg		7950	24800	24800	1	P	HSC	03/29/10 23:17	032910C–1	959114
7439–92–1	Lead	7150	ug/Kg		248	994	994	1	P	HSC	03/29/10 23:17	032910C–1	959114
7439–95–4	Magnesium	2020000	ug/Kg		8450	29800	29800	1	P	HSC	03/29/10 23:17	032910C–1	959114
7439–96–5	Manganese	278000	ug/Kg	*	199	994	994	1	P	HSC	03/29/10 23:17	032910C–1	959114
7439–97–6	Mercury	14.1	ug/kg		4.2	12.4	12.4	1	AV	JXL1	03/10/10 13:20	031010S1–4	958757
7440–02–0	Nickel	9.68	mg/kg		0.101	0.404	0.404	2	MS	RMJ	03/24/10 17:47	100323–2	959116
7440–09–7	Potassium	1410000	ug/Kg	N	6360	24800	24800	1	P	HSC	03/29/10 23:17	032910C–1	959114
7782–49–2	Selenium	1.01	mg/kg	UN	0.505	1.01	1.01	2	MS	RMJ	03/24/10 17:47	100323–2	959116
7440–22–4	Silver	497	ug/Kg	U	99.4	497	497	1	P	HSC	03/29/10 23:17	032910C–1	959114
7440–23–5	Sodium	456000	ug/Kg		6960	24800	24800	1	P	HSC	03/29/10 23:17	032910C–1	959114
7440–28–0	Thallium	0.189	mg/kg	J	0.0606	0.202	0.202	2	MS	RMJ	03/24/10 17:47	100323–2	959116
7440–61–1	Uranium	5.28	mg/kg		0.0133	0.0404	0.0404	2	MS	RMJ	03/26/10 01:24	100325–3	959116
7440–62–2	Vanadium	17700	ug/Kg		99.4	497	497	1	P	HSC	03/29/10 23:17	032910C–1	959114
7440–66–6	Zinc	27400	ug/Kg		328	994	994	1	P	HSC	03/29/10 23:17	032910C–1	959114

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958757	958755	SW846 7471A Prep	0.517	g	30	mL	03/10/10	LXH2
959114	959113	SW846 3050B	0.536	g	50	mL	03/09/10	AXG2
959116	959115	SW846 3050B	0.527	g	50	mL	03/03/10	BXA1

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2090-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,MER536,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Mercury	5.29	ug/L	5	ug/L	105.8	90.0 - 110.0	AV	10-MAR-10 11:37	031010S1-4
	Arsenic	51.4	ug/L	50	ug/L	102.8	90.0 - 110.0	MS	24-MAR-10 16:10	100323-2
	Beryllium	50.6	ug/L	50	ug/L	101.2	90.0 - 110.0	MS	24-MAR-10 16:10	100323-2
	Nickel	51.5	ug/L	50	ug/L	103	90.0 - 110.0	MS	24-MAR-10 16:10	100323-2
	Selenium	51.9	ug/L	50	ug/L	103.8	90.0 - 110.0	MS	24-MAR-10 16:10	100323-2
	Thallium	50.4	ug/L	50	ug/L	100.8	90.0 - 110.0	MS	24-MAR-10 16:10	100323-2
	Uranium	54.1	ug/L	50	ug/L	108.2	90.0 - 110.0	MS	25-MAR-10 23:48	100325-3
	Aluminum	5140	ug/L	5000	ug/L	102.7	90.0 - 110.0	P	29-MAR-10 18:35	032910C-1
	Antimony	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	29-MAR-10 18:35	032910C-1
	Barium	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	29-MAR-10 18:35	032910C-1
	Cadmium	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	29-MAR-10 18:35	032910C-1
	Calcium	5000	ug/L	5000	ug/L	100	90.0 - 110.0	P	29-MAR-10 18:35	032910C-1
	Chromium	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	29-MAR-10 18:35	032910C-1
	Cobalt	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	29-MAR-10 18:35	032910C-1
	Copper	510	ug/L	500	ug/L	102	90.0 - 110.0	P	29-MAR-10 18:35	032910C-1
	Iron	5010	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	29-MAR-10 18:35	032910C-1
	Lead	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	29-MAR-10 18:35	032910C-1
	Magnesium	5200	ug/L	5000	ug/L	103.9	90.0 - 110.0	P	29-MAR-10 18:35	032910C-1
	Manganese	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	29-MAR-10 18:35	032910C-1
	Potassium	2470	ug/L	2500	ug/L	98.7	90.0 - 110.0	P	29-MAR-10 18:35	032910C-1
	Silver	257	ug/L	250	ug/L	102.8	90.0 - 110.0	P	29-MAR-10 18:35	032910C-1
	Sodium	2460	ug/L	2500	ug/L	98.5	90.0 - 110.0	P	29-MAR-10 18:35	032910C-1
	Vanadium	505	ug/L	500	ug/L	100.9	90.0 - 110.0	P	29-MAR-10 18:35	032910C-1
	Zinc	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	29-MAR-10 18:35	032910C-1
CCV01										
	Mercury	5.16	ug/L	5	ug/L	103.3	80.0 - 120.0	AV	10-MAR-10 11:43	031010S1-4
	Arsenic	50.4	ug/L	50	ug/L	100.8	90.0 - 110.0	MS	24-MAR-10 16:30	100323-2
	Beryllium	49.4	ug/L	50	ug/L	98.7	90.0 - 110.0	MS	24-MAR-10 16:30	100323-2
	Nickel	51.3	ug/L	50	ug/L	102.6	90.0 - 110.0	MS	24-MAR-10 16:30	100323-2
	Selenium	51.9	ug/L	50	ug/L	103.8	90.0 - 110.0	MS	24-MAR-10 16:30	100323-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2090-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,MER536,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Thallium	50.1	ug/L	50	ug/L	100.1	90.0 - 110.0	MS	24-MAR-10 16:30	100323-2
	Uranium	53.8	ug/L	50	ug/L	107.6	90.0 - 110.0	MS	26-MAR-10 00:04	100325-3
	Aluminum	5090	ug/L	5000	ug/L	101.7	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Antimony	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Barium	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Cadmium	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Calcium	4990	ug/L	5000	ug/L	99.8	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Chromium	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Cobalt	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Copper	496	ug/L	500	ug/L	99.3	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Iron	4940	ug/L	5000	ug/L	98.8	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Lead	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Magnesium	5080	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Manganese	494	ug/L	500	ug/L	98.7	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Potassium	5440	ug/L	5000	ug/L	108.7	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Silver	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Sodium	10000	ug/L	10000	ug/L	100	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Vanadium	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
	Zinc	488	ug/L	500	ug/L	97.7	90.0 - 110.0	P	29-MAR-10 18:49	032910C-1
CCV02										
	Mercury	5.15	ug/L	5	ug/L	103	80.0 - 120.0	AV	10-MAR-10 12:06	031010S1-4
	Arsenic	50.2	ug/L	50	ug/L	100.3	90.0 - 110.0	MS	24-MAR-10 16:47	100323-2
	Beryllium	49.7	ug/L	50	ug/L	99.5	90.0 - 110.0	MS	24-MAR-10 16:47	100323-2
	Nickel	51.8	ug/L	50	ug/L	103.6	90.0 - 110.0	MS	24-MAR-10 16:47	100323-2
	Selenium	51.9	ug/L	50	ug/L	103.9	90.0 - 110.0	MS	24-MAR-10 16:47	100323-2
	Thallium	50.8	ug/L	50	ug/L	101.5	90.0 - 110.0	MS	24-MAR-10 16:47	100323-2
	Uranium	54	ug/L	50	ug/L	108.1	90.0 - 110.0	MS	26-MAR-10 00:32	100325-3
	Aluminum	5100	ug/L	5000	ug/L	102	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Antimony	490	ug/L	500	ug/L	97.9	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Barium	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2090-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,MER536,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cadmium	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Calcium	4970	ug/L	5000	ug/L	99.4	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Chromium	492	ug/L	500	ug/L	98.5	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Cobalt	490	ug/L	500	ug/L	98	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Copper	495	ug/L	500	ug/L	99	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Iron	4920	ug/L	5000	ug/L	98.4	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Lead	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Magnesium	5070	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Manganese	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Potassium	4890	ug/L	5000	ug/L	97.8	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Silver	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Sodium	9880	ug/L	10000	ug/L	98.8	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Vanadium	500	ug/L	500	ug/L	100	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
	Zinc	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	29-MAR-10 18:57	032910C-1
CCV03										
	Mercury	3.21	ug/L	5	ug/L	64.1	80.0 - 120.0	AV	10-MAR-10 12:31	031010S1-4
	Arsenic	51.8	ug/L	50	ug/L	103.5	90.0 - 110.0	MS	24-MAR-10 17:27	100323-2
	Beryllium	52.5	ug/L	50	ug/L	105	90.0 - 110.0	MS	24-MAR-10 17:27	100323-2
	Nickel	51.5	ug/L	50	ug/L	102.9	90.0 - 110.0	MS	24-MAR-10 17:27	100323-2
	Selenium	52.6	ug/L	50	ug/L	105.1	90.0 - 110.0	MS	24-MAR-10 17:27	100323-2
	Thallium	50.5	ug/L	50	ug/L	101.1	90.0 - 110.0	MS	24-MAR-10 17:27	100323-2
	Uranium	53.8	ug/L	50	ug/L	107.7	90.0 - 110.0	MS	26-MAR-10 01:02	100325-3
	Aluminum	5160	ug/L	5000	ug/L	103.3	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Antimony	485	ug/L	500	ug/L	97	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Barium	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Cadmium	483	ug/L	500	ug/L	96.5	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Calcium	4960	ug/L	5000	ug/L	99.2	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Chromium	488	ug/L	500	ug/L	97.7	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Cobalt	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Copper	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2090-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,MER536,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Iron	4930	ug/L	5000	ug/L	98.5	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Lead	479	ug/L	500	ug/L	95.8	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Magnesium	5060	ug/L	5000	ug/L	101.2	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Manganese	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Potassium	4830	ug/L	5000	ug/L	96.6	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Silver	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Sodium	9860	ug/L	10000	ug/L	98.6	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Vanadium	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
	Zinc	480	ug/L	500	ug/L	96.1	90.0 - 110.0	P	29-MAR-10 19:31	032910C-1
CCV04										
	Mercury	3.92	ug/L	5	ug/L	78.5	80.0 - 120.0	AV	10-MAR-10 12:54	031010S1-4
	Arsenic	50.3	ug/L	50	ug/L	100.5	90.0 - 110.0	MS	24-MAR-10 18:19	100323-2
	Beryllium	53.1	ug/L	50	ug/L	106.2	90.0 - 110.0	MS	24-MAR-10 18:19	100323-2
	Nickel	51.9	ug/L	50	ug/L	103.8	90.0 - 110.0	MS	24-MAR-10 18:19	100323-2
	Selenium	51.2	ug/L	50	ug/L	102.4	90.0 - 110.0	MS	24-MAR-10 18:19	100323-2
	Thallium	51	ug/L	50	ug/L	102	90.0 - 110.0	MS	24-MAR-10 18:19	100323-2
	Uranium	53.6	ug/L	50	ug/L	107.2	90.0 - 110.0	MS	26-MAR-10 01:36	100325-3
	Aluminum	5160	ug/L	5000	ug/L	103.1	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Antimony	486	ug/L	500	ug/L	97.2	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Barium	498	ug/L	500	ug/L	99.5	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Cadmium	481	ug/L	500	ug/L	96.2	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Calcium	4950	ug/L	5000	ug/L	98.9	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Chromium	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Cobalt	486	ug/L	500	ug/L	97.1	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Copper	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Iron	4910	ug/L	5000	ug/L	98.3	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Lead	481	ug/L	500	ug/L	96.2	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Magnesium	5060	ug/L	5000	ug/L	101.2	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Manganese	490	ug/L	500	ug/L	98	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1
	Potassium	4830	ug/L	5000	ug/L	96.7	90.0 - 110.0	P	29-MAR-10 19:52	032910C-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–2090–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,MER536,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Silver	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	29–MAR–10 19:52	032910C–1
	Sodium	9860	ug/L	10000	ug/L	98.6	90.0 – 110.0	P	29–MAR–10 19:52	032910C–1
	Vanadium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	29–MAR–10 19:52	032910C–1
	Zinc	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	29–MAR–10 19:52	032910C–1
CCV05										
	Mercury	4.95	ug/L	5	ug/L	99	80.0 – 120.0	AV	10–MAR–10 13:06	031010S1–4
	Aluminum	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Antimony	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Barium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Cadmium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Calcium	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Chromium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Cobalt	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Copper	495	ug/L	500	ug/L	99	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Iron	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Lead	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Magnesium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Manganese	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Potassium	4780	ug/L	5000	ug/L	95.7	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Silver	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Sodium	9800	ug/L	10000	ug/L	98	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
	Zinc	482	ug/L	500	ug/L	96.5	90.0 – 110.0	P	29–MAR–10 20:14	032910C–1
CCV06										
	Mercury	4.94	ug/L	5	ug/L	98.8	80.0 – 120.0	AV	10–MAR–10 13:30	031010S1–4
	Aluminum	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Antimony	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Barium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Cadmium	478	ug/L	500	ug/L	95.6	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Calcium	4890	ug/L	5000	ug/L	97.8	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–2090–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,MER536,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Chromium	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Cobalt	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Copper	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Iron	4870	ug/L	5000	ug/L	97.5	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Lead	477	ug/L	500	ug/L	95.5	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Magnesium	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Manganese	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Potassium	4730	ug/L	5000	ug/L	94.6	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Silver	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Sodium	9760	ug/L	10000	ug/L	97.6	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Vanadium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
	Zinc	478	ug/L	500	ug/L	95.7	90.0 – 110.0	P	29–MAR–10 20:39	032910C–1
CCV07										
	Aluminum	5210	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	29–MAR–10 21:03	032910C–1
	Antimony	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	29–MAR–10 21:03	032910C–1
	Barium	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	29–MAR–10 21:03	032910C–1
	Cadmium	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	29–MAR–10 21:03	032910C–1
	Calcium	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	29–MAR–10 21:03	032910C–1
	Chromium	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	29–MAR–10 21:03	032910C–1
	Cobalt	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	29–MAR–10 21:03	032910C–1
	Copper	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	29–MAR–10 21:03	032910C–1
	Iron	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	29–MAR–10 21:03	032910C–1
	Lead	480	ug/L	500	ug/L	96	90.0 – 110.0	P	29–MAR–10 21:03	032910C–1
	Magnesium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	29–MAR–10 21:03	032910C–1
	Manganese	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	29–MAR–10 21:03	032910C–1
	Potassium	4790	ug/L	5000	ug/L	95.9	90.0 – 110.0	P	29–MAR–10 21:03	032910C–1
	Silver	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	29–MAR–10 21:03	032910C–1
	Sodium	9820	ug/L	10000	ug/L	98.3	90.0 – 110.0	P	29–MAR–10 21:03	032910C–1
	Vanadium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	29–MAR–10 21:03	032910C–1
	Zinc	478	ug/L	500	ug/L	95.6	90.0 – 110.0	P	29–MAR–10 21:03	032910C–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–2090–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,MER536,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV08										
	Aluminum	5260	ug/L	5000	ug/L	105.2	90.0 – 110.0	P	29–MAR–10 21:21	032910C–1
	Antimony	490	ug/L	500	ug/L	98	90.0 – 110.0	P	29–MAR–10 21:21	032910C–1
	Barium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	29–MAR–10 21:21	032910C–1
	Cadmium	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	29–MAR–10 21:21	032910C–1
	Calcium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	29–MAR–10 21:21	032910C–1
	Chromium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	29–MAR–10 21:21	032910C–1
	Cobalt	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	29–MAR–10 21:21	032910C–1
	Copper	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	29–MAR–10 21:21	032910C–1
	Iron	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	29–MAR–10 21:21	032910C–1
	Lead	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	29–MAR–10 21:21	032910C–1
	Magnesium	5090	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	29–MAR–10 21:21	032910C–1
	Manganese	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	29–MAR–10 21:21	032910C–1
	Potassium	4820	ug/L	5000	ug/L	96.5	90.0 – 110.0	P	29–MAR–10 21:21	032910C–1
	Silver	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	29–MAR–10 21:21	032910C–1
	Sodium	9850	ug/L	10000	ug/L	98.5	90.0 – 110.0	P	29–MAR–10 21:21	032910C–1
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	29–MAR–10 21:21	032910C–1
	Zinc	480	ug/L	500	ug/L	96.1	90.0 – 110.0	P	29–MAR–10 21:21	032910C–1
CCV09										
	Aluminum	5260	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	29–MAR–10 21:41	032910C–1
	Antimony	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	29–MAR–10 21:41	032910C–1
	Barium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	29–MAR–10 21:41	032910C–1
	Cadmium	480	ug/L	500	ug/L	96.1	90.0 – 110.0	P	29–MAR–10 21:41	032910C–1
	Calcium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	29–MAR–10 21:41	032910C–1
	Chromium	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	29–MAR–10 21:41	032910C–1
	Cobalt	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	29–MAR–10 21:41	032910C–1
	Copper	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	29–MAR–10 21:41	032910C–1
	Iron	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	29–MAR–10 21:41	032910C–1
	Lead	480	ug/L	500	ug/L	96	90.0 – 110.0	P	29–MAR–10 21:41	032910C–1
	Magnesium	5080	ug/L	5000	ug/L	101.6	90.0 – 110.0	P	29–MAR–10 21:41	032910C–1
	Manganese	490	ug/L	500	ug/L	98	90.0 – 110.0	P	29–MAR–10 21:41	032910C–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2090-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,MER536,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	4830	ug/L	5000	ug/L	96.5	90.0 - 110.0	P	29-MAR-10 21:41	032910C-1
	Silver	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	29-MAR-10 21:41	032910C-1
	Sodium	9870	ug/L	10000	ug/L	98.7	90.0 - 110.0	P	29-MAR-10 21:41	032910C-1
	Vanadium	500	ug/L	500	ug/L	99.9	90.0 - 110.0	P	29-MAR-10 21:41	032910C-1
	Zinc	479	ug/L	500	ug/L	95.7	90.0 - 110.0	P	29-MAR-10 21:41	032910C-1
CCV10										
	Aluminum	5280	ug/L	5000	ug/L	105.6	90.0 - 110.0	P	29-MAR-10 22:01	032910C-1
	Antimony	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	29-MAR-10 22:01	032910C-1
	Barium	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	29-MAR-10 22:01	032910C-1
	Cadmium	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	29-MAR-10 22:01	032910C-1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 - 110.0	P	29-MAR-10 22:01	032910C-1
	Chromium	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	29-MAR-10 22:01	032910C-1
	Cobalt	488	ug/L	500	ug/L	97.7	90.0 - 110.0	P	29-MAR-10 22:01	032910C-1
	Copper	496	ug/L	500	ug/L	99.3	90.0 - 110.0	P	29-MAR-10 22:01	032910C-1
	Iron	4940	ug/L	5000	ug/L	98.9	90.0 - 110.0	P	29-MAR-10 22:01	032910C-1
	Lead	480	ug/L	500	ug/L	96	90.0 - 110.0	P	29-MAR-10 22:01	032910C-1
	Magnesium	5110	ug/L	5000	ug/L	102.2	90.0 - 110.0	P	29-MAR-10 22:01	032910C-1
	Manganese	492	ug/L	500	ug/L	98.3	90.0 - 110.0	P	29-MAR-10 22:01	032910C-1
	Potassium	4900	ug/L	5000	ug/L	98	90.0 - 110.0	P	29-MAR-10 22:01	032910C-1
	Silver	494	ug/L	500	ug/L	98.9	90.0 - 110.0	P	29-MAR-10 22:01	032910C-1
	Sodium	9910	ug/L	10000	ug/L	99.1	90.0 - 110.0	P	29-MAR-10 22:01	032910C-1
	Vanadium	500	ug/L	500	ug/L	99.9	90.0 - 110.0	P	29-MAR-10 22:01	032910C-1
	Zinc	482	ug/L	500	ug/L	96.5	90.0 - 110.0	P	29-MAR-10 22:01	032910C-1
CCV11										
	Aluminum	5250	ug/L	5000	ug/L	104.9	90.0 - 110.0	P	29-MAR-10 22:19	032910C-1
	Antimony	495	ug/L	500	ug/L	98.9	90.0 - 110.0	P	29-MAR-10 22:19	032910C-1
	Barium	505	ug/L	500	ug/L	101	90.0 - 110.0	P	29-MAR-10 22:19	032910C-1
	Cadmium	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	29-MAR-10 22:19	032910C-1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 - 110.0	P	29-MAR-10 22:19	032910C-1
	Chromium	491	ug/L	500	ug/L	98.3	90.0 - 110.0	P	29-MAR-10 22:19	032910C-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–2090–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,MER536,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	29–MAR–10 22:19	032910C–1
	Copper	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	29–MAR–10 22:19	032910C–1
	Iron	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	29–MAR–10 22:19	032910C–1
	Lead	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	29–MAR–10 22:19	032910C–1
	Magnesium	5120	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	29–MAR–10 22:19	032910C–1
	Manganese	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	29–MAR–10 22:19	032910C–1
	Potassium	4850	ug/L	5000	ug/L	96.9	90.0 – 110.0	P	29–MAR–10 22:19	032910C–1
	Silver	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	29–MAR–10 22:19	032910C–1
	Sodium	9930	ug/L	10000	ug/L	99.3	90.0 – 110.0	P	29–MAR–10 22:19	032910C–1
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	29–MAR–10 22:19	032910C–1
	Zinc	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	29–MAR–10 22:19	032910C–1
CCV12										
	Aluminum	5270	ug/L	5000	ug/L	105.5	90.0 – 110.0	P	29–MAR–10 22:42	032910C–1
	Antimony	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	29–MAR–10 22:42	032910C–1
	Barium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	29–MAR–10 22:42	032910C–1
	Cadmium	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	29–MAR–10 22:42	032910C–1
	Calcium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	29–MAR–10 22:42	032910C–1
	Chromium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	29–MAR–10 22:42	032910C–1
	Cobalt	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	29–MAR–10 22:42	032910C–1
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	29–MAR–10 22:42	032910C–1
	Iron	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	29–MAR–10 22:42	032910C–1
	Lead	480	ug/L	500	ug/L	96	90.0 – 110.0	P	29–MAR–10 22:42	032910C–1
	Magnesium	5120	ug/L	5000	ug/L	102.4	90.0 – 110.0	P	29–MAR–10 22:42	032910C–1
	Manganese	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	29–MAR–10 22:42	032910C–1
	Potassium	4860	ug/L	5000	ug/L	97.2	90.0 – 110.0	P	29–MAR–10 22:42	032910C–1
	Silver	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	29–MAR–10 22:42	032910C–1
	Sodium	9910	ug/L	10000	ug/L	99.1	90.0 – 110.0	P	29–MAR–10 22:42	032910C–1
	Vanadium	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	29–MAR–10 22:42	032910C–1
	Zinc	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	29–MAR–10 22:42	032910C–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2090-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,MER536,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV13										
	Aluminum	5270	ug/L	5000	ug/L	105.4	90.0 - 110.0	P	29-MAR-10 22:59	032910C-1
	Antimony	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	29-MAR-10 22:59	032910C-1
	Barium	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	29-MAR-10 22:59	032910C-1
	Cadmium	486	ug/L	500	ug/L	97.3	90.0 - 110.0	P	29-MAR-10 22:59	032910C-1
	Calcium	4960	ug/L	5000	ug/L	99.2	90.0 - 110.0	P	29-MAR-10 22:59	032910C-1
	Chromium	493	ug/L	500	ug/L	98.7	90.0 - 110.0	P	29-MAR-10 22:59	032910C-1
	Cobalt	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	29-MAR-10 22:59	032910C-1
	Copper	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	29-MAR-10 22:59	032910C-1
	Iron	4970	ug/L	5000	ug/L	99.5	90.0 - 110.0	P	29-MAR-10 22:59	032910C-1
	Lead	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	29-MAR-10 22:59	032910C-1
	Magnesium	5160	ug/L	5000	ug/L	103.2	90.0 - 110.0	P	29-MAR-10 22:59	032910C-1
	Manganese	495	ug/L	500	ug/L	99	90.0 - 110.0	P	29-MAR-10 22:59	032910C-1
	Potassium	4920	ug/L	5000	ug/L	98.4	90.0 - 110.0	P	29-MAR-10 22:59	032910C-1
	Silver	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	29-MAR-10 22:59	032910C-1
	Sodium	9930	ug/L	10000	ug/L	99.3	90.0 - 110.0	P	29-MAR-10 22:59	032910C-1
	Vanadium	504	ug/L	500	ug/L	100.9	90.0 - 110.0	P	29-MAR-10 22:59	032910C-1
	Zinc	485	ug/L	500	ug/L	97	90.0 - 110.0	P	29-MAR-10 22:59	032910C-1
CCV14										
	Aluminum	5300	ug/L	5000	ug/L	106	90.0 - 110.0	P	29-MAR-10 23:19	032910C-1
	Antimony	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	29-MAR-10 23:19	032910C-1
	Barium	505	ug/L	500	ug/L	101	90.0 - 110.0	P	29-MAR-10 23:19	032910C-1
	Cadmium	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	29-MAR-10 23:19	032910C-1
	Calcium	4980	ug/L	5000	ug/L	99.5	90.0 - 110.0	P	29-MAR-10 23:19	032910C-1
	Chromium	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	29-MAR-10 23:19	032910C-1
	Cobalt	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	29-MAR-10 23:19	032910C-1
	Copper	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	29-MAR-10 23:19	032910C-1
	Iron	4970	ug/L	5000	ug/L	99.4	90.0 - 110.0	P	29-MAR-10 23:19	032910C-1
	Lead	483	ug/L	500	ug/L	96.6	90.0 - 110.0	P	29-MAR-10 23:19	032910C-1
	Magnesium	5130	ug/L	5000	ug/L	102.7	90.0 - 110.0	P	29-MAR-10 23:19	032910C-1
	Manganese	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	29-MAR-10 23:19	032910C-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–2090–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,MER536,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	29–MAR–10 23:19	032910C–1
	Silver	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	29–MAR–10 23:19	032910C–1
	Sodium	9950	ug/L	10000	ug/L	99.5	90.0 – 110.0	P	29–MAR–10 23:19	032910C–1
	Vanadium	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	29–MAR–10 23:19	032910C–1
	Zinc	482	ug/L	500	ug/L	96.5	90.0 – 110.0	P	29–MAR–10 23:19	032910C–1

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–2090–1

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS6,MER536,OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.21	ug/L	.2	ug/L	105.2	70.0 – 130.0	AV	10–MAR–10 11:41	031010S1–4
	Nickel	2.3	ug/L	2	ug/L	114.8	70.0 – 130.0	MS	24–MAR–10 16:18	100323–2
	Thallium	1.16	ug/L	1	ug/L	115.9	70.0 – 130.0	MS	24–MAR–10 16:18	100323–2
	Selenium	5.47	ug/L	5	ug/L	109.5	70.0 – 130.0	MS	24–MAR–10 16:18	100323–2
	Beryllium	.591	ug/L	.5	ug/L	118.2	70.0 – 130.0	MS	24–MAR–10 16:18	100323–2
	Arsenic	5.68	ug/L	5	ug/L	113.6	70.0 – 130.0	MS	24–MAR–10 16:18	100323–2
	Uranium	.218	ug/L	.2	ug/L	109	70.0 – 130.0	MS	25–MAR–10 23:55	100325–3
PQL01										
	Chromium	4.84	ug/L	5	ug/L	96.8	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Lead	9.72	ug/L	10	ug/L	97.2	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Cadmium	4.98	ug/L	5	ug/L	99.6	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Barium	5.16	ug/L	5	ug/L	103.1	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Antimony	8.94	ug/L	10	ug/L	89.4	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Sodium	260	ug/L	300	ug/L	86.8	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Silver	4.62	ug/L	5	ug/L	92.4	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Potassium	170	ug/L	150	ug/L	113.4	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Manganese	10.3	ug/L	10	ug/L	103.4	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Magnesium	303	ug/L	300	ug/L	101.1	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Iron	103	ug/L	100	ug/L	103.4	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Cobalt	5.14	ug/L	5	ug/L	102.7	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Copper	10.1	ug/L	10	ug/L	101.4	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Vanadium	4.53	ug/L	5	ug/L	90.6	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Aluminum	201	ug/L	200	ug/L	100.4	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Zinc	9.92	ug/L	10	ug/L	99.2	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1
	Calcium	204	ug/L	200	ug/L	101.8	70.0 – 130.0	P	29–MAR–10 18:40	032910C–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2090-1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Mercury	-0.095	+/-.2	J	0.068	0.2	SOL	AV	10-MAR-10 11:39	031010S1-4
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	24-MAR-10 16:14	100323-2
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	24-MAR-10 16:14	100323-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	24-MAR-10 16:14	100323-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	24-MAR-10 16:14	100323-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	24-MAR-10 16:14	100323-2
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	25-MAR-10 23:52	100325-3
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	29-MAR-10 18:37	032910C-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	29-MAR-10 18:37	032910C-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 18:37	032910C-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 18:37	032910C-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	29-MAR-10 18:37	032910C-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	29-MAR-10 18:37	032910C-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	29-MAR-10 18:37	032910C-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	29-MAR-10 18:37	032910C-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	29-MAR-10 18:37	032910C-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	29-MAR-10 18:37	032910C-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	29-MAR-10 18:37	032910C-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	29-MAR-10 18:37	032910C-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	29-MAR-10 18:37	032910C-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 18:37	032910C-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	29-MAR-10 18:37	032910C-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 18:37	032910C-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	29-MAR-10 18:37	032910C-1
CCB01										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	10-MAR-10 11:45	031010S1-4
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	24-MAR-10 16:34	100323-2
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	24-MAR-10 16:34	100323-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	24-MAR-10 16:34	100323-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	24-MAR-10 16:34	100323-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	24-MAR-10 16:34	100323-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–2090–1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	26–MAR–10 00:07	100325–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	29–MAR–10 18:51	032910C–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	29–MAR–10 18:51	032910C–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 18:51	032910C–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 18:51	032910C–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	29–MAR–10 18:51	032910C–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–MAR–10 18:51	032910C–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–MAR–10 18:51	032910C–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–MAR–10 18:51	032910C–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	29–MAR–10 18:51	032910C–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	29–MAR–10 18:51	032910C–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	29–MAR–10 18:51	032910C–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	29–MAR–10 18:51	032910C–1
	Potassium	152.39	+/–250	J	64.0	250	SOL	P	29–MAR–10 18:51	032910C–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 18:51	032910C–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	29–MAR–10 18:51	032910C–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 18:51	032910C–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	29–MAR–10 18:51	032910C–1
CCB02										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	10–MAR–10 12:09	031010S1–4
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	24–MAR–10 16:51	100323–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	24–MAR–10 16:51	100323–2
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	24–MAR–10 16:51	100323–2
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	24–MAR–10 16:51	100323–2
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	24–MAR–10 16:51	100323–2
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	26–MAR–10 00:35	100325–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	29–MAR–10 18:59	032910C–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	29–MAR–10 18:59	032910C–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 18:59	032910C–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 18:59	032910C–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	29–MAR–10 18:59	032910C–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2090-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	29-MAR-10 18:59	032910C-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	29-MAR-10 18:59	032910C-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	29-MAR-10 18:59	032910C-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	29-MAR-10 18:59	032910C-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	29-MAR-10 18:59	032910C-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	29-MAR-10 18:59	032910C-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	29-MAR-10 18:59	032910C-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	29-MAR-10 18:59	032910C-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 18:59	032910C-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	29-MAR-10 18:59	032910C-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 18:59	032910C-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	29-MAR-10 18:59	032910C-1
CCB03										
	Mercury	-0.14	+/-.2	J	0.068	0.2	SOL	AV	10-MAR-10 12:33	031010S1-4
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	24-MAR-10 17:31	100323-2
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	24-MAR-10 17:31	100323-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	24-MAR-10 17:31	100323-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	24-MAR-10 17:31	100323-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	24-MAR-10 17:31	100323-2
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	26-MAR-10 01:05	100325-3
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	29-MAR-10 19:33	032910C-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	29-MAR-10 19:33	032910C-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 19:33	032910C-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 19:33	032910C-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	29-MAR-10 19:33	032910C-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	29-MAR-10 19:33	032910C-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	29-MAR-10 19:33	032910C-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	29-MAR-10 19:33	032910C-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	29-MAR-10 19:33	032910C-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	29-MAR-10 19:33	032910C-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	29-MAR-10 19:33	032910C-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2090-1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	29-MAR-10 19:33	032910C-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	29-MAR-10 19:33	032910C-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 19:33	032910C-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	29-MAR-10 19:33	032910C-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 19:33	032910C-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	29-MAR-10 19:33	032910C-1
CCB04										
	Mercury	-0.109	+/-.2	J	0.068	0.2	SOL	AV	10-MAR-10 12:56	031010S1-4
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	24-MAR-10 18:23	100323-2
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	24-MAR-10 18:23	100323-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	24-MAR-10 18:23	100323-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	24-MAR-10 18:23	100323-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	24-MAR-10 18:23	100323-2
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	26-MAR-10 01:39	100325-3
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	29-MAR-10 19:54	032910C-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	29-MAR-10 19:54	032910C-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 19:54	032910C-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 19:54	032910C-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	29-MAR-10 19:54	032910C-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	29-MAR-10 19:54	032910C-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	29-MAR-10 19:54	032910C-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	29-MAR-10 19:54	032910C-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	29-MAR-10 19:54	032910C-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	29-MAR-10 19:54	032910C-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	29-MAR-10 19:54	032910C-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	29-MAR-10 19:54	032910C-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	29-MAR-10 19:54	032910C-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 19:54	032910C-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	29-MAR-10 19:54	032910C-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 19:54	032910C-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	29-MAR-10 19:54	032910C-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–2090–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB05										
	Mercury	–0.086	+/–.2	J	0.068	0.2	SOL	AV	10–MAR–10 13:08	031010S1–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	29–MAR–10 20:16	032910C–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	29–MAR–10 20:16	032910C–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 20:16	032910C–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 20:16	032910C–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	29–MAR–10 20:16	032910C–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–MAR–10 20:16	032910C–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–MAR–10 20:16	032910C–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–MAR–10 20:16	032910C–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	29–MAR–10 20:16	032910C–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	29–MAR–10 20:16	032910C–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	29–MAR–10 20:16	032910C–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	29–MAR–10 20:16	032910C–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	29–MAR–10 20:16	032910C–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 20:16	032910C–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	29–MAR–10 20:16	032910C–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 20:16	032910C–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	29–MAR–10 20:16	032910C–1
CCB06										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	10–MAR–10 13:32	031010S1–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	29–MAR–10 20:41	032910C–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	29–MAR–10 20:41	032910C–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 20:41	032910C–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 20:41	032910C–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	29–MAR–10 20:41	032910C–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–MAR–10 20:41	032910C–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–MAR–10 20:41	032910C–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–MAR–10 20:41	032910C–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	29–MAR–10 20:41	032910C–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	29–MAR–10 20:41	032910C–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	29–MAR–10 20:41	032910C–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–2090–1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	29–MAR–10 20:41	032910C–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	29–MAR–10 20:41	032910C–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 20:41	032910C–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	29–MAR–10 20:41	032910C–1
	Vanadium	–1.05	+/–5	J	1.0	5.0	SOL	P	29–MAR–10 20:41	032910C–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	29–MAR–10 20:41	032910C–1
CCB07										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	29–MAR–10 21:05	032910C–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	29–MAR–10 21:05	032910C–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 21:05	032910C–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 21:05	032910C–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	29–MAR–10 21:05	032910C–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–MAR–10 21:05	032910C–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–MAR–10 21:05	032910C–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–MAR–10 21:05	032910C–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	29–MAR–10 21:05	032910C–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	29–MAR–10 21:05	032910C–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	29–MAR–10 21:05	032910C–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	29–MAR–10 21:05	032910C–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	29–MAR–10 21:05	032910C–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 21:05	032910C–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	29–MAR–10 21:05	032910C–1
	Vanadium	–1.02	+/–5	J	1.0	5.0	SOL	P	29–MAR–10 21:05	032910C–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	29–MAR–10 21:05	032910C–1
CCB08										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	29–MAR–10 21:23	032910C–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	29–MAR–10 21:23	032910C–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 21:23	032910C–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 21:23	032910C–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	29–MAR–10 21:23	032910C–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–MAR–10 21:23	032910C–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–2090–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–MAR–10 21:23	032910C–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–MAR–10 21:23	032910C–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	29–MAR–10 21:23	032910C–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	29–MAR–10 21:23	032910C–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	29–MAR–10 21:23	032910C–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	29–MAR–10 21:23	032910C–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	29–MAR–10 21:23	032910C–1
	Silver	1.24	+/–5	J	1.0	5.0	SOL	P	29–MAR–10 21:23	032910C–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	29–MAR–10 21:23	032910C–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 21:23	032910C–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	29–MAR–10 21:23	032910C–1
CCB09										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	29–MAR–10 21:43	032910C–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	29–MAR–10 21:43	032910C–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 21:43	032910C–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 21:43	032910C–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	29–MAR–10 21:43	032910C–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–MAR–10 21:43	032910C–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–MAR–10 21:43	032910C–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–MAR–10 21:43	032910C–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	29–MAR–10 21:43	032910C–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	29–MAR–10 21:43	032910C–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	29–MAR–10 21:43	032910C–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	29–MAR–10 21:43	032910C–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	29–MAR–10 21:43	032910C–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 21:43	032910C–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	29–MAR–10 21:43	032910C–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 21:43	032910C–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	29–MAR–10 21:43	032910C–1
CCB10										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	29–MAR–10 22:03	032910C–1

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

SDG No.: 10-2090-1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	29-MAR-10 22:03	032910C-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 22:03	032910C-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 22:03	032910C-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	29-MAR-10 22:03	032910C-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	29-MAR-10 22:03	032910C-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	29-MAR-10 22:03	032910C-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	29-MAR-10 22:03	032910C-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	29-MAR-10 22:03	032910C-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	29-MAR-10 22:03	032910C-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	29-MAR-10 22:03	032910C-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	29-MAR-10 22:03	032910C-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	29-MAR-10 22:03	032910C-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 22:03	032910C-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	29-MAR-10 22:03	032910C-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 22:03	032910C-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	29-MAR-10 22:03	032910C-1
CCB11										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	29-MAR-10 22:21	032910C-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	29-MAR-10 22:21	032910C-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 22:21	032910C-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 22:21	032910C-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	29-MAR-10 22:21	032910C-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	29-MAR-10 22:21	032910C-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	29-MAR-10 22:21	032910C-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	29-MAR-10 22:21	032910C-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	29-MAR-10 22:21	032910C-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	29-MAR-10 22:21	032910C-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	29-MAR-10 22:21	032910C-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	29-MAR-10 22:21	032910C-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	29-MAR-10 22:21	032910C-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 22:21	032910C-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–2090–1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	29–MAR–10 22:21	032910C–1
	Vanadium	–1.16	+/–5	J	1.0	5.0	SOL	P	29–MAR–10 22:21	032910C–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	29–MAR–10 22:21	032910C–1
CCB12										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	29–MAR–10 22:44	032910C–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	29–MAR–10 22:44	032910C–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 22:44	032910C–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 22:44	032910C–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	29–MAR–10 22:44	032910C–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–MAR–10 22:44	032910C–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–MAR–10 22:44	032910C–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–MAR–10 22:44	032910C–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	29–MAR–10 22:44	032910C–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	29–MAR–10 22:44	032910C–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	29–MAR–10 22:44	032910C–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	29–MAR–10 22:44	032910C–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	29–MAR–10 22:44	032910C–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 22:44	032910C–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	29–MAR–10 22:44	032910C–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 22:44	032910C–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	29–MAR–10 22:44	032910C–1
CCB13										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	29–MAR–10 23:01	032910C–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	29–MAR–10 23:01	032910C–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 23:01	032910C–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	29–MAR–10 23:01	032910C–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	29–MAR–10 23:01	032910C–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–MAR–10 23:01	032910C–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–MAR–10 23:01	032910C–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–MAR–10 23:01	032910C–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	29–MAR–10 23:01	032910C–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2090-1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	29-MAR-10 23:01	032910C-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	29-MAR-10 23:01	032910C-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	29-MAR-10 23:01	032910C-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	29-MAR-10 23:01	032910C-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 23:01	032910C-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	29-MAR-10 23:01	032910C-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 23:01	032910C-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	29-MAR-10 23:01	032910C-1
CCB14										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	29-MAR-10 23:21	032910C-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	29-MAR-10 23:21	032910C-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 23:21	032910C-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 23:21	032910C-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	29-MAR-10 23:21	032910C-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	29-MAR-10 23:21	032910C-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	29-MAR-10 23:21	032910C-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	29-MAR-10 23:21	032910C-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	29-MAR-10 23:21	032910C-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	29-MAR-10 23:21	032910C-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	29-MAR-10 23:21	032910C-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	29-MAR-10 23:21	032910C-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	29-MAR-10 23:21	032910C-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 23:21	032910C-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	29-MAR-10 23:21	032910C-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	29-MAR-10 23:21	032910C-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	29-MAR-10 23:21	032910C-1

METALS
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PREPARATION BLANK SUMMARY

SDG NO. 10-2090-1
Contract: LANL01004
Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1202056179								
	Mercury	-3.78	ug/kg	+/-11	J	AV	3.73	11
1202056877								
	Aluminum	7160	ug/Kg	+/-18200	J	P	6190	18200
	Antimony	301	ug/Kg	+/-911	U	P	301	911
	Barium	165	ug/Kg	+/-455	J	P	91.1	455
	Cadmium	91.1	ug/Kg	+/-455	U	P	91.1	455
	Calcium	7290	ug/Kg	+/-22800	U	P	7290	22800
	Chromium	137	ug/Kg	+/-455	U	P	137	455
	Cobalt	137	ug/Kg	+/-455	U	P	137	455
	Copper	273	ug/Kg	+/-911	U	P	273	911
	Iron	14000	ug/Kg	+/-22800	J	P	7290	22800
	Lead	228	ug/Kg	+/-911	U	P	228	911
	Magnesium	7740	ug/Kg	+/-27300	U	P	7740	27300
	Manganese	292	ug/Kg	+/-911	J	P	182	911
	Potassium	5830	ug/Kg	+/-22800	U	P	5830	22800
	Silver	91.1	ug/Kg	+/-455	U	P	91.1	455
	Sodium	6380	ug/Kg	+/-22800	U	P	6380	22800
	Vanadium	91.1	ug/Kg	+/-455	U	P	91.1	455
	Zinc	301	ug/Kg	+/-911	U	P	301	911
1202056883								
	Arsenic	0.192	mg/kg	+/-0.96	U	MS	0.192	0.96
	Beryllium	0.0192	mg/kg	+/-0.096	U	MS	0.0192	0.096
	Nickel	0.096	mg/kg	+/-0.384	U	MS	0.096	0.384
	Selenium	0.48	mg/kg	+/-0.96	U	MS	0.48	0.96
	Thallium	0.0576	mg/kg	+/-0.192	U	MS	0.0576	0.192
	Uranium	0.0127	mg/kg	+/-0.0384	U	MS	0.0127	0.0384

METALS
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Interference Check Sample

SDG No: 10–2090–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	511000	ug/L	500000	ug/L	102	80.0 – 120.0	29–MAR–10 18:43	032910C–1
	Antimony	–0.864	ug/L					29–MAR–10 18:43	032910C–1
	Barium	0.49	ug/L					29–MAR–10 18:43	032910C–1
	Cadmium	–2.27	ug/L					29–MAR–10 18:43	032910C–1
	Calcium	479000	ug/L	500000	ug/L	95.7	80.0 – 120.0	29–MAR–10 18:43	032910C–1
	Chromium	1.9	ug/L					29–MAR–10 18:43	032910C–1
	Cobalt	–6.27	ug/L					29–MAR–10 18:43	032910C–1
	Copper	–2.45	ug/L					29–MAR–10 18:43	032910C–1
	Iron	189000	ug/L	200000	ug/L	94.6	80.0 – 120.0	29–MAR–10 18:43	032910C–1
	Lead	0.983	ug/L					29–MAR–10 18:43	032910C–1
	Magnesium	481000	ug/L	500000	ug/L	96.2	80.0 – 120.0	29–MAR–10 18:43	032910C–1
	Manganese	2.08	ug/L					29–MAR–10 18:43	032910C–1
	Potassium	–157.0	ug/L					29–MAR–10 18:43	032910C–1
	Silver	0.683	ug/L					29–MAR–10 18:43	032910C–1
	Sodium	12.5	ug/L					29–MAR–10 18:43	032910C–1
	Vanadium	1.57	ug/L					29–MAR–10 18:43	032910C–1
	Zinc	7.6	ug/L					29–MAR–10 18:43	032910C–1
ICSAB01									
	Aluminum	520000	ug/L	500000	ug/L	104	80.0 – 120.0	29–MAR–10 18:45	032910C–1
	Antimony	502	ug/L	500	ug/L	100	80.0 – 120.0	29–MAR–10 18:45	032910C–1
	Barium	500	ug/L	500	ug/L	100	80.0 – 120.0	29–MAR–10 18:45	032910C–1
	Cadmium	467	ug/L	500	ug/L	93.3	80.0 – 120.0	29–MAR–10 18:45	032910C–1
	Calcium	487000	ug/L	500000	ug/L	97.4	80.0 – 120.0	29–MAR–10 18:45	032910C–1
	Chromium	485	ug/L	500	ug/L	96.9	80.0 – 120.0	29–MAR–10 18:45	032910C–1
	Cobalt	437	ug/L	500	ug/L	87.5	80.0 – 120.0	29–MAR–10 18:45	032910C–1
	Copper	537	ug/L	500	ug/L	107	80.0 – 120.0	29–MAR–10 18:45	032910C–1
	Iron	191000	ug/L	200000	ug/L	95.3	80.0 – 120.0	29–MAR–10 18:45	032910C–1
	Lead	459	ug/L	500	ug/L	91.7	80.0 – 120.0	29–MAR–10 18:45	032910C–1
	Magnesium	483000	ug/L	500000	ug/L	96.6	80.0 – 120.0	29–MAR–10 18:45	032910C–1

METALS
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Interference Check Sample

SDG No: 10–2090–1

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Manganese	478	ug/L	500	ug/L	95.7	80.0 – 120.0	29–MAR–10 18:45	032910C–1
	Potassium	5450	ug/L	5000	ug/L	109	80.0 – 120.0	29–MAR–10 18:45	032910C–1
	Silver	271	ug/L	250	ug/L	108	80.0 – 120.0	29–MAR–10 18:45	032910C–1
	Sodium	5320	ug/L	5000	ug/L	106	80.0 – 120.0	29–MAR–10 18:45	032910C–1
	Vanadium	517	ug/L	500	ug/L	103	80.0 – 120.0	29–MAR–10 18:45	032910C–1
	Zinc	484	ug/L	500	ug/L	96.8	80.0 – 120.0	29–MAR–10 18:45	032910C–1

METALS
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Interference Check Sample

SDG No: 10–2090–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS6

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	0.011	ug/L					24–MAR–10 16:22	100323–2
	Beryllium	0.103	ug/L					24–MAR–10 16:22	100323–2
	Nickel	2.45	ug/L					24–MAR–10 16:22	100323–2
	Selenium	–1.62	ug/L					24–MAR–10 16:22	100323–2
	Thallium	0.022	ug/L					24–MAR–10 16:22	100323–2
ICSAB01									
	Arsenic	21.8	ug/L	20	ug/L	109	80.0 – 120.0	24–MAR–10 16:26	100323–2
	Beryllium	20.0	ug/L	20	ug/L	100	80.0 – 120.0	24–MAR–10 16:26	100323–2
	Nickel	22.1	ug/L	23.31	ug/L	94.8	80.0 – 120.0	24–MAR–10 16:26	100323–2
	Selenium	20.0	ug/L	20	ug/L	100	80.0 – 120.0	24–MAR–10 16:26	100323–2
	Thallium	19.7	ug/L	20	ug/L	98.4	80.0 – 120.0	24–MAR–10 16:26	100323–2

METALS
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Interference Check Sample

SDG No: 10–2090–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS6

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Uranium	0.005	ug/L					25–MAR–10 23:58	100325–3
ICSAB01									
	Uranium	21.8	ug/L	20	ug/L	109	80.0 – 120.0	26–MAR–10 00:01	100325–3

METALS
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Matrix Spike Summary

SDG NO. 10-2090-1 **Client ID** RE11-10-1786S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.2

Sample ID: 248068001 **Spike ID:** 1202056182

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	133		3.96	U	127	103		AV

METALS
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Matrix Spike Duplicate Summary

SDG NO.	10–2090–1	**Client ID**	RE11–10–1786SD
Contract:	LANL01004	**Level:**	Low
Matrix:	SOIL	**% Solids:**	93.2
Sample ID:	248068001	**Spike ID:**	1202056184

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	129		3.96	U	122	105		AV

METALS
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Matrix Spike Summary

SDG NO. 10-2090-1 **Client ID** RE15-10-8404S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90.6

Sample ID: 248110001 **Spike ID:** 1202056880

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		19200000		11200000		538000	1480	N/A	P
Antimony	ug/Kg	75-125	32100		342	U	53800	59.7	N	P
Barium	ug/Kg	75-125	219000		167000		53800	96.8		P
Cadmium	ug/Kg	75-125	45400		104	U	53800	84.4		P
Calcium	ug/Kg		3970000		3220000		538000	139	N/A	P
Chromium	ug/Kg	75-125	63800		9850		53800	100		P
Cobalt	ug/Kg	75-125	49700		5200		53800	82.7		P
Copper	ug/Kg	75-125	63400		6500		53800	106		P
Iron	ug/Kg		16700000		14500000		538000	410	N/A	P
Lead	ug/Kg	75-125	54100		9820		53800	82.3		P
Magnesium	ug/Kg		3070000		2240000		538000	153	N/A	P
Manganese	ug/Kg		318000		300000		53800	32.4	N/A	P
Potassium	ug/Kg	75-125	2530000		1790000		538000	139	N	P
Silver	ug/Kg	75-125	46900		104	U	53800	87.2		P
Sodium	ug/Kg	75-125	1050000		546000		538000	93.5		P
Vanadium	ug/Kg	75-125	76600		21500		53800	103		P
Zinc	ug/Kg	75-125	85700		29900		53800	104		P

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–2090–1 **Client ID** RE15–10–8404SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90.6

Sample ID: 248110001 **Spike ID:** 1202056881

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		19800000		11200000		531000	1620	N/A	P
Antimony	ug/Kg	75–125	31900		342	U	53100	60	N	P
Barium	ug/Kg	75–125	216000		167000		53100	93		P
Cadmium	ug/Kg	75–125	45500		104	U	53100	85.7		P
Calcium	ug/Kg		3770000		3220000		531000	103	N/A	P
Chromium	ug/Kg	75–125	62800		9850		53100	99.8		P
Cobalt	ug/Kg	75–125	50700		5200		53100	85.6		P
Copper	ug/Kg	75–125	63100		6500		53100	107		P
Iron	ug/Kg		15500000		14500000		531000	193	N/A	P
Lead	ug/Kg	75–125	55600		9820		53100	86.3		P
Magnesium	ug/Kg		3050000		2240000		531000	152	N/A	P
Manganese	ug/Kg		340000		300000		53100	74.5	N/A	P
Potassium	ug/Kg	75–125	2510000		1790000		531000	136	N	P
Silver	ug/Kg	75–125	47200		104	U	53100	88.8		P
Sodium	ug/Kg	75–125	1070000		546000		531000	98.1		P
Vanadium	ug/Kg	75–125	75200		21500		53100	101		P
Zinc	ug/Kg	75–125	82400		29900		53100	98.8		P

METALS
--5a--

Matrix Spike Summary

SDG NO. 10–2090–1 **Client ID** RE15–10–8404S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90.6

Sample ID: 248110001 **Spike ID:** 1202056886

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Thallium	mg/kg	75–125	9.75		0.185	J	10.5	91.1		MS
Uranium	mg/kg	75–125	9.6		4.07		5.25	105		MS
Arsenic	mg/kg	75–125	9.63		1.74		8.4	93.9		MS
Beryllium	mg/kg	75–125	6.25		1.02		5.25	99.6		MS
Nickel	mg/kg	75–125	12.8		7.48		5.25	101		MS
Selenium	mg/kg	75–125	1.56		0.517	U	2.1	70.3	N	MS

METALS
-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-2090-1 **Client ID** RE15-10-8404SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90.6

Sample ID: 248110001 **Spike ID:** 1202056887

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	9.76		1.74		8.8	91.1		MS
Beryllium	mg/kg	75-125	6.25		1.02		5.5	95.1		MS
Nickel	mg/kg	75-125	12.7		7.48		5.5	95.7		MS
Selenium	mg/kg	75-125	1.58		0.517	U	2.2	67.8	N	MS
Thallium	mg/kg	75-125	9.99		0.185	J	11	89.2		MS
Uranium	mg/kg	75-125	9.64		4.07		5.5	101		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–2090–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE11–10–1786D

Sample ID: 248068001 **Duplicate ID:** 1202056181 **Percent Solids for Dup:** 93.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg		3.96	U	3.74	U			AV

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-2090-1

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE11-10-1786SD

Sample ID: 1202056182 **Duplicate ID:** 1202056184 **Percent Solids for Dup:** 93.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	133		129		2.71		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–2090–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE15–10–8404D

Sample ID: 248110001 **Duplicate ID:** 1202056878 **Percent Solids for Dup:** 90.6

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20%	11200000		11400000		1.7		P
Antimony	ug/Kg		342	U	346	U			P
Barium	ug/Kg	+/–20%	167000		151000		9.81		P
Cadmium	ug/Kg		104	U	105	U			P
Calcium	ug/Kg	+/–20%	3220000		3010000		6.62		P
Chromium	ug/Kg	+/–20%	9850		9720		1.34		P
Cobalt	ug/Kg	+/–20%	5200		4320		18.7		P
Copper	ug/Kg	+/–20%	6500		6300		3.16		P
Iron	ug/Kg	+/–20%	14500000		13900000		3.79		P
Lead	ug/Kg	+/–20%	9820		8510		14.3		P
Magnesium	ug/Kg	+/–20%	2240000		2050000		9.21		P
Manganese	ug/Kg	+/–20%	300000		245000		20.1	*	P
Potassium	ug/Kg	+/–20%	1790000		1650000		8.3		P
Silver	ug/Kg		104	U	105	U			P
Sodium	ug/Kg	+/–20%	546000		525000		4.04		P
Vanadium	ug/Kg	+/–20%	21500		21700		1.13		P
Zinc	ug/Kg	+/–20%	29900		29600		1.04		P

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-2090-1

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE15-10-8404SD

Sample ID: 1202056880 **Duplicate ID:** 1202056881 **Percent Solids for Dup:** 90.6

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20	19200000		19800000		3.04		P
Antimony	ug/Kg	+/-20	32100		31900		.884		P
Barium	ug/Kg	+/-20	219000		216000		1.25		P
Cadmium	ug/Kg	+/-20	45400		45500		.262		P
Calcium	ug/Kg	+/-20	3970000		3770000		5.2		P
Chromium	ug/Kg	+/-20	63800		62800		1.58		P
Cobalt	ug/Kg	+/-20	49700		50700		1.91		P
Copper	ug/Kg	+/-20	63400		63100		.51		P
Iron	ug/Kg	+/-20	16700000		15500000		7.32		P
Lead	ug/Kg	+/-20	54100		55600		2.71		P
Magnesium	ug/Kg	+/-20	3070000		3050000		.489		P
Manganese	ug/Kg	+/-20	318000		340000		6.72		P
Potassium	ug/Kg	+/-20	2530000		2510000		1.04		P
Silver	ug/Kg	+/-20	46900		47200		.435		P
Sodium	ug/Kg	+/-20	1050000		1070000		1.67		P
Vanadium	ug/Kg	+/-20	76600		75200		1.92		P
Zinc	ug/Kg	+/-20	85700		82400		3.98		P

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-2090-1

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE15-10-8404D

Sample ID: 248110001 **Duplicate ID:** 1202056884 **Percent Solids for Dup:** 90.6

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-.993	1.74		1.89		8.07		MS
Beryllium	mg/kg	+/-20%	1.02		1.02		.0288		MS
Nickel	mg/kg	+/-20%	7.48		7.58		1.33		MS
Selenium	mg/kg		0.517	U	0.497	U			MS
Thallium	mg/kg	+/-.199	0.185	J	0.183	J	1.39		MS
Uranium	mg/kg	+/-20%	4.07		4.82		17		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–2090–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE15–10–8404SD

Sample ID: 1202056886 **Duplicate ID:** 1202056887 **Percent Solids for Dup:** 90.6

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–20	9.63		9.76		1.35		MS
Beryllium	mg/kg	+/–20	6.25		6.25		.108		MS
Nickel	mg/kg	+/–20	12.8		12.7		.414		MS
Selenium	mg/kg	+/–20	1.56		1.58		.868		MS
Thallium	mg/kg	+/–20	9.75		9.99		2.46		MS
Uranium	mg/kg	+/–20	9.6		9.64		.412		MS

METALS
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Laboratory Control Sample Summary

SDG NO. 10–2090–1

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202056180								
	Mercury	ug/kg	5150	5250		102	71.6–128.3	AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-2090-1

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202056882								
	Chromium	ug/Kg	236000	241000		102	80-120	P
	Cobalt	ug/Kg	91200	92200		101	81-120	P
	Copper	ug/Kg	174000	187000		108	81-118	P
	Iron	ug/Kg	18000000	18100000		101	51-149	P
	Calcium	ug/Kg	9870000	9710000		98.3	83-117	P
	Lead	ug/Kg	86000	81800		95.1	79-121	P
	Magnesium	ug/Kg	4000000	3800000		94.9	79-122	P
	Manganese	ug/Kg	558000	530000		95.1	81-119	P
	Potassium	ug/Kg	4300000	4000000		93.1	74-127	P
	Silver	ug/Kg	30100	30600		102	66-134	P
	Sodium	ug/Kg	1020000	1030000		101	74-127	P
	Vanadium	ug/Kg	115000	122000		106	79-121	P
	Zinc	ug/Kg	594000	591000		99.5	80-121	P
	Aluminum	ug/Kg	10500000	9340000		88.9	56-144	P
	Antimony	ug/Kg	173000	109000		63.2	71-130	P
	Barium	ug/Kg	198000	194000		98	80-120	P
	Cadmium	ug/Kg	60700	59800		98.5	81-120	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-2090-1

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202056888								
	Arsenic	mg/kg	104	115		111	78-123	MS
	Beryllium	mg/kg	77.6	83.4		107	84-116	MS
	Nickel	mg/kg	134	148		111	78-123	MS
	Selenium	mg/kg	286	312		109	77-123	MS
	Thallium	mg/kg	121	128		106	78-122	MS
	Uranium	mg/kg	2.13	2.13		100	73-127	MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-2090-1 **Client ID** RE11-10-1786L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 248068001 **Serial Dilution ID:** 1202056183

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.068	U	.34	U				AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-2090-1 **Client ID** RE15-10-8404L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 248110001 **Serial Dilution ID:** 1202056879

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	108000		112000		3.24		10	P
Antimony	3.3	U	16.5	U				P
Barium	1610		1650		2.48		10	P
Cadmium	1	U	5	U				P
Calcium	31100		31700		1.77		10	P
Chromium	95.1		97		2		10	P
Cobalt	50.2		51.5		2.59			P
Copper	62.8		65.5		4.3			P
Iron	140000		145000		3.21		10	P
Lead	94.8		91.5		3.48			P
Magnesium	21700		22300		2.76		10	P
Manganese	2900		2980		2.59		10	P
Potassium	17300		17400		.578		10	P
Silver	1	U	5	U				P
Sodium	5270		5350		1.52		10	P
Vanadium	207		204		1.69		10	P
Zinc	288		293		1.56		10	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-2090-1 **Client ID** RE15-10-8404L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 248110001 **Serial Dilution ID:** 1202056885

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	8.42		10.5	J	24.1			MS
Beryllium	4.94		5.2		5.26			MS
Nickel	36.2		39.8		9.81			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.896	J	1.55	J	72.4			MS
Uranium	19.7		20		1.52		10	MS

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-2090-1 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 959113							
1202056877	MB for batch 959113	MB	S	09-MAR-10	.549g	50mL	
1202056882	LCS for batch 959113	LCS	S	09-MAR-10	.548g	50mL	
1202056880	RE15-10-8404S	MS	S	09-MAR-10	.513g	50mL	
1202056881	RE15-10-8404SD	MSD	S	09-MAR-10	.52g	50mL	
1202056878	RE15-10-8404D	DUP	S	09-MAR-10	.527g	50mL	
248110001	RE15-10-8404	SAMPLE	S	09-MAR-10	.533g	50mL	
248110002	RE15-10-8396	SAMPLE	S	09-MAR-10	.533g	50mL	
248110003	RE15-10-8393	SAMPLE	S	09-MAR-10	.566g	50mL	
248110004	RE15-10-8395	SAMPLE	S	09-MAR-10	.527g	50mL	
248110005	RE15-10-8398	SAMPLE	S	09-MAR-10	.533g	50mL	
248110006	RE15-10-8394	SAMPLE	S	09-MAR-10	.511g	50mL	
248110007	RE15-10-8399	SAMPLE	S	09-MAR-10	.515g	50mL	
248110008	RE15-10-8397	SAMPLE	S	09-MAR-10	.536g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2090-1 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 959115							
1202056883	MB for batch 959115	MB	S	03-MAR-10	.521g	50mL	
1202056888	LCS for batch 959115	LCS	S	03-MAR-10	.578g	50mL	
1202056886	RE15-10-8404S	MS	S	03-MAR-10	.526g	50mL	
1202056887	RE15-10-8404SD	MSD	S	03-MAR-10	.502g	50mL	
1202056884	RE15-10-8404D	DUP	S	03-MAR-10	.556g	50mL	
248110001	RE15-10-8404	SAMPLE	S	03-MAR-10	.534g	50mL	
248110002	RE15-10-8396	SAMPLE	S	03-MAR-10	.503g	50mL	
248110003	RE15-10-8393	SAMPLE	S	03-MAR-10	.511g	50mL	
248110004	RE15-10-8395	SAMPLE	S	03-MAR-10	.569g	50mL	
248110005	RE15-10-8398	SAMPLE	S	03-MAR-10	.519g	50mL	
248110006	RE15-10-8394	SAMPLE	S	03-MAR-10	.518g	50mL	
248110007	RE15-10-8399	SAMPLE	S	03-MAR-10	.505g	50mL	
248110008	RE15-10-8397	SAMPLE	S	03-MAR-10	.527g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2090-1 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 958755							
1202056179	MB for batch 958755	MB	S	10-MAR-10	.547g	30mL	
1202056180	LCS for batch 958755	LCS	S	10-MAR-10	.209g	30mL	
1202056182	RE11-10-1786S	MS	S	10-MAR-10	.505g	30mL	
1202056184	RE11-10-1786SD	MSD	S	10-MAR-10	.528g	30mL	
1202056181	RE11-10-1786D	DUP	S	10-MAR-10	.585g	30mL	
248110001	RE15-10-8404	SAMPLE	S	10-MAR-10	.512g	30mL	
248110002	RE15-10-8396	SAMPLE	S	10-MAR-10	.593g	30mL	
248110003	RE15-10-8393	SAMPLE	S	10-MAR-10	.521g	30mL	
248110004	RE15-10-8395	SAMPLE	S	10-MAR-10	.527g	30mL	
248110005	RE15-10-8398	SAMPLE	S	10-MAR-10	.557g	30mL	
248110006	RE15-10-8394	SAMPLE	S	10-MAR-10	.509g	30mL	
248110007	RE15-10-8399	SAMPLE	S	10-MAR-10	.558g	30mL	
248110008	RE15-10-8397	SAMPLE	S	10-MAR-10	.517g	30mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS6
Start Date: 24–MAR–10 **End Date:** 24–MAR–10

Client Sdg: 10–2090–1
Method MS
Data File: 100323–2

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	15:58			X		X											X		X			X			
S10	1	16:02			X		X											X		X			X			
S100	1	16:06			X		X											X		X			X			
ICV01	1	16:10			X		X											X		X			X			
ICB01	1	16:14			X		X											X		X			X			
CRDL01	1	16:18			X		X											X		X			X			
ICSA01	1	16:22			X		X											X		X			X			
ICSAB01	1	16:26			X		X											X		X			X			
CCV01	1	16:30			X		X											X		X			X			
CCB01	1	16:34			X		X											X		X			X			
1202056883	2	16:39			X		X											X		X			X			
1202056888	40	16:43			X		X											X		X			X			
CCV02	1	16:47			X		X											X		X			X			
CCB02	1	16:51			X		X											X		X			X			
248110001	2	16:55			X		X											X		X			X			
1202056884	2	16:59			X		X											X		X			X			
1202056886	2	17:03			X		X											X		X			X			
1202056887	2	17:07			X		X											X		X			X			
1202056885	10	17:11			X		X											X		X			X			
248110002	2	17:15			X		X											X		X			X			
248110003	2	17:19			X		X											X		X			X			
248110004	2	17:23			X		X											X		X			X			
CCV03	1	17:27			X		X											X		X			X			
CCB03	1	17:31			X		X											X		X			X			
248110005	2	17:35			X		X											X		X			X			
248110006	2	17:39			X		X											X		X			X			
248110007	2	17:43			X		X											X		X			X			
248110008	2	17:47			X		X											X		X			X			
ZZZZZZ	2	17:51																								
ZZZZZZ	2	17:55																								
ZZZZZZ	2	17:59																								
ZZZZZZ	2	18:03																								
ZZZZZZ	2	18:07																								
ZZZZZZ	2	18:11																								
ZZZZZZ	2	18:15																								
CCV04	1	18:19			X		X											X		X			X			
CCB04	1	18:23			X		X											X		X			X			

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS6
Start Date: 25–MAR–10 **End Date:** 26–MAR–10

Client Sdg: 10–2090–1
Method MS
Data File: 100325–3

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	23:39																						X		
S10	1	23:42																						X		
S100	1	23:45																						X		
ICV01	1	23:48																						X		
ICB01	1	23:52																						X		
CRDL01	1	23:55																						X		
ICSA01	1	23:58																						X		
ICSAB01	1	00:01																						X		
CCV01	1	00:04																						X		
CCB01	1	00:07																						X		
ZZZZZZ	2	00:10																								
ZZZZZZ	2	00:13																								
ZZZZZZ	2	00:16																								
ZZZZZZ	2	00:19																								
ZZZZZZ	2	00:22																								
ZZZZZZ	2	00:25																								
ZZZZZZ	2	00:28																								
CCV02	1	00:32																						X		
CCB02	1	00:35																						X		
1202056883	2	00:38																						X		
1202056888	40	00:41																						X		
248110001	2	00:44																						X		
1202056884	2	00:47																						X		
1202056886	2	00:50																						X		
1202056887	2	00:53																						X		
1202056885	10	00:56																						X		
248110002	2	00:59																						X		
CCV03	1	01:02																						X		
CCB03	1	01:05																						X		
248110003	2	01:08																						X		
248110004	2	01:11																						X		
248110005	2	01:15																						X		
248110006	2	01:18																						X		
248110007	2	01:21																						X		
248110008	2	01:24																						X		
ZZZZZZ	2	01:27																								
ZZZZZZ	2	01:30																								
ZZZZZZ	2	01:33																								
CCV04	1	01:36																						X		
CCB04	1	01:39																						X		

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA4
Start Date: 29-MAR-10 **End Date:** 29-MAR-10

Client Sdg: 10-2090-1
Method P
Data File: 032910C-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	18:25	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S0.1	1	18:28		X		X		X		X	X	X		X		X			X		X				X	X
S0.5	1	18:30	X	X		X		X	X	X	X	X		X	X	X			X		X				X	X
SCAL	1	18:32	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S10	1	18:34	X						X				X		X							X				
ICV01	1	18:35	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICB01	1	18:37	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
PQL01	1	18:40	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSA01	1	18:43	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSAB01	1	18:45	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR01	1	18:46	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR02	1	18:48	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV01	1	18:49	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB01	1	18:51	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV02	1	18:57	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB02	1	18:59	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	19:17																								
ZZZZZZ	1	19:20																								
ZZZZZZ	1	19:21																								
ZZZZZZ	1	19:23																								
ZZZZZZ	1	19:25																								
ZZZZZZ	1	19:26																								
ZZZZZZ	5	19:29																								
CCV03	1	19:31	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB03	1	19:33	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	19:36																								
ZZZZZZ	1	19:38																								
ZZZZZZ	1	19:40																								
ZZZZZZ	1	19:42																								
ZZZZZZ	1	19:44																								
ZZZZZZ	1	19:46																								
ZZZZZZ	1	19:48																								
ZZZZZZ	1	19:50																								
CCV04	1	19:52	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB04	1	19:54	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	19:57																								
ZZZZZZ	1	19:59																								
ZZZZZZ	1	20:02																								
ZZZZZZ	1	20:04																								
ZZZZZZ	1	20:06																								

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																							
ZZZZZZ	1	20:08																							
ZZZZZZ	1	20:10																							
ZZZZZZ	1	20:12																							
CCV05	1	20:14	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB05	1	20:16	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	20:20																							
ZZZZZZ	1	20:23																							
ZZZZZZ	1	20:25																							
ZZZZZZ	1	20:28																							
ZZZZZZ	1	20:31																							
ZZZZZZ	5	20:33																							
ZZZZZZ	1	20:36																							
CCV06	1	20:39	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB06	1	20:41	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	20:44																							
ZZZZZZ	1	20:47																							
ZZZZZZ	1	20:50																							
ZZZZZZ	1	20:52																							
ZZZZZZ	1	20:55																							
ZZZZZZ	1	20:57																							
ZZZZZZ	1	21:00																							
CCV07	1	21:03	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB07	1	21:05	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	21:08																							
ZZZZZZ	1	21:11																							
ZZZZZZ	1	21:12																							
ZZZZZZ	1	21:14																							
ZZZZZZ	1	21:16																							
ZZZZZZ	1	21:18																							
ZZZZZZ	5	21:19																							
CCV08	1	21:21	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB08	1	21:23	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	21:26																							
ZZZZZZ	1	21:28																							
ZZZZZZ	1	21:30																							
ZZZZZZ	1	21:32																							
ZZZZZZ	1	21:34																							
ZZZZZZ	1	21:37																							
ZZZZZZ	1	21:39																							
CCV09	1	21:41	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X

Metals
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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
CCB09	1	21:43	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	21:46																								
ZZZZZZ	1	21:48																								
ZZZZZZ	1	21:50																								
ZZZZZZ	1	21:52																								
ZZZZZZ	1	21:54																								
ZZZZZZ	1	21:56																								
ZZZZZZ	1	21:58																								
CCV10	1	22:01	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB10	1	22:03	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	22:06																								
ZZZZZZ	1	22:08																								
ZZZZZZ	1	22:10																								
ZZZZZZ	1	22:13																								
ZZZZZZ	1	22:15																								
ZZZZZZ	5	22:17																								
CCV11	1	22:19	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB11	1	22:21	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	22:24																								
ZZZZZZ	1	22:27																								
ZZZZZZ	1	22:29																								
ZZZZZZ	1	22:31																								
ZZZZZZ	1	22:34																								
ZZZZZZ	1	22:36																								
ZZZZZZ	1	22:39																								
CCV12	1	22:42	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB12	1	22:44	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202056877	1	22:47	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202056882	1	22:49	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248110001	1	22:50	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202056878	1	22:52	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202056880	1	22:55	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202056881	1	22:56	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202056879	5	22:57	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV13	1	22:59	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB13	1	23:01	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248110002	1	23:04	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248110003	1	23:06	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248110004	1	23:08	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248110005	1	23:11	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																								
248110006	1	23:13	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248110007	1	23:15	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248110008	1	23:17	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV14	1	23:19	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB14	1	23:21	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: MER536
Start Date: 10–MAR–10 **End Date:** 10–MAR–10

Client Sdg: 10–2090–1
Method AV
Data File: 031010S1–4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	11:25															X									
S0.2	1	11:27															X									
S0.5	1	11:29															X									
S2.0	1	11:31															X									
S5.0	1	11:33															X									
S10	1	11:35															X									
ICV01	1	11:37															X									
ICB01	1	11:39															X									
CRDL01	1	11:41															X									
CCV01	1	11:43															X									
CCB01	1	11:45															X									
1202056179	1	11:47															X									
1202056180	10	11:49															X									
ZZZZZZ	1	11:51																								
1202056181	1	11:53															X									
1202056182	1	11:55															X									
1202056184	1	11:57															X									
1202056183	5	11:59															X									
ZZZZZZ	1	12:01																								
248110001	1	12:03															X									
248110002	1	12:04															X									
CCV02	1	12:06															X									
CCB02	1	12:09															X									
ZZZZZZ	1	12:11																								
ZZZZZZ	1	12:12																								
ZZZZZZ	1	12:14																								
ZZZZZZ	1	12:16																								
ZZZZZZ	1	12:18																								
ZZZZZZ	1	12:20																								
ZZZZZZ	1	12:22																								
ZZZZZZ	1	12:24																								
ZZZZZZ	1	12:26																								
ZZZZZZ	1	12:28																								
CCV03	1	12:31															X									
CCB03	1	12:33															X									
ZZZZZZ	1	12:35																								
ZZZZZZ	1	12:36																								
ZZZZZZ	1	12:38																								
ZZZZZZ	1	12:40																								
ZZZZZZ	10	12:42																								

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																								
ZZZZZZ	1	12:44																								
ZZZZZZ	1	12:46																								
ZZZZZZ	1	12:48																								
ZZZZZZ	1	12:50																								
ZZZZZZ	5	12:52																								
CCV04	1	12:54														X										
CCB04	1	12:56														X										
ZZZZZZ	1	12:58																								
ZZZZZZ	1	13:00																								
CCV05	1	13:06														X										
CCB05	1	13:08														X										
248110003	1	13:10														X										
248110004	1	13:12														X										
248110005	1	13:14														X										
248110006	1	13:16														X										
248110007	1	13:18														X										
248110008	1	13:20														X										
ZZZZZZ	1	13:22																								
ZZZZZZ	1	13:24																								
ZZZZZZ	1	13:26																								
ZZZZZZ	1	13:28																								
CCV06	1	13:30														X										
CCB06	1	13:32														X										

Standards

METALS
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Instrument Detection Limits

SDG NO. 10-2090-J

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
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Instrument Detection Limits

SDG NO. 10-2090-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15-JUN-09

	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
MERCURY				
SOLID	Mercury		0.068	.2

METALS
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Instrument Detection Limits

SDG NO. 10-2090-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-2090-1
Contract: LANL01004
Instrument: OPTIMA4
Effective Dates: 25-MAR-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	0.00676	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	-0.98369	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.06206	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
Phosphorous	214.914	-0.22134	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.22220	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sodium	589.592	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	-0.01674	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-2090-1
Contract: LANL01004
Instrument: OPTIMA4
Effective Dates: 25-MAR-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	14.9992	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	-9.49960	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	3.47778	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	-0.18390	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	-0.60088	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.04741	0.32747
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
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	10.9289
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	-0.07359	0.00000	0.00000
Sodium	589.592	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	5.02864	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.33675	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	1.18768	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	-4.30004	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.03286	0.12442	0.79397

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-2090-1
Contract: LANL01004
Instrument: OPTIMA4 **Effective Dates:** 25-MAR-10
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Lead	Magnesium	Manganese	Molybdenum	Phosphorous
Aluminum	396.153	0.00000	0.00000	0.00000	46.4438	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	-14.0269	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	-2.84596	0.00000
Barium	233.527	0.00000	0.00000	0.00000	-0.32136	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	0.01216	0.24903	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	-0.02702	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	-2.77286	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	-24.4630	0.00000
Manganese	257.61	0.00000	0.03966	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	-0.01826	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	10.3832	0.00000
Potassium	766.49	0.00000	0.07568	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	13.3443	0.00000
Silver	328.068	0.00000	0.00000	0.28019	-0.03095	0.00000
Sodium	589.592	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	-8.43314	0.00000
Thallium	190.801	0.00000	0.00000	-2.58065	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.08144	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	-6.48399	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	-10.3466	0.00000
Zinc	213.857	0.00000	0.00000	0.06887	-0.04597	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-2090-1
Contract: LANL01004
Instrument: OPTIMA4 **Effective Dates:** 25-MAR-10
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Potassium	Selenium	Silicon	Silver	Sodium
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
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
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.16274
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sodium	589.592	0.88937	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: 10-2090-1
Contract: LANL01004
Instrument: OPTIMA4
Effective Dates: 25-MAR-10
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Strontium	Sulfur	Thallium	Tin	Titanium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	-1.82716	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
Lead	220.353	0.00000	0.00000	0.00000	0.00000	-1.32991
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
Phosphorous	214.914	0.00000	0.00000	0.00000	-8.61809	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
Silicon	251.611	0.00000	0.00000	0.00000	6.59640	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sodium	589.592	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	-10.0432
Tin	189.927	0.00000	0.00000	0.00000	0.00000	-3.37234
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	0.92753
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	-0.56798

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-2090-1
Contract: LANL01004
Instrument: OPTIMA4 **Effective Dates:** 25-MAR-10
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	-1.62578	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000
Barium	233.527	0.00000	-0.63442	0.00000
Beryllium	313.107	-0.30229	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000
Chromium	267.716	0.78601	-0.47146	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000
Copper	324.752	-0.82619	0.00000	0.00000
Lead	220.353	0.74521	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	-0.33953	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000
Selenium	196.026	-0.96499	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000
Silver	328.068	-1.22996	-11.9401	0.00000
Sodium	589.592	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	-7.37871	0.00000
Tin	189.927	0.00000	0.00000	0.00000
Titanium	334.94	0.40930	0.00000	0.00000
Uranium	409.014	0.00000	-57.5852	0.00000
Vanadium	292.402	-0.67226	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000

METALS
–12–
Linear Ranges

SDG NO. 10–2090–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS6

Analyte	Integration Time (msec)	LDR	Units	Effective Date
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
Beryllium	1000	1000	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

METALS
–12–
Linear Ranges

SDG NO. 10–2090–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA4

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–FEB–10
Antimony	20	10000	ug/L	01–FEB–10
Arsenic	20	10000	ug/L	01–FEB–10
Barium	20	15000	ug/L	01–FEB–10
Beryllium	20	3000	ug/L	01–FEB–10
Cadmium	20	10000	ug/L	01–FEB–10
Calcium	20	500000	ug/L	01–FEB–10
Chromium	20	25000	ug/L	01–FEB–10
Cobalt	20	10000	ug/L	01–FEB–10
Copper	20	20000	ug/L	01–FEB–10
Iron	20	500000	ug/L	01–FEB–10
Lead	20	25000	ug/L	01–FEB–10
Magnesium	20	500000	ug/L	01–FEB–10
Manganese	20	10000	ug/L	01–FEB–10
Nickel	20	10000	ug/L	01–FEB–10
Potassium	20	300000	ug/L	01–FEB–10
Selenium	20	10000	ug/L	01–FEB–10
Silver	20	1000	ug/L	01–FEB–10
Sodium	20	500000	ug/L	01–FEB–10
Thallium	20	10000	ug/L	01–FEB–10
Uranium	20	15000	ug/L	01–FEB–10
Vanadium	20	10000	ug/L	01–FEB–10
Zinc	20	15000	ug/L	01–FEB–10

Raw Data

Reprocessing Begun
Logged In Analyst: optima4 Technique: ICP Continuous

Results Data Set (original): 032910B
Results Library (original): C:\pe\optima4\Results\Results.mdb
Results Data Set (reprocessed): 032910C
Results Library (reprocessed): C:\pe\optima4\Results\Results.mdb

Method Loaded
Method Name: Gen Eng fast_new Si Method Last Saved: 3/29/2010 19:12:39
IEC File: 031810.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	No
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	Yes
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
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
SiO2	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

Sequence No.: 1 Autosampler Location: 8
Sample ID: S0 Date Collected: 3/29/2010 18:25:17
Analyst: Data Type: Reprocessed on 3/29/2010 19:14:31
Logged In Analyst (Original) : optima4
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1675486.4	1675486.4	100.16	%	18:27:09
1	Sc RADIAL	146509.4	146509.4	101	%	18:25:47
1	Y 371.029	1022720.1	1022720.1	100.01	%	18:27:09
1	Ag 328.068†	2983.2	2978.4	[0.00]	µg/L	18:27:11
1	Al 396.153Radial†	-35.1	-35.0	[0.00]	µg/L	18:26:07
1	As 188.979†	-19.2	-19.2	[0.00]	µg/L	18:27:31

1	B 249.677†	3447.9	3442.3	[0.00]	µg/L	18:27:11
1	Ba 233.527†	-170.9	-170.6	[0.00]	µg/L	18:27:31
1	Be 313.107†	-760.2	-759.0	[0.00]	µg/L	18:27:11
1	Ca 317.933Radial†	609.6	606.5	[0.00]	µg/L	18:26:07
1	Cd 226.502†	-94.3	-94.2	[0.00]	µg/L	18:27:31
1	Co 228.616†	-177.2	-176.9	[0.00]	µg/L	18:27:31
1	Cr 267.716†	191.1	190.8	[0.00]	µg/L	18:27:31
1	Cu 324.752†	2447.0	2443.1	[0.00]	µg/L	18:27:11
1	Fe 238.204 Radial†	120.7	120.1	[0.00]	µg/L	18:26:07
1	K 766.490 Radial†	1409.9	1402.7	[0.00]	µg/L	18:25:47
1	Mg 279.077 IEC†	182.4	181.4	[0.00]	µg/L	18:26:07
1	Mn 257.610†	83.5	83.4	[0.00]	µg/L	18:27:31
1	Mo 202.031†	-61.5	-61.4	[0.00]	µg/L	18:27:31
1	Na 589.592 Radial†	1727.7	1718.8	[0.00]	µg/L	18:25:47
1	Ni 231.604†	-12.7	-12.7	[0.00]	µg/L	18:27:31
1	P 214.914†	74.6	74.5	[0.00]	µg/L	18:27:31
1	Pb 220.353†	124.0	123.8	[0.00]	µg/L	18:27:31
1	S 181.975 Axial†	92.2	92.1	[0.00]	µg/L	18:27:31
1	Sb 206.836†	94.8	94.7	[0.00]	µg/L	18:27:31
1	Se 196.026†	10.9	10.9	[0.00]	µg/L	18:27:31
1	SiO2†	1567.1	1564.5	[0.00]	µg/L	18:27:31
1	Si 251.611†	683.3	682.2	[0.00]	µg/L	18:27:11
1	Sn 189.927†	-0.3	-0.3	[0.00]	µg/L	18:27:31
1	Sr 421.552†	-242.7	-241.5	[0.00]	µg/L	18:25:47
1	Ti 334.940†	661.0	659.9	[0.00]	µg/L	18:27:11
1	Tl 190.801†	-125.7	-125.5	[0.00]	µg/L	18:27:31
1	U 409.014†	-452.8	-452.0	[0.00]	µg/L	18:27:11
1	V 292.402†	515.3	514.5	[0.00]	µg/L	18:27:11
1	Zn 213.857†	458.0	457.2	[0.00]	µg/L	18:27:31
2	Sc 361.383	1673882.1	1673882.1	100.07	%	18:27:33
2	Sc RADIAL	143614.2	143614.2	98.5	%	18:26:09
2	Y 371.029	1022767.5	1022767.5	100.02	%	18:27:33
2	Ag 328.068†	3053.8	3051.7	[0.00]	µg/L	18:27:35
2	Al 396.153Radial†	-38.9	-39.5	[0.00]	µg/L	18:26:29
2	As 188.979†	-15.1	-15.1	[0.00]	µg/L	18:27:55
2	B 249.677†	3293.2	3291.1	[0.00]	µg/L	18:27:35
2	Ba 233.527†	-175.9	-175.8	[0.00]	µg/L	18:27:55
2	Be 313.107†	-530.4	-530.1	[0.00]	µg/L	18:27:35
2	Ca 317.933Radial†	602.3	611.3	[0.00]	µg/L	18:26:29
2	Cd 226.502†	-94.9	-94.9	[0.00]	µg/L	18:27:55
2	Co 228.616†	-169.1	-169.0	[0.00]	µg/L	18:27:55
2	Cr 267.716†	157.6	157.5	[0.00]	µg/L	18:27:55
2	Cu 324.752†	2326.2	2324.7	[0.00]	µg/L	18:27:35
2	Fe 238.204 Radial†	112.7	114.4	[0.00]	µg/L	18:26:29
2	K 766.490 Radial†	1475.1	1497.1	[0.00]	µg/L	18:26:09
2	Mg 279.077 IEC†	191.8	194.7	[0.00]	µg/L	18:26:29
2	Mn 257.610†	69.4	69.3	[0.00]	µg/L	18:27:55
2	Mo 202.031†	-55.1	-55.0	[0.00]	µg/L	18:27:55
2	Na 589.592 Radial†	1691.1	1716.3	[0.00]	µg/L	18:26:09
2	Ni 231.604†	-51.5	-51.5	[0.00]	µg/L	18:27:55
2	P 214.914†	99.0	98.9	[0.00]	µg/L	18:27:55
2	Pb 220.353†	108.5	108.4	[0.00]	µg/L	18:27:55
2	S 181.975 Axial†	90.3	90.2	[0.00]	µg/L	18:27:55
2	Sb 206.836†	81.0	81.0	[0.00]	µg/L	18:27:55
2	Se 196.026†	15.5	15.5	[0.00]	µg/L	18:27:55
2	SiO2†	1541.6	1540.6	[0.00]	µg/L	18:27:55
2	Si 251.611†	721.8	721.4	[0.00]	µg/L	18:27:35
2	Sn 189.927†	7.0	7.0	[0.00]	µg/L	18:27:55
2	Sr 421.552†	-264.2	-268.1	[0.00]	µg/L	18:26:09
2	Ti 334.940†	533.5	533.1	[0.00]	µg/L	18:27:35
2	Tl 190.801†	-121.5	-121.4	[0.00]	µg/L	18:27:55
2	U 409.014†	-565.6	-565.2	[0.00]	µg/L	18:27:35
2	V 292.402†	425.8	425.5	[0.00]	µg/L	18:27:35
2	Zn 213.857†	466.7	466.4	[0.00]	µg/L	18:27:55
3	Sc 361.383	1668955.0	1668955.0	99.772	%	18:27:57
3	Sc RADIAL	147139.1	147139.1	101	%	18:26:31
3	Y 371.029	1022257.2	1022257.2	99.968	%	18:27:57
3	Ag 328.068†	2864.4	2871.0	[0.00]	µg/L	18:27:59
3	Al 396.153Radial†	-21.4	-21.2	[0.00]	µg/L	18:26:51
3	As 188.979†	-8.4	-8.4	[0.00]	µg/L	18:28:20
3	B 249.677†	3326.1	3333.7	[0.00]	µg/L	18:27:59

3	Ba 233.527†	-178.4	-178.8	[0.00] µg/L	18:28:20
3	Be 313.107†	-689.7	-691.3	[0.00] µg/L	18:27:59
3	Ca 317.933Radial†	636.8	630.8	[0.00] µg/L	18:26:51
3	Cd 226.502†	-94.0	-94.2	[0.00] µg/L	18:28:20
3	Co 228.616†	-183.5	-183.9	[0.00] µg/L	18:28:20
3	Cr 267.716†	132.1	132.4	[0.00] µg/L	18:28:20
3	Cu 324.752†	2501.2	2506.9	[0.00] µg/L	18:27:59
3	Fe 238.204 Radial†	106.3	105.3	[0.00] µg/L	18:26:51
3	K 766.490 Radial†	1479.1	1465.2	[0.00] µg/L	18:26:31
3	Mg 279.077 IEC†	185.6	183.9	[0.00] µg/L	18:26:51
3	Mn 257.610†	87.1	87.3	[0.00] µg/L	18:28:20
3	Mo 202.031†	-49.1	-49.2	[0.00] µg/L	18:28:20
3	Na 589.592 Radial†	1664.8	1649.1	[0.00] µg/L	18:26:31
3	Ni 231.604†	-58.4	-58.5	[0.00] µg/L	18:28:20
3	P 214.914†	65.2	65.3	[0.00] µg/L	18:28:20
3	Pb 220.353†	104.9	105.1	[0.00] µg/L	18:28:20
3	S 181.975 Axial†	101.9	102.2	[0.00] µg/L	18:28:20
3	Sb 206.836†	84.1	84.3	[0.00] µg/L	18:28:20
3	Se 196.026†	6.3	6.3	[0.00] µg/L	18:28:20
3	SiO2†	1609.7	1613.4	[0.00] µg/L	18:28:20
3	Si 251.611†	624.2	625.6	[0.00] µg/L	18:27:59
3	Sn 189.927†	-0.6	-0.6	[0.00] µg/L	18:28:20
3	Sr 421.552†	-327.4	-324.4	[0.00] µg/L	18:26:31
3	Ti 334.940†	714.3	716.0	[0.00] µg/L	18:27:59
3	Tl 190.801†	-113.7	-113.9	[0.00] µg/L	18:28:20
3	U 409.014†	-419.1	-420.1	[0.00] µg/L	18:27:59
3	V 292.402†	354.6	355.5	[0.00] µg/L	18:27:59
3	Zn 213.857†	468.5	469.6	[0.00] µg/L	18:28:20

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1672774.5	3403.67	0.20%	100.00	%
Sc RADIAL	145754.2	1879.88	1.29%	100	%
Y 371.029	1022581.6	281.95	0.03%	100.00	%
Ag 328.068†	2967.0	90.92	3.06%	[0.00]	µg/L
Al 396.153Radial†	-31.9	9.54	29.92%	[0.00]	µg/L
As 188.979†	-14.2	5.41	37.98%	[0.00]	µg/L
B 249.677†	3355.7	78.00	2.32%	[0.00]	µg/L
Ba 233.527†	-175.1	4.13	2.36%	[0.00]	µg/L
Be 313.107†	-660.1	117.60	17.82%	[0.00]	µg/L
Ca 317.933Radial†	616.2	12.87	2.09%	[0.00]	µg/L
Cd 226.502†	-94.4	0.38	0.41%	[0.00]	µg/L
Co 228.616†	-176.6	7.48	4.23%	[0.00]	µg/L
Cr 267.716†	160.2	29.32	18.30%	[0.00]	µg/L
Cu 324.752†	2424.9	92.45	3.81%	[0.00]	µg/L
Fe 238.204 Radial†	113.3	7.45	6.58%	[0.00]	µg/L
K 766.490 Radial†	1455.0	48.06	3.30%	[0.00]	µg/L
Mg 279.077 IEC†	186.7	7.04	3.77%	[0.00]	µg/L
Mn 257.610†	80.0	9.46	11.83%	[0.00]	µg/L
Mo 202.031†	-55.2	6.06	10.98%	[0.00]	µg/L
Na 589.592 Radial†	1694.7	39.52	2.33%	[0.00]	µg/L
Ni 231.604†	-40.9	24.66	60.28%	[0.00]	µg/L
P 214.914†	79.6	17.37	21.83%	[0.00]	µg/L
Pb 220.353†	112.4	9.96	8.86%	[0.00]	µg/L
S 181.975 Axial†	94.8	6.43	6.78%	[0.00]	µg/L
Sb 206.836†	86.6	7.13	8.23%	[0.00]	µg/L
Se 196.026†	10.9	4.59	42.08%	[0.00]	µg/L
SiO2†	1572.9	37.13	2.36%	[0.00]	µg/L
Si 251.611†	676.4	48.15	7.12%	[0.00]	µg/L
Sn 189.927†	2.0	4.32	214.20%	[0.00]	µg/L
Sr 421.552†	-278.0	42.30	15.22%	[0.00]	µg/L
Ti 334.940†	636.3	93.67	14.72%	[0.00]	µg/L
Tl 190.801†	-120.3	5.87	4.88%	[0.00]	µg/L
U 409.014†	-479.1	76.26	15.92%	[0.00]	µg/L
V 292.402†	431.8	79.70	18.46%	[0.00]	µg/L
Zn 213.857†	464.4	6.40	1.38%	[0.00]	µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 3/29/2010 18:28:28
Data Type: Reprocessed on 3/29/2010 19:14:33

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1661946.1	1661946.1	99.353	%	18:29:20
1	Sc RADIAL	142262.8	142262.8	97.6	%	18:28:58
1	Y 371.029	1013636.7	1013636.7	99.125	%	18:29:20
1	Ag 328.068†	28004.5	25219.9	[100]	µg/L	18:29:22
1	As 188.979†	214.7	230.4	[100]	µg/L	18:29:42
1	B 249.677†	9080.8	5784.2	[100]	µg/L	18:29:22
1	Ba 233.527†	21988.9	22307.2	[100]	µg/L	18:29:22
1	Be 313.107†	303759.0	306398.2	[100]	µg/L	18:29:20
1	Cd 226.502†	14418.1	14606.5	[100]	µg/L	18:29:22
1	Co 228.616†	7233.5	7457.2	[100]	µg/L	18:29:42
1	Cr 267.716†	11824.2	11741.0	[100]	µg/L	18:29:22
1	Cu 324.752†	25515.5	23256.9	[100]	µg/L	18:29:22
1	K 766.490 Radial†	3700.4	2336.2	[1000]	µg/L	18:28:58
1	Mn 257.610†	75396.6	75807.8	[100]	µg/L	18:29:22
1	Mo 202.031†	3080.8	3156.1	[100]	µg/L	18:29:42
1	Ni 231.604†	8001.7	8094.7	[100]	µg/L	18:29:22
1	P 214.914†	2111.9	2046.0	[500]	µg/L	18:29:42
1	Pb 220.353†	1769.2	1668.3	[100]	µg/L	18:29:42
1	S 181.975 Axial†	329.8	237.2	[200]	µg/L	18:29:42
1	Sb 206.836†	823.1	741.9	[100]	µg/L	18:29:42
1	Se 196.026†	270.2	261.0	[100]	µg/L	18:29:42
1	SiO2†	11219.8	9720.0	[1069.5]	µg/L	18:29:22
1	Si 251.611†	30808.9	30333.3	[500]	µg/L	18:29:22
1	Sn 189.927†	1389.8	1396.8	[100]	µg/L	18:29:42
1	Sr 421.552†	43261.6	44601.3	[100]	µg/L	18:28:58
1	Ti 334.940†	97625.2	97625.0	[100]	µg/L	18:29:22
1	Tl 190.801†	629.9	754.3	[100]	µg/L	18:29:42
1	U 409.014†	1288.2	1775.7	[100]	µg/L	18:29:22
1	V 292.402†	18219.3	17906.2	[100]	µg/L	18:29:22
1	Zn 213.857†	16338.0	15980.0	[100]	µg/L	18:29:22
2	Sc 361.383	1666549.8	1666549.8	99.628	%	18:29:44
2	Sc RADIAL	146980.5	146980.5	101	%	18:29:00
2	Y 371.029	1017353.0	1017353.0	99.489	%	18:29:44
2	Ag 328.068†	28245.8	25384.2	[100]	µg/L	18:29:47
2	As 188.979†	216.8	231.9	[100]	µg/L	18:30:07
2	B 249.677†	9095.6	5773.9	[100]	µg/L	18:29:47
2	Ba 233.527†	22220.1	22478.2	[100]	µg/L	18:29:47
2	Be 313.107†	301592.1	303378.7	[100]	µg/L	18:29:44
2	Cd 226.502†	14444.4	14592.7	[100]	µg/L	18:29:47
2	Co 228.616†	7194.5	7397.9	[100]	µg/L	18:30:07
2	Cr 267.716†	11989.4	11874.0	[100]	µg/L	18:29:47
2	Cu 324.752†	25454.5	23124.7	[100]	µg/L	18:29:47
2	K 766.490 Radial†	3828.6	2341.7	[1000]	µg/L	18:29:00
2	Mn 257.610†	75955.3	76159.0	[100]	µg/L	18:29:47
2	Mo 202.031†	3072.9	3139.6	[100]	µg/L	18:30:07
2	Ni 231.604†	7945.1	8015.7	[100]	µg/L	18:29:47
2	P 214.914†	2095.0	2023.3	[500]	µg/L	18:30:07
2	Pb 220.353†	1806.4	1700.7	[100]	µg/L	18:30:07
2	S 181.975 Axial†	328.8	235.2	[200]	µg/L	18:30:07
2	Sb 206.836†	831.1	747.6	[100]	µg/L	18:30:07
2	Se 196.026†	268.7	258.8	[100]	µg/L	18:30:07
2	SiO2†	11380.9	9850.6	[1069.5]	µg/L	18:29:47
2	Si 251.611†	30908.3	30347.4	[500]	µg/L	18:29:47
2	Sn 189.927†	1386.9	1390.0	[100]	µg/L	18:30:07
2	Sr 421.552†	43897.3	43809.0	[100]	µg/L	18:29:00
2	Ti 334.940†	97949.2	97678.7	[100]	µg/L	18:29:47
2	Tl 190.801†	629.9	752.6	[100]	µg/L	18:30:07
2	U 409.014†	1127.3	1610.7	[100]	µg/L	18:29:47

2	V 292.402†	18287.8	17924.3	[100] µg/L	18:29:47
2	Zn 213.857†	16478.9	16076.1	[100] µg/L	18:29:47
3	Sc 361.383	1678711.7	1678711.7	100.35 %	18:30:09
3	Sc RADIAL	143945.0	143945.0	98.8 %	18:29:02
3	Y 371.029	1024374.9	1024374.9	100.18 %	18:30:09
3	Ag 328.068†	27960.9	24894.9	[100] µg/L	18:30:11
3	As 188.979†	221.3	234.7	[100] µg/L	18:30:31
3	B 249.677†	9088.4	5700.5	[100] µg/L	18:30:11
3	Ba 233.527†	21982.2	22079.5	[100] µg/L	18:30:11
3	Be 313.107†	305374.6	304954.6	[100] µg/L	18:30:09
3	Cd 226.502†	14449.3	14492.6	[100] µg/L	18:30:11
3	Co 228.616†	7225.7	7376.7	[100] µg/L	18:30:31
3	Cr 267.716†	11783.4	11581.4	[100] µg/L	18:30:11
3	Cu 324.752†	25635.6	23120.1	[100] µg/L	18:30:11
3	K 766.490 Radial†	3785.9	2378.5	[1000] µg/L	18:29:02
3	Mn 257.610†	75567.2	75219.9	[100] µg/L	18:30:11
3	Mo 202.031†	3088.5	3132.8	[100] µg/L	18:30:31
3	Ni 231.604†	7999.7	8012.3	[100] µg/L	18:30:11
3	P 214.914†	2091.9	2004.9	[500] µg/L	18:30:31
3	Pb 220.353†	1784.3	1665.6	[100] µg/L	18:30:31
3	S 181.975 Axial†	327.0	231.0	[200] µg/L	18:30:31
3	Sb 206.836†	817.3	727.8	[100] µg/L	18:30:31
3	Se 196.026†	251.7	239.9	[100] µg/L	18:30:31
3	SiO2†	11327.9	9715.0	[1069.5] µg/L	18:30:11
3	Si 251.611†	30819.3	30033.9	[500] µg/L	18:30:11
3	Sn 189.927†	1401.4	1394.4	[100] µg/L	18:30:31
3	Sr 421.552†	43851.5	44680.7	[100] µg/L	18:29:02
3	Ti 334.940†	97740.3	96758.3	[100] µg/L	18:30:11
3	Tl 190.801†	620.5	738.6	[100] µg/L	18:30:31
3	U 409.014†	1269.9	1744.5	[100] µg/L	18:30:11
3	V 292.402†	18059.5	17563.8	[100] µg/L	18:30:11
3	Zn 213.857†	16510.7	15987.9	[100] µg/L	18:30:11

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1669069.2	8662.09	0.52%	99.778	%
Sc RADIAL	144396.1	2390.99	1.66%	99.1	%
Y 371.029	1018454.9	5453.26	0.54%	99.596	%
Ag 328.068†	25166.4	249.02	0.99%	[100]	µg/L
As 188.979†	232.3	2.20	0.95%	[100]	µg/L
B 249.677†	5752.9	45.63	0.79%	[100]	µg/L
Ba 233.527†	22288.3	200.02	0.90%	[100]	µg/L
Be 313.107†	304910.5	1510.27	0.50%	[100]	µg/L
Cd 226.502†	14563.9	62.13	0.43%	[100]	µg/L
Co 228.616†	7410.6	41.70	0.56%	[100]	µg/L
Cr 267.716†	11732.1	146.47	1.25%	[100]	µg/L
Cu 324.752†	23167.2	77.70	0.34%	[100]	µg/L
K 766.490 Radial†	2352.1	22.98	0.98%	[1000]	µg/L
Mn 257.610†	75728.9	474.50	0.63%	[100]	µg/L
Mo 202.031†	3142.8	11.99	0.38%	[100]	µg/L
Ni 231.604†	8040.9	46.63	0.58%	[100]	µg/L
P 214.914†	2024.7	20.61	1.02%	[500]	µg/L
Pb 220.353†	1678.2	19.56	1.17%	[100]	µg/L
S 181.975 Axial†	234.4	3.15	1.34%	[200]	µg/L
Sb 206.836†	739.1	10.21	1.38%	[100]	µg/L
Se 196.026†	253.2	11.62	4.59%	[100]	µg/L
SiO2†	9761.9	76.87	0.79%	[1069.5]	µg/L
Si 251.611†	30238.2	177.02	0.59%	[500]	µg/L
Sn 189.927†	1393.8	3.45	0.25%	[100]	µg/L
Sr 421.552†	44363.6	481.98	1.09%	[100]	µg/L
Ti 334.940†	97354.0	516.57	0.53%	[100]	µg/L
Tl 190.801†	748.5	8.62	1.15%	[100]	µg/L
U 409.014†	1710.3	87.69	5.13%	[100]	µg/L
V 292.402†	17798.1	203.14	1.14%	[100]	µg/L
Zn 213.857†	16014.7	53.32	0.33%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 3/29/2010 18:30:39
Data Type: Reprocessed on 3/29/2010 19:14:34

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1666330.4	1666330.4	99.615	%	18:31:37
1	Sc RADIAL	146255.9	146255.9	100	%	18:31:10
1	Y 371.029	1010770.4	1010770.4	98.845	%	18:31:37
1	Ag 328.068†	124810.0	122325.6	[500]	µg/L	18:31:37
1	Al 396.153Radial†	22730.9	22684.8	[5000]	µg/L	18:31:10
1	As 188.979†	1130.3	1148.9	[500]	µg/L	18:31:57
1	B 249.677†	32443.2	29213.0	[500]	µg/L	18:31:37
1	Ba 233.527†	108021.9	108614.7	[500]	µg/L	18:31:37
1	Be 313.107†	1516563.3	1523088.3	[500]	µg/L	18:31:37
1	Ca 317.933Radial†	86179.3	85267.4	[5000]	µg/L	18:31:10
1	Cd 226.502†	71219.1	71589.0	[500]	µg/L	18:31:37
1	Co 228.616†	35394.0	35707.4	[500]	µg/L	18:31:57
1	Cr 267.716†	57615.1	57677.6	[500]	µg/L	18:31:37
1	Cu 324.752†	116290.7	114315.5	[500]	µg/L	18:31:37
1	K 766.490 Radial†	13629.8	12128.1	[5000]	µg/L	18:31:10
1	Mg 279.077 IEC†	12468.2	12238.8	[5000]	µg/L	18:31:10
1	Mn 257.610†	362696.8	364019.5	[500]	µg/L	18:31:37
1	Mo 202.031†	15371.1	15485.8	[500]	µg/L	18:31:57
1	Ni 231.604†	38767.1	38957.9	[500]	µg/L	18:31:37
1	P 214.914†	10122.4	10082.0	[2500]	µg/L	18:31:57
1	Pb 220.353†	8161.6	8080.8	[500]	µg/L	18:31:57
1	S 181.975 Axial†	1278.6	1188.7	[1000]	µg/L	18:31:57
1	Sb 206.836†	3687.2	3614.8	[500]	µg/L	18:31:57
1	Se 196.026†	1225.0	1218.8	[500]	µg/L	18:31:57
1	SiO2†	49926.4	48546.6	[5347.5]	µg/L	18:31:37
1	Si 251.611†	150511.0	150416.7	[2500]	µg/L	18:31:37
1	Sn 189.927†	6828.0	6852.4	[500]	µg/L	18:31:57
1	Sr 421.552†	212817.9	212365.9	[500]	µg/L	18:31:08
1	Ti 334.940†	484276.9	485513.3	[500]	µg/L	18:31:37
1	Tl 190.801†	3503.2	3637.1	[500]	µg/L	18:31:57
1	U 409.014†	6910.1	7415.9	[500]	µg/L	18:31:37
1	V 292.402†	89155.4	89068.4	[500]	µg/L	18:31:37
1	Zn 213.857†	79249.5	79091.5	[500]	µg/L	18:31:37
2	Sc 361.383	1656377.5	1656377.5	99.020	%	18:32:00
2	Sc RADIAL	143364.9	143364.9	98.4	%	18:31:14
2	Y 371.029	1005040.5	1005040.5	98.285	%	18:32:00
2	Ag 328.068†	123893.4	122152.8	[500]	µg/L	18:32:00
2	Al 396.153Radial†	22411.8	22817.2	[5000]	µg/L	18:31:14
2	As 188.979†	1160.9	1186.7	[500]	µg/L	18:32:21
2	B 249.677†	32166.0	29128.7	[500]	µg/L	18:32:00
2	Ba 233.527†	106821.0	108053.5	[500]	µg/L	18:32:00
2	Be 313.107†	1497872.7	1513360.7	[500]	µg/L	18:32:00
2	Ca 317.933Radial†	83955.9	84739.0	[5000]	µg/L	18:31:14
2	Cd 226.502†	70376.7	71167.8	[500]	µg/L	18:32:00
2	Co 228.616†	35865.0	36396.7	[500]	µg/L	18:32:21
2	Cr 267.716†	57094.1	57499.1	[500]	µg/L	18:32:00
2	Cu 324.752†	115218.7	113934.4	[500]	µg/L	18:32:00
2	K 766.490 Radial†	13146.4	11910.5	[5000]	µg/L	18:31:14
2	Mg 279.077 IEC†	12081.5	12096.2	[5000]	µg/L	18:31:14
2	Mn 257.610†	359096.8	362571.6	[500]	µg/L	18:32:00
2	Mo 202.031†	15556.5	15765.7	[500]	µg/L	18:32:21
2	Ni 231.604†	38151.2	38569.7	[500]	µg/L	18:32:00
2	P 214.914†	10250.6	10272.5	[2500]	µg/L	18:32:21
2	Pb 220.353†	8247.6	8216.9	[500]	µg/L	18:32:21
2	S 181.975 Axial†	1295.5	1213.5	[1000]	µg/L	18:32:21
2	Sb 206.836†	3729.7	3679.9	[500]	µg/L	18:32:21
2	Se 196.026†	1259.6	1261.2	[500]	µg/L	18:32:21
2	SiO2†	49488.1	48405.1	[5347.5]	µg/L	18:32:00

2	Si 251.611†	149066.4	149865.6	[2500] µg/L	18:32:00
2	Sn 189.927†	6928.0	6994.5	[500] µg/L	18:32:21
2	Sr 421.552†	210571.1	214358.5	[500] µg/L	18:31:12
2	Ti 334.940†	480119.5	484236.0	[500] µg/L	18:32:00
2	Tl 190.801†	3520.8	3676.0	[500] µg/L	18:32:21
2	U 409.014†	6871.4	7418.6	[500] µg/L	18:32:00
2	V 292.402†	88228.0	88669.5	[500] µg/L	18:32:00
2	Zn 213.857†	78116.6	78425.5	[500] µg/L	18:32:00
3	Sc 361.383	1678591.9	1678591.9	100.35 %	18:32:24
3	Sc RADIAL	148088.8	148088.8	102 %	18:31:18
3	Y 371.029	1018746.9	1018746.9	99.625 %	18:32:24
3	Ag 328.068†	125886.3	122483.0	[500] µg/L	18:32:24
3	Al 396.153Radial†	22914.6	22585.2	[5000] µg/L	18:31:18
3	As 188.979†	1161.2	1171.4	[500] µg/L	18:32:44
3	B 249.677†	32821.8	29352.3	[500] µg/L	18:32:24
3	Ba 233.527†	108685.7	108484.1	[500] µg/L	18:32:24
3	Be 313.107†	1528160.6	1523524.6	[500] µg/L	18:32:24
3	Ca 317.933Radial†	86630.7	84648.8	[5000] µg/L	18:31:18
3	Cd 226.502†	72351.9	72195.6	[500] µg/L	18:32:24
3	Co 228.616†	36165.4	36216.7	[500] µg/L	18:32:44
3	Cr 267.716†	58224.7	57862.7	[500] µg/L	18:32:24
3	Cu 324.752†	117068.1	114237.5	[500] µg/L	18:32:24
3	K 766.490 Radial†	13544.3	11875.7	[5000] µg/L	18:31:18
3	Mg 279.077 IEC†	12711.0	12323.9	[5000] µg/L	18:31:18
3	Mn 257.610†	365977.4	364629.0	[500] µg/L	18:32:24
3	Mo 202.031†	15658.0	15658.9	[500] µg/L	18:32:44
3	Ni 231.604†	38949.9	38855.9	[500] µg/L	18:32:24
3	P 214.914†	10378.5	10262.9	[2500] µg/L	18:32:44
3	Pb 220.353†	8301.3	8160.1	[500] µg/L	18:32:44
3	S 181.975 Axial†	1298.3	1199.0	[1000] µg/L	18:32:44
3	Sb 206.836†	3757.3	3657.7	[500] µg/L	18:32:44
3	Se 196.026†	1268.4	1253.0	[500] µg/L	18:32:44
3	SiO2†	50453.3	48705.6	[5347.5] µg/L	18:32:24
3	Si 251.611†	151847.8	150645.2	[2500] µg/L	18:32:24
3	Sn 189.927†	6976.6	6950.4	[500] µg/L	18:32:44
3	Sr 421.552†	212729.2	209653.5	[500] µg/L	18:31:16
3	Ti 334.940†	487904.2	485577.0	[500] µg/L	18:32:24
3	Tl 190.801†	3573.5	3681.5	[500] µg/L	18:32:44
3	U 409.014†	7083.7	7538.2	[500] µg/L	18:32:24
3	V 292.402†	89928.1	89184.6	[500] µg/L	18:32:24
3	Zn 213.857†	79862.3	79121.1	[500] µg/L	18:32:24

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1667099.9	11127.18	0.67%	99.661	%
Sc RADIAL	145903.2	2381.65	1.63%	100	%
Y 371.029	1011519.3	6883.81	0.68%	98.918	%
Ag 328.068†	122320.5	165.15	0.14%	[500]	µg/L
Al 396.153Radial†	22695.7	116.36	0.51%	[5000]	µg/L
As 188.979†	1169.0	19.01	1.63%	[500]	µg/L
B 249.677†	29231.4	112.94	0.39%	[500]	µg/L
Ba 233.527†	108384.1	293.66	0.27%	[500]	µg/L
Be 313.107†	1519991.2	5746.30	0.38%	[500]	µg/L
Ca 317.933Radial†	84885.1	334.21	0.39%	[5000]	µg/L
Cd 226.502†	71650.8	516.66	0.72%	[500]	µg/L
Co 228.616†	36106.9	357.49	0.99%	[500]	µg/L
Cr 267.716†	57679.8	181.81	0.32%	[500]	µg/L
Cu 324.752†	114162.5	201.35	0.18%	[500]	µg/L
K 766.490 Radial†	11971.4	136.75	1.14%	[5000]	µg/L
Mg 279.077 IEC†	12219.6	115.04	0.94%	[5000]	µg/L
Mn 257.610†	363740.0	1056.77	0.29%	[500]	µg/L
Mo 202.031†	15636.8	141.25	0.90%	[500]	µg/L
Ni 231.604†	38794.5	201.22	0.52%	[500]	µg/L
P 214.914†	10205.8	107.31	1.05%	[2500]	µg/L
Pb 220.353†	8152.6	68.35	0.84%	[500]	µg/L
S 181.975 Axial†	1200.4	12.45	1.04%	[1000]	µg/L
Sb 206.836†	3650.8	33.08	0.91%	[500]	µg/L
Se 196.026†	1244.3	22.47	1.81%	[500]	µg/L
SiO2†	48552.4	150.29	0.31%	[5347.5]	µg/L

Si 251.611†	150309.2	400.75	0.27%	[2500]	µg/L
Sn 189.927†	6932.4	72.76	1.05%	[500]	µg/L
Sr 421.552†	212126.0	2361.66	1.11%	[500]	µg/L
Ti 334.940†	485108.8	756.53	0.16%	[500]	µg/L
Tl 190.801†	3664.9	24.20	0.66%	[500]	µg/L
U 409.014†	7457.6	69.86	0.94%	[500]	µg/L
V 292.402†	88974.2	270.15	0.30%	[500]	µg/L
Zn 213.857†	78879.4	393.36	0.50%	[500]	µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 3/29/2010 18:32:52
Data Type: Reprocessed on 3/29/2010 19:14:34

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1695274.3	1695274.3	101.35	%	18:33:51
1	Sc RADIAL	148093.8	148093.8	102	%	18:33:23
1	Y 371.029	1024428.2	1024428.2	100.18	%	18:33:51
1	Ag 328.068†	253437.3	247106.6	[1000]	µg/L	18:33:51
1	Al 396.153Radial†	47074.8	46363.0	[10000]	µg/L	18:33:23
1	As 188.979†	2423.7	2405.8	[1000]	µg/L	18:33:53
1	B 249.677†	64171.5	59964.1	[1000]	µg/L	18:33:51
1	Ba 233.527†	222696.0	219915.4	[1000]	µg/L	18:33:51
1	Be 313.107†	3125497.2	3084675.4	[1000]	µg/L	18:33:51
1	Ca 317.933Radial†	175989.6	172593.1	[10000]	µg/L	18:33:23
1	Cd 226.502†	147319.9	145459.1	[1000]	µg/L	18:33:51
1	Co 228.616†	73285.4	72489.3	[1000]	µg/L	18:33:53
1	Cr 267.716†	118453.3	116720.9	[1000]	µg/L	18:33:51
1	Cu 324.752†	236158.0	230598.8	[1000]	µg/L	18:33:51
1	Fe 238.204 Radial†	153305.8	150770.6	[10000]	µg/L	18:33:23
1	K 766.490 Radial†	26333.7	24462.7	[10000]	µg/L	18:33:23
1	Mg 279.077 IEC†	25539.7	24949.5	[10000]	µg/L	18:33:23
1	Mn 257.610†	742700.4	732763.2	[1000]	µg/L	18:33:51
1	Mo 202.031†	31916.7	31548.3	[1000]	µg/L	18:33:53
1	Na 589.592 Radial†	67840.0	65073.6	[10000]	µg/L	18:33:23
1	Ni 231.604†	79543.1	78528.3	[1000]	µg/L	18:33:51
1	P 214.914†	21051.1	20692.1	[5000]	µg/L	18:33:53
1	Pb 220.353†	16751.4	16416.6	[1000]	µg/L	18:33:53
1	S 181.975 Axial†	2600.1	2470.7	[2000]	µg/L	18:33:53
1	Sb 206.836†	7615.0	7427.3	[1000]	µg/L	18:33:53
1	Se 196.026†	2517.5	2473.2	[1000]	µg/L	18:33:53
1	SiO2†	101024.7	98111.1	[10695]	µg/L	18:33:51
1	Si 251.611†	307939.1	303175.7	[5000]	µg/L	18:33:51
1	Sn 189.927†	14211.0	14020.4	[1000]	µg/L	18:33:53
1	Sr 421.552†	434456.1	427870.5	[1000]	µg/L	18:33:21
1	Ti 334.940†	997481.3	983606.3	[1000]	µg/L	18:33:51
1	Tl 190.801†	7335.9	7358.9	[1000]	µg/L	18:33:53
1	U 409.014†	16212.4	16476.3	[1000]	µg/L	18:33:51
1	V 292.402†	183867.8	180995.7	[1000]	µg/L	18:33:51
1	Zn 213.857†	161925.8	159312.2	[1000]	µg/L	18:33:51
2	Sc 361.383	1690996.4	1690996.4	101.09	%	18:33:57
2	Sc RADIAL	145999.7	145999.7	100	%	18:33:27
2	Y 371.029	1021922.1	1021922.1	99.936	%	18:33:57
2	Ag 328.068†	252044.6	246361.5	[1000]	µg/L	18:33:57
2	Al 396.153Radial†	46624.8	46578.3	[10000]	µg/L	18:33:27
2	As 188.979†	2403.1	2391.4	[1000]	µg/L	18:33:59
2	B 249.677†	63843.6	59800.0	[1000]	µg/L	18:33:57
2	Ba 233.527†	221227.7	219018.9	[1000]	µg/L	18:33:57
2	Be 313.107†	3107291.9	3074468.3	[1000]	µg/L	18:33:57
2	Ca 317.933Radial†	173656.9	172748.8	[10000]	µg/L	18:33:27
2	Cd 226.502†	146575.4	145090.3	[1000]	µg/L	18:33:57
2	Co 228.616†	74805.8	74176.3	[1000]	µg/L	18:33:59
2	Cr 267.716†	118015.5	116583.5	[1000]	µg/L	18:33:57
2	Cu 324.752†	235118.6	230160.1	[1000]	µg/L	18:33:57
2	Fe 238.204 Radial†	151211.1	150843.6	[10000]	µg/L	18:33:27
2	K 766.490 Radial†	25931.4	24432.8	[10000]	µg/L	18:33:27
2	Mg 279.077 IEC†	24969.0	24740.4	[10000]	µg/L	18:33:27
2	Mn 257.610†	740445.3	732386.4	[1000]	µg/L	18:33:57
2	Mo 202.031†	32495.1	32200.2	[1000]	µg/L	18:33:59
2	Na 589.592 Radial†	67249.4	65441.6	[10000]	µg/L	18:33:27
2	Ni 231.604†	79100.3	78288.9	[1000]	µg/L	18:33:57
2	P 214.914†	21690.5	21377.2	[5000]	µg/L	18:33:59
2	Pb 220.353†	17172.9	16875.4	[1000]	µg/L	18:33:59

2	S 181.975 Axial†	2679.6	2555.9	[2000] µg/L	18:33:59
2	Sb 206.836†	7635.7	7466.8	[1000] µg/L	18:33:59
2	Se 196.026†	2666.5	2626.9	[1000] µg/L	18:33:59
2	SiO2†	100664.8	98007.2	[10695] µg/L	18:33:57
2	Si 251.611†	306502.8	302523.6	[5000] µg/L	18:33:57
2	Sn 189.927†	14443.7	14286.0	[1000] µg/L	18:33:59
2	Sr 421.552†	430963.7	430517.1	[1000] µg/L	18:33:25
2	Ti 334.940†	993955.9	982608.8	[1000] µg/L	18:33:57
2	Tl 190.801†	7531.3	7570.4	[1000] µg/L	18:33:59
2	U 409.014†	16040.6	16346.9	[1000] µg/L	18:33:57
2	V 292.402†	183235.5	180829.1	[1000] µg/L	18:33:57
2	Zn 213.857†	161264.5	159062.3	[1000] µg/L	18:33:57
3	Sc 361.383	1679595.4	1679595.4	100.41 %	18:34:04
3	Sc RADIAL	149693.3	149693.3	103 %	18:33:31
3	Y 371.029	1015550.9	1015550.9	99.312 %	18:34:04
3	Ag 328.068†	251016.5	247030.1	[1000] µg/L	18:34:04
3	Al 396.153Radial†	47551.4	46332.0	[10000] µg/L	18:33:31
3	As 188.979†	2421.2	2425.6	[1000] µg/L	18:34:06
3	B 249.677†	63426.3	59813.0	[1000] µg/L	18:34:04
3	Ba 233.527†	219963.3	219245.0	[1000] µg/L	18:34:04
3	Be 313.107†	3093622.9	3081719.7	[1000] µg/L	18:34:04
3	Ca 317.933Radial†	178184.0	172879.1	[10000] µg/L	18:33:31
3	Cd 226.502†	145509.3	145012.8	[1000] µg/L	18:34:04
3	Co 228.616†	73160.7	73040.2	[1000] µg/L	18:34:06
3	Cr 267.716†	117369.2	116732.4	[1000] µg/L	18:34:04
3	Cu 324.752†	233979.9	230604.8	[1000] µg/L	18:34:04
3	Fe 238.204 Radial†	154947.1	150756.5	[10000] µg/L	18:33:31
3	K 766.490 Radial†	26410.5	24260.6	[10000] µg/L	18:33:31
3	Mg 279.077 IEC†	25740.2	24876.2	[10000] µg/L	18:33:31
3	Mn 257.610†	735902.7	732834.1	[1000] µg/L	18:34:04
3	Mo 202.031†	31675.9	31602.5	[1000] µg/L	18:34:06
3	Na 589.592 Radial†	68591.3	65091.7	[10000] µg/L	18:33:31
3	Ni 231.604†	78372.8	78095.4	[1000] µg/L	18:34:04
3	P 214.914†	21100.1	20934.8	[5000] µg/L	18:34:06
3	Pb 220.353†	16565.8	16386.1	[1000] µg/L	18:34:06
3	S 181.975 Axial†	2538.8	2433.7	[2000] µg/L	18:34:06
3	Sb 206.836†	7547.1	7429.8	[1000] µg/L	18:34:06
3	Se 196.026†	2534.8	2513.6	[1000] µg/L	18:34:06
3	SiO2†	99973.5	97994.7	[10695] µg/L	18:34:04
3	Si 251.611†	304718.9	302805.0	[5000] µg/L	18:34:04
3	Sn 189.927†	14107.2	14047.9	[1000] µg/L	18:34:06
3	Sr 421.552†	434068.2	422924.1	[1000] µg/L	18:33:29
3	Ti 334.940†	988596.9	983945.8	[1000] µg/L	18:34:04
3	Tl 190.801†	7419.8	7510.0	[1000] µg/L	18:34:06
3	U 409.014†	16237.0	16650.2	[1000] µg/L	18:34:04
3	V 292.402†	181988.8	180817.9	[1000] µg/L	18:34:04
3	Zn 213.857†	160057.9	158943.5	[1000] µg/L	18:34:04

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Sc 361.383	1688622.0	8104.65	0.48%	100.95	%
Sc RADIAL	147928.9	1852.30	1.25%	101	%
Y 371.029	1020633.7	4576.76	0.45%	99.810	%
Ag 328.068†	246832.7	409.85	0.17%	[1000]	µg/L
Al 396.153Radial†	46424.4	134.12	0.29%	[10000]	µg/L
As 188.979†	2407.6	17.16	0.71%	[1000]	µg/L
B 249.677†	59859.0	91.23	0.15%	[1000]	µg/L
Ba 233.527†	219393.1	466.22	0.21%	[1000]	µg/L
Be 313.107†	3080287.8	5252.04	0.17%	[1000]	µg/L
Ca 317.933Radial†	172740.3	143.17	0.08%	[10000]	µg/L
Cd 226.502†	145187.4	238.43	0.16%	[1000]	µg/L
Co 228.616†	73235.3	860.22	1.17%	[1000]	µg/L
Cr 267.716†	116678.9	82.81	0.07%	[1000]	µg/L
Cu 324.752†	230454.6	255.03	0.11%	[1000]	µg/L
Fe 238.204 Radial†	150790.2	46.73	0.03%	[10000]	µg/L
K 766.490 Radial†	24385.4	109.10	0.45%	[10000]	µg/L
Mg 279.077 IEC†	24855.4	106.12	0.43%	[10000]	µg/L
Mn 257.610†	732661.3	240.63	0.03%	[1000]	µg/L
Mo 202.031†	31783.7	361.73	1.14%	[1000]	µg/L

Na 589.592 Radial†	65202.3	207.44	0.32%	[10000]	µg/L
Ni 231.604†	78304.2	216.83	0.28%	[1000]	µg/L
P 214.914†	21001.4	347.34	1.65%	[5000]	µg/L
Pb 220.353†	16559.4	274.11	1.66%	[1000]	µg/L
S 181.975 Axial†	2486.8	62.65	2.52%	[2000]	µg/L
Sb 206.836†	7441.3	22.10	0.30%	[1000]	µg/L
Se 196.026†	2537.9	79.67	3.14%	[1000]	µg/L
SiO2†	98037.6	63.89	0.07%	[10695]	µg/L
Si 251.611†	302834.8	327.07	0.11%	[5000]	µg/L
Sn 189.927†	14118.1	146.08	1.03%	[1000]	µg/L
Sr 421.552†	427103.9	3854.12	0.90%	[1000]	µg/L
Ti 334.940†	983387.0	694.94	0.07%	[1000]	µg/L
Tl 190.801†	7479.8	108.97	1.46%	[1000]	µg/L
U 409.014†	16491.1	152.21	0.92%	[1000]	µg/L
V 292.402†	180880.9	99.54	0.06%	[1000]	µg/L
Zn 213.857†	159106.0	188.24	0.12%	[1000]	µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 3/29/2010 18:34:14
Data Type: Reprocessed on 3/29/2010 19:14:35
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1647889.5	1647889.5	98.512	%	18:35:05
1	Sc RADIAL	147922.0	147922.0	101	%	18:34:43
1	Y 371.029	997984.1	997984.1	97.595	%	18:35:05
1	Al 396.153Radial†	231630.6	228268.0	[50000]	µg/L	18:34:43
1	Ca 317.933Radial†	864405.0	851121.2	[50000]	µg/L	18:34:43
1	Fe 238.204 Radial†	304562.8	299986.3	[20000]	µg/L	18:34:43
1	Mg 279.077 IEC†	122786.4	120800.3	[50000]	µg/L	18:34:43
1	Na 589.592 Radial†	134121.8	130461.6	[20000]	µg/L	18:34:43
2	Sc 361.383	1646965.2	1646965.2	98.457	%	18:35:08
2	Sc RADIAL	147135.1	147135.1	101	%	18:34:45
2	Y 371.029	998151.2	998151.2	97.611	%	18:35:08
2	Al 396.153Radial†	231070.3	228933.5	[50000]	µg/L	18:34:45
2	Ca 317.933Radial†	860622.6	851929.2	[50000]	µg/L	18:34:45
2	Fe 238.204 Radial†	303079.0	300121.2	[20000]	µg/L	18:34:45
2	Mg 279.077 IEC†	122393.7	121058.3	[50000]	µg/L	18:34:45
2	Na 589.592 Radial†	133483.0	130535.5	[20000]	µg/L	18:34:45
3	Sc 361.383	1642134.3	1642134.3	98.168	%	18:35:10
3	Sc RADIAL	146873.2	146873.2	101	%	18:34:47
3	Y 371.029	994617.7	994617.7	97.265	%	18:35:10
3	Al 396.153Radial†	231391.3	229660.2	[50000]	µg/L	18:34:47
3	Ca 317.933Radial†	862939.8	855749.1	[50000]	µg/L	18:34:47
3	Fe 238.204 Radial†	304238.1	301806.9	[20000]	µg/L	18:34:47
3	Mg 279.077 IEC†	122676.5	121555.2	[50000]	µg/L	18:34:47
3	Na 589.592 Radial†	134070.7	131354.5	[20000]	µg/L	18:34:47

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1645663.0	3090.68	0.19%	98.379	%
Sc RADIAL	147310.1	545.84	0.37%	101	%
Y 371.029	996917.7	1993.60	0.20%	97.490	%
Al 396.153Radial†	228953.9	696.32	0.30%	[50000]	µg/L
Ca 317.933Radial†	852933.2	2471.89	0.29%	[50000]	µg/L
Fe 238.204 Radial†	300638.1	1014.46	0.34%	[20000]	µg/L
Mg 279.077 IEC†	121137.9	383.71	0.32%	[50000]	µg/L
Na 589.592 Radial†	130783.9	495.57	0.38%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	246.4	0.00000	0.999992	
Al 396.153Radial	3	Lin Thru 0	0.0	4.581	0.00000	0.999996	
As 188.979	3	Lin Thru 0	0.0	2.393	0.00000	0.999929	
B 249.677	3	Lin Thru 0	0.0	59.56	0.00000	0.999952	
Ba 233.527	3	Lin Thru 0	0.0	218.9	0.00000	0.999987	
Be 313.107	3	Lin Thru 0	0.0	3072	0.00000	0.999986	
Ca 317.933Radial	3	Lin Thru 0	0.0	17.07	0.00000	0.999997	
Cd 226.502	3	Lin Thru 0	0.0	144.8	0.00000	0.999986	
Co 228.616	3	Lin Thru 0	0.0	73.04	0.00000	0.999984	
Cr 267.716	3	Lin Thru 0	0.0	116.4	0.00000	0.999990	
Cu 324.752	3	Lin Thru 0	0.0	230.0	0.00000	0.999993	
Fe 238.204 Radia	2	Lin Thru 0	0.0	15.04	0.00000	0.999999	
K 766.490 Radial	3	Lin Thru 0	0.0	2.429	0.00000	0.999970	
Mg 279.077 IEC	3	Lin Thru 0	0.0	2.425	0.00000	0.999987	
Mn 257.610	3	Lin Thru 0	0.0	731.8	0.00000	0.999991	
Mo 202.031	3	Lin Thru 0	0.0	31.68	0.00000	0.999979	

Na 589.592 Radia	2	Lin Thru 0	0.0	6.535	0.00000	0.999999
Ni 231.604	3	Lin Thru 0	0.0	78.18	0.00000	0.999990
P 214.914	3	Lin Thru 0	0.0	4.176	0.00000	0.999933
Pb 220.353	3	Lin Thru 0	0.0	16.51	0.00000	0.999980
S 181.975 Axial	3	Lin Thru 0	0.0	1.234	0.00000	0.999894
Sb 206.836	3	Lin Thru 0	0.0	7.413	0.00000	0.999972
Se 196.026	3	Lin Thru 0	0.0	2.528	0.00000	0.999970
SiO2	3	Lin Thru 0	0.0	9.149	0.00000	0.999993
Si 251.611	3	Lin Thru 0	0.0	60.48	0.00000	0.999996
Sn 189.927	3	Lin Thru 0	0.0	14.07	0.00000	0.999974
Sr 421.552	3	Lin Thru 0	0.0	426.7	0.00000	0.999990
Ti 334.940	3	Lin Thru 0	0.0	980.7	0.00000	0.999985
Tl 190.801	3	Lin Thru 0	0.0	7.450	0.00000	0.999968
U 409.014	3	Lin Thru 0	0.0	16.18	0.00000	0.999235
V 292.402	3	Lin Thru 0	0.0	180.3	0.00000	0.999978
Zn 213.857	3	Lin Thru 0	0.0	158.8	0.00000	0.999994

Sequence No.: 6
Sample ID: ICV
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 3/29/2010 18:35:18
Data Type: Reprocessed on 3/29/2010 19:14:36

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 361.383	1701844.8	1701844.8	101.74	%			18:36:17
1	Sc RADIAL	151216.0	151216.0	104	%			18:35:50
1	Y 371.029	1036585.9	1036585.9	101.37	%			18:36:17
1	Ag 328.068†	65858.6	61766.5	256.87	µg/L	256.87	ppb	18:36:17
1	Al 396.153Radial†	24486.5	23634.0	5134.9	µg/L	5134.9	ppb	18:35:50
1	As 188.979†	1140.6	1135.4	481.67	µg/L	481.67	ppb	18:36:37
1	B 249.677†	34168.2	30228.9	505.75	µg/L	505.75	ppb	18:36:17
1	Ba 233.527†	112714.3	110964.0	507.33	µg/L	507.33	ppb	18:36:17
1	Be 313.107†	798269.6	785294.0	255.76	µg/L	255.76	ppb	18:36:17
1	Ca 317.933Radial†	89164.4	85327.7	4999.8	µg/L	4999.8	ppb	18:35:50
1	Cd 226.502†	72993.3	71840.9	495.79	µg/L	495.79	ppb	18:36:17
1	Co 228.616†	37444.2	36981.2	506.64	µg/L	506.64	ppb	18:36:17
1	Cr 267.716†	57873.1	56724.3	487.10	µg/L	487.10	ppb	18:36:17
1	Cu 324.752†	121386.5	116888.2	509.66	µg/L	509.66	ppb	18:36:17
1	Fe 238.204 Radial†	78431.6	75485.5	5018.5	µg/L	5018.5	ppb	18:35:50
1	K 766.490 Radial†	7725.2	5991.2	2463.6	µg/L	2463.6	ppb	18:35:50
1	Mg 279.077 IEC†	13310.9	12643.4	5221.4	µg/L	5221.4	ppb	18:35:50
1	Mn 257.610†	376288.9	369781.3	505.06	µg/L	505.06	ppb	18:36:17
1	Mo 202.031†	16673.6	16444.0	519.54	µg/L	519.54	ppb	18:36:37
1	Na 589.592 Radial†	18471.5	16109.6	2462.8	µg/L	2462.8	ppb	18:35:50
1	Ni 231.604†	39283.0	38652.9	494.42	µg/L	494.42	ppb	18:36:17
1	P 214.914†	10554.2	10294.3	2456.6	µg/L	2456.6	ppb	18:36:37
1	Pb 220.353†	8472.5	8215.3	499.30	µg/L	499.30	ppb	18:36:37
1	S 181.975 Axial†	3123.6	2975.4	2415.0	µg/L	2415.0	ppb	18:36:37
1	Sb 206.836†	3775.1	3624.0	490.49	µg/L	490.49	ppb	18:36:37
1	Se 196.026†	6364.3	6244.7	2470	µg/L	2470	ppb	18:36:37
1	SiO2†	99568.8	96295.2	10503	µg/L	10503	ppb	18:36:17
1	Si 251.611†	303093.3	297239.6	4904.5	µg/L	4904.5	ppb	18:36:17
1	Sn 189.927†	7432.7	7303.7	520.86	µg/L	520.86	ppb	18:36:37
1	Sr 421.552†	233447.1	225293.2	527.99	µg/L	527.99	ppb	18:35:48
1	Ti 334.940†	482527.6	473648.9	482.33	µg/L	482.33	ppb	18:36:17
1	Tl 190.801†	3799.6	3855.0	524.73	µg/L	524.73	ppb	18:36:37
1	U 409.014†	6773.0	7136.4	471.37	µg/L	471.37	ppb	18:36:17
1	V 292.402†	91625.4	89628.5	503.69	µg/L	503.69	ppb	18:36:17
1	Zn 213.857†	81346.1	79492.2	496.47	µg/L	496.47	ppb	18:36:17
2	Sc 361.383	1701980.9	1701980.9	101.75	%			18:36:40
2	Sc RADIAL	148848.9	148848.9	102	%			18:35:54
2	Y 371.029	1036246.9	1036246.9	101.34	%			18:36:40
2	Ag 328.068†	66063.0	61962.3	257.67	µg/L	257.67	ppb	18:36:40
2	Al 396.153Radial†	24189.6	23718.6	5153.2	µg/L	5153.2	ppb	18:35:54
2	As 188.979†	1141.1	1135.8	481.85	µg/L	481.85	ppb	18:37:00
2	B 249.677†	34342.1	30397.1	508.57	µg/L	508.57	ppb	18:36:40
2	Ba 233.527†	113003.6	111239.5	508.60	µg/L	508.60	ppb	18:36:40
2	Be 313.107†	803326.2	790201.1	257.35	µg/L	257.35	ppb	18:36:40
2	Ca 317.933Radial†	87776.3	85335.2	5000.3	µg/L	5000.3	ppb	18:35:54
2	Cd 226.502†	73305.6	72142.1	497.87	µg/L	497.87	ppb	18:36:40
2	Co 228.616†	37456.8	36990.6	506.77	µg/L	506.77	ppb	18:36:40
2	Cr 267.716†	58033.0	56876.9	488.42	µg/L	488.42	ppb	18:36:40
2	Cu 324.752†	121826.1	117310.6	511.48	µg/L	511.48	ppb	18:36:40
2	Fe 238.204 Radial†	77113.3	75396.8	5012.6	µg/L	5012.6	ppb	18:35:54
2	K 766.490 Radial†	7618.8	6005.4	2469.4	µg/L	2469.4	ppb	18:35:54
2	Mg 279.077 IEC†	12970.7	12514.3	5168.3	µg/L	5168.3	ppb	18:35:54
2	Mn 257.610†	377832.0	371268.3	507.10	µg/L	507.10	ppb	18:36:40
2	Mo 202.031†	16755.0	16522.7	522.02	µg/L	522.02	ppb	18:37:00
2	Na 589.592 Radial†	18069.9	15999.5	2445.9	µg/L	2445.9	ppb	18:35:54
2	Ni 231.604†	39447.3	38811.3	496.44	µg/L	496.44	ppb	18:36:40
2	P 214.914†	10626.3	10364.3	2473.3	µg/L	2473.3	ppb	18:37:00
2	Pb 220.353†	8494.9	8236.7	500.61	µg/L	500.61	ppb	18:37:00

2	S 181.975 Axial†	3125.4	2976.9	2416.3 µg/L	2416.3 ppb	18:37:00
2	Sb 206.836†	3806.5	3654.5	494.63 µg/L	494.63 ppb	18:37:00
2	Se 196.026†	6410.3	6289.4	2490 µg/L	2490 ppb	18:37:00
2	SiO2†	100159.6	96868.0	10565 µg/L	10565 ppb	18:36:40
2	Si 251.611†	304136.0	298240.5	4921.0 µg/L	4921.0 ppb	18:36:40
2	Sn 189.927†	7468.1	7337.9	523.29 µg/L	523.29 ppb	18:37:00
2	Sr 421.552†	233080.0	228512.0	535.53 µg/L	535.53 ppb	18:35:52
2	Ti 334.940†	484116.4	475172.5	483.90 µg/L	483.90 ppb	18:36:40
2	Tl 190.801†	3811.9	3866.8	526.34 µg/L	526.34 ppb	18:37:00
2	U 409.014†	6593.5	6959.4	460.57 µg/L	460.57 ppb	18:36:40
2	V 292.402†	92020.5	90009.6	505.83 µg/L	505.83 ppb	18:36:40
2	Zn 213.857†	81495.2	79632.3	497.34 µg/L	497.34 ppb	18:36:40
3	Sc 361.383	1720635.0	1720635.0	102.86 %		18:37:03
3	Sc RADIAL	149044.6	149044.6	102 %		18:35:58
3	Y 371.029	1046771.8	1046771.8	102.37 %		18:37:03
3	Ag 328.068†	66524.8	61707.3	256.63 µg/L	256.63 ppb	18:37:03
3	Al 396.153Radial†	24064.3	23565.0	5120.0 µg/L	5120.0 ppb	18:35:58
3	As 188.979†	1131.9	1114.6	473.00 µg/L	473.00 ppb	18:37:23
3	B 249.677†	34751.0	30428.7	509.10 µg/L	509.10 ppb	18:37:03
3	Ba 233.527†	114119.3	111120.0	508.05 µg/L	508.05 ppb	18:37:03
3	Be 313.107†	809136.9	787290.3	256.41 µg/L	256.41 ppb	18:37:03
3	Ca 317.933Radial†	87762.2	85208.6	4992.9 µg/L	4992.9 ppb	18:35:58
3	Cd 226.502†	74233.6	72263.2	498.71 µg/L	498.71 ppb	18:37:03
3	Co 228.616†	37810.4	36935.2	506.02 µg/L	506.02 ppb	18:37:03
3	Cr 267.716†	58579.7	56790.0	487.67 µg/L	487.67 ppb	18:37:03
3	Cu 324.752†	122627.9	116792.1	509.24 µg/L	509.24 ppb	18:37:03
3	Fe 238.204 Radial†	77211.6	75393.8	5012.4 µg/L	5012.4 ppb	18:35:58
3	K 766.490 Radial†	7631.8	6008.3	2470.6 µg/L	2470.6 ppb	18:35:58
3	Mg 279.077 IEC†	13062.0	12587.0	5198.1 µg/L	5198.1 ppb	18:35:58
3	Mn 257.610†	380724.0	370053.9	505.44 µg/L	505.44 ppb	18:37:03
3	Mo 202.031†	16767.7	16356.5	516.77 µg/L	516.77 ppb	18:37:23
3	Na 589.592 Radial†	18288.4	16189.9	2475.1 µg/L	2475.1 ppb	18:35:58
3	Ni 231.604†	39680.9	38618.1	493.97 µg/L	493.97 ppb	18:37:03
3	P 214.914†	10598.2	10223.8	2439.7 µg/L	2439.7 ppb	18:37:23
3	Pb 220.353†	8535.0	8185.1	497.46 µg/L	497.46 ppb	18:37:23
3	S 181.975 Axial†	3153.8	2971.2	2411.6 µg/L	2411.6 ppb	18:37:23
3	Sb 206.836†	3795.0	3602.8	487.58 µg/L	487.58 ppb	18:37:23
3	Se 196.026†	6408.5	6219.4	2460 µg/L	2460 ppb	18:37:23
3	SiO2†	100969.8	96588.4	10535 µg/L	10535 ppb	18:37:03
3	Si 251.611†	306927.5	297713.8	4912.4 µg/L	4912.4 ppb	18:37:03
3	Sn 189.927†	7476.5	7266.5	518.21 µg/L	518.21 ppb	18:37:23
3	Sr 421.552†	230245.5	225440.5	528.33 µg/L	528.33 ppb	18:35:56
3	Ti 334.940†	487355.2	473162.7	481.84 µg/L	481.84 ppb	18:37:03
3	Tl 190.801†	3807.3	3821.7	520.26 µg/L	520.26 ppb	18:37:23
3	U 409.014†	6788.8	7079.0	467.87 µg/L	467.87 ppb	18:37:03
3	V 292.402†	92755.7	89743.8	504.30 µg/L	504.30 ppb	18:37:03
3	Zn 213.857†	82290.5	79537.1	496.75 µg/L	496.75 ppb	18:37:03

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1708153.5	102.11	%	0.646				0.63%
Sc RADIAL	149703.2	103	%	0.9				0.88%
Y 371.029	1039868.2	101.69	%	0.585				0.58%
Ag 328.068†	61812.1	257.06	µg/L	0.547	257.06	ppb	0.547	0.21%
QC value within limits for Ag 328.068 Recovery = 102.82%								
Al 396.153Radial†	23639.2	5136.0	µg/L	16.67	5136.0	ppb	16.67	0.32%
QC value within limits for Al 396.153Radial Recovery = 102.72%								
As 188.979†	1128.6	478.84	µg/L	5.057	478.84	ppb	5.057	1.06%
QC value within limits for As 188.979 Recovery = 95.77%								
B 249.677†	30351.6	507.81	µg/L	1.804	507.81	ppb	1.804	0.36%
QC value within limits for B 249.677 Recovery = 101.56%								
Ba 233.527†	111107.9	507.99	µg/L	0.632	507.99	ppb	0.632	0.12%
QC value within limits for Ba 233.527 Recovery = 101.60%								
Be 313.107†	787595.1	256.51	µg/L	0.802	256.51	ppb	0.802	0.31%
QC value within limits for Be 313.107 Recovery = 102.60%								
Ca 317.933Radial†	85290.5	4997.7	µg/L	4.16	4997.7	ppb	4.16	0.08%
QC value within limits for Ca 317.933Radial Recovery = 99.95%								
Cd 226.502†	72082.0	497.46	µg/L	1.502	497.46	ppb	1.502	0.30%
QC value within limits for Cd 226.502 Recovery = 99.49%								

Co 228.616†	36969.0	506.48 µg/L	0.406	506.48 ppb	0.406	0.08%
QC value within limits for Co 228.616 Recovery = 101.30%						
Cr 267.716†	56797.1	487.73 µg/L	0.662	487.73 ppb	0.662	0.14%
QC value within limits for Cr 267.716 Recovery = 97.55%						
Cu 324.752†	116997.0	510.13 µg/L	1.195	510.13 ppb	1.195	0.23%
QC value within limits for Cu 324.752 Recovery = 102.03%						
Fe 238.204 Radial†	75425.3	5014.5 µg/L	3.46	5014.5 ppb	3.46	0.07%
QC value within limits for Fe 238.204 Radial Recovery = 100.29%						
K 766.490 Radial†	6001.6	2467.9 µg/L	3.77	2467.9 ppb	3.77	0.15%
QC value within limits for K 766.490 Radial Recovery = 98.71%						
Mg 279.077 IEC†	12581.6	5195.9 µg/L	26.65	5195.9 ppb	26.65	0.51%
QC value within limits for Mg 279.077 IEC Recovery = 103.92%						
Mn 257.610†	370367.8	505.87 µg/L	1.083	505.87 ppb	1.083	0.21%
QC value within limits for Mn 257.610 Recovery = 101.17%						
Mo 202.031†	16441.1	519.44 µg/L	2.624	519.44 ppb	2.624	0.51%
QC value within limits for Mo 202.031 Recovery = 103.89%						
Na 589.592 Radial†	16099.7	2461.3 µg/L	14.63	2461.3 ppb	14.63	0.59%
QC value within limits for Na 589.592 Radial Recovery = 98.45%						
Ni 231.604†	38694.1	494.94 µg/L	1.317	494.94 ppb	1.317	0.27%
QC value within limits for Ni 231.604 Recovery = 98.99%						
P 214.914†	10294.2	2456.5 µg/L	16.81	2456.5 ppb	16.81	0.68%
QC value within limits for P 214.914 Recovery = 98.26%						
Pb 220.353†	8212.4	499.12 µg/L	1.581	499.12 ppb	1.581	0.32%
QC value within limits for Pb 220.353 Recovery = 99.82%						
S 181.975 Axial†	2974.5	2414.3 µg/L	2.40	2414.3 ppb	2.40	0.10%
QC value within limits for S 181.975 Axial Recovery = 96.57%						
Sb 206.836†	3627.1	490.90 µg/L	3.546	490.90 ppb	3.546	0.72%
QC value within limits for Sb 206.836 Recovery = 98.18%						
Se 196.026†	6251.2	2470 µg/L	14.0	2470 ppb	14.0	0.57%
QC value within limits for Se 196.026 Recovery = 98.99%						
SiO2†	96583.8	10534 µg/L	31.3	10534 ppb	31.3	0.30%
QC value within limits for SiO2 Recovery = 98.50%						
Si 251.611†	297731.3	4912.6 µg/L	8.25	4912.6 ppb	8.25	0.17%
QC value within limits for Si 251.611 Recovery = 98.25%						
Sn 189.927†	7302.7	520.79 µg/L	2.541	520.79 ppb	2.541	0.49%
QC value within limits for Sn 189.927 Recovery = 104.16%						
Sr 421.552†	226415.3	530.62 µg/L	4.259	530.62 ppb	4.259	0.80%
QC value within limits for Sr 421.552 Recovery = 106.12%						
Ti 334.940†	473994.7	482.69 µg/L	1.073	482.69 ppb	1.073	0.22%
QC value within limits for Ti 334.940 Recovery = 96.54%						
Tl 190.801†	3847.8	523.78 µg/L	3.151	523.78 ppb	3.151	0.60%
QC value within limits for Tl 190.801 Recovery = 104.76%						
U 409.014†	7058.3	466.61 µg/L	5.511	466.61 ppb	5.511	1.18%
QC value within limits for U 409.014 Recovery = 93.32%						
V 292.402†	89793.9	504.61 µg/L	1.101	504.61 ppb	1.101	0.22%
QC value within limits for V 292.402 Recovery = 100.92%						
Zn 213.857†	79553.9	496.85 µg/L	0.443	496.85 ppb	0.443	0.09%
QC value within limits for Zn 213.857 Recovery = 99.37%						

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICB
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 3/29/2010 18:37:32
Data Type: Reprocessed on 3/29/2010 19:14:36

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1718110.5	1718110.5	102.71	%			18:39:24
1	Sc RADIAL	149870.1	149870.1	103	%			18:38:01
1	Y 371.029	1056124.6	1056124.6	103.28	%			18:39:24
1	Ag 328.068†	2764.1	-275.9	-1.1170	µg/L	-1.1170	ppb	18:39:26
1	Al 396.153Radial†	-34.1	-1.3	-0.3025	µg/L	-0.3025	ppb	18:38:21
1	As 188.979†	-13.9	0.8	0.3158	µg/L	0.3158	ppb	18:39:46
1	B 249.677†	3290.8	-151.7	-2.5477	µg/L	-2.5477	ppb	18:39:46
1	Ba 233.527†	-149.3	29.7	0.1352	µg/L	0.1352	ppb	18:39:46
1	Be 313.107†	-642.8	34.2	0.0134	µg/L	0.0134	ppb	18:39:26
1	Ca 317.933Radial†	601.2	-31.5	-1.8457	µg/L	-1.8457	ppb	18:38:21
1	Cd 226.502†	-82.2	14.4	0.0988	µg/L	0.0988	ppb	18:39:46
1	Co 228.616†	-179.0	2.3	0.0321	µg/L	0.0321	ppb	18:39:46
1	Cr 267.716†	164.4	-0.2	-0.0075	µg/L	-0.0075	ppb	18:39:46
1	Cu 324.752†	2372.4	-115.1	-0.4939	µg/L	-0.4939	ppb	18:39:26
1	Fe 238.204 Radial†	141.5	24.3	1.6170	µg/L	1.6170	ppb	18:38:21
1	K 766.490 Radial†	1569.1	71.0	29.223	µg/L	29.223	ppb	18:38:01
1	Mg 279.077 IEC†	162.3	-28.9	-11.902	µg/L	-11.902	ppb	18:38:21
1	Mn 257.610†	162.2	77.9	0.1069	µg/L	0.1069	ppb	18:39:46
1	Mo 202.031†	-48.8	7.7	0.2416	µg/L	0.2416	ppb	18:39:46
1	Na 589.592 Radial†	1595.3	-143.3	-21.948	µg/L	-21.948	ppb	18:38:01
1	Ni 231.604†	-74.2	-31.3	-0.4003	µg/L	-0.4003	ppb	18:39:46
1	P 214.914†	77.1	-4.5	-1.0788	µg/L	-1.0788	ppb	18:39:46
1	Pb 220.353†	105.8	-9.5	-0.5776	µg/L	-0.5776	ppb	18:39:46
1	S 181.975 Axial†	96.4	-1.0	-0.8082	µg/L	-0.8082	ppb	18:39:46
1	Sb 206.836†	76.9	-11.8	-1.5863	µg/L	-1.5863	ppb	18:39:46
1	Se 196.026†	30.3	18.6	7.35	µg/L	7.35	ppb	18:39:46
1	SiO2†	1615.4	-0.1	-0.0156	µg/L	-0.0156	ppb	18:39:46
1	Si 251.611†	756.3	60.0	0.9881	µg/L	0.9881	ppb	18:39:26
1	Sn 189.927†	2.2	0.2	0.0117	µg/L	0.0117	ppb	18:39:46
1	Sr 421.552†	-232.4	51.9	0.1217	µg/L	0.1217	ppb	18:38:01
1	Ti 334.940†	823.7	165.6	0.1667	µg/L	0.1667	ppb	18:39:26
1	Tl 190.801†	-129.5	-5.8	-0.7821	µg/L	-0.7821	ppb	18:39:46
1	U 409.014†	-365.4	123.4	7.5895	µg/L	7.5895	ppb	18:39:26
1	V 292.402†	336.7	-104.0	-0.5695	µg/L	-0.5695	ppb	18:39:26
1	Zn 213.857†	481.8	4.7	0.0326	µg/L	0.0326	ppb	18:39:46
2	Sc 361.383	1718304.1	1718304.1	102.72	%			18:39:48
2	Sc RADIAL	149819.8	149819.8	103	%			18:38:23
2	Y 371.029	1056622.1	1056622.1	103.33	%			18:39:48
2	Ag 328.068†	3062.4	14.3	0.0846	µg/L	0.0846	ppb	18:39:50
2	Al 396.153Radial†	-45.4	-12.3	-2.7171	µg/L	-2.7171	ppb	18:38:44
2	As 188.979†	-10.9	3.6	1.5162	µg/L	1.5162	ppb	18:40:10
2	B 249.677†	3277.0	-165.5	-2.7792	µg/L	-2.7792	ppb	18:40:10
2	Ba 233.527†	-168.1	11.4	0.0526	µg/L	0.0526	ppb	18:40:10
2	Be 313.107†	-415.9	255.2	0.0882	µg/L	0.0882	ppb	18:39:50
2	Ca 317.933Radial†	633.4	0.0	0.0016	µg/L	0.0016	ppb	18:38:44
2	Cd 226.502†	-115.3	-17.9	-0.1235	µg/L	-0.1235	ppb	18:40:10
2	Co 228.616†	-162.9	18.1	0.2472	µg/L	0.2472	ppb	18:40:10
2	Cr 267.716†	189.3	24.1	0.1939	µg/L	0.1939	ppb	18:40:10
2	Cu 324.752†	2490.6	-0.2	0.0132	µg/L	0.0132	ppb	18:39:50
2	Fe 238.204 Radial†	132.2	15.4	1.0215	µg/L	1.0215	ppb	18:38:44
2	K 766.490 Radial†	1519.5	23.3	9.5884	µg/L	9.5884	ppb	18:38:23
2	Mg 279.077 IEC†	195.8	3.8	1.5733	µg/L	1.5733	ppb	18:38:44
2	Mn 257.610†	168.0	83.5	0.1141	µg/L	0.1141	ppb	18:40:10
2	Mo 202.031†	-35.6	20.5	0.6489	µg/L	0.6489	ppb	18:40:10
2	Na 589.592 Radial†	1651.7	-87.8	-13.450	µg/L	-13.450	ppb	18:38:23
2	Ni 231.604†	-55.2	-12.8	-0.1641	µg/L	-0.1641	ppb	18:40:10
2	P 214.914†	83.6	1.8	0.4344	µg/L	0.4344	ppb	18:40:10
2	Pb 220.353†	94.6	-20.3	-1.2399	µg/L	-1.2399	ppb	18:40:10

2	S 181.975 Axial†	84.2	-12.9	-10.416 µg/L	-10.416 ppb	18:40:10
2	Sb 206.836†	72.7	-15.8	-2.1296 µg/L	-2.1296 ppb	18:40:10
2	Se 196.026†	25.1	13.5	5.37 µg/L	5.37 ppb	18:40:10
2	SiO2†	1629.2	13.2	1.4227 µg/L	1.4227 ppb	18:40:10
2	Si 251.611†	776.2	79.3	1.3023 µg/L	1.3023 ppb	18:39:50
2	Sn 189.927†	1.7	-0.4	-0.0258 µg/L	-0.0258 ppb	18:40:10
2	Sr 421.552†	-119.9	161.3	0.3781 µg/L	0.3781 ppb	18:38:23
2	Ti 334.940†	906.1	245.8	0.2435 µg/L	0.2435 ppb	18:39:50
2	Tl 190.801†	-120.0	3.5	0.4698 µg/L	0.4698 ppb	18:40:10
2	U 409.014†	-211.2	273.5	16.929 µg/L	16.929 ppb	18:39:50
2	V 292.402†	536.3	90.3	0.5193 µg/L	0.5193 ppb	18:39:50
2	Zn 213.857†	461.1	-15.5	-0.0967 µg/L	-0.0967 ppb	18:40:10
3	Sc 361.383	1698930.8	1698930.8	101.56 %		18:40:12
3	Sc RADIAL	152143.2	152143.2	104 %		18:38:46
3	Y 371.029	1045315.3	1045315.3	102.22 %		18:40:12
3	Ag 328.068†	3085.7	71.1	0.2837 µg/L	0.2837 ppb	18:40:14
3	Al 396.153Radial†	-62.8	-28.3	-6.2230 µg/L	-6.2230 ppb	18:39:06
3	As 188.979†	-25.2	-10.6	-4.4173 µg/L	-4.4173 ppb	18:40:34
3	B 249.677†	3266.7	-139.3	-2.3411 µg/L	-2.3411 ppb	18:40:34
3	Ba 233.527†	-163.9	13.7	0.0623 µg/L	0.0623 ppb	18:40:34
3	Be 313.107†	-627.7	42.1	0.0141 µg/L	0.0141 ppb	18:40:14
3	Ca 317.933Radial†	630.0	-12.6	-0.7399 µg/L	-0.7399 ppb	18:39:06
3	Cd 226.502†	-76.1	19.4	0.1339 µg/L	0.1339 ppb	18:40:34
3	Co 228.616†	-133.4	45.2	0.6195 µg/L	0.6195 ppb	18:40:34
3	Cr 267.716†	156.7	-5.9	-0.0523 µg/L	-0.0523 ppb	18:40:34
3	Cu 324.752†	2540.5	76.5	0.3341 µg/L	0.3341 ppb	18:40:14
3	Fe 238.204 Radial†	134.4	15.5	1.0313 µg/L	1.0313 ppb	18:39:06
3	K 766.490 Radial†	1520.9	2.1	0.8535 µg/L	0.8535 ppb	18:38:46
3	Mg 279.077 IEC†	186.1	-8.4	-3.4269 µg/L	-3.4269 ppb	18:39:06
3	Mn 257.610†	142.8	60.6	0.0829 µg/L	0.0829 ppb	18:40:34
3	Mo 202.031†	-28.7	26.9	0.8495 µg/L	0.8495 ppb	18:40:34
3	Na 589.592 Radial†	1594.0	-167.7	-25.662 µg/L	-25.662 ppb	18:38:46
3	Ni 231.604†	-74.3	-32.3	-0.4127 µg/L	-0.4127 ppb	18:40:34
3	P 214.914†	71.0	-9.6	-2.3151 µg/L	-2.3151 ppb	18:40:34
3	Pb 220.353†	138.9	24.3	1.4738 µg/L	1.4738 ppb	18:40:34
3	S 181.975 Axial†	87.7	-8.5	-6.8917 µg/L	-6.8917 ppb	18:40:34
3	Sb 206.836†	71.9	-15.8	-2.1234 µg/L	-2.1234 ppb	18:40:34
3	Se 196.026†	21.3	10.1	3.99 µg/L	3.99 ppb	18:40:34
3	SiO2†	1618.8	21.0	2.2686 µg/L	2.2686 ppb	18:40:34
3	Si 251.611†	788.9	100.3	1.6458 µg/L	1.6458 ppb	18:40:14
3	Sn 189.927†	6.3	4.2	0.2956 µg/L	0.2956 ppb	18:40:34
3	Sr 421.552†	-237.8	50.2	0.1176 µg/L	0.1176 ppb	18:38:46
3	Ti 334.940†	556.8	-88.1	-0.0902 µg/L	-0.0902 ppb	18:40:14
3	Tl 190.801†	-119.8	2.3	0.3073 µg/L	0.3073 ppb	18:40:34
3	U 409.014†	-464.1	22.2	1.3392 µg/L	1.3392 ppb	18:40:14
3	V 292.402†	338.6	-98.5	-0.5367 µg/L	-0.5367 ppb	18:40:14
3	Zn 213.857†	460.6	-10.9	-0.0662 µg/L	-0.0662 ppb	18:40:34

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1711781.8	102.33	%	0.665				0.65%
Sc RADIAL	150611.1	103	%	0.9				0.88%
Y 371.029	1052687.3	102.94	%	0.625				0.61%
Ag 328.068†	-63.5	-0.2496	µg/L	0.75780	-0.2496	ppb	0.75780	303.64%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-14.0	-3.0809	µg/L	2.97697	-3.0809	ppb	2.97697	96.63%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.1	-0.8618	µg/L	3.13716	-0.8618	ppb	3.13716	364.04%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-152.2	-2.5560	µg/L	0.21918	-2.5560	ppb	0.21918	8.58%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	18.2	0.0834	µg/L	0.04516	0.0834	ppb	0.04516	54.17%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	110.5	0.0386	µg/L	0.04296	0.0386	ppb	0.04296	111.35%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-14.7	-0.8613	µg/L	0.92961	-0.8613	ppb	0.92961	107.93%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	5.3	0.0364	µg/L	0.13959	0.0364	ppb	0.13959	383.42%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	21.9	0.2996 µg/L	0.29720	0.2996 ppb	0.29720	99.21%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	6.0	0.0447 µg/L	0.13112	0.0447 ppb	0.13112	293.47%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-12.9	-0.0489 µg/L	0.41746	-0.0489 ppb	0.41746	854.27%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	18.4	1.2233 µg/L	0.34099	1.2233 ppb	0.34099	27.88%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	32.1	13.222 µg/L	14.5294	13.222 ppb	14.5294	109.89%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-11.2	-4.5853 µg/L	6.81203	-4.5853 ppb	6.81203	148.56%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	74.0	0.1013 µg/L	0.01630	0.1013 ppb	0.01630	16.09%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	18.4	0.5800 µg/L	0.30975	0.5800 ppb	0.30975	53.40%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-132.9	-20.353 µg/L	6.2604	-20.353 ppb	6.2604	30.76%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-25.5	-0.3257 µg/L	0.14010	-0.3257 ppb	0.14010	43.01%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-4.1	-0.9865 µg/L	1.37705	-0.9865 ppb	1.37705	139.59%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-1.8	-0.1146 µg/L	1.41489	-0.1146 ppb	1.41489	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-7.5	-6.0387 µg/L	4.86046	-6.0387 ppb	4.86046	80.49%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-14.5	-1.9465 µg/L	0.31193	-1.9465 ppb	0.31193	16.03%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	14.1	5.57 µg/L	1.688	5.57 ppb	1.688	30.30%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	11.4	1.2252 µg/L	1.15483	1.2252 ppb	1.15483	94.25%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	79.9	1.3121 µg/L	0.32896	1.3121 ppb	0.32896	25.07%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	1.3	0.0938 µg/L	0.17571	0.0938 ppb	0.17571	187.29%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	87.8	0.2058 µg/L	0.14923	0.2058 ppb	0.14923	72.50%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	107.7	0.1067 µg/L	0.17474	0.1067 ppb	0.17474	163.81%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	0.0	-0.0017 µg/L	0.68072	-0.0017 ppb	0.68072	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	139.7	8.6193 µg/L	7.84577	8.6193 ppb	7.84577	91.03%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-37.4	-0.1957 µg/L	0.61936	-0.1957 ppb	0.61936	316.55%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-7.2	-0.0435 µg/L	0.06758	-0.0435 ppb	0.06758	155.53%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: PQL
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 3/29/2010 18:40:43
Data Type: Reprocessed on 3/29/2010 19:14:37
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1721442.6	1721442.6	102.91	%			18:41:40
1	Sc RADIAL	147903.8	147903.8	101	%			18:41:13
1	Y 371.029	1058404.9	1058404.9	103.50	%			18:41:40
1	Ag 328.068†	4025.6	944.7	3.9659	µg/L	3.9659	ppb	18:41:43
1	Al 396.153Radial†	922.6	941.1	204.98	µg/L	204.98	ppb	18:41:15
1	As 188.979†	70.2	82.5	34.551	µg/L	34.551	ppb	18:42:03
1	B 249.677†	6252.3	2719.8	45.645	µg/L	45.645	ppb	18:41:43
1	Ba 233.527†	968.6	1116.3	5.1042	µg/L	5.1042	ppb	18:42:03
1	Be 313.107†	14893.3	15132.4	4.9477	µg/L	4.9477	ppb	18:41:43
1	Ca 317.933Radial†	4243.5	3565.6	208.93	µg/L	208.93	ppb	18:41:15
1	Cd 226.502†	637.3	713.7	4.9197	µg/L	4.9197	ppb	18:42:03
1	Co 228.616†	202.6	373.5	5.1141	µg/L	5.1141	ppb	18:42:03
1	Cr 267.716†	729.0	548.1	4.6505	µg/L	4.6505	ppb	18:42:03
1	Cu 324.752†	4895.4	2332.1	10.224	µg/L	10.224	ppb	18:41:43
1	Fe 238.204 Radial†	1705.5	1567.4	104.21	µg/L	104.21	ppb	18:41:15
1	K 766.490 Radial†	1904.1	421.4	173.34	µg/L	173.34	ppb	18:41:13
1	Mg 279.077 IEC†	935.0	734.7	303.09	µg/L	303.09	ppb	18:41:15
1	Mn 257.610†	7824.8	7523.6	10.268	µg/L	10.268	ppb	18:41:43
1	Mo 202.031†	258.6	306.5	9.6870	µg/L	9.6870	ppb	18:42:03
1	Na 589.592 Radial†	3412.3	1667.9	255.06	µg/L	255.06	ppb	18:41:15
1	Ni 231.604†	353.8	384.7	4.9210	µg/L	4.9210	ppb	18:42:03
1	P 214.914†	701.3	601.9	143.99	µg/L	143.99	ppb	18:42:03
1	Pb 220.353†	285.3	164.8	9.9640	µg/L	9.9640	ppb	18:42:03
1	S 181.975 Axial†	217.5	116.6	94.518	µg/L	94.518	ppb	18:42:03
1	Sb 206.836†	151.7	60.8	8.2873	µg/L	8.2873	ppb	18:42:03
1	Se 196.026†	93.5	79.9	31.7	µg/L	31.7	ppb	18:42:03
1	SiO2†	3528.6	1856.0	202.45	µg/L	202.45	ppb	18:41:43
1	Si 251.611†	7008.2	6133.7	101.23	µg/L	101.23	ppb	18:41:43
1	Sn 189.927†	141.3	135.3	9.6379	µg/L	9.6379	ppb	18:42:03
1	Sr 421.552†	2328.3	2572.4	6.0274	µg/L	6.0274	ppb	18:41:15
1	Ti 334.940†	5694.2	4896.9	4.9428	µg/L	4.9428	ppb	18:41:43
1	Tl 190.801†	28.4	147.9	19.934	µg/L	19.934	ppb	18:42:03
1	U 409.014†	713.0	1172.0	72.715	µg/L	72.715	ppb	18:41:43
1	V 292.402†	1246.9	779.8	4.4736	µg/L	4.4736	ppb	18:41:43
1	Zn 213.857†	2077.4	1554.3	9.7365	µg/L	9.7365	ppb	18:42:03
2	Sc 361.383	1724623.2	1724623.2	103.10	%			18:42:05
2	Sc RADIAL	148676.2	148676.2	102	%			18:41:17
2	Y 371.029	1060877.7	1060877.7	103.75	%			18:42:05
2	Ag 328.068†	4441.5	1340.9	5.5444	µg/L	5.5444	ppb	18:42:07
2	Al 396.153Radial†	882.0	896.6	195.25	µg/L	195.25	ppb	18:41:19
2	As 188.979†	60.0	72.5	30.385	µg/L	30.385	ppb	18:42:27
2	B 249.677†	6195.0	2653.1	44.524	µg/L	44.524	ppb	18:42:07
2	Ba 233.527†	972.4	1118.3	5.1130	µg/L	5.1130	ppb	18:42:27
2	Be 313.107†	15035.6	15243.7	4.9775	µg/L	4.9775	ppb	18:42:07
2	Ca 317.933Radial†	4053.9	3358.0	196.76	µg/L	196.76	ppb	18:41:19
2	Cd 226.502†	642.0	717.1	4.9432	µg/L	4.9432	ppb	18:42:27
2	Co 228.616†	195.2	365.9	5.0104	µg/L	5.0104	ppb	18:42:27
2	Cr 267.716†	741.9	559.4	4.7640	µg/L	4.7640	ppb	18:42:27
2	Cu 324.752†	4804.6	2235.3	9.7851	µg/L	9.7851	ppb	18:42:07
2	Fe 238.204 Radial†	1689.7	1543.2	102.60	µg/L	102.60	ppb	18:41:19
2	K 766.490 Radial†	1941.0	447.8	184.20	µg/L	184.20	ppb	18:41:17
2	Mg 279.077 IEC†	934.9	729.8	301.08	µg/L	301.08	ppb	18:41:19
2	Mn 257.610†	7840.1	7524.4	10.269	µg/L	10.269	ppb	18:42:07
2	Mo 202.031†	268.7	315.9	9.9813	µg/L	9.9813	ppb	18:42:27
2	Na 589.592 Radial†	3585.8	1820.6	278.41	µg/L	278.41	ppb	18:41:19
2	Ni 231.604†	360.6	390.7	4.9969	µg/L	4.9969	ppb	18:42:27
2	P 214.914†	704.9	604.1	144.53	µg/L	144.53	ppb	18:42:27
2	Pb 220.353†	256.9	136.7	8.2831	µg/L	8.2831	ppb	18:42:27

2	S 181.975 Axial†	211.0	109.8	89.075 µg/L	89.075 ppb	18:42:27
2	Sb 206.836†	139.1	48.3	6.6025 µg/L	6.6025 ppb	18:42:27
2	Se 196.026†	85.2	71.7	28.4 µg/L	28.4 ppb	18:42:27
2	SiO2†	3666.3	1983.3	216.34 µg/L	216.34 ppb	18:42:07
2	Si 251.611†	6987.0	6100.5	100.67 µg/L	100.67 ppb	18:42:07
2	Sn 189.927†	148.9	142.4	10.142 µg/L	10.142 ppb	18:42:27
2	Sr 421.552†	2257.8	2491.4	5.8378 µg/L	5.8378 ppb	18:41:19
2	Ti 334.940†	5599.5	4794.8	4.8474 µg/L	4.8474 ppb	18:42:07
2	Tl 190.801†	28.5	147.9	19.938 µg/L	19.938 ppb	18:42:27
2	U 409.014†	356.1	824.5	51.229 µg/L	51.229 ppb	18:42:07
2	V 292.402†	1199.8	731.9	4.1969 µg/L	4.1969 ppb	18:42:07
2	Zn 213.857†	2110.9	1583.0	9.9172 µg/L	9.9172 ppb	18:42:27
3	Sc 361.383	1709181.0	1709181.0	102.18 %		18:42:29
3	Sc RADIAL	148765.1	148765.1	102 %		18:41:21
3	Y 371.029	1051117.1	1051117.1	102.79 %		18:42:29
3	Ag 328.068†	4096.5	1042.2	4.3518 µg/L	4.3518 ppb	18:42:31
3	Al 396.153Radial†	913.9	927.3	201.93 µg/L	201.93 ppb	18:41:23
3	As 188.979†	45.1	58.4	24.503 µg/L	24.503 ppb	18:42:51
3	B 249.677†	6365.0	2873.8	48.229 µg/L	48.229 ppb	18:42:31
3	Ba 233.527†	993.8	1147.7	5.2479 µg/L	5.2479 ppb	18:42:51
3	Be 313.107†	15404.4	15736.4	5.1406 µg/L	5.1406 ppb	18:42:31
3	Ca 317.933Radial†	4204.3	3503.0	205.26 µg/L	205.26 ppb	18:41:23
3	Cd 226.502†	656.9	737.3	5.0831 µg/L	5.0831 ppb	18:42:51
3	Co 228.616†	214.1	386.1	5.2868 µg/L	5.2868 ppb	18:42:51
3	Cr 267.716†	776.9	600.1	5.1070 µg/L	5.1070 ppb	18:42:51
3	Cu 324.752†	4905.4	2376.0	10.405 µg/L	10.405 ppb	18:42:31
3	Fe 238.204 Radial†	1701.7	1554.0	103.31 µg/L	103.31 ppb	18:41:23
3	K 766.490 Radial†	1863.7	371.0	152.58 µg/L	152.58 ppb	18:41:21
3	Mg 279.077 IEC†	946.2	740.4	305.43 µg/L	305.43 ppb	18:41:23
3	Mn 257.610†	7932.9	7683.9	10.487 µg/L	10.487 ppb	18:42:31
3	Mo 202.031†	276.9	326.2	10.308 µg/L	10.308 ppb	18:42:51
3	Na 589.592 Radial†	3380.4	1617.2	247.32 µg/L	247.32 ppb	18:41:23
3	Ni 231.604†	372.2	405.1	5.1823 µg/L	5.1823 ppb	18:42:51
3	P 214.914†	693.9	599.5	143.42 µg/L	143.42 ppb	18:42:51
3	Pb 220.353†	299.1	180.3	10.914 µg/L	10.914 ppb	18:42:51
3	S 181.975 Axial†	216.9	117.4	95.241 µg/L	95.241 ppb	18:42:51
3	Sb 206.836†	178.2	87.8	11.935 µg/L	11.935 ppb	18:42:51
3	Se 196.026†	84.3	71.6	28.4 µg/L	28.4 ppb	18:42:51
3	SiO2†	3665.9	2015.0	219.80 µg/L	219.80 ppb	18:42:31
3	Si 251.611†	7292.1	6460.4	106.62 µg/L	106.62 ppb	18:42:31
3	Sn 189.927†	146.0	140.9	10.035 µg/L	10.035 ppb	18:42:51
3	Sr 421.552†	2185.8	2419.5	5.6692 µg/L	5.6692 ppb	18:41:23
3	Ti 334.940†	5763.7	5004.6	5.0573 µg/L	5.0573 ppb	18:42:31
3	Tl 190.801†	37.2	156.7	21.117 µg/L	21.117 ppb	18:42:51
3	U 409.014†	504.2	972.6	60.421 µg/L	60.421 ppb	18:42:31
3	V 292.402†	1321.2	861.3	4.9254 µg/L	4.9254 ppb	18:42:31
3	Zn 213.857†	2122.4	1612.8	10.103 µg/L	10.103 ppb	18:42:51

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1718415.6	102.73	%	0.487				0.47%
Sc RADIAL	148448.4	102	%	0.3				0.32%
Y 371.029	1056799.9	103.35	%	0.496				0.48%
Ag 328.068†	1109.3	4.6207	µg/L	0.82285	4.6207	ppb	0.82285	17.81%
QC value within limits for Ag 328.068 Recovery = 92.41%								
Al 396.153Radial†	921.7	200.72	µg/L	4.978	200.72	ppb	4.978	2.48%
QC value within limits for Al 396.153Radial Recovery = 100.36%								
As 188.979†	71.1	29.813	µg/L	5.0483	29.813	ppb	5.0483	16.93%
QC value within limits for As 188.979 Recovery = 99.38%								
B 249.677†	2748.9	46.133	µg/L	1.8998	46.133	ppb	1.8998	4.12%
QC value within limits for B 249.677 Recovery = 92.27%								
Ba 233.527†	1127.4	5.1550	µg/L	0.08056	5.1550	ppb	0.08056	1.56%
QC value within limits for Ba 233.527 Recovery = 103.10%								
Be 313.107†	15370.8	5.0219	µg/L	0.10386	5.0219	ppb	0.10386	2.07%
QC value within limits for Be 313.107 Recovery = 100.44%								
Ca 317.933Radial†	3475.5	203.65	µg/L	6.241	203.65	ppb	6.241	3.06%
QC value within limits for Ca 317.933Radial Recovery = 101.83%								
Cd 226.502†	722.7	4.9820	µg/L	0.08834	4.9820	ppb	0.08834	1.77%
QC value within limits for Cd 226.502 Recovery = 99.64%								

Co 228.616†	375.2	5.1371 µg/L	0.13962	5.1371 ppb	0.13962	2.72%
QC value within limits for Co 228.616 Recovery = 102.74%						
Cr 267.716†	569.2	4.8405 µg/L	0.23770	4.8405 ppb	0.23770	4.91%
QC value within limits for Cr 267.716 Recovery = 96.81%						
Cu 324.752†	2314.5	10.138 µg/L	0.3187	10.138 ppb	0.3187	3.14%
QC value within limits for Cu 324.752 Recovery = 101.38%						
Fe 238.204 Radial†	1554.9	103.37 µg/L	0.806	103.37 ppb	0.806	0.78%
QC value within limits for Fe 238.204 Radial Recovery = 103.37%						
K 766.490 Radial†	413.4	170.04 µg/L	16.070	170.04 ppb	16.070	9.45%
QC value within limits for K 766.490 Radial Recovery = 113.36%						
Mg 279.077 IEC†	735.0	303.20 µg/L	2.180	303.20 ppb	2.180	0.72%
QC value within limits for Mg 279.077 IEC Recovery = 101.07%						
Mn 257.610†	7577.3	10.342 µg/L	0.1261	10.342 ppb	0.1261	1.22%
QC value within limits for Mn 257.610 Recovery = 103.42%						
Mo 202.031†	316.2	9.9921 µg/L	0.31074	9.9921 ppb	0.31074	3.11%
QC value within limits for Mo 202.031 Recovery = 99.92%						
Na 589.592 Radial†	1701.9	260.27 µg/L	16.186	260.27 ppb	16.186	6.22%
QC value within limits for Na 589.592 Radial Recovery = 86.76%						
Ni 231.604†	393.5	5.0334 µg/L	0.13439	5.0334 ppb	0.13439	2.67%
QC value within limits for Ni 231.604 Recovery = 100.67%						
P 214.914†	601.9	143.98 µg/L	0.554	143.98 ppb	0.554	0.38%
QC value within limits for P 214.914 Recovery = 95.99%						
Pb 220.353†	160.6	9.7204 µg/L	1.33235	9.7204 ppb	1.33235	13.71%
QC value within limits for Pb 220.353 Recovery = 97.20%						
S 181.975 Axial†	114.6	92.945 µg/L	3.3708	92.945 ppb	3.3708	3.63%
QC value within limits for S 181.975 Axial Recovery = 92.94%						
Sb 206.836†	65.6	8.9415 µg/L	2.72562	8.9415 ppb	2.72562	30.48%
QC value within limits for Sb 206.836 Recovery = 89.41%						
Se 196.026†	74.4	29.5 µg/L	1.90	29.5 ppb	1.90	6.42%
QC value within limits for Se 196.026 Recovery = 98.43%						
SiO2†	1951.4	212.86 µg/L	9.186	212.86 ppb	9.186	4.32%
QC value within limits for SiO2 Recovery = 99.94%						
Si 251.611†	6231.5	102.84 µg/L	3.285	102.84 ppb	3.285	3.19%
QC value within limits for Si 251.611 Recovery = 102.84%						
Sn 189.927†	139.6	9.9381 µg/L	0.26552	9.9381 ppb	0.26552	2.67%
QC value within limits for Sn 189.927 Recovery = 99.38%						
Sr 421.552†	2494.5	5.8448 µg/L	0.17922	5.8448 ppb	0.17922	3.07%
QC value within limits for Sr 421.552 Recovery = 116.90%						
Ti 334.940†	4898.8	4.9492 µg/L	0.10510	4.9492 ppb	0.10510	2.12%
QC value within limits for Ti 334.940 Recovery = 98.98%						
Tl 190.801†	150.8	20.330 µg/L	0.6817	20.330 ppb	0.6817	3.35%
QC value within limits for Tl 190.801 Recovery = 101.65%						
U 409.014†	989.7	61.455 µg/L	10.7804	61.455 ppb	10.7804	17.54%
QC value within limits for U 409.014 Recovery = 122.91%						
V 292.402†	791.0	4.5320 µg/L	0.36774	4.5320 ppb	0.36774	8.11%
QC value within limits for V 292.402 Recovery = 90.64%						
Zn 213.857†	1583.4	9.9190 µg/L	0.18336	9.9190 ppb	0.18336	1.85%
QC value within limits for Zn 213.857 Recovery = 99.19%						

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 3/29/2010 18:43:01
Data Type: Reprocessed on 3/29/2010 19:14:38

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1519975.5	1519975.5	90.866	%			18:44:01
1	Sc RADIAL	137750.3	137750.3	94.5	%			18:43:34
1	Y 371.029	919968.6	919968.6	89.965	%			18:44:01
1	Ag 328.068†	5916.7	3544.4	1.2267	µg/L	1.2267	ppb	18:44:01
1	Al 396.153Radial†	2228558.9	2358079.9	514740	µg/L	514740	ppb	18:43:31
1	As 188.979†	-88.3	-82.9	8.1301	µg/L	8.1301	ppb	18:44:21
1	B 249.677†	3032.6	-18.3	-0.3191	µg/L	-0.3191	ppb	18:44:01
1	Ba 233.527†	439.8	659.1	0.5804	µg/L	0.5804	ppb	18:44:21
1	Be 313.107†	-620.0	-22.3	0.0066	µg/L	0.0066	ppb	18:44:01
1	Ca 317.933Radial†	7783821.6	8235480.1	482560	µg/L	482560	ppb	18:43:31
1	Cd 226.502†	2257.8	2579.2	-2.2506	µg/L	-2.2506	ppb	18:44:21
1	Co 228.616†	76.3	260.5	-6.3814	µg/L	-6.3814	ppb	18:44:21
1	Cr 267.716†	306.4	176.9	2.2002	µg/L	2.2002	ppb	18:44:21
1	Cu 324.752†	-6875.9	-9992.0	-2.5122	µg/L	-2.5122	ppb	18:44:01
1	Fe 238.204 Radial†	2712004.8	2869471.1	190770	µg/L	190770	ppb	18:43:31
1	K 766.490 Radial†	1538.5	172.9	-171.54	µg/L	-171.54	ppb	18:43:34
1	Mg 279.077 IEC†	1111575.2	1175976.0	484700	µg/L	484700	ppb	18:43:31
1	Mn 257.610†	14620.3	16010.1	2.1476	µg/L	2.1476	ppb	18:44:01
1	Mo 202.031†	-501.7	-496.9	0.7251	µg/L	0.7251	ppb	18:44:01
1	Na 589.592 Radial†	1635.3	35.6	5.3873	µg/L	5.3873	ppb	18:43:34
1	Ni 231.604†	146.0	201.6	2.5791	µg/L	2.5791	ppb	18:44:21
1	P 214.914†	148.1	83.5	4.8563	µg/L	4.8563	ppb	18:44:21
1	Pb 220.353†	-247.5	-384.9	2.4276	µg/L	2.4276	ppb	18:44:21
1	S 181.975 Axial†	166.5	88.4	71.471	µg/L	71.471	ppb	18:44:21
1	Sb 206.836†	109.8	34.2	-1.4541	µg/L	-1.4541	ppb	18:44:21
1	Se 196.026†	-143.9	-169.3	-0.728	µg/L	-0.728	ppb	18:44:21
1	SiO2†	1500.4	78.4	8.9950	µg/L	8.9950	ppb	18:44:21
1	Si 251.611†	379.6	-258.7	-4.0756	µg/L	-4.0756	ppb	18:44:21
1	Sn 189.927†	17.0	16.7	1.2650	µg/L	1.2650	ppb	18:44:21
1	Sr 421.552†	1360.0	1717.1	0.2472	µg/L	0.2472	ppb	18:43:34
1	Ti 334.940†	20973.2	22445.2	-4.0421	µg/L	-4.0421	ppb	18:44:01
1	Tl 190.801†	-165.7	-62.0	-7.8287	µg/L	-7.8287	ppb	18:44:21
1	U 409.014†	239.9	743.1	25.180	µg/L	25.180	ppb	18:44:01
1	V 292.402†	5463.3	5580.7	0.4848	µg/L	0.4848	ppb	18:44:01
1	Zn 213.857†	3868.4	3792.8	7.6857	µg/L	7.6857	ppb	18:44:21
2	Sc 361.383	1532514.6	1532514.6	91.615	%			18:44:24
2	Sc RADIAL	139244.5	139244.5	95.5	%			18:43:38
2	Y 371.029	927898.5	927898.5	90.741	%			18:44:24
2	Ag 328.068†	5725.2	3282.1	0.2956	µg/L	0.2956	ppb	18:44:24
2	Al 396.153Radial†	2228857.8	2333088.7	509290	µg/L	509290	ppb	18:43:36
2	As 188.979†	-96.0	-90.5	4.5139	µg/L	4.5139	ppb	18:44:44
2	B 249.677†	3203.6	141.1	2.3574	µg/L	2.3574	ppb	18:44:24
2	Ba 233.527†	417.7	631.0	0.4768	µg/L	0.4768	ppb	18:44:44
2	Be 313.107†	-855.2	-273.4	-0.0781	µg/L	-0.0781	ppb	18:44:24
2	Ca 317.933Radial†	7791433.2	8155066.3	477850	µg/L	477850	ppb	18:43:36
2	Cd 226.502†	2233.3	2532.1	-2.3767	µg/L	-2.3767	ppb	18:44:44
2	Co 228.616†	66.6	249.3	-6.4368	µg/L	-6.4368	ppb	18:44:44
2	Cr 267.716†	246.3	108.6	1.6057	µg/L	1.6057	ppb	18:44:44
2	Cu 324.752†	-6872.9	-9926.8	-2.6212	µg/L	-2.6212	ppb	18:44:24
2	Fe 238.204 Radial†	2714288.8	2841068.4	188880	µg/L	188880	ppb	18:43:36
2	K 766.490 Radial†	1618.0	238.7	-142.04	µg/L	-142.04	ppb	18:43:38
2	Mg 279.077 IEC†	1114260.0	1166165.0	480660	µg/L	480660	ppb	18:43:36
2	Mn 257.610†	14586.8	15841.8	2.0830	µg/L	2.0830	ppb	18:44:24
2	Mo 202.031†	-508.1	-499.4	0.4957	µg/L	0.4957	ppb	18:44:24
2	Na 589.592 Radial†	1714.1	99.5	15.141	µg/L	15.141	ppb	18:43:38
2	Ni 231.604†	152.3	207.2	2.6500	µg/L	2.6500	ppb	18:44:44
2	P 214.914†	105.5	35.5	-6.5606	µg/L	-6.5606	ppb	18:44:44
2	Pb 220.353†	-290.5	-429.6	-0.5500	µg/L	-0.5500	ppb	18:44:44

2	S 181.975 Axial†	171.6	92.5	74.799 µg/L	74.799 ppb	18:44:44
2	Sb 206.836†	130.7	56.0	1.5606 µg/L	1.5606 ppb	18:44:44
2	Se 196.026†	-155.0	-180.1	-5.67 µg/L	-5.67 ppb	18:44:44
2	SiO2†	1504.6	69.4	8.0425 µg/L	8.0425 ppb	18:44:44
2	Si 251.611†	375.1	-267.0	-4.2014 µg/L	-4.2014 ppb	18:44:44
2	Sn 189.927†	-4.2	-6.6	-0.3924 µg/L	-0.3924 ppb	18:44:44
2	Sr 421.552†	1366.5	1708.4	0.2637 µg/L	0.2637 ppb	18:43:38
2	Ti 334.940†	21214.1	22519.4	-3.7556 µg/L	-3.7556 ppb	18:44:24
2	Tl 190.801†	-155.0	-48.9	-6.0537 µg/L	-6.0537 ppb	18:44:44
2	U 409.014†	96.2	584.1	15.646 µg/L	15.646 ppb	18:44:24
2	V 292.402†	5684.6	5773.1	1.8417 µg/L	1.8417 ppb	18:44:24
2	Zn 213.857†	3858.3	3747.0	7.5506 µg/L	7.5506 ppb	18:44:44
3	Sc 361.383	1531662.1	1531662.1	91.564 %		18:44:46
3	Sc RADIAL	139848.7	139848.7	95.9 %		18:43:42
3	Y 371.029	927170.5	927170.5	90.670 %		18:44:46
3	Ag 328.068†	5762.9	3326.8	0.5251 µg/L	0.5251 ppb	18:44:46
3	Al 396.153Radial†	2231390.2	2325648.7	507660 µg/L	507660 ppb	18:43:40
3	As 188.979†	-103.4	-98.7	0.8735 µg/L	0.8735 ppb	18:45:06
3	B 249.677†	3235.4	177.8	2.9710 µg/L	2.9710 ppb	18:44:46
3	Ba 233.527†	402.4	614.5	0.4137 µg/L	0.4137 ppb	18:45:06
3	Be 313.107†	-678.3	-80.7	-0.0209 µg/L	-0.0209 ppb	18:44:46
3	Ca 317.933Radial†	7787439.6	8115669.6	475540 µg/L	475540 ppb	18:43:40
3	Cd 226.502†	2245.5	2546.8	-2.1709 µg/L	-2.1709 ppb	18:45:06
3	Co 228.616†	93.2	278.4	-5.9871 µg/L	-5.9871 ppb	18:45:06
3	Cr 267.716†	275.9	141.1	1.8999 µg/L	1.8999 ppb	18:45:06
3	Cu 324.752†	-6732.3	-9777.4	-2.2074 µg/L	-2.2074 ppb	18:44:46
3	Fe 238.204 Radial†	2711795.4	2826195.2	187900 µg/L	187900 ppb	18:43:40
3	K 766.490 Radial†	1584.0	195.9	-158.63 µg/L	-158.63 ppb	18:43:42
3	Mg 279.077 IEC†	1112495.6	1159287.1	477830 µg/L	477830 ppb	18:43:40
3	Mn 257.610†	14462.2	15714.6	2.0242 µg/L	2.0242 ppb	18:44:46
3	Mo 202.031†	-593.4	-592.8	-2.5422 µg/L	-2.5422 ppb	18:44:46
3	Na 589.592 Radial†	1732.7	111.2	16.939 µg/L	16.939 ppb	18:43:42
3	Ni 231.604†	209.1	269.3	3.4450 µg/L	3.4450 ppb	18:45:06
3	P 214.914†	118.4	49.8	-2.8056 µg/L	-2.8056 ppb	18:45:06
3	Pb 220.353†	-264.9	-401.8	1.0704 µg/L	1.0704 ppb	18:45:06
3	S 181.975 Axial†	171.3	92.2	74.546 µg/L	74.546 ppb	18:45:06
3	Sb 206.836†	101.8	24.6	-2.6986 µg/L	-2.6986 ppb	18:45:06
3	Se 196.026†	-151.8	-176.7	-4.70 µg/L	-4.70 ppb	18:45:06
3	SiO2†	1457.7	19.2	2.6178 µg/L	2.6178 ppb	18:45:06
3	Si 251.611†	375.6	-266.2	-4.1555 µg/L	-4.1555 ppb	18:45:06
3	Sn 189.927†	9.2	8.1	0.6527 µg/L	0.6527 ppb	18:45:06
3	Sr 421.552†	1404.5	1741.8	0.3601 µg/L	0.3601 ppb	18:43:42
3	Ti 334.940†	21500.8	22845.3	-3.2450 µg/L	-3.2450 ppb	18:44:46
3	Tl 190.801†	-148.3	-41.6	-5.0807 µg/L	-5.0807 ppb	18:45:06
3	U 409.014†	-176.5	286.3	-2.6068 µg/L	-2.6068 ppb	18:44:46
3	V 292.402†	5753.1	5851.3	2.3911 µg/L	2.3911 ppb	18:44:46
3	Zn 213.857†	3845.3	3735.2	7.5699 µg/L	7.5699 ppb	18:45:06

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1528050.7	91.348	%	0.4188				0.46%
Sc RADIAL	138947.9	95.3	%	0.74				0.78%
Y 371.029	925012.6	90.459	%	0.4287				0.47%
Ag 328.068†	3384.5	0.6825	µg/L	0.48505	0.6825	ppb	0.48505	71.07%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2338939.1	510560	µg/L	3708.4	510560	ppb	3708.4	0.73%
QC value within limits for Al 396.153Radial Recovery = 102.11%								
As 188.979†	-90.7	4.5059	µg/L	3.62830	4.5059	ppb	3.62830	80.52%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	100.2	1.6697	µg/L	1.74948	1.6697	ppb	1.74948	104.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	634.8	0.4903	µg/L	0.08415	0.4903	ppb	0.08415	17.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-125.5	-0.0308	µg/L	0.04321	-0.0308	ppb	0.04321	140.33%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	8168738.7	478650	µg/L	3578.1	478650	ppb	3578.1	0.75%
QC value within limits for Ca 317.933Radial Recovery = 95.73%								
Cd 226.502†	2552.7	-2.2661	µg/L	0.10379	-2.2661	ppb	0.10379	4.58%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	262.7	-6.2685 µg/L	0.24520	-6.2685 ppb	0.24520	3.91%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	142.2	1.9019 µg/L	0.29723	1.9019 ppb	0.29723	15.63%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-9898.7	-2.4469 µg/L	0.21446	-2.4469 ppb	0.21446	8.76%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	2845578.2	189180 µg/L	1461.8	189180 ppb	1461.8	0.77%
QC value within limits for Fe 238.204 Radial Recovery = 94.59%						
K 766.490 Radial†	202.5	-157.40 µg/L	14.790	-157.40 ppb	14.790	9.40%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1167142.7	481060 µg/L	3456.9	481060 ppb	3456.9	0.72%
QC value within limits for Mg 279.077 IEC Recovery = 96.21%						
Mn 257.610†	15855.5	2.0849 µg/L	0.06170	2.0849 ppb	0.06170	2.96%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-529.7	-0.4405 µg/L	1.82378	-0.4405 ppb	1.82378	414.05%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	82.1	12.489 µg/L	6.2157	12.489 ppb	6.2157	49.77%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	226.0	2.8914 µg/L	0.48079	2.8914 ppb	0.48079	16.63%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	56.3	-1.5033 µg/L	5.81883	-1.5033 ppb	5.81883	387.07%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-405.4	0.9827 µg/L	1.49074	0.9827 ppb	1.49074	151.70%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	91.0	73.605 µg/L	1.8528	73.605 ppb	1.8528	2.52%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	38.3	-0.8640 µg/L	2.19006	-0.8640 ppb	2.19006	253.47%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-175.4	-3.70 µg/L	2.618	-3.70 ppb	2.618	70.77%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	55.7	6.5518 µg/L	3.44005	6.5518 ppb	3.44005	52.51%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	-264.0	-4.1441 µg/L	0.06368	-4.1441 ppb	0.06368	1.54%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	6.1	0.5084 µg/L	0.83805	0.5084 ppb	0.83805	164.84%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	1722.4	0.2904 µg/L	0.06098	0.2904 ppb	0.06098	21.00%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	22603.3	-3.6809 µg/L	0.40375	-3.6809 ppb	0.40375	10.97%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-50.8	-6.3210 µg/L	1.39339	-6.3210 ppb	1.39339	22.04%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	537.8	12.740 µg/L	14.1197	12.740 ppb	14.1197	110.83%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	5735.0	1.5725 µg/L	0.98127	1.5725 ppb	0.98127	62.40%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	3758.3	7.6020 µg/L	0.07306	7.6020 ppb	0.07306	0.96%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 3/29/2010 18:45:15
Data Type: Reprocessed on 3/29/2010 19:14:39

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1510684.4	1510684.4	90.310	%			18:46:21
1	Sc RADIAL	137128.2	137128.2	94.1	%			18:45:49
1	Y 371.029	915417.0	915417.0	89.520	%			18:46:21
1	Ag 328.068†	64579.9	68542.0	271.32	µg/L	271.32	ppb	18:46:21
1	Al 396.153Radial†	2257035.7	2399046.7	523660	µg/L	523660	ppb	18:45:45
1	As 188.979†	1040.4	1166.3	536.34	µg/L	536.34	ppb	18:46:23
1	B 249.677†	30637.0	30568.6	511.66	µg/L	511.66	ppb	18:46:21
1	Ba 233.527†	99072.5	109877.7	499.99	µg/L	499.99	ppb	18:46:21
1	Be 313.107†	681148.0	754892.4	245.89	µg/L	245.89	ppb	18:46:21
1	Ca 317.933Radial†	7888724.1	8384349.0	491290	µg/L	491290	ppb	18:45:45
1	Cd 226.502†	63574.5	70490.2	466.80	µg/L	466.80	ppb	18:46:21
1	Co 228.616†	29268.7	32585.7	436.71	µg/L	436.71	ppb	18:46:23
1	Cr 267.716†	51261.8	56601.7	486.64	µg/L	486.64	ppb	18:46:23
1	Cu 324.752†	105042.3	113888.0	536.82	µg/L	536.82	ppb	18:46:21
1	Fe 238.204 Radial†	2714615.2	2885265.2	191820	µg/L	191820	ppb	18:45:47
1	K 766.490 Radial†	14492.6	13949.3	5495.4	µg/L	5495.4	ppb	18:45:49
1	Mg 279.077 IEC†	1107607.9	1177095.4	485180	µg/L	485180	ppb	18:45:49
1	Mn 257.610†	329092.8	364323.1	478.08	µg/L	478.08	ppb	18:46:21
1	Mo 202.031†	13229.8	14704.5	480.80	µg/L	480.80	ppb	18:46:23
1	Na 589.592 Radial†	34394.1	34862.9	5329.4	µg/L	5329.4	ppb	18:45:49
1	Ni 231.604†	31853.0	35311.6	451.68	µg/L	451.68	ppb	18:46:23
1	P 214.914†	9576.1	10524.0	2499.6	µg/L	2499.6	ppb	18:46:23
1	Pb 220.353†	6597.4	7192.9	463.36	µg/L	463.36	ppb	18:46:23
1	S 181.975 Axial†	3009.0	3237.0	2626.5	µg/L	2626.5	ppb	18:46:23
1	Sb 206.836†	3499.0	3787.8	505.98	µg/L	505.98	ppb	18:46:23
1	Se 196.026†	5309.9	5868.7	2390	µg/L	2390	ppb	18:46:23
1	SiO2†	92256.7	100582.6	10974	µg/L	10974	ppb	18:46:21
1	Si 251.611†	281270.8	310773.6	5129.3	µg/L	5129.3	ppb	18:46:21
1	Sn 189.927†	6022.0	6666.1	475.68	µg/L	475.68	ppb	18:46:23
1	Sr 421.552†	210049.1	223540.3	520.07	µg/L	520.07	ppb	18:45:49
1	Ti 334.940†	468269.2	517876.1	500.97	µg/L	500.97	ppb	18:46:21
1	Tl 190.801†	2818.9	3241.7	443.45	µg/L	443.45	ppb	18:46:23
1	U 409.014†	7133.6	8378.1	528.93	µg/L	528.93	ppb	18:46:21
1	V 292.402†	88326.4	97371.6	516.38	µg/L	516.38	ppb	18:46:21
1	Zn 213.857†	72620.0	79947.4	483.88	µg/L	483.88	ppb	18:46:21
2	Sc 361.383	1518034.6	1518034.6	90.750	%			18:46:26
2	Sc RADIAL	136837.3	136837.3	93.9	%			18:45:56
2	Y 371.029	919619.6	919619.6	89.931	%			18:46:26
2	Ag 328.068†	64494.6	68101.8	269.69	µg/L	269.69	ppb	18:46:26
2	Al 396.153Radial†	2229777.5	2375110.8	518440	µg/L	518440	ppb	18:45:52
2	As 188.979†	1016.8	1134.7	522.67	µg/L	522.67	ppb	18:46:28
2	B 249.677†	30917.4	30713.3	514.09	µg/L	514.09	ppb	18:46:26
2	Ba 233.527†	99392.7	109699.3	499.19	µg/L	499.19	ppb	18:46:26
2	Be 313.107†	684598.1	755042.2	245.93	µg/L	245.93	ppb	18:46:26
2	Ca 317.933Radial†	7784991.4	8291677.2	485860	µg/L	485860	ppb	18:45:52
2	Cd 226.502†	63805.9	70404.3	466.38	µg/L	466.38	ppb	18:46:26
2	Co 228.616†	29275.9	32436.7	434.76	µg/L	434.76	ppb	18:46:28
2	Cr 267.716†	50741.5	55753.6	479.35	µg/L	479.35	ppb	18:46:28
2	Cu 324.752†	105439.6	113762.6	535.91	µg/L	535.91	ppb	18:46:26
2	Fe 238.204 Radial†	2684811.7	2859651.8	190120	µg/L	190120	ppb	18:45:54
2	K 766.490 Radial†	14227.4	13699.5	5395.1	µg/L	5395.1	ppb	18:45:56
2	Mg 279.077 IEC†	1095117.9	1166293.6	480720	µg/L	480720	ppb	18:45:56
2	Mn 257.610†	330574.5	364191.4	478.08	µg/L	478.08	ppb	18:46:26
2	Mo 202.031†	13322.6	14735.9	481.64	µg/L	481.64	ppb	18:46:28
2	Na 589.592 Radial†	34233.3	34769.4	5315.2	µg/L	5315.2	ppb	18:45:56
2	Ni 231.604†	31592.4	34853.7	445.82	µg/L	445.82	ppb	18:46:28
2	P 214.914†	9407.5	10286.9	2442.8	µg/L	2442.8	ppb	18:46:28
2	Pb 220.353†	6453.4	6998.8	451.34	µg/L	451.34	ppb	18:46:28

2	S 181.975 Axial†	2940.7	3145.6	2552.4 µg/L	2552.4 ppb	18:46:28
2	Sb 206.836†	3475.9	3743.6	500.18 µg/L	500.18 ppb	18:46:28
2	Se 196.026†	5145.8	5659.4	2310 µg/L	2310 ppb	18:46:28
2	SiO2†	92799.3	100685.9	10985 µg/L	10985 ppb	18:46:26
2	Si 251.611†	282521.5	310643.8	5127.1 µg/L	5127.1 ppb	18:46:26
2	Sn 189.927†	5996.0	6605.2	471.35 µg/L	471.35 ppb	18:46:28
2	Sr 421.552†	208807.5	222692.2	518.13 µg/L	518.13 ppb	18:45:56
2	Ti 334.940†	470515.6	517840.9	501.16 µg/L	501.16 ppb	18:46:26
2	Tl 190.801†	2878.3	3292.0	450.21 µg/L	450.21 ppb	18:46:28
2	U 409.014†	7163.0	8372.3	528.73 µg/L	528.73 ppb	18:46:26
2	V 292.402†	88754.8	97370.2	516.63 µg/L	516.63 ppb	18:46:26
2	Zn 213.857†	72903.7	79870.6	483.58 µg/L	483.58 ppb	18:46:26
3	Sc 361.383	1509678.5	1509678.5	90.250 %		18:46:31
3	Sc RADIAL	138373.5	138373.5	94.9 %		18:46:03
3	Y 371.029	914674.1	914674.1	89.448 %		18:46:31
3	Ag 328.068†	64587.4	68598.0	271.77 µg/L	271.77 ppb	18:46:31
3	Al 396.153Radial†	2250390.9	2370456.7	517420 µg/L	517420 ppb	18:45:58
3	As 188.979†	1006.1	1129.0	520.40 µg/L	520.40 ppb	18:46:33
3	B 249.677†	30857.6	30835.5	516.13 µg/L	516.13 ppb	18:46:31
3	Ba 233.527†	99227.6	110122.6	501.13 µg/L	501.13 ppb	18:46:31
3	Be 313.107†	682431.3	756816.9	246.51 µg/L	246.51 ppb	18:46:31
3	Ca 317.933Radial†	7834035.4	8251280.0	483490 µg/L	483490 ppb	18:45:58
3	Cd 226.502†	63517.1	70473.5	466.87 µg/L	466.87 ppb	18:46:31
3	Co 228.616†	29487.3	32849.5	440.42 µg/L	440.42 ppb	18:46:33
3	Cr 267.716†	51368.6	56757.9	487.95 µg/L	487.95 ppb	18:46:33
3	Cu 324.752†	105432.6	114397.9	538.71 µg/L	538.71 ppb	18:46:31
3	Fe 238.204 Radial†	2714742.3	2859431.1	190100 µg/L	190100 ppb	18:46:01
3	K 766.490 Radial†	14507.9	13826.8	5448.0 µg/L	5448.0 ppb	18:46:03
3	Mg 279.077 IEC†	1111196.5	1170280.1	482370 µg/L	482370 ppb	18:46:03
3	Mn 257.610†	329292.9	364787.6	478.83 µg/L	478.83 ppb	18:46:31
3	Mo 202.031†	13311.3	14804.5	483.83 µg/L	483.83 ppb	18:46:33
3	Na 589.592 Radial†	34668.7	34823.2	5323.3 µg/L	5323.3 ppb	18:46:03
3	Ni 231.604†	31996.5	35494.2	454.01 µg/L	454.01 ppb	18:46:33
3	P 214.914†	9605.6	10563.7	2508.9 µg/L	2508.9 ppb	18:46:33
3	Pb 220.353†	6567.4	7164.5	461.32 µg/L	461.32 ppb	18:46:33
3	S 181.975 Axial†	2974.8	3201.4	2597.7 µg/L	2597.7 ppb	18:46:33
3	Sb 206.836†	3463.3	3750.8	501.08 µg/L	501.08 ppb	18:46:33
3	Se 196.026†	5291.7	5852.5	2380 µg/L	2380 ppb	18:46:33
3	SiO2†	92489.2	100908.3	11009 µg/L	11009 ppb	18:46:31
3	Si 251.611†	281639.3	311389.5	5139.4 µg/L	5139.4 ppb	18:46:31
3	Sn 189.927†	6087.5	6743.1	481.17 µg/L	481.17 ppb	18:46:33
3	Sr 421.552†	210738.5	222257.1	517.13 µg/L	517.13 ppb	18:46:03
3	Ti 334.940†	470683.6	520896.9	504.08 µg/L	504.08 ppb	18:46:31
3	Tl 190.801†	2864.6	3294.4	450.54 µg/L	450.54 ppb	18:46:33
3	U 409.014†	7145.1	8396.1	530.14 µg/L	530.14 ppb	18:46:31
3	V 292.402†	88390.3	97507.5	517.45 µg/L	517.45 ppb	18:46:31
3	Zn 213.857†	72542.0	79914.6	483.81 µg/L	483.81 ppb	18:46:31

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1512799.2	90.437	%	0.2727				0.30%
Sc RADIAL	137446.3	94.3	%	0.56				0.59%
Y 371.029	916570.2	89.633	%	0.2608				0.29%
Ag 328.068†	68413.9	270.93	µg/L	1.098	270.93	ppb	1.098	0.41%
QC value within limits for Ag 328.068 Recovery = 108.37%								
Al 396.153Radial†	2381538.1	519840	µg/L	3348.7	519840	ppb	3348.7	0.64%
QC value within limits for Al 396.153Radial Recovery = 103.97%								
As 188.979†	1143.3	526.47	µg/L	8.621	526.47	ppb	8.621	1.64%
QC value within limits for As 188.979 Recovery = 105.29%								
B 249.677†	30705.8	513.96	µg/L	2.238	513.96	ppb	2.238	0.44%
QC value within limits for B 249.677 Recovery = 102.79%								
Ba 233.527†	109899.8	500.10	µg/L	0.973	500.10	ppb	0.973	0.19%
QC value within limits for Ba 233.527 Recovery = 100.02%								
Be 313.107†	755583.8	246.11	µg/L	0.349	246.11	ppb	0.349	0.14%
QC value within limits for Be 313.107 Recovery = 98.44%								
Ca 317.933Radial†	8309102.1	486880	µg/L	3997.7	486880	ppb	3997.7	0.82%
QC value within limits for Ca 317.933Radial Recovery = 97.38%								
Cd 226.502†	70456.0	466.68	µg/L	0.262	466.68	ppb	0.262	0.06%
QC value within limits for Cd 226.502 Recovery = 93.34%								

Co 228.616†	32623.9	437.30 µg/L	2.873	437.30 ppb	2.873	0.66%
QC value within limits for Co 228.616 Recovery = 87.46%						
Cr 267.716†	56371.1	484.65 µg/L	4.635	484.65 ppb	4.635	0.96%
QC value within limits for Cr 267.716 Recovery = 96.93%						
Cu 324.752†	114016.2	537.15 µg/L	1.432	537.15 ppb	1.432	0.27%
QC value within limits for Cu 324.752 Recovery = 107.43%						
Fe 238.204 Radial†	2868116.0	190680 µg/L	987.4	190680 ppb	987.4	0.52%
QC value within limits for Fe 238.204 Radial Recovery = 95.34%						
K 766.490 Radial†	13825.2	5446.2 µg/L	50.18	5446.2 ppb	50.18	0.92%
QC value within limits for K 766.490 Radial Recovery = 108.92%						
Mg 279.077 IEC†	1171223.1	482760 µg/L	2251.4	482760 ppb	2251.4	0.47%
QC value within limits for Mg 279.077 IEC Recovery = 96.55%						
Mn 257.610†	364434.0	478.33 µg/L	0.433	478.33 ppb	0.433	0.09%
QC value within limits for Mn 257.610 Recovery = 95.67%						
Mo 202.031†	14748.3	482.09 µg/L	1.569	482.09 ppb	1.569	0.33%
QC value within limits for Mo 202.031 Recovery = 96.42%						
Na 589.592 Radial†	34818.5	5322.6 µg/L	7.14	5322.6 ppb	7.14	0.13%
QC value within limits for Na 589.592 Radial Recovery = 106.45%						
Ni 231.604†	35219.8	450.50 µg/L	4.221	450.50 ppb	4.221	0.94%
QC value within limits for Ni 231.604 Recovery = 90.10%						
P 214.914†	10458.2	2483.8 µg/L	35.79	2483.8 ppb	35.79	1.44%
QC value within limits for P 214.914 Recovery = 99.35%						
Pb 220.353†	7118.7	458.68 µg/L	6.431	458.68 ppb	6.431	1.40%
QC value within limits for Pb 220.353 Recovery = 91.74%						
S 181.975 Axial†	3194.7	2592.2 µg/L	37.32	2592.2 ppb	37.32	1.44%
QC value within limits for S 181.975 Axial Recovery = 103.69%						
Sb 206.836†	3760.7	502.41 µg/L	3.120	502.41 ppb	3.120	0.62%
QC value within limits for Sb 206.836 Recovery = 100.48%						
Se 196.026†	5793.5	2360 µg/L	46.2	2360 ppb	46.2	1.96%
QC value within limits for Se 196.026 Recovery = 94.33%						
SiO2†	100725.6	10989 µg/L	18.1	10989 ppb	18.1	0.16%
QC value within limits for SiO2 Recovery = 102.75%						
Si 251.611†	310935.6	5131.9 µg/L	6.54	5131.9 ppb	6.54	0.13%
QC value within limits for Si 251.611 Recovery = 102.64%						
Sn 189.927†	6671.5	476.07 µg/L	4.919	476.07 ppb	4.919	1.03%
QC value within limits for Sn 189.927 Recovery = 95.21%						
Sr 421.552†	222829.9	518.44 µg/L	1.498	518.44 ppb	1.498	0.29%
QC value within limits for Sr 421.552 Recovery = 103.69%						
Ti 334.940†	518871.3	502.07 µg/L	1.741	502.07 ppb	1.741	0.35%
QC value within limits for Ti 334.940 Recovery = 100.41%						
Tl 190.801†	3276.0	448.07 µg/L	4.004	448.07 ppb	4.004	0.89%
QC value within limits for Tl 190.801 Recovery = 89.61%						
U 409.014†	8382.2	529.27 µg/L	0.763	529.27 ppb	0.763	0.14%
QC value within limits for U 409.014 Recovery = 105.85%						
V 292.402†	97416.4	516.82 µg/L	0.558	516.82 ppb	0.558	0.11%
QC value within limits for V 292.402 Recovery = 103.36%						
Zn 213.857†	79910.9	483.76 µg/L	0.156	483.76 ppb	0.156	0.03%
QC value within limits for Zn 213.857 Recovery = 96.75%						

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: LR1
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 3/29/2010 18:46:42
Data Type: Reprocessed on 3/29/2010 19:14:40

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1475217.1	1475217.1	88.190	%			18:47:41
1	Sc RADIAL	134988.0	134988.0	92.6	%			18:47:14
1	Y 371.029	890652.0	890652.0	87.098	%			18:47:41
1	Ag 328.068†	2600.2	-18.7	4.2300	µg/L	4.2300	ppb	18:47:41
1	Al 396.153Radial†	2173247.9	2346612.0	512240	µg/L	512240	ppb	18:47:12
1	As 188.979†	-221.7	-237.2	2.3463	µg/L	2.3463	ppb	18:47:43
1	B 249.677†	3640.1	771.9	12.918	µg/L	12.918	ppb	18:47:41
1	Ba 233.527†	451.6	687.2	-2.6252	µg/L	-2.6252	ppb	18:47:43
1	Be 313.107†	-13095.3	-14188.9	-0.0322	µg/L	-0.0322	ppb	18:47:41
1	Ca 317.933Radial†	7559025.2	8161296.1	478220	µg/L	478220	ppb	18:47:12
1	Cd 226.502†	5610.9	6456.7	-2.9745	µg/L	-2.9745	ppb	18:47:43
1	Co 228.616†	613.3	872.0	-11.650	µg/L	-11.650	ppb	18:47:43
1	Cr 267.716†	908.0	869.3	5.4318	µg/L	5.4318	ppb	18:47:43
1	Cu 324.752†	-17506.0	-22275.2	-5.5587	µg/L	-5.5587	ppb	18:47:43
1	Fe 238.204 Radial†	6300456.2	6802850.0	452280	µg/L	452280	ppb	18:47:12
1	K 766.490 Radial†	1898.7	595.1	-78.007	µg/L	-78.007	ppb	18:47:14
1	Mg 279.077 IEC†	1069506.5	1154620.7	475670	µg/L	475670	ppb	18:47:12
1	Mn 257.610†	14951.4	16873.6	2.9939	µg/L	2.9939	ppb	18:47:41
1	Mo 202.031†	-853.5	-912.6	-2.2055	µg/L	-2.2055	ppb	18:47:41
1	Na 589.592 Radial†	3064907.6	3307661.5	506110	µg/L	506110	ppb	18:47:12
1	Ni 231.604†	241.8	315.0	4.0298	µg/L	4.0298	ppb	18:47:43
1	P 214.914†	851.2	885.7	19.361	µg/L	19.361	ppb	18:47:43
1	Pb 220.353†	111.2	13.7	6.6643	µg/L	6.6643	ppb	18:47:43
1	S 181.975 Axial†	199.5	131.4	106.18	µg/L	106.18	ppb	18:47:43
1	Sb 206.836†	173.5	110.1	5.3162	µg/L	5.3162	ppb	18:47:43
1	Se 196.026†	-269.6	-316.6	46.3	µg/L	46.3	ppb	18:47:43
1	SiO2†	1875.2	553.5	61.247	µg/L	61.247	ppb	18:47:43
1	Si 251.611†	-2234.1	-3209.7	-52.717	µg/L	-52.717	ppb	18:47:43
1	Sn 189.927†	58.5	64.3	4.6670	µg/L	4.6670	ppb	18:47:43
1	Sr 421.552†	4787.3	5447.1	9.0235	µg/L	9.0235	ppb	18:47:14
1	Ti 334.940†	25472.1	28246.9	-3.7159	µg/L	-3.7159	ppb	18:47:41
1	Tl 190.801†	-294.1	-213.1	-27.836	µg/L	-27.836	ppb	18:47:43
1	U 409.014†	216123.9	245545.7	15094	µg/L	15094	ppb	18:47:41
1	V 292.402†	10776.3	11787.7	3.3989	µg/L	3.3989	ppb	18:47:43
1	Zn 213.857†	7832.8	8417.4	9.2023	µg/L	9.2023	ppb	18:47:43
2	Sc 361.383	1474797.5	1474797.5	88.165	%			18:47:46
2	Sc RADIAL	136487.8	136487.8	93.6	%			18:47:19
2	Y 371.029	890090.9	890090.9	87.044	%			18:47:46
2	Ag 328.068†	2591.0	-28.2	4.2336	µg/L	4.2336	ppb	18:47:46
2	Al 396.153Radial†	2181204.6	2329323.3	508460	µg/L	508460	ppb	18:47:17
2	As 188.979†	-251.7	-271.3	-12.460	µg/L	-12.460	ppb	18:47:48
2	B 249.677†	3729.3	874.2	14.628	µg/L	14.628	ppb	18:47:46
2	Ba 233.527†	527.6	773.5	-2.2009	µg/L	-2.2009	ppb	18:47:48
2	Be 313.107†	-13474.2	-14622.9	-0.1807	µg/L	-0.1807	ppb	18:47:46
2	Ca 317.933Radial†	7600178.4	8115555.5	475540	µg/L	475540	ppb	18:47:17
2	Cd 226.502†	5683.2	6540.6	-2.1393	µg/L	-2.1393	ppb	18:47:48
2	Co 228.616†	752.5	1030.1	-9.3590	µg/L	-9.3590	ppb	18:47:48
2	Cr 267.716†	724.6	661.7	3.6080	µg/L	3.6080	ppb	18:47:48
2	Cu 324.752†	-17459.2	-22227.9	-5.7811	µg/L	-5.7811	ppb	18:47:48
2	Fe 238.204 Radial†	6336284.1	6766355.5	449850	µg/L	449850	ppb	18:47:17
2	K 766.490 Radial†	1981.3	660.8	-49.077	µg/L	-49.077	ppb	18:47:19
2	Mg 279.077 IEC†	1076643.1	1149552.1	473590	µg/L	473590	ppb	18:47:17
2	Mn 257.610†	15045.5	16985.2	3.2356	µg/L	3.2356	ppb	18:47:46
2	Mo 202.031†	-881.3	-944.4	-3.3453	µg/L	-3.3453	ppb	18:47:46
2	Na 589.592 Radial†	3084400.4	3292112.6	503740	µg/L	503740	ppb	18:47:17
2	Ni 231.604†	341.9	428.7	5.4833	µg/L	5.4833	ppb	18:47:48
2	P 214.914†	888.6	928.3	30.390	µg/L	30.390	ppb	18:47:48
2	Pb 220.353†	63.3	-40.6	3.2317	µg/L	3.2317	ppb	18:47:48

2	S 181.975 Axial†	169.7	97.6	78.843 µg/L	78.843 ppb	18:47:48
2	Sb 206.836†	95.2	21.4	-6.5888 µg/L	-6.5888 ppb	18:47:48
2	Se 196.026†	-403.3	-468.4	-14.6 µg/L	-14.6 ppb	18:47:48
2	SiO2†	1816.0	486.9	54.020 µg/L	54.020 ppb	18:47:48
2	Si 251.611†	-2084.7	-3041.0	-49.906 µg/L	-49.906 ppb	18:47:48
2	Sn 189.927†	43.9	47.8	3.4920 µg/L	3.4920 ppb	18:47:48
2	Sr 421.552†	4824.6	5430.1	9.0047 µg/L	9.0047 ppb	18:47:19
2	Ti 334.940†	25083.7	27814.6	-4.0459 µg/L	-4.0459 ppb	18:47:46
2	Tl 190.801†	-241.3	-153.4	-19.840 µg/L	-19.840 ppb	18:47:48
2	U 409.014†	215721.0	245158.5	15071 µg/L	15071 ppb	18:47:46
2	V 292.402†	10612.7	11605.5	2.7405 µg/L	2.7405 ppb	18:47:48
2	Zn 213.857†	7898.7	8494.6	9.8973 µg/L	9.8973 ppb	18:47:48
3	Sc 361.383	1482973.9	1482973.9	88.654 %		18:47:51
3	Sc RADIAL	135581.7	135581.7	93.0 %		18:47:23
3	Y 371.029	894893.3	894893.3	87.513 %		18:47:51
3	Ag 328.068†	2907.1	312.1	5.3159 µg/L	5.3159 ppb	18:47:51
3	Al 396.153Radial†	2198157.6	2363115.2	515840 µg/L	515840 ppb	18:47:21
3	As 188.979†	-166.7	-173.8	30.035 µg/L	30.035 ppb	18:47:53
3	B 249.677†	3819.0	952.0	15.940 µg/L	15.940 ppb	18:47:51
3	Ba 233.527†	467.2	702.0	-2.6283 µg/L	-2.6283 ppb	18:47:53
3	Be 313.107†	-13583.2	-14661.6	-0.1997 µg/L	-0.1997 ppb	18:47:51
3	Ca 317.933Radial†	7679845.3	8255440.6	483730 µg/L	483730 ppb	18:47:21
3	Cd 226.502†	5523.3	6324.6	-4.4547 µg/L	-4.4547 ppb	18:47:53
3	Co 228.616†	665.1	926.8	-11.181 µg/L	-11.181 ppb	18:47:53
3	Cr 267.716†	895.3	849.6	5.3942 µg/L	5.3942 ppb	18:47:53
3	Cu 324.752†	-17409.5	-22062.6	-3.6839 µg/L	-3.6839 ppb	18:47:53
3	Fe 238.204 Radial†	6403813.8	6884172.5	457680 µg/L	457680 ppb	18:47:21
3	K 766.490 Radial†	2077.2	778.0	-6.1386 µg/L	-6.1386 ppb	18:47:23
3	Mg 279.077 IEC†	1090892.1	1172554.0	483060 µg/L	483060 ppb	18:47:21
3	Mn 257.610†	15096.7	16948.9	2.7894 µg/L	2.7894 ppb	18:47:51
3	Mo 202.031†	-879.5	-936.8	-2.6225 µg/L	-2.6225 ppb	18:47:51
3	Na 589.592 Radial†	3116499.7	3348632.9	512380 µg/L	512380 ppb	18:47:21
3	Ni 231.604†	249.4	322.2	4.1219 µg/L	4.1219 ppb	18:47:53
3	P 214.914†	734.4	748.9	-16.245 µg/L	-16.245 ppb	18:47:53
3	Pb 220.353†	-96.4	-221.1	-7.4793 µg/L	-7.4793 ppb	18:47:53
3	S 181.975 Axial†	169.9	96.8	78.205 µg/L	78.205 ppb	18:47:53
3	Sb 206.836†	73.9	-3.3	-10.074 µg/L	-10.074 ppb	18:47:53
3	Se 196.026†	-324.5	-376.9	24.3 µg/L	24.3 ppb	18:47:53
3	SiO2†	1980.5	661.1	72.973 µg/L	72.973 ppb	18:47:53
3	Si 251.611†	-1826.1	-2736.2	-44.905 µg/L	-44.905 ppb	18:47:53
3	Sn 189.927†	110.7	122.9	8.8298 µg/L	8.8298 ppb	18:47:53
3	Sr 421.552†	4811.0	5449.9	8.9869 µg/L	8.9869 ppb	18:47:23
3	Ti 334.940†	25226.4	27818.7	-4.5924 µg/L	-4.5924 ppb	18:47:51
3	Tl 190.801†	-184.7	-88.0	-11.070 µg/L	-11.070 ppb	18:47:53
3	U 409.014†	216613.9	244816.6	15048 µg/L	15048 ppb	18:47:51
3	V 292.402†	10498.6	11410.5	0.4086 µg/L	0.4086 ppb	18:47:53
3	Zn 213.857†	7725.4	8249.7	7.5805 µg/L	7.5805 ppb	18:47:53

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1477662.9	88.336	%	0.2752				0.31%
Sc RADIAL	135685.8	93.1	%	0.52				0.56%
Y 371.029	891878.7	87.218	%	0.2568				0.29%
Ag 328.068†	88.4	4.5932	µg/L	0.62588	4.5932	ppb	0.62588	13.63%
Al 396.153Radial†	2346350.2	512180	µg/L	3688.5	512180	ppb	3688.5	0.72%
QC value within limits for Al 396.153Radial Recovery = 102.44%								
As 188.979†	-227.4	6.6405	µg/L	21.57070	6.6405	ppb	21.57070	324.83%
B 249.677†	866.1	14.495	µg/L	1.5153	14.495	ppb	1.5153	10.45%
Ba 233.527†	720.9	-2.4848	µg/L	0.24586	-2.4848	ppb	0.24586	9.89%
Be 313.107†	-14491.1	-0.1375	µg/L	0.09171	-0.1375	ppb	0.09171	66.68%
Ca 317.933Radial†	8177430.7	479160	µg/L	4179.3	479160	ppb	4179.3	0.87%
QC value within limits for Ca 317.933Radial Recovery = 95.83%								
Cd 226.502†	6440.6	-3.1895	µg/L	1.17255	-3.1895	ppb	1.17255	36.76%
Co 228.616†	943.0	-10.730	µg/L	1.2103	-10.730	ppb	1.2103	11.28%
Cr 267.716†	793.5	4.8113	µg/L	1.04230	4.8113	ppb	1.04230	21.66%
Cu 324.752†	-22188.5	-5.0079	µg/L	1.15199	-5.0079	ppb	1.15199	23.00%
Fe 238.204 Radial†	6817792.7	453270	µg/L	4009.8	453270	ppb	4009.8	0.88%
QC value within limits for Fe 238.204 Radial Recovery = 90.65%								
K 766.490 Radial†	678.0	-44.408	µg/L	36.1609	-44.408	ppb	36.1609	81.43%

Mg 279.077 IEC†	1158908.9	477440 µg/L	4979.6	477440 ppb	4979.6	1.04%
QC value within limits for Mg 279.077 IEC Recovery = 95.49%						
Mn 257.610†	16935.9	3.0063 µg/L	0.22334	3.0063 ppb	0.22334	7.43%
Mo 202.031†	-931.3	-2.7244 µg/L	0.57668	-2.7244 ppb	0.57668	21.17%
Na 589.592 Radial†	3316135.7	507410 µg/L	4467.6	507410 ppb	4467.6	0.88%
QC value within limits for Na 589.592 Radial Recovery = 101.48%						
Ni 231.604†	355.3	4.5450 µg/L	0.81388	4.5450 ppb	0.81388	17.91%
P 214.914†	854.3	11.169 µg/L	24.3729	11.169 ppb	24.3729	218.22%
Pb 220.353†	-82.7	0.8056 µg/L	7.37729	0.8056 ppb	7.37729	915.80%
S 181.975 Axial†	108.6	87.742 µg/L	15.9697	87.742 ppb	15.9697	18.20%
Sb 206.836†	42.7	-3.7822 µg/L	8.06989	-3.7822 ppb	8.06989	213.36%
Se 196.026†	-387.3	18.7 µg/L	30.84	18.7 ppb	30.84	165.04%
SiO2†	567.2	62.747 µg/L	9.5648	62.747 ppb	9.5648	15.24%
Si 251.611†	-2995.6	-49.176 µg/L	3.9567	-49.176 ppb	3.9567	8.05%
Sn 189.927†	78.3	5.6629 µg/L	2.80476	5.6629 ppb	2.80476	49.53%
Sr 421.552†	5442.4	9.0050 µg/L	0.01831	9.0050 ppb	0.01831	0.20%
Ti 334.940†	27960.1	-4.1181 µg/L	0.44268	-4.1181 ppb	0.44268	10.75%
Tl 190.801†	-151.5	-19.582 µg/L	8.3859	-19.582 ppb	8.3859	42.82%
U 409.014†	245173.6	15071 µg/L	23.1	15071 ppb	23.1	0.15%
QC value within limits for U 409.014 Recovery = 100.47%						
V 292.402†	11601.2	2.1827 µg/L	1.57124	2.1827 ppb	1.57124	71.99%
Zn 213.857†	8387.2	8.8934 µg/L	1.18890	8.8934 ppb	1.18890	13.37%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 3/29/2010 18:48:01
Data Type: Reprocessed on 3/29/2010 19:14:40

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1698380.4	1698380.4	101.53	%			18:49:13
1	Sc RADIAL	151205.1	151205.1	104	%			18:48:34
1	Y 371.029	1017103.0	1017103.0	99.464	%			18:49:13
1	Ag 328.068†	-18686.1	-21371.4	31.131	µg/L	31.131	ppb	18:49:15
1	Al 396.153Radial†	2338.4	2286.0	66.356	µg/L	66.356	ppb	18:48:36
1	As 188.979†	24060.3	23711.8	10160	µg/L	10160	ppb	18:49:15
1	B 249.677†	302290.6	294377.4	4910.3	µg/L	4910.3	ppb	18:49:13
1	Ba 233.527†	3091920.0	3045479.3	13922	µg/L	13922	ppb	18:49:13
1	Be 313.107†	8967503.4	8832963.6	2875.2	µg/L	2875.2	ppb	18:49:09
1	Ca 317.933Radial†	1386.8	720.6	42.226	µg/L	42.226	ppb	18:48:36
1	Cd 226.502†	1391850.4	1370960.3	9471.5	µg/L	9471.5	ppb	18:49:13
1	Co 228.616†	680530.5	670447.0	9197.3	µg/L	9197.3	ppb	18:49:13
1	Cr 267.716†	2796482.2	2754160.4	23659	µg/L	23659	ppb	18:49:13
1	Cu 324.752†	4652514.4	4579945.2	19914	µg/L	19914	ppb	18:49:13
1	Fe 238.204 Radial†	-1093.2	-1167.1	-77.594	µg/L	-77.594	ppb	18:48:36
1	K 766.490 Radial†	735082.9	707128.4	291110	µg/L	291110	ppb	18:48:34
1	Mg 279.077 IEC†	-573.2	-739.2	-76.817	µg/L	-76.817	ppb	18:48:36
1	Mn 257.610†	6850554.7	6747191.3	9219.6	µg/L	9219.6	ppb	18:49:13
1	Mo 202.031†	299568.0	295106.7	9318.7	µg/L	9318.7	ppb	18:49:15
1	Na 589.592 Radial†	4106.1	2263.3	87.417	µg/L	87.417	ppb	18:48:36
1	Ni 231.604†	759020.4	747617.8	9562.9	µg/L	9562.9	ppb	18:49:13
1	P 214.914†	61793.1	60781.8	14324	µg/L	14324	ppb	18:49:15
1	Pb 220.353†	385088.4	379170.1	22997	µg/L	22997	ppb	18:49:13
1	S 181.975 Axial†	62300.3	61266.2	49715	µg/L	49715	ppb	18:49:15
1	Sb 206.836†	72365.8	71188.1	9412.3	µg/L	9412.3	ppb	18:49:15
1	Se 196.026†	23983.3	23610.8	9340	µg/L	9340	ppb	18:49:15
1	SiO2†	927224.5	911672.2	99243	µg/L	99243	ppb	18:49:13
1	Si 251.611†	2845330.8	2801756.4	46140	µg/L	46140	ppb	18:49:13
1	Sn 189.927†	135952.5	133900.7	9552.3	µg/L	9552.3	ppb	18:49:15
1	Sr 421.552†	4291141.6	4136725.5	9695.4	µg/L	9695.4	ppb	18:48:32
1	Ti 334.940†	9795412.6	9647094.3	9829.2	µg/L	9829.2	ppb	18:49:09
1	Tl 190.801†	68839.1	67921.6	9266.8	µg/L	9266.8	ppb	18:49:15
1	U 409.014†	-6352.9	-5778.0	247.84	µg/L	247.84	ppb	18:49:15
1	V 292.402†	1822287.8	1794382.0	10142	µg/L	10142	ppb	18:49:13
1	Zn 213.857†	2271454.5	2236744.1	14006	µg/L	14006	ppb	18:49:13
2	Sc 361.383	1692355.1	1692355.1	101.17	%			18:49:22
2	Sc RADIAL	148148.5	148148.5	102	%			18:48:40
2	Y 371.029	1013670.4	1013670.4	99.129	%			18:49:22
2	Ag 328.068†	-18902.0	-21650.3	30.241	µg/L	30.241	ppb	18:49:25
2	Al 396.153Radial†	2166.1	2162.9	32.480	µg/L	32.480	ppb	18:48:43
2	As 188.979†	24382.8	24114.9	10329	µg/L	10329	ppb	18:49:25
2	B 249.677†	301947.2	295098.0	4922.4	µg/L	4922.4	ppb	18:49:22
2	Ba 233.527†	3087006.8	3051465.1	13949	µg/L	13949	ppb	18:49:22
2	Be 313.107†	8888938.4	8786753.2	2860.1	µg/L	2860.1	ppb	18:49:19
2	Ca 317.933Radial†	1193.0	557.5	32.668	µg/L	32.668	ppb	18:48:43
2	Cd 226.502†	1387271.1	1371314.7	9474.0	µg/L	9474.0	ppb	18:49:22
2	Co 228.616†	679503.2	671817.9	9216.1	µg/L	9216.1	ppb	18:49:22
2	Cr 267.716†	2791317.7	2758861.8	23700	µg/L	23700	ppb	18:49:22
2	Cu 324.752†	4645173.2	4589003.5	19954	µg/L	19954	ppb	18:49:22
2	Fe 238.204 Radial†	-1141.0	-1235.9	-82.165	µg/L	-82.165	ppb	18:48:43
2	K 766.490 Radial†	723724.6	710573.4	292530	µg/L	292530	ppb	18:48:40
2	Mg 279.077 IEC†	-594.9	-771.9	-86.616	µg/L	-86.616	ppb	18:48:43
2	Mn 257.610†	6838819.1	6759613.7	9236.6	µg/L	9236.6	ppb	18:49:22
2	Mo 202.031†	303352.5	299897.9	9470.0	µg/L	9470.0	ppb	18:49:25
2	Na 589.592 Radial†	3886.9	2129.3	65.648	µg/L	65.648	ppb	18:48:43
2	Ni 231.604†	757365.3	748643.5	9576.0	µg/L	9576.0	ppb	18:49:22
2	P 214.914†	62941.1	62133.3	14647	µg/L	14647	ppb	18:49:25
2	Pb 220.353†	383628.9	379077.8	22992	µg/L	22992	ppb	18:49:22

2	S 181.975 Axial†	63093.2	62268.3	50529 µg/L	50529 ppb	18:49:25
2	Sb 206.836†	73391.6	72455.9	9585.2 µg/L	9585.2 ppb	18:49:25
2	Se 196.026†	24264.9	23973.2	9480 µg/L	9480 ppb	18:49:25
2	SiO2†	925612.2	913330.0	99418 µg/L	99418 ppb	18:49:22
2	Si 251.611†	2841383.2	2807831.9	46237 µg/L	46237 ppb	18:49:22
2	Sn 189.927†	137626.2	136031.8	9703.7 µg/L	9703.7 ppb	18:49:25
2	Sr 421.552†	4251704.3	4183270.4	9804.5 µg/L	9804.5 ppb	18:48:38
2	Ti 334.940†	9732958.3	9619711.2	9801.3 µg/L	9801.3 ppb	18:49:19
2	Tl 190.801†	69796.1	69108.9	9426.0 µg/L	9426.0 ppb	18:49:25
2	U 409.014†	-6518.6	-5964.1	237.63 µg/L	237.63 ppb	18:49:25
2	V 292.402†	1819682.2	1798196.6	10165 µg/L	10165 ppb	18:49:22
2	Zn 213.857†	2265596.7	2238919.2	14019 µg/L	14019 ppb	18:49:22
3	Sc 361.383	1700875.8	1700875.8	101.68 %		18:49:32
3	Sc RADIAL	149241.8	149241.8	102 %		18:48:47
3	Y 371.029	1018743.4	1018743.4	99.625 %		18:49:32
3	Ag 328.068†	-19043.0	-21695.4	29.614 µg/L	29.614 ppb	18:49:34
3	Al 396.153Radial†	2183.6	2164.5	34.118 µg/L	34.118 ppb	18:48:49
3	As 188.979†	24384.9	23996.2	10278 µg/L	10278 ppb	18:49:34
3	B 249.677†	302272.0	293922.3	4902.7 µg/L	4902.7 ppb	18:49:32
3	Ba 233.527†	3092416.4	3041499.6	13904 µg/L	13904 ppb	18:49:32
3	Be 313.107†	8907241.5	8760739.0	2851.7 µg/L	2851.7 ppb	18:49:28
3	Ca 317.933Radial†	1218.9	574.2	33.647 µg/L	33.647 ppb	18:48:49
3	Cd 226.502†	1391102.2	1368213.3	9452.5 µg/L	9452.5 ppb	18:49:32
3	Co 228.616†	681435.9	670354.0	9196.0 µg/L	9196.0 ppb	18:49:32
3	Cr 267.716†	2794875.2	2748538.9	23611 µg/L	23611 ppb	18:49:32
3	Cu 324.752†	4650199.8	4570945.8	19875 µg/L	19875 ppb	18:49:32
3	Fe 238.204 Radial†	-1251.6	-1335.7	-88.800 µg/L	-88.800 ppb	18:48:49
3	K 766.490 Radial†	729684.2	711177.7	292780 µg/L	292780 ppb	18:48:47
3	Mg 279.077 IEC†	-664.5	-835.6	-113.55 µg/L	-113.55 ppb	18:48:49
3	Mn 257.610†	6850008.1	6736754.4	9205.4 µg/L	9205.4 ppb	18:49:32
3	Mo 202.031†	303976.8	299009.8	9441.9 µg/L	9441.9 ppb	18:49:34
3	Na 589.592 Radial†	3504.7	1728.1	4.0327 µg/L	4.0327 ppb	18:48:49
3	Ni 231.604†	758972.5	746473.9	9548.3 µg/L	9548.3 ppb	18:49:32
3	P 214.914†	62994.4	61874.1	14586 µg/L	14586 ppb	18:49:34
3	Pb 220.353†	384992.3	378519.2	22958 µg/L	22958 ppb	18:49:32
3	S 181.975 Axial†	63225.2	62085.8	50381 µg/L	50381 ppb	18:49:34
3	Sb 206.836†	73461.5	72161.1	9546.2 µg/L	9546.2 ppb	18:49:34
3	Se 196.026†	24345.1	23931.9	9470 µg/L	9470 ppb	18:49:34
3	SiO2†	927967.0	911062.6	99172 µg/L	99172 ppb	18:49:32
3	Si 251.611†	2848954.5	2801208.6	46128 µg/L	46128 ppb	18:49:32
3	Sn 189.927†	137708.4	135431.2	9660.9 µg/L	9660.9 ppb	18:49:34
3	Sr 421.552†	4283363.5	4183546.2	9805.1 µg/L	9805.1 ppb	18:48:45
3	Ti 334.940†	9739101.8	9577559.1	9758.3 µg/L	9758.3 ppb	18:49:28
3	Tl 190.801†	69743.1	68711.1	9371.9 µg/L	9371.9 ppb	18:49:34
3	U 409.014†	-6372.0	-5787.7	246.22 µg/L	246.22 ppb	18:49:34
3	V 292.402†	1821804.8	1791273.7	10126 µg/L	10126 ppb	18:49:32
3	Zn 213.857†	2271404.4	2233412.6	13985 µg/L	13985 ppb	18:49:32

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1697203.7	101.46	%	0.262				0.26%
Sc RADIAL	149531.8	103	%	1.1				1.04%
Y 371.029	1016505.6	99.406	%	0.2532				0.25%
Ag 328.068†	-21572.4	30.328	µg/L	0.7622	30.328	ppb	0.7622	2.51%
Al 396.153Radial†	2204.5	44.318	µg/L	19.1029	44.318	ppb	19.1029	43.10%
As 188.979†	23941.0	10256	µg/L	86.9	10256	ppb	86.9	0.85%
QC value within limits for As 188.979 Recovery = 102.56%								
B 249.677†	294465.9	4911.8	µg/L	9.92	4911.8	ppb	9.92	0.20%
QC value within limits for B 249.677 Recovery = 98.24%								
Ba 233.527†	3046148.0	13925	µg/L	22.9	13925	ppb	22.9	0.16%
QC value within limits for Ba 233.527 Recovery = 92.83%								
Be 313.107†	8793485.2	2862.3	µg/L	11.91	2862.3	ppb	11.91	0.42%
QC value within limits for Be 313.107 Recovery = 95.41%								
Ca 317.933Radial†	617.5	36.181	µg/L	5.2587	36.181	ppb	5.2587	14.53%
Cd 226.502†	1370162.8	9466.0	µg/L	11.73	9466.0	ppb	11.73	0.12%
QC value within limits for Cd 226.502 Recovery = 94.66%								
Co 228.616†	670873.0	9203.1	µg/L	11.25	9203.1	ppb	11.25	0.12%
QC value within limits for Co 228.616 Recovery = 92.03%								
Cr 267.716†	2753853.7	23657	µg/L	44.4	23657	ppb	44.4	0.19%

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   QC value within limits for Cr 267.716  Recovery = 94.63%
Cu 324.752†          4579964.8       19914 µg/L          39.3       19914 ppb          39.3   0.20%
   QC value within limits for Cu 324.752  Recovery = 99.57%
Fe 238.204 Radial†     -1246.2     -82.853 µg/L        5.6347     -82.853 ppb        5.6347   6.80%
K 766.490 Radial†     709626.5      292140 µg/L         899.3      292140 ppb         899.3   0.31%
   QC value within limits for K 766.490 Radial  Recovery = 97.38%
Mg 279.077 IEC†        -782.2     -92.329 µg/L       19.0229     -92.329 ppb       19.0229  20.60%
Mn 257.610†          6747853.1      9220.5 µg/L         15.64      9220.5 ppb         15.64   0.17%
   QC value within limits for Mn 257.610  Recovery = 92.21%
Mo 202.031†           298004.8      9410.2 µg/L         80.46      9410.2 ppb         80.46   0.86%
   QC value within limits for Mo 202.031  Recovery = 94.10%
Na 589.592 Radial†     2040.3      52.366 µg/L       43.2497      52.366 ppb       43.2497  82.59%
Ni 231.604†           747578.4      9562.4 µg/L         13.88      9562.4 ppb         13.88   0.15%
   QC value within limits for Ni 231.604  Recovery = 95.62%
P 214.914†             61596.4       14519 µg/L         171.5       14519 ppb         171.5   1.18%
   QC value within limits for P 214.914  Recovery = 96.79%
Pb 220.353†           378922.4       22983 µg/L          21.3       22983 ppb          21.3   0.09%
   QC value within limits for Pb 220.353  Recovery = 91.93%
S 181.975 Axial†       61873.4       50208 µg/L         433.1       50208 ppb         433.1   0.86%
   QC value within limits for S 181.975 Axial  Recovery = 100.42%
Sb 206.836†            71935.0      9514.6 µg/L         90.66      9514.6 ppb         90.66   0.95%
   QC value within limits for Sb 206.836  Recovery = 95.15%
Se 196.026†            23838.7       9430 µg/L          78.5        9430 ppb          78.5   0.83%
   QC value within limits for Se 196.026  Recovery = 94.29%
SiO2†                 912021.6       99278 µg/L         126.7       99278 ppb         126.7   0.13%
   QC value within limits for SiO2  Recovery = 92.78%
Si 251.611†          2803599.0       46168 µg/L          59.8       46168 ppb          59.8   0.13%
   QC value within limits for Si 251.611  Recovery = 92.34%
Sn 189.927†           135121.2      9639.0 µg/L         78.05      9639.0 ppb         78.05   0.81%
   QC value within limits for Sn 189.927  Recovery = 96.39%
Sr 421.552†          4167847.3      9768.3 µg/L         63.17      9768.3 ppb         63.17   0.65%
   QC value within limits for Sr 421.552  Recovery = 97.68%
Ti 334.940†          9614788.2      9796.3 µg/L         35.71      9796.3 ppb         35.71   0.36%
   QC value within limits for Ti 334.940  Recovery = 97.96%
Tl 190.801†            68580.5      9354.9 µg/L         80.95      9354.9 ppb         80.95   0.87%
   QC value within limits for Tl 190.801  Recovery = 93.55%
U 409.014†             -5843.2      243.90 µg/L         5.490      243.90 ppb         5.490   2.25%
V 292.402†           1794617.4       10145 µg/L          19.6       10145 ppb          19.6   0.19%
   QC value within limits for V 292.402  Recovery = 101.45%
Zn 213.857†          2236358.7       14003 µg/L          17.3       14003 ppb          17.3   0.12%
   QC value within limits for Zn 213.857  Recovery = 93.36%
All analyte(s) passed QC.
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Sequence No.: 13
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/29/2010 18:49:43
Data Type: Reprocessed on 3/29/2010 19:14:41

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1716469.7	1716469.7	102.61	%			18:50:43
1	Sc RADIAL	154139.7	154139.7	106	%			18:50:16
1	Y 371.029	1044074.8	1044074.8	102.10	%			18:50:43
1	Ag 328.068†	127602.5	121387.1	498.79	µg/L	498.79	ppb	18:50:43
1	Al 396.153Radial†	24715.7	23403.0	5085.7	µg/L	5085.7	ppb	18:50:16
1	As 188.979†	1226.4	1209.4	512.57	µg/L	512.57	ppb	18:51:03
1	B 249.677†	33333.5	29129.3	487.34	µg/L	487.34	ppb	18:50:43
1	Ba 233.527†	111436.2	108774.4	497.32	µg/L	497.32	ppb	18:50:43
1	Be 313.107†	1573483.9	1534088.7	499.51	µg/L	499.51	ppb	18:50:43
1	Ca 317.933Radial†	90206.4	84682.8	4962.0	µg/L	4962.0	ppb	18:50:16
1	Cd 226.502†	72401.2	70652.6	487.60	µg/L	487.60	ppb	18:50:43
1	Co 228.616†	36477.3	35725.3	489.45	µg/L	489.45	ppb	18:50:43
1	Cr 267.716†	59006.8	57344.5	492.41	µg/L	492.41	ppb	18:50:43
1	Cu 324.752†	119200.3	113741.0	495.97	µg/L	495.97	ppb	18:50:43
1	Fe 238.204 Radial†	78399.3	74021.0	4921.2	µg/L	4921.2	ppb	18:50:16
1	K 766.490 Radial†	15543.8	13243.2	5447.9	µg/L	5447.9	ppb	18:50:16
1	Mg 279.077 IEC†	13152.3	12250.1	5058.7	µg/L	5058.7	ppb	18:50:16
1	Mn 257.610†	370669.7	361153.8	493.28	µg/L	493.28	ppb	18:50:43
1	Mo 202.031†	15969.2	15617.9	493.45	µg/L	493.45	ppb	18:51:03
1	Na 589.592 Radial†	70596.7	65061.3	9950.4	µg/L	9950.4	ppb	18:50:16
1	Ni 231.604†	39349.5	38388.8	491.04	µg/L	491.04	ppb	18:50:43
1	P 214.914†	10515.6	10168.3	2426.7	µg/L	2426.7	ppb	18:51:03
1	Pb 220.353†	8561.1	8230.7	500.15	µg/L	500.15	ppb	18:51:03
1	S 181.975 Axial†	1372.2	1242.5	1010.8	µg/L	1010.8	ppb	18:51:03
1	Sb 206.836†	3825.6	3641.6	492.37	µg/L	492.37	ppb	18:51:03
1	Se 196.026†	1275.8	1232.4	490	µg/L	490	ppb	18:51:03
1	SiO2†	51362.9	48482.5	5278.0	µg/L	5278.0	ppb	18:50:43
1	Si 251.611†	154098.4	149499.2	2462.1	µg/L	2462.1	ppb	18:50:43
1	Sn 189.927†	7147.3	6963.3	496.69	µg/L	496.69	ppb	18:51:03
1	Sr 421.552†	225096.8	213129.1	499.48	µg/L	499.48	ppb	18:50:14
1	Ti 334.940†	496998.7	483710.6	492.59	µg/L	492.59	ppb	18:50:43
1	Tl 190.801†	3658.8	3685.9	502.16	µg/L	502.16	ppb	18:51:03
1	U 409.014†	7304.5	7597.6	499.58	µg/L	499.58	ppb	18:50:43
1	V 292.402†	91666.3	88901.0	499.43	µg/L	499.43	ppb	18:50:43
1	Zn 213.857†	80718.2	78199.0	488.38	µg/L	488.38	ppb	18:50:43
2	Sc 361.383	1735506.8	1735506.8	103.75	%			18:51:06
2	Sc RADIAL	152000.4	152000.4	104	%			18:50:20
2	Y 371.029	1054226.6	1054226.6	103.09	%			18:51:06
2	Ag 328.068†	129107.7	121473.9	499.12	µg/L	499.12	ppb	18:51:06
2	Al 396.153Radial†	24426.5	23454.6	5097.3	µg/L	5097.3	ppb	18:50:20
2	As 188.979†	1211.7	1182.2	501.18	µg/L	501.18	ppb	18:51:26
2	B 249.677†	33876.9	29296.7	490.15	µg/L	490.15	ppb	18:51:06
2	Ba 233.527†	112976.1	109067.5	498.66	µg/L	498.66	ppb	18:51:06
2	Be 313.107†	1597015.9	1539949.6	501.42	µg/L	501.42	ppb	18:51:06
2	Ca 317.933Radial†	89516.0	85221.3	4993.6	µg/L	4993.6	ppb	18:50:20
2	Cd 226.502†	73594.6	71028.9	490.19	µg/L	490.19	ppb	18:51:06
2	Co 228.616†	37103.5	35939.0	492.37	µg/L	492.37	ppb	18:51:06
2	Cr 267.716†	59788.6	57467.2	493.47	µg/L	493.47	ppb	18:51:06
2	Cu 324.752†	121059.6	114258.9	498.22	µg/L	498.22	ppb	18:51:06
2	Fe 238.204 Radial†	77655.1	74350.7	4943.1	µg/L	4943.1	ppb	18:50:20
2	K 766.490 Radial†	15260.2	13178.1	5421.1	µg/L	5421.1	ppb	18:50:20
2	Mg 279.077 IEC†	13002.7	12281.7	5071.5	µg/L	5071.5	ppb	18:50:20
2	Mn 257.610†	375944.4	362275.4	494.81	µg/L	494.81	ppb	18:51:06
2	Mo 202.031†	15890.3	15371.2	485.66	µg/L	485.66	ppb	18:51:26
2	Na 589.592 Radial†	70215.3	65635.2	10038	µg/L	10038	ppb	18:50:20
2	Ni 231.604†	40047.6	38641.0	494.26	µg/L	494.26	ppb	18:51:06
2	P 214.914†	10471.7	10013.6	2389.6	µg/L	2389.6	ppb	18:51:26
2	Pb 220.353†	8484.3	8065.2	490.12	µg/L	490.12	ppb	18:51:26

2	S 181.975 Axial†	1365.8	1221.6	993.82 µg/L	993.82 ppb	18:51:26
2	Sb 206.836†	3834.3	3609.1	487.85 µg/L	487.85 ppb	18:51:26
2	Se 196.026†	1280.6	1223.4	486 µg/L	486 ppb	18:51:26
2	SiO2†	52085.9	48630.3	5294.5 µg/L	5294.5 ppb	18:51:06
2	Si 251.611†	156279.7	149954.3	2469.8 µg/L	2469.8 ppb	18:51:06
2	Sn 189.927†	7113.5	6854.4	488.96 µg/L	488.96 ppb	18:51:26
2	Sr 421.552†	226242.9	217223.8	509.08 µg/L	509.08 ppb	18:50:18
2	Ti 334.940†	504866.7	485981.2	494.91 µg/L	494.91 ppb	18:51:06
2	Tl 190.801†	3631.8	3620.9	493.44 µg/L	493.44 ppb	18:51:26
2	U 409.014†	7123.0	7344.6	483.95 µg/L	483.95 ppb	18:51:06
2	V 292.402†	92685.9	88903.8	499.36 µg/L	499.36 ppb	18:51:06
2	Zn 213.857†	81781.8	78361.2	489.37 µg/L	489.37 ppb	18:51:06
3	Sc 361.383	1735485.3	1735485.3	103.75 %		18:51:29
3	Sc RADIAL	153403.0	153403.0	105 %		18:50:24
3	Y 371.029	1055021.0	1055021.0	103.17 %		18:51:29
3	Ag 328.068†	128496.4	120886.2	496.73 µg/L	496.73 ppb	18:51:29
3	Al 396.153Radial†	24553.1	23360.7	5076.8 µg/L	5076.8 ppb	18:50:24
3	As 188.979†	1228.3	1198.2	507.85 µg/L	507.85 ppb	18:51:49
3	B 249.677†	33764.7	29188.9	488.34 µg/L	488.34 ppb	18:51:29
3	Ba 233.527†	112730.4	108832.0	497.58 µg/L	497.58 ppb	18:51:29
3	Be 313.107†	1593609.1	1536684.9	500.35 µg/L	500.35 ppb	18:51:29
3	Ca 317.933Radial†	90597.1	85463.7	5007.8 µg/L	5007.8 ppb	18:50:24
3	Cd 226.502†	73406.3	70848.2	488.94 µg/L	488.94 ppb	18:51:29
3	Co 228.616†	37011.7	35850.9	491.16 µg/L	491.16 ppb	18:51:29
3	Cr 267.716†	59666.8	57350.6	492.47 µg/L	492.47 ppb	18:51:29
3	Cu 324.752†	120307.7	113535.5	495.08 µg/L	495.08 ppb	18:51:29
3	Fe 238.204 Radial†	78518.4	74490.1	4952.4 µg/L	4952.4 ppb	18:50:24
3	K 766.490 Radial†	15451.9	13226.5	5441.0 µg/L	5441.0 ppb	18:50:24
3	Mg 279.077 IEC†	13189.3	12345.0	5097.6 µg/L	5097.6 ppb	18:50:24
3	Mn 257.610†	374488.1	360876.2	492.90 µg/L	492.90 ppb	18:51:29
3	Mo 202.031†	15929.3	15408.9	486.85 µg/L	486.85 ppb	18:51:49
3	Na 589.592 Radial†	70596.2	65381.5	9999.4 µg/L	9999.4 ppb	18:50:24
3	Ni 231.604†	39740.3	38345.2	490.48 µg/L	490.48 ppb	18:51:29
3	P 214.914†	10488.7	10030.1	2393.6 µg/L	2393.6 ppb	18:51:49
3	Pb 220.353†	8512.5	8092.5	491.77 µg/L	491.77 ppb	18:51:49
3	S 181.975 Axial†	1342.5	1199.2	975.68 µg/L	975.68 ppb	18:51:49
3	Sb 206.836†	3856.9	3630.9	490.82 µg/L	490.82 ppb	18:51:49
3	Se 196.026†	1283.1	1225.8	487 µg/L	487 ppb	18:51:49
3	SiO2†	51906.7	48458.3	5275.6 µg/L	5275.6 ppb	18:51:29
3	Si 251.611†	155757.0	149452.4	2461.5 µg/L	2461.5 ppb	18:51:29
3	Sn 189.927†	7131.5	6871.8	490.19 µg/L	490.19 ppb	18:51:49
3	Sr 421.552†	223596.8	212726.1	498.53 µg/L	498.53 ppb	18:50:22
3	Ti 334.940†	502794.3	483989.7	492.88 µg/L	492.88 ppb	18:51:29
3	Tl 190.801†	3635.4	3624.3	493.87 µg/L	493.87 ppb	18:51:49
3	U 409.014†	7197.3	7416.4	488.32 µg/L	488.32 ppb	18:51:29
3	V 292.402†	92498.4	88724.2	498.37 µg/L	498.37 ppb	18:51:29
3	Zn 213.857†	81445.8	78038.4	487.36 µg/L	487.36 ppb	18:51:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1729154.0	103.37	%	0.657				0.64%
Sc RADIAL	153181.0	105	%	0.7				0.71%
Y 371.029	1051107.5	102.79	%	0.597				0.58%
Ag 328.068†	121249.1	498.21	µg/L	1.295	498.21	ppb	1.295	0.26%
QC value within limits for Ag 328.068 Recovery = 99.64%								
Al 396.153Radial†	23406.1	5086.6	µg/L	10.30	5086.6	ppb	10.30	0.20%
QC value within limits for Al 396.153Radial Recovery = 101.73%								
As 188.979†	1196.6	507.20	µg/L	5.724	507.20	ppb	5.724	1.13%
QC value within limits for As 188.979 Recovery = 101.44%								
B 249.677†	29205.0	488.61	µg/L	1.419	488.61	ppb	1.419	0.29%
QC value within limits for B 249.677 Recovery = 97.72%								
Ba 233.527†	108891.3	497.85	µg/L	0.708	497.85	ppb	0.708	0.14%
QC value within limits for Ba 233.527 Recovery = 99.57%								
Be 313.107†	1536907.7	500.43	µg/L	0.954	500.43	ppb	0.954	0.19%
QC value within limits for Be 313.107 Recovery = 100.09%								
Ca 317.933Radial†	85122.6	4987.8	µg/L	23.42	4987.8	ppb	23.42	0.47%
QC value within limits for Ca 317.933Radial Recovery = 99.76%								
Cd 226.502†	70843.2	488.91	µg/L	1.299	488.91	ppb	1.299	0.27%
QC value within limits for Cd 226.502 Recovery = 97.78%								

Co 228.616†	35838.4	490.99 µg/L	1.470	490.99 ppb	1.470	0.30%
QC value within limits for Co 228.616 Recovery = 98.20%						
Cr 267.716†	57387.4	492.78 µg/L	0.599	492.78 ppb	0.599	0.12%
QC value within limits for Cr 267.716 Recovery = 98.56%						
Cu 324.752†	113845.1	496.42 µg/L	1.617	496.42 ppb	1.617	0.33%
QC value within limits for Cu 324.752 Recovery = 99.28%						
Fe 238.204 Radial†	74287.3	4938.9 µg/L	16.02	4938.9 ppb	16.02	0.32%
QC value within limits for Fe 238.204 Radial Recovery = 98.78%						
K 766.490 Radial†	13215.9	5436.6 µg/L	13.92	5436.6 ppb	13.92	0.26%
QC value within limits for K 766.490 Radial Recovery = 108.73%						
Mg 279.077 IEC†	12292.3	5076.0 µg/L	19.85	5076.0 ppb	19.85	0.39%
QC value within limits for Mg 279.077 IEC Recovery = 101.52%						
Mn 257.610†	361435.1	493.67 µg/L	1.013	493.67 ppb	1.013	0.21%
QC value within limits for Mn 257.610 Recovery = 98.73%						
Mo 202.031†	15466.0	488.65 µg/L	4.194	488.65 ppb	4.194	0.86%
QC value within limits for Mo 202.031 Recovery = 97.73%						
Na 589.592 Radial†	65359.4	9996.0 µg/L	44.02	9996.0 ppb	44.02	0.44%
QC value within limits for Na 589.592 Radial Recovery = 99.96%						
Ni 231.604†	38458.3	491.93 µg/L	2.043	491.93 ppb	2.043	0.42%
QC value within limits for Ni 231.604 Recovery = 98.39%						
P 214.914†	10070.7	2403.3 µg/L	20.35	2403.3 ppb	20.35	0.85%
QC value within limits for P 214.914 Recovery = 96.13%						
Pb 220.353†	8129.5	494.02 µg/L	5.379	494.02 ppb	5.379	1.09%
QC value within limits for Pb 220.353 Recovery = 98.80%						
S 181.975 Axial†	1221.1	993.43 µg/L	17.559	993.43 ppb	17.559	1.77%
QC value within limits for S 181.975 Axial Recovery = 99.34%						
Sb 206.836†	3627.2	490.35 µg/L	2.300	490.35 ppb	2.300	0.47%
QC value within limits for Sb 206.836 Recovery = 98.07%						
Se 196.026†	1227.2	488 µg/L	1.8	488 ppb	1.8	0.38%
QC value within limits for Se 196.026 Recovery = 97.52%						
SiO2†	48523.7	5282.7 µg/L	10.27	5282.7 ppb	10.27	0.19%
QC value within limits for SiO2 Recovery = 98.79%						
Si 251.611†	149635.3	2464.5 µg/L	4.63	2464.5 ppb	4.63	0.19%
QC value within limits for Si 251.611 Recovery = 98.58%						
Sn 189.927†	6896.5	491.95 µg/L	4.158	491.95 ppb	4.158	0.85%
QC value within limits for Sn 189.927 Recovery = 98.39%						
Sr 421.552†	214359.7	502.36 µg/L	5.833	502.36 ppb	5.833	1.16%
QC value within limits for Sr 421.552 Recovery = 100.47%						
Ti 334.940†	484560.5	493.46 µg/L	1.265	493.46 ppb	1.265	0.26%
QC value within limits for Ti 334.940 Recovery = 98.69%						
Tl 190.801†	3643.7	496.49 µg/L	4.915	496.49 ppb	4.915	0.99%
QC value within limits for Tl 190.801 Recovery = 99.30%						
U 409.014†	7452.9	490.62 µg/L	8.063	490.62 ppb	8.063	1.64%
QC value within limits for U 409.014 Recovery = 98.12%						
V 292.402†	88843.0	499.05 µg/L	0.592	499.05 ppb	0.592	0.12%
QC value within limits for V 292.402 Recovery = 99.81%						
Zn 213.857†	78199.5	488.37 µg/L	1.004	488.37 ppb	1.004	0.21%
QC value within limits for Zn 213.857 Recovery = 97.67%						

All analyte(s) passed QC.

Sequence No.: 14
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/29/2010 18:51:58
Data Type: Reprocessed on 3/29/2010 19:14:42

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1728897.1	1728897.1	103.36	%			18:53:35
1	Sc RADIAL	154974.9	154974.9	106	%			18:52:27
1	Y 371.029	1063835.8	1063835.8	104.03	%			18:53:35
1	Ag 328.068†	3134.9	66.1	0.2939	µg/L	0.2939	ppb	18:53:37
1	Al 396.153Radial†	-26.1	7.3	1.5617	µg/L	1.5617	ppb	18:52:47
1	As 188.979†	-6.1	8.3	3.4794	µg/L	3.4794	ppb	18:53:57
1	B 249.677†	3279.3	-182.9	-3.0715	µg/L	-3.0715	ppb	18:53:57
1	Ba 233.527†	-172.5	8.1	0.0372	µg/L	0.0372	ppb	18:53:57
1	Be 313.107†	-265.8	402.9	0.1379	µg/L	0.1379	ppb	18:53:37
1	Ca 317.933Radial†	701.7	43.7	2.5615	µg/L	2.5615	ppb	18:52:47
1	Cd 226.502†	-78.0	18.9	0.1302	µg/L	0.1302	ppb	18:53:57
1	Co 228.616†	-150.4	31.1	0.4253	µg/L	0.4253	ppb	18:53:57
1	Cr 267.716†	165.7	0.1	-0.0163	µg/L	-0.0163	ppb	18:53:57
1	Cu 324.752†	2708.5	195.7	0.8692	µg/L	0.8692	ppb	18:53:37
1	Fe 238.204 Radial†	162.5	39.6	2.6306	µg/L	2.6306	ppb	18:52:47
1	K 766.490 Radial†	1937.4	367.1	151.11	µg/L	151.11	ppb	18:52:27
1	Mg 279.077 IEC†	162.4	-33.9	-13.972	µg/L	-13.972	ppb	18:52:47
1	Mn 257.610†	174.4	88.7	0.1218	µg/L	0.1218	ppb	18:53:57
1	Mo 202.031†	-30.8	25.4	0.8010	µg/L	0.8010	ppb	18:53:57
1	Na 589.592 Radial†	2342.1	508.0	77.603	µg/L	77.603	ppb	18:52:27
1	Ni 231.604†	-58.4	-15.6	-0.1996	µg/L	-0.1996	ppb	18:53:57
1	P 214.914†	71.2	-10.7	-2.5700	µg/L	-2.5700	ppb	18:53:57
1	Pb 220.353†	154.2	36.7	2.2095	µg/L	2.2095	ppb	18:53:57
1	S 181.975 Axial†	101.6	3.4	2.7893	µg/L	2.7893	ppb	18:53:57
1	Sb 206.836†	90.3	0.8	0.1164	µg/L	0.1164	ppb	18:53:57
1	Se 196.026†	18.0	6.5	2.59	µg/L	2.59	ppb	18:53:57
1	SiO2†	1694.9	67.0	7.2702	µg/L	7.2702	ppb	18:53:57
1	Si 251.611†	856.4	152.3	2.4932	µg/L	2.4932	ppb	18:53:57
1	Sn 189.927†	32.2	29.2	2.0730	µg/L	2.0730	ppb	18:53:57
1	Sr 421.552†	-130.0	155.7	0.3650	µg/L	0.3650	ppb	18:52:27
1	Ti 334.940†	561.4	-93.1	-0.1029	µg/L	-0.1029	ppb	18:53:37
1	Tl 190.801†	-112.5	11.5	1.5393	µg/L	1.5393	ppb	18:53:57
1	U 409.014†	-122.5	360.6	22.274	µg/L	22.274	ppb	18:53:37
1	V 292.402†	422.0	-23.5	-0.1074	µg/L	-0.1074	ppb	18:53:37
1	Zn 213.857†	665.5	179.5	1.1304	µg/L	1.1304	ppb	18:53:57
2	Sc 361.383	1739415.6	1739415.6	103.98	%			18:53:59
2	Sc RADIAL	153949.0	153949.0	106	%			18:52:49
2	Y 371.029	1070599.7	1070599.7	104.70	%			18:53:59
2	Ag 328.068†	3011.7	-70.7	-0.2648	µg/L	-0.2648	ppb	18:54:01
2	Al 396.153Radial†	-22.1	11.0	2.3766	µg/L	2.3766	ppb	18:53:09
2	As 188.979†	-13.6	1.2	0.4948	µg/L	0.4948	ppb	18:54:21
2	B 249.677†	3226.1	-253.2	-4.2510	µg/L	-4.2510	ppb	18:54:21
2	Ba 233.527†	-183.8	-1.7	-0.0082	µg/L	-0.0082	ppb	18:54:21
2	Be 313.107†	-497.9	181.3	0.0661	µg/L	0.0661	ppb	18:54:01
2	Ca 317.933Radial†	683.5	30.9	1.8113	µg/L	1.8113	ppb	18:53:09
2	Cd 226.502†	-81.2	16.3	0.1120	µg/L	0.1120	ppb	18:54:21
2	Co 228.616†	-169.3	13.8	0.1886	µg/L	0.1886	ppb	18:54:21
2	Cr 267.716†	203.3	35.3	0.2845	µg/L	0.2845	ppb	18:54:21
2	Cu 324.752†	2932.9	395.7	1.7397	µg/L	1.7397	ppb	18:54:01
2	Fe 238.204 Radial†	156.9	35.2	2.3419	µg/L	2.3419	ppb	18:53:09
2	K 766.490 Radial†	1851.5	297.9	122.64	µg/L	122.64	ppb	18:52:49
2	Mg 279.077 IEC†	181.3	-15.0	-6.1810	µg/L	-6.1810	ppb	18:53:09
2	Mn 257.610†	185.1	98.0	0.1342	µg/L	0.1342	ppb	18:54:21
2	Mo 202.031†	-40.6	16.1	0.5093	µg/L	0.5093	ppb	18:54:21
2	Na 589.592 Radial†	2203.5	391.5	59.792	µg/L	59.792	ppb	18:52:49
2	Ni 231.604†	-87.1	-42.9	-0.5483	µg/L	-0.5483	ppb	18:54:21
2	P 214.914†	70.7	-11.6	-2.7920	µg/L	-2.7920	ppb	18:54:21
2	Pb 220.353†	120.5	3.4	0.1904	µg/L	0.1904	ppb	18:54:21

2	S 181.975 Axial†	93.2	-5.2	-4.2193 µg/L	-4.2193 ppb	18:54:21
2	Sb 206.836†	93.2	3.0	0.4017 µg/L	0.4017 ppb	18:54:21
2	Se 196.026†	16.5	5.0	1.99 µg/L	1.99 ppb	18:54:21
2	SiO2†	1661.9	25.3	2.7424 µg/L	2.7424 ppb	18:54:21
2	Si 251.611†	798.6	91.6	1.5029 µg/L	1.5029 ppb	18:54:21
2	Sn 189.927†	13.9	11.4	0.8082 µg/L	0.8082 ppb	18:54:21
2	Sr 421.552†	-162.3	124.3	0.2914 µg/L	0.2914 ppb	18:52:49
2	Ti 334.940†	589.0	-69.9	-0.0804 µg/L	-0.0804 ppb	18:54:01
2	Tl 190.801†	-123.3	1.7	0.2267 µg/L	0.2267 ppb	18:54:21
2	U 409.014†	-105.6	377.6	23.300 µg/L	23.300 ppb	18:54:01
2	V 292.402†	344.7	-100.3	-0.5347 µg/L	-0.5347 ppb	18:54:01
2	Zn 213.857†	642.6	153.6	0.9689 µg/L	0.9689 ppb	18:54:21
3	Sc 361.383	1736015.7	1736015.7	103.78 %		18:54:23
3	Sc RADIAL	153754.9	153754.9	105 %		18:53:11
3	Y 371.029	1068282.8	1068282.8	104.47 %		18:54:23
3	Ag 328.068†	2964.9	-110.2	-0.4509 µg/L	-0.4509 ppb	18:54:26
3	Al 396.153Radial†	-16.1	16.6	3.5986 µg/L	3.5986 ppb	18:53:31
3	As 188.979†	-20.3	-5.3	-2.2272 µg/L	-2.2272 ppb	18:54:46
3	B 249.677†	3208.4	-264.2	-4.4364 µg/L	-4.4364 ppb	18:54:46
3	Ba 233.527†	-175.6	5.8	0.0262 µg/L	0.0262 ppb	18:54:46
3	Be 313.107†	-146.9	518.6	0.1704 µg/L	0.1704 ppb	18:54:26
3	Ca 317.933Radial†	709.7	56.6	3.3147 µg/L	3.3147 ppb	18:53:31
3	Cd 226.502†	-66.7	30.1	0.2078 µg/L	0.2078 ppb	18:54:46
3	Co 228.616†	-149.7	32.3	0.4424 µg/L	0.4424 ppb	18:54:46
3	Cr 267.716†	183.5	16.6	0.1380 µg/L	0.1380 ppb	18:54:46
3	Cu 324.752†	2785.8	259.4	1.1323 µg/L	1.1323 ppb	18:54:26
3	Fe 238.204 Radial†	167.4	45.4	3.0195 µg/L	3.0195 ppb	18:53:31
3	K 766.490 Radial†	2004.9	445.6	183.43 µg/L	183.43 ppb	18:53:11
3	Mg 279.077 IEC†	164.0	-31.2	-12.871 µg/L	-12.871 ppb	18:53:31
3	Mn 257.610†	141.8	56.6	0.0779 µg/L	0.0779 ppb	18:54:46
3	Mo 202.031†	-43.5	13.3	0.4189 µg/L	0.4189 ppb	18:54:46
3	Na 589.592 Radial†	2025.0	224.9	34.251 µg/L	34.251 ppb	18:53:11
3	Ni 231.604†	-54.8	-11.9	-0.1527 µg/L	-0.1527 ppb	18:54:46
3	P 214.914†	63.8	-18.1	-4.3341 µg/L	-4.3341 ppb	18:54:46
3	Pb 220.353†	149.8	31.9	1.9285 µg/L	1.9285 ppb	18:54:46
3	S 181.975 Axial†	104.0	5.4	4.3655 µg/L	4.3655 ppb	18:54:46
3	Sb 206.836†	91.0	1.1	0.1457 µg/L	0.1457 ppb	18:54:46
3	Se 196.026†	19.4	7.7	3.06 µg/L	3.06 ppb	18:54:46
3	SiO2†	1644.1	11.4	1.2195 µg/L	1.2195 ppb	18:54:46
3	Si 251.611†	797.5	92.1	1.5112 µg/L	1.5112 ppb	18:54:46
3	Sn 189.927†	13.8	11.3	0.8038 µg/L	0.8038 ppb	18:54:46
3	Sr 421.552†	-194.0	94.1	0.2206 µg/L	0.2206 ppb	18:53:11
3	Ti 334.940†	849.4	182.1	0.1846 µg/L	0.1846 ppb	18:54:26
3	Tl 190.801†	-118.6	6.0	0.7978 µg/L	0.7978 ppb	18:54:46
3	U 409.014†	-409.0	85.0	5.2024 µg/L	5.2024 ppb	18:54:26
3	V 292.402†	290.0	-152.4	-0.8373 µg/L	-0.8373 ppb	18:54:26
3	Zn 213.857†	615.7	128.9	0.8114 µg/L	0.8114 ppb	18:54:46

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1734776.2	103.71	%	0.321				0.31%
Sc RADIAL	154226.3	106	%	0.4				0.43%
Y 371.029	1067572.8	104.40	%	0.336				0.32%
Ag 328.068†	-38.3	-0.1406	µg/L	0.38763	-0.1406	ppb	0.38763	275.71%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.6	2.5123	µg/L	1.02521	2.5123	ppb	1.02521	40.81%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.4	0.5823	µg/L	2.85430	0.5823	ppb	2.85430	490.14%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-233.4	-3.9196	µg/L	0.74029	-3.9196	ppb	0.74029	18.89%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.1	0.0184	µg/L	0.02367	0.0184	ppb	0.02367	128.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	367.6	0.1248	µg/L	0.05339	0.1248	ppb	0.05339	42.78%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	43.7	2.5625	µg/L	0.75170	2.5625	ppb	0.75170	29.33%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	21.8	0.1500	µg/L	0.05085	0.1500	ppb	0.05085	33.90%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	25.7	0.3521 µg/L	0.14188	0.3521 ppb	0.14188	40.30%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	17.3	0.1354 µg/L	0.15041	0.1354 ppb	0.15041	111.10%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	283.6	1.2471 µg/L	0.44643	1.2471 ppb	0.44643	35.80%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	40.1	2.6640 µg/L	0.34002	2.6640 ppb	0.34002	12.76%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	370.2	152.39 µg/L	30.414	152.39 ppb	30.414	19.96%
QC value greater than the upper limit for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-26.7	-11.008 µg/L	4.2166	-11.008 ppb	4.2166	38.30%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	81.1	0.1113 µg/L	0.02959	0.1113 ppb	0.02959	26.59%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	18.3	0.5764 µg/L	0.19971	0.5764 ppb	0.19971	34.65%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	374.8	57.216 µg/L	21.7906	57.216 ppb	21.7906	38.09%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-23.5	-0.3002 µg/L	0.21614	-0.3002 ppb	0.21614	72.00%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-13.5	-3.2320 µg/L	0.96088	-3.2320 ppb	0.96088	29.73%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	24.0	1.4428 µg/L	1.09369	1.4428 ppb	1.09369	75.80%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	1.2	0.9785 µg/L	4.56987	0.9785 ppb	4.56987	467.04%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	1.6	0.2213 µg/L	0.15695	0.2213 ppb	0.15695	70.93%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	6.4	2.55 µg/L	0.537	2.55 ppb	0.537	21.07%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	34.6	3.7440 µg/L	3.14725	3.7440 ppb	3.14725	84.06%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	112.0	1.8358 µg/L	0.56935	1.8358 ppb	0.56935	31.01%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	17.3	1.2284 µg/L	0.73152	1.2284 ppb	0.73152	59.55%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	124.7	0.2923 µg/L	0.07221	0.2923 ppb	0.07221	24.70%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	6.3	0.0004 µg/L	0.15987	0.0004 ppb	0.15987	>999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	6.4	0.8546 µg/L	0.65815	0.8546 ppb	0.65815	77.01%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	274.4	16.925 µg/L	10.1653	16.925 ppb	10.1653	60.06%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-92.1	-0.4931 µg/L	0.36672	-0.4931 ppb	0.36672	74.37%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	154.0	0.9702 µg/L	0.15951	0.9702 ppb	0.15951	16.44%
QC value within limits for Zn 213.857 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 15
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/29/2010 18:57:39
Data Type: Reprocessed on 3/29/2010 19:14:43

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1742170.7	1742170.7	104.15	%			18:58:39
1	Sc RADIAL	154515.3	154515.3	106	%			18:58:11
1	Y 371.029	1059060.1	1059060.1	103.57	%			18:58:39
1	Ag 328.068†	129322.6	121204.2	498.05	µg/L	498.05	ppb	18:58:39
1	Al 396.153Radial†	24823.0	23447.4	5095.8	µg/L	5095.8	ppb	18:58:11
1	As 188.979†	1217.4	1183.1	501.56	µg/L	501.56	ppb	18:58:59
1	B 249.677†	33548.3	28856.2	482.76	µg/L	482.76	ppb	18:58:39
1	Ba 233.527†	113126.0	108794.9	497.41	µg/L	497.41	ppb	18:58:39
1	Be 313.107†	1604803.7	1541539.3	501.94	µg/L	501.94	ppb	18:58:39
1	Ca 317.933Radial†	90245.5	84512.4	4952.1	µg/L	4952.1	ppb	18:58:11
1	Cd 226.502†	73575.0	70738.7	488.19	µg/L	488.19	ppb	18:58:39
1	Co 228.616†	37114.9	35813.1	490.65	µg/L	490.65	ppb	18:58:39
1	Cr 267.716†	59986.2	57436.6	493.20	µg/L	493.20	ppb	18:58:39
1	Cu 324.752†	120959.5	113716.5	495.86	µg/L	495.86	ppb	18:58:39
1	Fe 238.204 Radial†	78194.0	73647.1	4896.3	µg/L	4896.3	ppb	18:58:11
1	K 766.490 Radial†	14176.6	11917.8	4902.2	µg/L	4902.2	ppb	18:58:11
1	Mg 279.077 IEC†	13187.4	12253.0	5059.7	µg/L	5059.7	ppb	18:58:11
1	Mn 257.610†	376145.4	361082.3	493.18	µg/L	493.18	ppb	18:58:39
1	Mo 202.031†	15919.4	15340.5	484.69	µg/L	484.69	ppb	18:58:59
1	Na 589.592 Radial†	70146.9	64474.8	9861.1	µg/L	9861.1	ppb	18:58:11
1	Ni 231.604†	39988.6	38436.6	491.65	µg/L	491.65	ppb	18:58:39
1	P 214.914†	10512.2	10013.9	2389.7	µg/L	2389.7	ppb	18:58:59
1	Pb 220.353†	8436.4	7988.0	485.43	µg/L	485.43	ppb	18:58:59
1	S 181.975 Axial†	1318.2	1170.9	952.74	µg/L	952.74	ppb	18:58:59
1	Sb 206.836†	3856.6	3616.3	488.81	µg/L	488.81	ppb	18:58:59
1	Se 196.026†	1269.9	1208.4	480	µg/L	480	ppb	18:58:59
1	SiO2†	51891.1	48251.3	5253.1	µg/L	5253.1	ppb	18:58:39
1	Si 251.611†	155814.4	148931.5	2452.9	µg/L	2452.9	ppb	18:58:39
1	Sn 189.927†	7088.8	6804.4	485.40	µg/L	485.40	ppb	18:58:59
1	Sr 421.552†	226055.0	213515.6	500.39	µg/L	500.39	ppb	18:58:09
1	Ti 334.940†	505203.6	484443.4	493.34	µg/L	493.34	ppb	18:58:39
1	Tl 190.801†	3627.2	3603.0	491.03	µg/L	491.03	ppb	18:58:59
1	U 409.014†	7391.3	7576.0	498.27	µg/L	498.27	ppb	18:58:39
1	V 292.402†	93133.5	88991.9	499.85	µg/L	499.85	ppb	18:58:39
1	Zn 213.857†	81243.9	77543.3	484.25	µg/L	484.25	ppb	18:58:39
2	Sc 361.383	1731918.8	1731918.8	103.54	%			18:59:02
2	Sc RADIAL	153334.6	153334.6	105	%			18:58:15
2	Y 371.029	1053099.9	1053099.9	102.98	%			18:59:02
2	Ag 328.068†	128679.2	121317.8	498.52	µg/L	498.52	ppb	18:59:02
2	Al 396.153Radial†	24533.3	23352.3	5074.9	µg/L	5074.9	ppb	18:58:15
2	As 188.979†	1225.6	1198.0	507.75	µg/L	507.75	ppb	18:59:22
2	B 249.677†	33340.5	28846.3	482.59	µg/L	482.59	ppb	18:59:02
2	Ba 233.527†	112441.8	108777.0	497.33	µg/L	497.33	ppb	18:59:02
2	Be 313.107†	1592364.8	1538646.2	501.00	µg/L	501.00	ppb	18:59:02
2	Ca 317.933Radial†	89792.3	84737.0	4965.2	µg/L	4965.2	ppb	18:58:15
2	Cd 226.502†	73051.4	70651.1	487.59	µg/L	487.59	ppb	18:59:02
2	Co 228.616†	36781.7	35702.2	489.13	µg/L	489.13	ppb	18:59:02
2	Cr 267.716†	59502.2	57310.0	492.11	µg/L	492.11	ppb	18:59:02
2	Cu 324.752†	119947.4	113426.4	494.60	µg/L	494.60	ppb	18:59:02
2	Fe 238.204 Radial†	77968.6	74000.8	4919.8	µg/L	4919.8	ppb	18:58:15
2	K 766.490 Radial†	14058.0	11908.0	4898.2	µg/L	4898.2	ppb	18:58:15
2	Mg 279.077 IEC†	13036.1	12205.0	5039.9	µg/L	5039.9	ppb	18:58:15
2	Mn 257.610†	373427.3	360594.9	492.52	µg/L	492.52	ppb	18:59:02
2	Mo 202.031†	15910.1	15421.9	487.26	µg/L	487.26	ppb	18:59:22
2	Na 589.592 Radial†	69792.3	64647.2	9887.5	µg/L	9887.5	ppb	18:58:15
2	Ni 231.604†	39642.4	38329.5	490.28	µg/L	490.28	ppb	18:59:02
2	P 214.914†	10490.2	10052.4	2398.9	µg/L	2398.9	ppb	18:59:22
2	Pb 220.353†	8461.2	8059.8	489.79	µg/L	489.79	ppb	18:59:22

2	S 181.975 Axial†	1332.4	1192.1	969.89 µg/L	969.89 ppb	18:59:22
2	Sb 206.836†	3845.4	3627.4	490.36 µg/L	490.36 ppb	18:59:22
2	Se 196.026†	1281.0	1226.3	487 µg/L	487 ppb	18:59:22
2	SiO2†	51762.5	48422.0	5271.6 µg/L	5271.6 ppb	18:59:02
2	Si 251.611†	154651.7	148694.0	2448.9 µg/L	2448.9 ppb	18:59:02
2	Sn 189.927†	7107.0	6862.3	489.51 µg/L	489.51 ppb	18:59:22
2	Sr 421.552†	226773.0	215840.0	505.83 µg/L	505.83 ppb	18:58:13
2	Ti 334.940†	500715.6	482980.0	491.85 µg/L	491.85 ppb	18:59:02
2	Tl 190.801†	3643.2	3639.1	495.88 µg/L	495.88 ppb	18:59:22
2	U 409.014†	7329.7	7558.5	497.20 µg/L	497.20 ppb	18:59:02
2	V 292.402†	92631.5	89036.3	500.12 µg/L	500.12 ppb	18:59:02
2	Zn 213.857†	80666.5	77447.4	483.65 µg/L	483.65 ppb	18:59:02
3	Sc 361.383	1731636.7	1731636.7	103.52 %		18:59:25
3	Sc RADIAL	154205.4	154205.4	106 %		18:58:20
3	Y 371.029	1052626.8	1052626.8	102.94 %		18:59:25
3	Ag 328.068†	128532.9	121196.7	498.02 µg/L	498.02 ppb	18:59:25
3	Al 396.153Radial†	24950.8	23615.3	5132.4 µg/L	5132.4 ppb	18:58:20
3	As 188.979†	1233.7	1206.0	511.11 µg/L	511.11 ppb	18:59:45
3	B 249.677†	33475.9	28982.3	484.88 µg/L	484.88 ppb	18:59:25
3	Ba 233.527†	112293.7	108651.6	496.76 µg/L	496.76 ppb	18:59:25
3	Be 313.107†	1590952.1	1537532.1	500.63 µg/L	500.63 ppb	18:59:25
3	Ca 317.933Radial†	90838.5	85244.0	4994.9 µg/L	4994.9 ppb	18:58:20
3	Cd 226.502†	73036.3	70648.1	487.56 µg/L	487.56 ppb	18:59:25
3	Co 228.616†	36829.8	35754.4	489.84 µg/L	489.84 ppb	18:59:25
3	Cr 267.716†	59440.0	57259.2	491.68 µg/L	491.68 ppb	18:59:25
3	Cu 324.752†	119916.0	113414.9	494.56 µg/L	494.56 ppb	18:59:25
3	Fe 238.204 Radial†	78885.0	74448.4	4949.6 µg/L	4949.6 ppb	18:58:20
3	K 766.490 Radial†	14076.3	11849.9	4874.3 µg/L	4874.3 ppb	18:58:20
3	Mg 279.077 IEC†	13322.3	12405.5	5122.6 µg/L	5122.6 ppb	18:58:20
3	Mn 257.610†	373424.5	360651.0	492.59 µg/L	492.59 ppb	18:59:25
3	Mo 202.031†	15880.4	15395.8	486.44 µg/L	486.44 ppb	18:59:45
3	Na 589.592 Radial†	70305.8	64758.0	9904.5 µg/L	9904.5 ppb	18:58:20
3	Ni 231.604†	39803.4	38491.3	492.35 µg/L	492.35 ppb	18:59:25
3	P 214.914†	10482.3	10046.4	2397.5 µg/L	2397.5 ppb	18:59:45
3	Pb 220.353†	8408.9	8010.6	486.81 µg/L	486.81 ppb	18:59:45
3	S 181.975 Axial†	1326.3	1186.4	965.31 µg/L	965.31 ppb	18:59:45
3	Sb 206.836†	3839.9	3622.7	489.73 µg/L	489.73 ppb	18:59:45
3	Se 196.026†	1268.7	1214.6	483 µg/L	483 ppb	18:59:45
3	SiO2†	51614.7	48287.3	5257.0 µg/L	5257.0 ppb	18:59:25
3	Si 251.611†	154566.1	148635.7	2448.0 µg/L	2448.0 ppb	18:59:25
3	Sn 189.927†	7092.3	6849.2	488.58 µg/L	488.58 ppb	18:59:45
3	Sr 421.552†	224060.1	212058.6	496.97 µg/L	496.97 ppb	18:58:17
3	Ti 334.940†	500694.3	483038.2	491.90 µg/L	491.90 ppb	18:59:25
3	Tl 190.801†	3646.3	3642.7	496.35 µg/L	496.35 ppb	18:59:45
3	U 409.014†	7327.6	7557.6	497.15 µg/L	497.15 ppb	18:59:25
3	V 292.402†	92621.5	89041.2	500.13 µg/L	500.13 ppb	18:59:25
3	Zn 213.857†	80736.0	77527.2	484.14 µg/L	484.14 ppb	18:59:25

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1735242.1	103.73	%	0.359				0.35%
Sc RADIAL	154018.4	106	%	0.4				0.40%
Y 371.029	1054928.9	103.16	%	0.351				0.34%
Ag 328.068†	121239.6	498.20	µg/L	0.276	498.20	ppb	0.276	0.06%
QC value within limits for Ag 328.068 Recovery = 99.64%								
Al 396.153Radial†	23471.7	5101.0	µg/L	29.08	5101.0	ppb	29.08	0.57%
QC value within limits for Al 396.153Radial Recovery = 102.02%								
As 188.979†	1195.7	506.81	µg/L	4.846	506.81	ppb	4.846	0.96%
QC value within limits for As 188.979 Recovery = 101.36%								
B 249.677†	28895.0	483.41	µg/L	1.273	483.41	ppb	1.273	0.26%
QC value within limits for B 249.677 Recovery = 96.68%								
Ba 233.527†	108741.2	497.17	µg/L	0.357	497.17	ppb	0.357	0.07%
QC value within limits for Ba 233.527 Recovery = 99.43%								
Be 313.107†	1539239.2	501.19	µg/L	0.673	501.19	ppb	0.673	0.13%
QC value within limits for Be 313.107 Recovery = 100.24%								
Ca 317.933Radial†	84831.1	4970.7	µg/L	21.96	4970.7	ppb	21.96	0.44%
QC value within limits for Ca 317.933Radial Recovery = 99.41%								
Cd 226.502†	70679.3	487.78	µg/L	0.358	487.78	ppb	0.358	0.07%
QC value within limits for Cd 226.502 Recovery = 97.56%								

Co 228.616†	35756.6	489.87 µg/L	0.760	489.87 ppb	0.760	0.16%
QC value within limits for Co 228.616 Recovery = 97.97%						
Cr 267.716†	57335.3	492.33 µg/L	0.783	492.33 ppb	0.783	0.16%
QC value within limits for Cr 267.716 Recovery = 98.47%						
Cu 324.752†	113519.3	495.01 µg/L	0.740	495.01 ppb	0.740	0.15%
QC value within limits for Cu 324.752 Recovery = 99.00%						
Fe 238.204 Radial†	74032.1	4921.9 µg/L	26.70	4921.9 ppb	26.70	0.54%
QC value within limits for Fe 238.204 Radial Recovery = 98.44%						
K 766.490 Radial†	11891.9	4891.6 µg/L	15.12	4891.6 ppb	15.12	0.31%
QC value within limits for K 766.490 Radial Recovery = 97.83%						
Mg 279.077 IEC†	12287.8	5074.1 µg/L	43.14	5074.1 ppb	43.14	0.85%
QC value within limits for Mg 279.077 IEC Recovery = 101.48%						
Mn 257.610†	360776.1	492.77 µg/L	0.365	492.77 ppb	0.365	0.07%
QC value within limits for Mn 257.610 Recovery = 98.55%						
Mo 202.031†	15386.1	486.13 µg/L	1.313	486.13 ppb	1.313	0.27%
QC value within limits for Mo 202.031 Recovery = 97.23%						
Na 589.592 Radial†	64626.7	9884.4 µg/L	21.84	9884.4 ppb	21.84	0.22%
QC value within limits for Na 589.592 Radial Recovery = 98.84%						
Ni 231.604†	38419.1	491.43 µg/L	1.053	491.43 ppb	1.053	0.21%
QC value within limits for Ni 231.604 Recovery = 98.29%						
P 214.914†	10037.5	2395.4 µg/L	4.95	2395.4 ppb	4.95	0.21%
QC value within limits for P 214.914 Recovery = 95.81%						
Pb 220.353†	8019.5	487.34 µg/L	2.227	487.34 ppb	2.227	0.46%
QC value within limits for Pb 220.353 Recovery = 97.47%						
S 181.975 Axial†	1183.1	962.65 µg/L	8.881	962.65 ppb	8.881	0.92%
QC value within limits for S 181.975 Axial Recovery = 96.26%						
Sb 206.836†	3622.2	489.63 µg/L	0.781	489.63 ppb	0.781	0.16%
QC value within limits for Sb 206.836 Recovery = 97.93%						
Se 196.026†	1216.4	483 µg/L	3.6	483 ppb	3.6	0.75%
QC value within limits for Se 196.026 Recovery = 96.66%						
SiO2†	48320.2	5260.6 µg/L	9.78	5260.6 ppb	9.78	0.19%
QC value within limits for SiO2 Recovery = 98.37%						
Si 251.611†	148753.7	2449.9 µg/L	2.62	2449.9 ppb	2.62	0.11%
QC value within limits for Si 251.611 Recovery = 98.00%						
Sn 189.927†	6838.6	487.83 µg/L	2.157	487.83 ppb	2.157	0.44%
QC value within limits for Sn 189.927 Recovery = 97.57%						
Sr 421.552†	213804.8	501.06 µg/L	4.470	501.06 ppb	4.470	0.89%
QC value within limits for Sr 421.552 Recovery = 100.21%						
Ti 334.940†	483487.2	492.36 µg/L	0.845	492.36 ppb	0.845	0.17%
QC value within limits for Ti 334.940 Recovery = 98.47%						
Tl 190.801†	3628.3	494.42 µg/L	2.943	494.42 ppb	2.943	0.60%
QC value within limits for Tl 190.801 Recovery = 98.88%						
U 409.014†	7564.0	497.54 µg/L	0.636	497.54 ppb	0.636	0.13%
QC value within limits for U 409.014 Recovery = 99.51%						
V 292.402†	89023.2	500.03 µg/L	0.157	500.03 ppb	0.157	0.03%
QC value within limits for V 292.402 Recovery = 100.01%						
Zn 213.857†	77506.0	484.01 µg/L	0.318	484.01 ppb	0.318	0.07%
QC value within limits for Zn 213.857 Recovery = 96.80%						

All analyte(s) passed QC.

Sequence No.: 16
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : optima4
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/29/2010 18:59:54
Data Type: Reprocessed on 3/29/2010 19:14:44

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1743930.9	1743930.9	104.25	%			19:01:45
1	Sc RADIAL	157207.9	157207.9	108	%			19:00:23
1	Y 371.029	1072817.8	1072817.8	104.91	%			19:01:45
1	Ag 328.068†	2785.5	-295.2	-1.1824	µg/L	-1.1824	ppb	19:01:47
1	Al 396.153Radial†	-35.9	-1.4	-0.3269	µg/L	-0.3269	ppb	19:00:43
1	As 188.979†	-9.7	4.9	2.0592	µg/L	2.0592	ppb	19:02:07
1	B 249.677†	3169.2	-315.8	-5.3028	µg/L	-5.3028	ppb	19:02:07
1	Ba 233.527†	-172.8	9.3	0.0423	µg/L	0.0423	ppb	19:02:07
1	Be 313.107†	-580.2	103.6	0.0392	µg/L	0.0392	ppb	19:01:47
1	Ca 317.933Radial†	703.1	35.6	2.0888	µg/L	2.0888	ppb	19:00:43
1	Cd 226.502†	-117.2	-18.0	-0.1248	µg/L	-0.1248	ppb	19:02:07
1	Co 228.616†	-175.0	8.7	0.1195	µg/L	0.1195	ppb	19:02:07
1	Cr 267.716†	174.7	7.4	0.0489	µg/L	0.0489	ppb	19:02:07
1	Cu 324.752†	2833.3	292.9	1.2883	µg/L	1.2883	ppb	19:01:47
1	Fe 238.204 Radial†	147.5	23.5	1.5605	µg/L	1.5605	ppb	19:00:43
1	K 766.490 Radial†	1652.9	77.5	31.907	µg/L	31.907	ppb	19:00:23
1	Mg 279.077 IEC†	179.9	-19.9	-8.1726	µg/L	-8.1726	ppb	19:00:43
1	Mn 257.610†	174.5	87.4	0.1197	µg/L	0.1197	ppb	19:02:07
1	Mo 202.031†	-38.4	18.4	0.5797	µg/L	0.5797	ppb	19:02:07
1	Na 589.592 Radial†	1931.7	96.3	14.699	µg/L	14.699	ppb	19:00:23
1	Ni 231.604†	-49.3	-6.4	-0.0822	µg/L	-0.0822	ppb	19:02:07
1	P 214.914†	78.3	-4.5	-1.0824	µg/L	-1.0824	ppb	19:02:07
1	Pb 220.353†	116.5	-0.7	-0.0551	µg/L	-0.0551	ppb	19:02:07
1	S 181.975 Axial†	92.5	-6.1	-4.9234	µg/L	-4.9234	ppb	19:02:07
1	Sb 206.836†	87.4	-2.8	-0.3729	µg/L	-0.3729	ppb	19:02:07
1	Se 196.026†	21.5	9.7	3.85	µg/L	3.85	ppb	19:02:07
1	SiO2†	1662.9	22.2	2.3983	µg/L	2.3983	ppb	19:02:07
1	Si 251.611†	781.9	73.6	1.2037	µg/L	1.2037	ppb	19:02:07
1	Sn 189.927†	15.0	12.4	0.8828	µg/L	0.8828	ppb	19:02:07
1	Sr 421.552†	-145.8	142.8	0.3347	µg/L	0.3347	ppb	19:00:23
1	Ti 334.940†	822.4	152.5	0.1487	µg/L	0.1487	ppb	19:01:47
1	Tl 190.801†	-112.5	12.4	1.6651	µg/L	1.6651	ppb	19:02:07
1	U 409.014†	-191.3	295.6	18.231	µg/L	18.231	ppb	19:01:47
1	V 292.402†	340.4	-105.3	-0.5658	µg/L	-0.5658	ppb	19:01:47
1	Zn 213.857†	528.4	42.4	0.2666	µg/L	0.2666	ppb	19:02:07
2	Sc 361.383	1749880.6	1749880.6	104.61	%			19:02:09
2	Sc RADIAL	154607.9	154607.9	106	%			19:00:45
2	Y 371.029	1075429.4	1075429.4	105.17	%			19:02:09
2	Ag 328.068†	2854.9	-238.0	-0.9266	µg/L	-0.9266	ppb	19:02:11
2	Al 396.153Radial†	-53.8	-18.9	-4.1894	µg/L	-4.1894	ppb	19:01:05
2	As 188.979†	-8.5	6.1	2.5641	µg/L	2.5641	ppb	19:02:31
2	B 249.677†	3184.7	-311.3	-5.2277	µg/L	-5.2277	ppb	19:02:31
2	Ba 233.527†	-166.1	16.2	0.0743	µg/L	0.0743	ppb	19:02:31
2	Be 313.107†	-429.5	249.5	0.0921	µg/L	0.0921	ppb	19:02:11
2	Ca 317.933Radial†	674.2	19.4	1.1395	µg/L	1.1395	ppb	19:01:05
2	Cd 226.502†	-92.3	6.1	0.0422	µg/L	0.0422	ppb	19:02:31
2	Co 228.616†	-147.4	35.7	0.4889	µg/L	0.4889	ppb	19:02:31
2	Cr 267.716†	146.6	-20.1	-0.2010	µg/L	-0.2010	ppb	19:02:31
2	Cu 324.752†	2740.1	194.5	0.8753	µg/L	0.8753	ppb	19:02:11
2	Fe 238.204 Radial†	152.9	30.9	2.0532	µg/L	2.0532	ppb	19:01:05
2	K 766.490 Radial†	1696.1	144.0	59.261	µg/L	59.261	ppb	19:00:45
2	Mg 279.077 IEC†	164.9	-31.2	-12.828	µg/L	-12.828	ppb	19:01:05
2	Mn 257.610†	159.3	72.2	0.0992	µg/L	0.0992	ppb	19:02:31
2	Mo 202.031†	-10.4	45.2	1.4272	µg/L	1.4272	ppb	19:02:31
2	Na 589.592 Radial†	1913.7	109.4	16.687	µg/L	16.687	ppb	19:00:45
2	Ni 231.604†	-34.9	7.5	0.0960	µg/L	0.0960	ppb	19:02:31
2	P 214.914†	88.9	5.5	1.2769	µg/L	1.2769	ppb	19:02:31
2	Pb 220.353†	116.9	-0.7	-0.0641	µg/L	-0.0641	ppb	19:02:31

2	S 181.975 Axial†	98.1	-1.0	-0.8273 µg/L	-0.8273 ppb	19:02:31
2	Sb 206.836†	79.8	-10.4	-1.3806 µg/L	-1.3806 ppb	19:02:31
2	Se 196.026†	23.1	11.2	4.46 µg/L	4.46 ppb	19:02:31
2	SiO2†	1662.3	16.2	1.7388 µg/L	1.7388 ppb	19:02:31
2	Si 251.611†	771.7	61.4	0.9975 µg/L	0.9975 ppb	19:02:31
2	Sn 189.927†	-2.4	-4.3	-0.3060 µg/L	-0.3060 ppb	19:02:31
2	Sr 421.552†	-168.4	119.2	0.2795 µg/L	0.2795 ppb	19:00:45
2	Ti 334.940†	843.2	169.7	0.1595 µg/L	0.1595 ppb	19:02:11
2	Tl 190.801†	-115.5	9.9	1.3206 µg/L	1.3206 ppb	19:02:31
2	U 409.014†	109.4	583.7	36.043 µg/L	36.043 ppb	19:02:11
2	V 292.402†	368.0	-80.0	-0.4063 µg/L	-0.4063 ppb	19:02:11
2	Zn 213.857†	532.3	44.4	0.2783 µg/L	0.2783 ppb	19:02:31
3	Sc 361.383	1734424.8	1734424.8	103.69 %		19:02:33
3	Sc RADIAL	152171.1	152171.1	104 %		19:01:07
3	Y 371.029	1067156.7	1067156.7	104.36 %		19:02:33
3	Ag 328.068†	2902.9	-167.4	-0.6806 µg/L	-0.6806 ppb	19:02:36
3	Al 396.153Radial†	-58.9	-24.5	-5.3555 µg/L	-5.3555 ppb	19:01:27
3	As 188.979†	-18.7	-3.8	-1.5762 µg/L	-1.5762 ppb	19:02:56
3	B 249.677†	3166.5	-301.7	-5.0666 µg/L	-5.0666 ppb	19:02:56
3	Ba 233.527†	-187.7	-6.0	-0.0277 µg/L	-0.0277 ppb	19:02:56
3	Be 313.107†	-333.0	339.0	0.1115 µg/L	0.1115 ppb	19:02:36
3	Ca 317.933Radial†	709.2	63.1	3.6954 µg/L	3.6954 ppb	19:01:27
3	Cd 226.502†	-99.5	-1.5	-0.0105 µg/L	-0.0105 ppb	19:02:56
3	Co 228.616†	-170.8	11.9	0.1624 µg/L	0.1624 ppb	19:02:56
3	Cr 267.716†	184.7	17.9	0.1506 µg/L	0.1506 ppb	19:02:56
3	Cu 324.752†	2715.6	194.2	0.8472 µg/L	0.8472 ppb	19:02:36
3	Fe 238.204 Radial†	137.1	18.1	1.2007 µg/L	1.2007 ppb	19:01:27
3	K 766.490 Radial†	1528.8	9.4	3.8507 µg/L	3.8507 ppb	19:01:07
3	Mg 279.077 IEC†	173.3	-20.7	-8.5238 µg/L	-8.5238 ppb	19:01:27
3	Mn 257.610†	141.1	56.1	0.0769 µg/L	0.0769 ppb	19:02:56
3	Mo 202.031†	-52.8	4.2	0.1336 µg/L	0.1336 ppb	19:02:56
3	Na 589.592 Radial†	1839.9	67.6	10.341 µg/L	10.341 ppb	19:01:07
3	Ni 231.604†	-39.3	3.0	0.0386 µg/L	0.0386 ppb	19:02:56
3	P 214.914†	57.3	-24.3	-5.8246 µg/L	-5.8246 ppb	19:02:56
3	Pb 220.353†	120.4	3.6	0.2179 µg/L	0.2179 ppb	19:02:56
3	S 181.975 Axial†	88.1	-9.8	-7.9574 µg/L	-7.9574 ppb	19:02:56
3	Sb 206.836†	87.1	-2.6	-0.3549 µg/L	-0.3549 ppb	19:02:56
3	Se 196.026†	3.8	-7.2	-2.85 µg/L	-2.85 ppb	19:02:56
3	SiO2†	1649.9	18.4	1.9980 µg/L	1.9980 ppb	19:02:56
3	Si 251.611†	767.7	64.1	1.0530 µg/L	1.0530 ppb	19:02:56
3	Sn 189.927†	11.8	9.4	0.6667 µg/L	0.6667 ppb	19:02:56
3	Sr 421.552†	-198.5	87.9	0.2060 µg/L	0.2060 ppb	19:01:07
3	Ti 334.940†	650.8	-8.7	-0.0097 µg/L	-0.0097 ppb	19:02:36
3	Tl 190.801†	-110.3	13.9	1.8642 µg/L	1.8642 ppb	19:02:56
3	U 409.014†	-434.4	60.1	3.6852 µg/L	3.6852 ppb	19:02:36
3	V 292.402†	355.5	-88.9	-0.4890 µg/L	-0.4890 ppb	19:02:36
3	Zn 213.857†	538.0	54.5	0.3420 µg/L	0.3420 ppb	19:02:56

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1742745.4	104.18	%	0.466				0.45%
Sc RADIAL	154662.3	106	%	1.7				1.63%
Y 371.029	1071801.3	104.81	%	0.414				0.39%
Ag 328.068†	-233.5	-0.9298	µg/L	0.25091	-0.9298	ppb	0.25091	26.98%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-14.9	-3.2906	µg/L	2.63203	-3.2906	ppb	2.63203	79.99%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.4	1.0157	µg/L	2.25883	1.0157	ppb	2.25883	222.39%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-309.6	-5.1990	µg/L	0.12069	-5.1990	ppb	0.12069	2.32%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.5	0.0297	µg/L	0.05216	0.0297	ppb	0.05216	175.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	230.7	0.0809	µg/L	0.03739	0.0809	ppb	0.03739	46.19%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	39.4	2.3079	µg/L	1.29199	2.3079	ppb	1.29199	55.98%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-4.5	-0.0310	µg/L	0.08537	-0.0310	ppb	0.08537	275.14%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	18.8	0.2569 µg/L	0.20203	0.2569 ppb	0.20203	78.63%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	1.7	-0.0005 µg/L	0.18092	-0.0005 ppb	0.18092	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	227.2	1.0036 µg/L	0.24693	1.0036 ppb	0.24693	24.60%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	24.1	1.6048 µg/L	0.42799	1.6048 ppb	0.42799	26.67%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	76.9	31.673 µg/L	27.7059	31.673 ppb	27.7059	87.48%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-23.9	-9.8414 µg/L	2.59218	-9.8414 ppb	2.59218	26.34%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	71.9	0.0986 µg/L	0.02141	0.0986 ppb	0.02141	21.70%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	22.6	0.7135 µg/L	0.65711	0.7135 ppb	0.65711	92.10%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	91.1	13.909 µg/L	3.2461	13.909 ppb	3.2461	23.34%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	1.4	0.0175 µg/L	0.09096	0.0175 ppb	0.09096	520.03%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-7.8	-1.8767 µg/L	3.61681	-1.8767 ppb	3.61681	192.72%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	0.8	0.0329 µg/L	0.16029	0.0329 ppb	0.16029	486.83%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-5.6	-4.5694 µg/L	3.57820	-4.5694 ppb	3.57820	78.31%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-5.3	-0.7028 µg/L	0.58704	-0.7028 ppb	0.58704	83.53%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	4.6	1.82 µg/L	4.054	1.82 ppb	4.054	222.54%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	19.0	2.0451 µg/L	0.33227	2.0451 ppb	0.33227	16.25%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	66.3	1.0847 µg/L	0.10673	1.0847 ppb	0.10673	9.84%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	5.8	0.4145 µg/L	0.63329	0.4145 ppb	0.63329	152.78%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	116.6	0.2734 µg/L	0.06458	0.2734 ppb	0.06458	23.62%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	104.5	0.0995 µg/L	0.09469	0.0995 ppb	0.09469	95.16%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	12.1	1.6167 µg/L	0.27502	1.6167 ppb	0.27502	17.01%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	313.1	19.320 µg/L	16.2065	19.320 ppb	16.2065	83.89%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-91.4	-0.4870 µg/L	0.07980	-0.4870 ppb	0.07980	16.39%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	47.1	0.2956 µg/L	0.04054	0.2956 ppb	0.04054	13.71%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/29/2010 19:31:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	154889.6	154889.6	106	%			19:31:56
1	Al 396.153Radial†	25248.9	23791.6	5171.1	µg/L	5171.1	ppb	19:31:56
1	Ca 317.933Radial†	90787.7	84816.9	4969.9	µg/L	4969.9	ppb	19:31:56
1	Fe 238.204 Radial†	79020.5	74246.6	4936.2	µg/L	4936.2	ppb	19:31:56
1	K 766.490 Radial†	14072.9	11787.9	4848.7	µg/L	4848.7	ppb	19:31:56
1	Mg 279.077 IEC†	13305.1	12333.7	5092.8	µg/L	5092.8	ppb	19:31:56
1	Na 589.592 Radial†	70517.8	64663.9	9890.1	µg/L	9890.1	ppb	19:31:56
1	Sr 421.552†	229051.2	215819.7	505.79	µg/L	505.79	ppb	19:31:54
1	Sc 361.383	1743822.4	1743822.4	104.25	%			19:32:23
1	Y 371.029	1059163.2	1059163.2	103.58	%			19:32:23
1	Ag 328.068†	128580.1	120374.3	494.64	µg/L	494.64	ppb	19:32:23
1	As 188.979†	1249.3	1212.6	513.82	µg/L	513.82	ppb	19:32:43
1	B 249.677†	33313.2	28600.3	478.47	µg/L	478.47	ppb	19:32:23
1	Ba 233.527†	113123.6	108689.7	496.93	µg/L	496.93	ppb	19:32:23
1	Be 313.107†	1610699.9	1545735.8	503.30	µg/L	503.30	ppb	19:32:23
1	Cd 226.502†	72730.5	69861.7	482.13	µg/L	482.13	ppb	19:32:23
1	Co 228.616†	36860.0	35534.8	486.84	µg/L	486.84	ppb	19:32:23
1	Cr 267.716†	59413.7	56832.8	488.02	µg/L	488.02	ppb	19:32:23
1	Cu 324.752†	120074.9	112757.8	491.69	µg/L	491.69	ppb	19:32:23
1	Mn 257.610†	374470.1	359133.2	490.52	µg/L	490.52	ppb	19:32:23
1	Mo 202.031†	15834.2	15244.3	481.66	µg/L	481.66	ppb	19:32:43
1	Ni 231.604†	39808.6	38227.6	488.98	µg/L	488.98	ppb	19:32:23
1	P 214.914†	10378.9	9876.5	2356.8	µg/L	2356.8	ppb	19:32:43
1	Pb 220.353†	8316.1	7864.8	477.97	µg/L	477.97	ppb	19:32:43
1	S 181.975 Axial†	1303.7	1155.8	940.47	µg/L	940.47	ppb	19:32:43
1	Sb 206.836†	3839.6	3596.5	486.17	µg/L	486.17	ppb	19:32:43
1	Se 196.026†	1266.7	1204.2	478	µg/L	478	ppb	19:32:43
1	SiO2†	51618.1	47942.2	5219.4	µg/L	5219.4	ppb	19:32:23
1	Si 251.611†	154593.2	147618.3	2431.2	µg/L	2431.2	ppb	19:32:23
1	Sn 189.927†	7080.7	6790.2	484.38	µg/L	484.38	ppb	19:32:43
1	Ti 334.940†	502894.8	481769.2	490.61	µg/L	490.61	ppb	19:32:23
1	Tl 190.801†	3593.0	3566.9	486.15	µg/L	486.15	ppb	19:32:43
1	U 409.014†	7303.3	7484.9	492.46	µg/L	492.46	ppb	19:32:23
1	V 292.402†	92682.1	88474.1	496.92	µg/L	496.92	ppb	19:32:23
1	Zn 213.857†	80453.5	76711.2	479.02	µg/L	479.02	ppb	19:32:23
2	Sc RADIAL	155203.4	155203.4	106	%			19:32:01
2	Al 396.153Radial†	25234.3	23729.9	5157.5	µg/L	5157.5	ppb	19:32:01
2	Ca 317.933Radial†	90949.0	84795.6	4968.7	µg/L	4968.7	ppb	19:32:01
2	Fe 238.204 Radial†	79090.7	74162.2	4930.6	µg/L	4930.6	ppb	19:32:01
2	K 766.490 Radial†	13942.4	11638.6	4787.3	µg/L	4787.3	ppb	19:32:01
2	Mg 279.077 IEC†	13250.9	12257.5	5061.5	µg/L	5061.5	ppb	19:32:01
2	Na 589.592 Radial†	70292.0	64317.7	9837.2	µg/L	9837.2	ppb	19:32:01
2	Sr 421.552†	228066.3	214459.1	502.60	µg/L	502.60	ppb	19:31:59
2	Sc 361.383	1737215.7	1737215.7	103.85	%			19:32:47
2	Y 371.029	1054931.1	1054931.1	103.16	%			19:32:47
2	Ag 328.068†	128483.5	120750.5	496.17	µg/L	496.17	ppb	19:32:47
2	As 188.979†	1256.3	1223.9	518.55	µg/L	518.55	ppb	19:33:07
2	B 249.677†	33149.8	28564.4	477.87	µg/L	477.87	ppb	19:32:47
2	Ba 233.527†	112832.9	108822.5	497.54	µg/L	497.54	ppb	19:32:47
2	Be 313.107†	1606762.7	1547820.7	503.98	µg/L	503.98	ppb	19:32:47
2	Cd 226.502†	72368.9	69778.8	481.56	µg/L	481.56	ppb	19:32:47
2	Co 228.616†	36711.4	35526.2	486.72	µg/L	486.72	ppb	19:32:47
2	Cr 267.716†	59192.4	56836.4	488.05	µg/L	488.05	ppb	19:32:47
2	Cu 324.752†	119958.6	113083.9	493.10	µg/L	493.10	ppb	19:32:47
2	Mn 257.610†	372915.3	359002.2	490.34	µg/L	490.34	ppb	19:32:47
2	Mo 202.031†	15840.2	15307.8	483.66	µg/L	483.66	ppb	19:33:07
2	Ni 231.604†	39651.1	38221.1	488.89	µg/L	488.89	ppb	19:32:47
2	P 214.914†	10418.1	9952.1	2374.9	µg/L	2374.9	ppb	19:33:07
2	Pb 220.353†	8335.8	7914.1	480.97	µg/L	480.97	ppb	19:33:07

2	S 181.975 Axial†	1310.0	1166.6	949.21 µg/L	949.21 ppb	19:33:07
2	Sb 206.836†	3818.2	3589.9	485.30 µg/L	485.30 ppb	19:33:07
2	Se 196.026†	1256.0	1198.5	476 µg/L	476 ppb	19:33:07
2	SiO2†	51436.2	47955.4	5220.8 µg/L	5220.8 ppb	19:32:47
2	Si 251.611†	154237.0	147839.3	2434.9 µg/L	2434.9 ppb	19:32:47
2	Sn 189.927†	7075.7	6811.2	485.88 µg/L	485.88 ppb	19:33:07
2	Ti 334.940†	501670.2	482424.6	491.29 µg/L	491.29 ppb	19:32:47
2	Tl 190.801†	3598.0	3584.8	488.57 µg/L	488.57 ppb	19:33:07
2	U 409.014†	7114.9	7330.1	482.93 µg/L	482.93 ppb	19:32:47
2	V 292.402†	92447.3	88586.2	497.56 µg/L	497.56 ppb	19:32:47
2	Zn 213.857†	80237.4	76796.6	479.56 µg/L	479.56 ppb	19:32:47
3	Sc RADIAL	152343.2	152343.2	105 %		19:32:05
3	Al 396.153Radial†	24790.2	23749.9	5162.0 µg/L	5162.0 ppb	19:32:05
3	Ca 317.933Radial†	88711.7	84258.7	4937.2 µg/L	4937.2 ppb	19:32:05
3	Fe 238.204 Radial†	77301.6	73844.9	4909.5 µg/L	4909.5 ppb	19:32:05
3	K 766.490 Radial†	13851.3	11797.3	4852.6 µg/L	4852.6 ppb	19:32:05
3	Mg 279.077 IEC†	12897.2	12152.7	5018.2 µg/L	5018.2 ppb	19:32:05
3	Na 589.592 Radial†	69172.5	64486.0	9862.9 µg/L	9862.9 ppb	19:32:05
3	Sr 421.552†	226674.9	217149.0	508.90 µg/L	508.90 ppb	19:32:03
3	Sc 361.383	1739184.0	1739184.0	103.97 %		19:33:10
3	Y 371.029	1056341.4	1056341.4	103.30 %		19:33:10
3	Ag 328.068†	128938.9	121048.4	497.41 µg/L	497.41 ppb	19:33:10
3	As 188.979†	1242.3	1209.1	512.38 µg/L	512.38 ppb	19:33:30
3	B 249.677†	33322.5	28694.4	480.05 µg/L	480.05 ppb	19:33:10
3	Ba 233.527†	113432.0	109275.8	499.61 µg/L	499.61 ppb	19:33:10
3	Be 313.107†	1612377.9	1551470.5	505.17 µg/L	505.17 ppb	19:33:10
3	Cd 226.502†	72852.6	70165.2	484.23 µg/L	484.23 ppb	19:33:10
3	Co 228.616†	36901.2	35668.8	488.67 µg/L	488.67 ppb	19:33:10
3	Cr 267.716†	59397.9	56969.5	489.19 µg/L	489.19 ppb	19:33:10
3	Cu 324.752†	120225.9	113210.3	493.66 µg/L	493.66 ppb	19:33:10
3	Mn 257.610†	374839.5	360446.6	492.32 µg/L	492.32 ppb	19:33:10
3	Mo 202.031†	15729.4	15184.0	479.75 µg/L	479.75 ppb	19:33:30
3	Ni 231.604†	40031.5	38543.8	493.02 µg/L	493.02 ppb	19:33:10
3	P 214.914†	10307.1	9834.0	2346.7 µg/L	2346.7 ppb	19:33:30
3	Pb 220.353†	8288.5	7859.6	477.65 µg/L	477.65 ppb	19:33:30
3	S 181.975 Axial†	1283.8	1140.0	927.63 µg/L	927.63 ppb	19:33:30
3	Sb 206.836†	3807.3	3575.3	483.25 µg/L	483.25 ppb	19:33:30
3	Se 196.026†	1249.7	1191.1	473 µg/L	473 ppb	19:33:30
3	SiO2†	51607.6	48064.2	5232.9 µg/L	5232.9 ppb	19:33:10
3	Si 251.611†	155270.1	148664.8	2448.6 µg/L	2448.6 ppb	19:33:10
3	Sn 189.927†	7010.2	6740.5	480.86 µg/L	480.86 ppb	19:33:30
3	Ti 334.940†	504064.8	484181.1	493.08 µg/L	493.08 ppb	19:33:10
3	Tl 190.801†	3573.6	3557.4	484.91 µg/L	484.91 ppb	19:33:30
3	U 409.014†	7322.0	7521.5	494.86 µg/L	494.86 ppb	19:33:10
3	V 292.402†	92839.2	88862.3	499.06 µg/L	499.06 ppb	19:33:10
3	Zn 213.857†	80753.8	77205.9	482.11 µg/L	482.11 ppb	19:33:10

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1740074.0	104.02	%	0.203				0.19%
Sc RADIAL	154145.4	106	%	1.1				1.02%
Y 371.029	1056811.9	103.35	%	0.211				0.20%
Ag 328.068†	120724.4	496.07	µg/L	1.385	496.07	ppb	1.385	0.28%
QC value within limits for Ag 328.068 Recovery = 99.21%								
Al 396.153Radial†	23757.1	5163.5	µg/L	6.91	5163.5	ppb	6.91	0.13%
QC value within limits for Al 396.153Radial Recovery = 103.27%								
As 188.979†	1215.2	514.92	µg/L	3.230	514.92	ppb	3.230	0.63%
QC value within limits for As 188.979 Recovery = 102.98%								
B 249.677†	28619.7	478.80	µg/L	1.123	478.80	ppb	1.123	0.23%
QC value within limits for B 249.677 Recovery = 95.76%								
Ba 233.527†	108929.3	498.02	µg/L	1.404	498.02	ppb	1.404	0.28%
QC value within limits for Ba 233.527 Recovery = 99.60%								
Be 313.107†	1548342.3	504.15	µg/L	0.946	504.15	ppb	0.946	0.19%
QC value within limits for Be 313.107 Recovery = 100.83%								
Ca 317.933Radial†	84623.7	4958.6	µg/L	18.54	4958.6	ppb	18.54	0.37%
QC value within limits for Ca 317.933Radial Recovery = 99.17%								
Cd 226.502†	69935.2	482.64	µg/L	1.407	482.64	ppb	1.407	0.29%
QC value within limits for Cd 226.502 Recovery = 96.53%								
Co 228.616†	35576.6	487.41	µg/L	1.097	487.41	ppb	1.097	0.23%

QC value within limits for Co 228.616 Recovery = 97.48%						
Cr 267.716†	56879.6	488.42 µg/L	0.666	488.42 ppb	0.666	0.14%
QC value within limits for Cr 267.716 Recovery = 97.68%						
Cu 324.752†	113017.4	492.82 µg/L	1.012	492.82 ppb	1.012	0.21%
QC value within limits for Cu 324.752 Recovery = 98.56%						
Fe 238.204 Radial†	74084.6	4925.4 µg/L	14.08	4925.4 ppb	14.08	0.29%
QC value within limits for Fe 238.204 Radial Recovery = 98.51%						
K 766.490 Radial†	11741.2	4829.6 µg/L	36.64	4829.6 ppb	36.64	0.76%
QC value within limits for K 766.490 Radial Recovery = 96.59%						
Mg 279.077 IEC†	12248.0	5057.5 µg/L	37.48	5057.5 ppb	37.48	0.74%
QC value within limits for Mg 279.077 IEC Recovery = 101.15%						
Mn 257.610†	359527.3	491.06 µg/L	1.093	491.06 ppb	1.093	0.22%
QC value within limits for Mn 257.610 Recovery = 98.21%						
Mo 202.031†	15245.4	481.69 µg/L	1.954	481.69 ppb	1.954	0.41%
QC value within limits for Mo 202.031 Recovery = 96.34%						
Na 589.592 Radial†	64489.2	9863.4 µg/L	26.47	9863.4 ppb	26.47	0.27%
QC value within limits for Na 589.592 Radial Recovery = 98.63%						
Ni 231.604†	38330.9	490.30 µg/L	2.360	490.30 ppb	2.360	0.48%
QC value within limits for Ni 231.604 Recovery = 98.06%						
P 214.914†	9887.5	2359.5 µg/L	14.32	2359.5 ppb	14.32	0.61%
QC value within limits for P 214.914 Recovery = 94.38%						
Pb 220.353†	7879.5	478.86 µg/L	1.831	478.86 ppb	1.831	0.38%
QC value within limits for Pb 220.353 Recovery = 95.77%						
S 181.975 Axial†	1154.1	939.11 µg/L	10.857	939.11 ppb	10.857	1.16%
QC value within limits for S 181.975 Axial Recovery = 93.91%						
Sb 206.836†	3587.2	484.91 µg/L	1.496	484.91 ppb	1.496	0.31%
QC value within limits for Sb 206.836 Recovery = 96.98%						
Se 196.026†	1197.9	476 µg/L	2.6	476 ppb	2.6	0.55%
QC value within limits for Se 196.026 Recovery = 95.20%						
SiO2†	47987.3	5224.4 µg/L	7.40	5224.4 ppb	7.40	0.14%
QC value within limits for SiO2 Recovery = 97.70%						
Si 251.611†	148040.8	2438.2 µg/L	9.16	2438.2 ppb	9.16	0.38%
QC value within limits for Si 251.611 Recovery = 97.53%						
Sn 189.927†	6780.7	483.70 µg/L	2.578	483.70 ppb	2.578	0.53%
QC value within limits for Sn 189.927 Recovery = 96.74%						
Sr 421.552†	215809.3	505.76 µg/L	3.152	505.76 ppb	3.152	0.62%
QC value within limits for Sr 421.552 Recovery = 101.15%						
Ti 334.940†	482791.6	491.66 µg/L	1.273	491.66 ppb	1.273	0.26%
QC value within limits for Ti 334.940 Recovery = 98.33%						
Tl 190.801†	3569.7	486.55 µg/L	1.860	486.55 ppb	1.860	0.38%
QC value within limits for Tl 190.801 Recovery = 97.31%						
U 409.014†	7445.5	490.08 µg/L	6.310	490.08 ppb	6.310	1.29%
QC value within limits for U 409.014 Recovery = 98.02%						
V 292.402†	88640.9	497.85 µg/L	1.100	497.85 ppb	1.100	0.22%
QC value within limits for V 292.402 Recovery = 99.57%						
Zn 213.857†	76904.5	480.23 µg/L	1.651	480.23 ppb	1.651	0.34%
QC value within limits for Zn 213.857 Recovery = 96.05%						

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/29/2010 19:33:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	154440.8	154440.8	106	%			19:34:06
1	Al 396.153Radial†	-43.3	-9.0	-2.0043	µg/L	-2.0043	ppb	19:34:26
1	Ca 317.933Radial†	696.6	41.2	2.4138	µg/L	2.4138	ppb	19:34:26
1	Fe 238.204 Radial†	166.8	44.1	2.9352	µg/L	2.9352	ppb	19:34:26
1	K 766.490 Radial†	1613.3	67.6	27.814	µg/L	27.814	ppb	19:34:06
1	Mg 279.077 IEC†	157.8	-37.7	-15.541	µg/L	-15.541	ppb	19:34:26
1	Na 589.592 Radial†	1722.8	-68.9	-10.561	µg/L	-10.561	ppb	19:34:06
1	Sr 421.552†	-120.8	163.9	0.3842	µg/L	0.3842	ppb	19:34:06
1	Sc 361.383	1731581.1	1731581.1	103.52	%			19:35:14
1	Y 371.029	1065562.9	1065562.9	104.20	%			19:35:14
1	Ag 328.068†	3216.9	140.6	0.5847	µg/L	0.5847	ppb	19:35:16
1	As 188.979†	-11.7	2.9	1.2300	µg/L	1.2300	ppb	19:35:36
1	B 249.677†	3120.0	-341.7	-5.7362	µg/L	-5.7362	ppb	19:35:36
1	Ba 233.527†	-175.6	5.4	0.0247	µg/L	0.0247	ppb	19:35:36
1	Be 313.107†	-246.2	422.2	0.1424	µg/L	0.1424	ppb	19:35:16
1	Cd 226.502†	-69.1	27.7	0.1908	µg/L	0.1908	ppb	19:35:36
1	Co 228.616†	-181.3	1.5	0.0198	µg/L	0.0198	ppb	19:35:36
1	Cr 267.716†	175.8	9.6	0.0693	µg/L	0.0693	ppb	19:35:36
1	Cu 324.752†	2669.4	153.9	0.6825	µg/L	0.6825	ppb	19:35:16
1	Mn 257.610†	196.9	110.2	0.1512	µg/L	0.1512	ppb	19:35:36
1	Mo 202.031†	-29.9	26.3	0.8305	µg/L	0.8305	ppb	19:35:36
1	Ni 231.604†	-61.5	-18.5	-0.2372	µg/L	-0.2372	ppb	19:35:36
1	P 214.914†	55.3	-26.1	-6.2662	µg/L	-6.2662	ppb	19:35:36
1	Pb 220.353†	115.1	-1.2	-0.0837	µg/L	-0.0837	ppb	19:35:36
1	S 181.975 Axial†	87.6	-10.2	-8.2246	µg/L	-8.2246	ppb	19:35:36
1	Sb 206.836†	73.1	-16.1	-2.1571	µg/L	-2.1571	ppb	19:35:36
1	Se 196.026†	13.4	2.0	0.826	µg/L	0.826	ppb	19:35:36
1	SiO2†	1671.5	41.8	4.5433	µg/L	4.5433	ppb	19:35:36
1	Si 251.611†	796.8	93.3	1.5290	µg/L	1.5290	ppb	19:35:36
1	Sn 189.927†	8.8	6.4	0.4582	µg/L	0.4582	ppb	19:35:36
1	Ti 334.940†	627.3	-30.4	-0.0364	µg/L	-0.0364	ppb	19:35:16
1	Tl 190.801†	-118.4	5.9	0.7913	µg/L	0.7913	ppb	19:35:36
1	U 409.014†	-222.3	264.4	16.308	µg/L	16.308	ppb	19:35:16
1	V 292.402†	354.1	-89.7	-0.4781	µg/L	-0.4781	ppb	19:35:16
1	Zn 213.857†	527.0	44.7	0.2818	µg/L	0.2818	ppb	19:35:36
2	Sc RADIAL	154279.9	154279.9	106	%			19:34:28
2	Al 396.153Radial†	-70.9	-35.1	-7.7094	µg/L	-7.7094	ppb	19:34:48
2	Ca 317.933Radial†	709.7	54.3	3.1826	µg/L	3.1826	ppb	19:34:48
2	Fe 238.204 Radial†	178.3	55.2	3.6708	µg/L	3.6708	ppb	19:34:48
2	K 766.490 Radial†	1463.8	-72.1	-29.690	µg/L	-29.690	ppb	19:34:28
2	Mg 279.077 IEC†	161.8	-33.8	-13.912	µg/L	-13.912	ppb	19:34:48
2	Na 589.592 Radial†	1747.5	-43.7	-6.6675	µg/L	-6.6675	ppb	19:34:28
2	Sr 421.552†	-216.0	73.9	0.1732	µg/L	0.1732	ppb	19:34:28
2	Sc 361.383	1751103.4	1751103.4	104.68	%			19:35:38
2	Y 371.029	1076583.0	1076583.0	105.28	%			19:35:38
2	Ag 328.068†	2689.9	-397.5	-1.6314	µg/L	-1.6314	ppb	19:35:40
2	As 188.979†	-19.4	-4.3	-1.7955	µg/L	-1.7955	ppb	19:36:00
2	B 249.677†	3164.1	-333.1	-5.5927	µg/L	-5.5927	ppb	19:36:00
2	Ba 233.527†	-177.8	5.3	0.0236	µg/L	0.0236	ppb	19:36:00
2	Be 313.107†	-520.5	162.9	0.0516	µg/L	0.0516	ppb	19:35:40
2	Cd 226.502†	-104.5	-5.4	-0.0378	µg/L	-0.0378	ppb	19:36:00
2	Co 228.616†	-170.5	13.7	0.1872	µg/L	0.1872	ppb	19:36:00
2	Cr 267.716†	176.6	8.5	0.0762	µg/L	0.0762	ppb	19:36:00
2	Cu 324.752†	2448.1	-86.2	-0.3785	µg/L	-0.3785	ppb	19:35:40
2	Mn 257.610†	240.0	149.3	0.2045	µg/L	0.2045	ppb	19:36:00
2	Mo 202.031†	-29.0	27.5	0.8664	µg/L	0.8664	ppb	19:36:00
2	Ni 231.604†	-48.2	-5.1	-0.0655	µg/L	-0.0655	ppb	19:36:00
2	P 214.914†	58.0	-24.2	-5.7906	µg/L	-5.7906	ppb	19:36:00
2	Pb 220.353†	124.4	6.4	0.3918	µg/L	0.3918	ppb	19:36:00

2	S 181.975 Axial†	90.4	-8.5	-6.8756 µg/L	-6.8756 ppb	19:36:00
2	Sb 206.836†	78.1	-12.0	-1.6140 µg/L	-1.6140 ppb	19:36:00
2	Se 196.026†	15.0	3.5	1.36 µg/L	1.36 ppb	19:36:00
2	SiO2†	1656.1	9.2	0.9709 µg/L	0.9709 ppb	19:36:00
2	Si 251.611†	759.0	48.7	0.7903 µg/L	0.7903 ppb	19:36:00
2	Sn 189.927†	8.2	5.8	0.4148 µg/L	0.4148 ppb	19:36:00
2	Ti 334.940†	745.1	75.4	0.0800 µg/L	0.0800 ppb	19:35:40
2	Tl 190.801†	-111.6	13.7	1.8304 µg/L	1.8304 ppb	19:36:00
2	U 409.014†	-582.4	-77.2	-4.8304 µg/L	-4.8304 ppb	19:35:40
2	V 292.402†	254.3	-188.9	-1.0423 µg/L	-1.0423 ppb	19:35:40
2	Zn 213.857†	524.9	37.0	0.2333 µg/L	0.2333 ppb	19:36:00
3	Sc RADIAL	154300.7	154300.7	106 %		19:34:50
3	Al 396.153Radial†	-22.9	10.3	2.2225 µg/L	2.2225 ppb	19:35:10
3	Ca 317.933Radial†	702.8	47.7	2.7963 µg/L	2.7963 ppb	19:35:10
3	Fe 238.204 Radial†	157.6	35.6	2.3638 µg/L	2.3638 ppb	19:35:10
3	K 766.490 Radial†	1363.4	-167.1	-68.805 µg/L	-68.805 ppb	19:34:50
3	Mg 279.077 IEC†	165.1	-30.7	-12.669 µg/L	-12.669 ppb	19:35:10
3	Na 589.592 Radial†	1617.5	-166.8	-25.467 µg/L	-25.467 ppb	19:34:50
3	Sr 421.552†	-166.5	120.7	0.2829 µg/L	0.2829 ppb	19:34:50
3	Sc 361.383	1756722.7	1756722.7	105.02 %		19:36:02
3	Y 371.029	1079825.4	1079825.4	105.60 %		19:36:02
3	Ag 328.068†	3226.0	104.8	0.4137 µg/L	0.4137 ppb	19:36:04
3	As 188.979†	-24.9	-9.5	-3.9669 µg/L	-3.9669 ppb	19:36:25
3	B 249.677†	3162.1	-344.7	-5.7874 µg/L	-5.7874 ppb	19:36:25
3	Ba 233.527†	-158.1	24.5	0.1116 µg/L	0.1116 ppb	19:36:25
3	Be 313.107†	-509.5	174.9	0.0572 µg/L	0.0572 ppb	19:36:04
3	Cd 226.502†	-104.2	-4.8	-0.0337 µg/L	-0.0337 ppb	19:36:25
3	Co 228.616†	-161.9	22.4	0.3068 µg/L	0.3068 ppb	19:36:25
3	Cr 267.716†	163.5	-4.5	-0.0399 µg/L	-0.0399 ppb	19:36:25
3	Cu 324.752†	2579.5	31.3	0.1372 µg/L	0.1372 ppb	19:36:04
3	Mn 257.610†	210.9	120.8	0.1656 µg/L	0.1656 ppb	19:36:25
3	Mo 202.031†	-42.5	14.8	0.4652 µg/L	0.4652 ppb	19:36:25
3	Ni 231.604†	-54.2	-10.7	-0.1372 µg/L	-0.1372 ppb	19:36:25
3	P 214.914†	63.9	-18.7	-4.4865 µg/L	-4.4865 ppb	19:36:25
3	Pb 220.353†	88.7	-28.0	-1.6935 µg/L	-1.6935 ppb	19:36:25
3	S 181.975 Axial†	84.6	-14.3	-11.562 µg/L	-11.562 ppb	19:36:25
3	Sb 206.836†	89.1	-1.8	-0.2346 µg/L	-0.2346 ppb	19:36:25
3	Se 196.026†	11.7	0.2	0.100 µg/L	0.100 ppb	19:36:25
3	SiO2†	1684.0	30.6	3.3325 µg/L	3.3325 ppb	19:36:25
3	Si 251.611†	773.1	59.7	0.9802 µg/L	0.9802 ppb	19:36:25
3	Sn 189.927†	5.3	3.0	0.2161 µg/L	0.2161 ppb	19:36:25
3	Ti 334.940†	867.2	189.4	0.1939 µg/L	0.1939 ppb	19:36:04
3	Tl 190.801†	-113.0	12.7	1.7012 µg/L	1.7012 ppb	19:36:25
3	U 409.014†	-487.5	14.9	0.8641 µg/L	0.8641 ppb	19:36:04
3	V 292.402†	257.1	-187.1	-1.0329 µg/L	-1.0329 ppb	19:36:04
3	Zn 213.857†	501.2	12.8	0.0813 µg/L	0.0813 ppb	19:36:25

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1746469.1	104.41	%	0.789				0.76%
Sc RADIAL	154340.5	106	%	0.1				0.06%
Y 371.029	1073990.4	105.03	%	0.731				0.70%
Ag 328.068†	-50.7	-0.2110	µg/L	1.23303	-0.2110	ppb	1.23303	584.39%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-11.3	-2.4971	µg/L	4.98426	-2.4971	ppb	4.98426	199.60%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.6	-1.5108	µg/L	2.61013	-1.5108	ppb	2.61013	172.77%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-339.8	-5.7054	µg/L	0.10093	-5.7054	ppb	0.10093	1.77%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.7	0.0533	µg/L	0.05049	0.0533	ppb	0.05049	94.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	253.3	0.0837	µg/L	0.05087	0.0837	ppb	0.05087	60.76%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	47.7	2.7975	µg/L	0.38440	2.7975	ppb	0.38440	13.74%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	5.8	0.0397	µg/L	0.13082	0.0397	ppb	0.13082	329.26%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	12.5	0.1713	µg/L	0.14419	0.1713	ppb	0.14419	84.18%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                4.5      0.0352 µg/L       0.06512      0.0352 ppb       0.06512 185.02%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               33.0      0.1470 µg/L       0.53058      0.1470 ppb       0.53058 360.82%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         45.0      2.9899 µg/L       0.65521      2.9899 ppb       0.65521  21.91%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -57.2     -23.560 µg/L       48.6004     -23.560 ppb       48.6004 206.28%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -34.1     -14.041 µg/L        1.4406     -14.041 ppb        1.4406  10.26%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               126.8      0.1738 µg/L       0.02760      0.1738 ppb       0.02760  15.88%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                22.8      0.7207 µg/L       0.22201      0.7207 ppb       0.22201  30.81%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -93.1     -14.232 µg/L        9.9226     -14.232 ppb        9.9226  69.72%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -11.5      -0.1466 µg/L       0.08623      -0.1466 ppb      0.08623  58.80%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -23.0      -5.5144 µg/L       0.92145      -5.5144 ppb      0.92145  16.71%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -7.6      -0.4618 µg/L       1.09284      -0.4618 ppb      1.09284 236.66%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -11.0      -8.8875 µg/L       2.41268      -8.8875 ppb      2.41268  27.15%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -10.0      -1.3353 µg/L       0.99108      -1.3353 ppb      0.99108  74.22%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 1.9       0.763 µg/L        0.6334       0.763 ppb       0.6334  83.06%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      27.2      2.9489 µg/L       1.81680      2.9489 ppb       1.81680  61.61%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                67.2      1.0998 µg/L       0.38363      1.0998 ppb       0.38363  34.88%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 5.1      0.3630 µg/L       0.12911      0.3630 ppb       0.12911  35.56%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               119.5      0.2801 µg/L       0.10556      0.2801 ppb       0.10556  37.69%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                78.1      0.0792 µg/L       0.11512      0.0792 ppb       0.11512 145.40%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                10.8      1.4410 µg/L       0.56631      1.4410 ppb       0.56631  39.30%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 67.4      4.1140 µg/L      10.93772      4.1140 ppb      10.93772 265.87%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -155.2     -0.8511 µg/L       0.32304     -0.8511 ppb       0.32304  37.96%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                31.5      0.1988 µg/L       0.10458      0.1988 ppb       0.10458  52.60%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 18
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/29/2010 19:52:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	155882.7	155882.7	107	%			19:53:21
1	Al 396.153Radial†	25404.5	23785.7	5169.7	µg/L	5169.7	ppb	19:53:21
1	Ca 317.933Radial†	90923.1	84399.2	4945.4	µg/L	4945.4	ppb	19:53:21
1	Fe 238.204 Radial†	79031.3	73782.9	4905.3	µg/L	4905.3	ppb	19:53:21
1	K 766.490 Radial†	14120.7	11748.2	4832.4	µg/L	4832.4	ppb	19:53:21
1	Mg 279.077 IEC†	13276.7	12227.4	5049.1	µg/L	5049.1	ppb	19:53:21
1	Na 589.592 Radial†	70685.1	64397.5	9849.3	µg/L	9849.3	ppb	19:53:21
1	Sr 421.552†	229627.1	214985.0	503.83	µg/L	503.83	ppb	19:53:19
1	Sc 361.383	1753609.4	1753609.4	104.83	%			19:53:33
1	Y 371.029	1065335.0	1065335.0	104.18	%			19:53:33
1	Ag 328.068†	129859.6	120906.6	496.82	µg/L	496.82	ppb	19:53:33
1	As 188.979†	1259.2	1215.4	515.01	µg/L	515.01	ppb	19:53:54
1	B 249.677†	33439.0	28541.9	477.50	µg/L	477.50	ppb	19:53:33
1	Ba 233.527†	114213.7	109124.0	498.92	µg/L	498.92	ppb	19:53:33
1	Be 313.107†	1623855.4	1549661.7	504.58	µg/L	504.58	ppb	19:53:33
1	Cd 226.502†	73102.1	69826.8	481.89	µg/L	481.89	ppb	19:53:33
1	Co 228.616†	36982.2	35454.0	485.73	µg/L	485.73	ppb	19:53:33
1	Cr 267.716†	59867.3	56947.4	489.01	µg/L	489.01	ppb	19:53:33
1	Cu 324.752†	121039.4	113035.1	492.88	µg/L	492.88	ppb	19:53:33
1	Mn 257.610†	376767.1	359319.5	490.78	µg/L	490.78	ppb	19:53:33
1	Mo 202.031†	15963.8	15283.1	482.88	µg/L	482.88	ppb	19:53:54
1	Ni 231.604†	39977.6	38175.7	488.31	µg/L	488.31	ppb	19:53:33
1	P 214.914†	10457.3	9895.7	2361.5	µg/L	2361.5	ppb	19:53:54
1	Pb 220.353†	8391.8	7892.5	479.66	µg/L	479.66	ppb	19:53:54
1	S 181.975 Axial†	1293.9	1139.4	927.23	µg/L	927.23	ppb	19:53:54
1	Sb 206.836†	3874.2	3609.0	487.86	µg/L	487.86	ppb	19:53:54
1	Se 196.026†	1272.9	1203.3	478	µg/L	478	ppb	19:53:54
1	SiO2†	51967.3	47999.0	5225.6	µg/L	5225.6	ppb	19:53:33
1	Si 251.611†	156115.9	148243.1	2441.5	µg/L	2441.5	ppb	19:53:33
1	Sn 189.927†	7141.4	6810.1	485.80	µg/L	485.80	ppb	19:53:54
1	Ti 334.940†	507174.4	483159.2	492.04	µg/L	492.04	ppb	19:53:33
1	Tl 190.801†	3640.2	3592.7	489.65	µg/L	489.65	ppb	19:53:54
1	U 409.014†	7175.3	7323.6	482.62	µg/L	482.62	ppb	19:53:33
1	V 292.402†	93601.0	88854.5	499.04	µg/L	499.04	ppb	19:53:33
1	Zn 213.857†	81005.3	76806.8	479.63	µg/L	479.63	ppb	19:53:33
2	Sc RADIAL	156189.6	156189.6	107	%			19:53:25
2	Al 396.153Radial†	25453.6	23784.9	5169.5	µg/L	5169.5	ppb	19:53:25
2	Ca 317.933Radial†	91189.7	84480.9	4950.2	µg/L	4950.2	ppb	19:53:25
2	Fe 238.204 Radial†	79453.6	74031.8	4921.9	µg/L	4921.9	ppb	19:53:25
2	K 766.490 Radial†	14048.5	11654.9	4794.0	µg/L	4794.0	ppb	19:53:25
2	Mg 279.077 IEC†	13352.4	12273.6	5068.1	µg/L	5068.1	ppb	19:53:25
2	Na 589.592 Radial†	70950.0	64514.9	9867.3	µg/L	9867.3	ppb	19:53:25
2	Sr 421.552†	232352.0	217106.1	508.80	µg/L	508.80	ppb	19:53:23
2	Sc 361.383	1749571.1	1749571.1	104.59	%			19:53:57
2	Y 371.029	1062777.0	1062777.0	103.93	%			19:53:57
2	Ag 328.068†	129030.1	120399.3	494.76	µg/L	494.76	ppb	19:53:57
2	As 188.979†	1277.4	1235.6	523.42	µg/L	523.42	ppb	19:54:17
2	B 249.677†	33289.1	28472.2	476.33	µg/L	476.33	ppb	19:53:57
2	Ba 233.527†	113708.3	108892.2	497.86	µg/L	497.86	ppb	19:53:57
2	Be 313.107†	1621134.0	1550635.2	504.90	µg/L	504.90	ppb	19:53:57
2	Cd 226.502†	72772.0	69672.1	480.82	µg/L	480.82	ppb	19:53:57
2	Co 228.616†	36900.7	35457.5	485.78	µg/L	485.78	ppb	19:53:57
2	Cr 267.716†	59600.3	56824.0	487.94	µg/L	487.94	ppb	19:53:57
2	Cu 324.752†	120397.9	112688.2	491.39	µg/L	491.39	ppb	19:53:57
2	Mn 257.610†	375323.1	358768.5	490.02	µg/L	490.02	ppb	19:53:57
2	Mo 202.031†	15936.5	15292.2	483.17	µg/L	483.17	ppb	19:54:17
2	Ni 231.604†	39772.4	38067.5	486.93	µg/L	486.93	ppb	19:53:57
2	P 214.914†	10473.9	9934.6	2370.8	µg/L	2370.8	ppb	19:54:17
2	Pb 220.353†	8398.2	7917.1	481.14	µg/L	481.14	ppb	19:54:17

2	S 181.975 Axial†	1310.8	1158.5	942.63 µg/L	942.63 ppb	19:54:17
2	Sb 206.836†	3846.2	3590.8	485.41 µg/L	485.41 ppb	19:54:17
2	Se 196.026†	1265.1	1198.6	476 µg/L	476 ppb	19:54:17
2	SiO2†	51895.6	48044.8	5230.6 µg/L	5230.6 ppb	19:53:57
2	Si 251.611†	155321.7	147827.6	2434.7 µg/L	2434.7 ppb	19:53:57
2	Sn 189.927†	7131.0	6815.9	486.21 µg/L	486.21 ppb	19:54:17
2	Ti 334.940†	504709.9	481919.6	490.77 µg/L	490.77 ppb	19:53:57
2	Tl 190.801†	3621.3	3582.7	488.28 µg/L	488.28 ppb	19:54:17
2	U 409.014†	7284.6	7443.9	490.00 µg/L	490.00 ppb	19:53:57
2	V 292.402†	93209.2	88686.0	498.11 µg/L	498.11 ppb	19:53:57
2	Zn 213.857†	80533.7	76534.3	477.93 µg/L	477.93 ppb	19:53:57
3	Sc RADIAL	155078.4	155078.4	106 %		19:53:29
3	Al 396.153Radial†	25069.2	23593.8	5127.8 µg/L	5127.8 ppb	19:53:29
3	Ca 317.933Radial†	90380.5	84330.2	4941.4 µg/L	4941.4 ppb	19:53:29
3	Fe 238.204 Radial†	78812.3	73960.4	4917.1 µg/L	4917.1 ppb	19:53:29
3	K 766.490 Radial†	14162.7	11856.1	4876.9 µg/L	4876.9 ppb	19:53:29
3	Mg 279.077 IEC†	13255.0	12271.4	5067.2 µg/L	5067.2 ppb	19:53:29
3	Na 589.592 Radial†	70378.5	64452.3	9857.7 µg/L	9857.7 ppb	19:53:29
3	Sr 421.552†	229789.0	216250.9	506.80 µg/L	506.80 ppb	19:53:27
3	Sc 361.383	1754221.5	1754221.5	104.87 %		19:54:20
3	Y 371.029	1065517.6	1065517.6	104.20 %		19:54:20
3	Ag 328.068†	129249.8	120281.8	494.30 µg/L	494.30 ppb	19:54:20
3	As 188.979†	1278.2	1233.1	522.37 µg/L	522.37 ppb	19:54:40
3	B 249.677†	33485.8	28575.4	478.06 µg/L	478.06 ppb	19:54:20
3	Ba 233.527†	113649.5	108547.9	496.28 µg/L	496.28 ppb	19:54:20
3	Be 313.107†	1620552.1	1545971.4	503.38 µg/L	503.38 ppb	19:54:20
3	Cd 226.502†	72839.4	69552.0	479.99 µg/L	479.99 ppb	19:54:20
3	Co 228.616†	36967.6	35427.9	485.37 µg/L	485.37 ppb	19:54:20
3	Cr 267.716†	59675.2	56744.3	487.25 µg/L	487.25 ppb	19:54:20
3	Cu 324.752†	120775.4	112743.0	491.64 µg/L	491.64 ppb	19:54:20
3	Mn 257.610†	375706.0	358182.3	489.22 µg/L	489.22 ppb	19:54:20
3	Mo 202.031†	15964.1	15278.1	482.72 µg/L	482.72 ppb	19:54:40
3	Ni 231.604†	39857.9	38048.2	486.68 µg/L	486.68 ppb	19:54:20
3	P 214.914†	10507.5	9940.1	2372.1 µg/L	2372.1 ppb	19:54:40
3	Pb 220.353†	8449.2	7944.5	482.78 µg/L	482.78 ppb	19:54:40
3	S 181.975 Axial†	1329.7	1173.2	954.54 µg/L	954.54 ppb	19:54:40
3	Sb 206.836†	3845.9	3580.7	484.06 µg/L	484.06 ppb	19:54:40
3	Se 196.026†	1261.3	1191.8	474 µg/L	474 ppb	19:54:40
3	SiO2†	51759.5	47783.5	5202.0 µg/L	5202.0 ppb	19:54:20
3	Si 251.611†	155480.2	147585.0	2430.6 µg/L	2430.6 ppb	19:54:20
3	Sn 189.927†	7188.1	6852.4	488.80 µg/L	488.80 ppb	19:54:40
3	Ti 334.940†	505136.1	481046.7	489.87 µg/L	489.87 ppb	19:54:20
3	Tl 190.801†	3646.0	3597.0	490.19 µg/L	490.19 ppb	19:54:40
3	U 409.014†	7585.0	7711.9	506.54 µg/L	506.54 ppb	19:54:20
3	V 292.402†	93415.0	88646.0	497.89 µg/L	497.89 ppb	19:54:20
3	Zn 213.857†	80914.4	76693.2	478.93 µg/L	478.93 ppb	19:54:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1752467.3	104.76	%	0.151				0.14%
Sc RADIAL	155716.9	107	%	0.4				0.37%
Y 371.029	1064543.2	104.10	%	0.150				0.14%
Ag 328.068†	120529.2	495.29	µg/L	1.342	495.29	ppb	1.342	0.27%
QC value within limits for Ag 328.068 Recovery = 99.06%								
Al 396.153Radial†	23721.5	5155.7	µg/L	24.12	5155.7	ppb	24.12	0.47%
QC value within limits for Al 396.153Radial Recovery = 103.11%								
As 188.979†	1228.0	520.27	µg/L	4.583	520.27	ppb	4.583	0.88%
QC value within limits for As 188.979 Recovery = 104.05%								
B 249.677†	28529.8	477.29	µg/L	0.884	477.29	ppb	0.884	0.19%
QC value within limits for B 249.677 Recovery = 95.46%								
Ba 233.527†	108854.7	497.68	µg/L	1.325	497.68	ppb	1.325	0.27%
QC value within limits for Ba 233.527 Recovery = 99.54%								
Be 313.107†	1548756.1	504.29	µg/L	0.798	504.29	ppb	0.798	0.16%
QC value within limits for Be 313.107 Recovery = 100.86%								
Ca 317.933Radial†	84403.4	4945.7	µg/L	4.42	4945.7	ppb	4.42	0.09%
QC value within limits for Ca 317.933Radial Recovery = 98.91%								
Cd 226.502†	69683.6	480.90	µg/L	0.952	480.90	ppb	0.952	0.20%
QC value within limits for Cd 226.502 Recovery = 96.18%								
Co 228.616†	35446.5	485.63	µg/L	0.223	485.63	ppb	0.223	0.05%

QC value within limits for Co 228.616 Recovery = 97.13%						
Cr 267.716†	56838.6	488.07 µg/L	0.888	488.07 ppb	0.888	0.18%
QC value within limits for Cr 267.716 Recovery = 97.61%						
Cu 324.752†	112822.1	491.97 µg/L	0.803	491.97 ppb	0.803	0.16%
QC value within limits for Cu 324.752 Recovery = 98.39%						
Fe 238.204 Radial†	73925.1	4914.8 µg/L	8.52	4914.8 ppb	8.52	0.17%
QC value within limits for Fe 238.204 Radial Recovery = 98.30%						
K 766.490 Radial†	11753.1	4834.4 µg/L	41.46	4834.4 ppb	41.46	0.86%
QC value within limits for K 766.490 Radial Recovery = 96.69%						
Mg 279.077 IEC†	12257.5	5061.5 µg/L	10.75	5061.5 ppb	10.75	0.21%
QC value within limits for Mg 279.077 IEC Recovery = 101.23%						
Mn 257.610†	358756.8	490.01 µg/L	0.777	490.01 ppb	0.777	0.16%
QC value within limits for Mn 257.610 Recovery = 98.00%						
Mo 202.031†	15284.5	482.92 µg/L	0.226	482.92 ppb	0.226	0.05%
QC value within limits for Mo 202.031 Recovery = 96.58%						
Na 589.592 Radial†	64454.9	9858.1 µg/L	9.01	9858.1 ppb	9.01	0.09%
QC value within limits for Na 589.592 Radial Recovery = 98.58%						
Ni 231.604†	38097.1	487.31 µg/L	0.879	487.31 ppb	0.879	0.18%
QC value within limits for Ni 231.604 Recovery = 97.46%						
P 214.914†	9923.5	2368.1 µg/L	5.81	2368.1 ppb	5.81	0.25%
QC value within limits for P 214.914 Recovery = 94.72%						
Pb 220.353†	7918.0	481.20 µg/L	1.563	481.20 ppb	1.563	0.32%
QC value within limits for Pb 220.353 Recovery = 96.24%						
S 181.975 Axial†	1157.0	941.47 µg/L	13.693	941.47 ppb	13.693	1.45%
QC value within limits for S 181.975 Axial Recovery = 94.15%						
Sb 206.836†	3593.5	485.78 µg/L	1.923	485.78 ppb	1.923	0.40%
QC value within limits for Sb 206.836 Recovery = 97.16%						
Se 196.026†	1197.9	476 µg/L	2.3	476 ppb	2.3	0.48%
QC value within limits for Se 196.026 Recovery = 95.20%						
SiO2†	47942.4	5219.4 µg/L	15.27	5219.4 ppb	15.27	0.29%
QC value within limits for SiO2 Recovery = 97.60%						
Si 251.611†	147885.2	2435.6 µg/L	5.51	2435.6 ppb	5.51	0.23%
QC value within limits for Si 251.611 Recovery = 97.42%						
Sn 189.927†	6826.1	486.94 µg/L	1.623	486.94 ppb	1.623	0.33%
QC value within limits for Sn 189.927 Recovery = 97.39%						
Sr 421.552†	216114.0	506.48 µg/L	2.501	506.48 ppb	2.501	0.49%
QC value within limits for Sr 421.552 Recovery = 101.30%						
Ti 334.940†	482041.8	490.89 µg/L	1.088	490.89 ppb	1.088	0.22%
QC value within limits for Ti 334.940 Recovery = 98.18%						
Tl 190.801†	3590.8	489.38 µg/L	0.983	489.38 ppb	0.983	0.20%
QC value within limits for Tl 190.801 Recovery = 97.88%						
U 409.014†	7493.2	493.05 µg/L	12.247	493.05 ppb	12.247	2.48%
QC value within limits for U 409.014 Recovery = 98.61%						
V 292.402†	88728.8	498.35 µg/L	0.611	498.35 ppb	0.611	0.12%
QC value within limits for V 292.402 Recovery = 99.67%						
Zn 213.857†	76678.1	478.83 µg/L	0.858	478.83 ppb	0.858	0.18%
QC value within limits for Zn 213.857 Recovery = 95.77%						

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/29/2010 19:54:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	157224.0	157224.0	108	%			19:55:16
1	Al 396.153Radial†	-32.4	1.9	0.3819	µg/L	0.3819	ppb	19:55:36
1	Ca 317.933Radial†	709.9	41.9	2.4560	µg/L	2.4560	ppb	19:55:36
1	Fe 238.204 Radial†	168.7	43.1	2.8662	µg/L	2.8662	ppb	19:55:36
1	K 766.490 Radial†	1483.0	-80.2	-33.015	µg/L	-33.015	ppb	19:55:16
1	Mg 279.077 IEC†	179.6	-20.2	-8.3135	µg/L	-8.3135	ppb	19:55:36
1	Na 589.592 Radial†	1705.0	-114.1	-17.428	µg/L	-17.428	ppb	19:55:16
1	Sr 421.552†	-122.3	164.6	0.3859	µg/L	0.3859	ppb	19:55:16
1	Sc 361.383	1744373.3	1744373.3	104.28	%			19:56:24
1	Y 371.029	1071958.2	1071958.2	104.83	%			19:56:24
1	Ag 328.068†	3041.9	-50.0	-0.2039	µg/L	-0.2039	ppb	19:56:26
1	As 188.979†	-16.7	-1.8	-0.7391	µg/L	-0.7391	ppb	19:56:46
1	B 249.677†	3115.7	-367.9	-6.1751	µg/L	-6.1751	ppb	19:56:46
1	Ba 233.527†	-172.9	9.3	0.0420	µg/L	0.0420	ppb	19:56:46
1	Be 313.107†	-510.3	170.7	0.0584	µg/L	0.0584	ppb	19:56:26
1	Cd 226.502†	-91.2	6.9	0.0476	µg/L	0.0476	ppb	19:56:46
1	Co 228.616†	-200.7	-15.9	-0.2172	µg/L	-0.2172	ppb	19:56:46
1	Cr 267.716†	193.2	25.0	0.2074	µg/L	0.2074	ppb	19:56:46
1	Cu 324.752†	2573.6	43.1	0.1952	µg/L	0.1952	ppb	19:56:26
1	Mn 257.610†	146.1	60.1	0.0824	µg/L	0.0824	ppb	19:56:46
1	Mo 202.031†	-38.9	17.9	0.5656	µg/L	0.5656	ppb	19:56:46
1	Ni 231.604†	-15.8	25.7	0.3290	µg/L	0.3290	ppb	19:56:46
1	P 214.914†	40.8	-40.5	-9.7010	µg/L	-9.7010	ppb	19:56:46
1	Pb 220.353†	105.0	-11.7	-0.7153	µg/L	-0.7153	ppb	19:56:46
1	S 181.975 Axial†	80.4	-17.8	-14.383	µg/L	-14.383	ppb	19:56:46
1	Sb 206.836†	78.7	-11.2	-1.5082	µg/L	-1.5082	ppb	19:56:46
1	Se 196.026†	26.3	14.3	5.65	µg/L	5.65	ppb	19:56:46
1	SiO2†	1648.2	7.7	0.8224	µg/L	0.8224	ppb	19:56:46
1	Si 251.611†	791.8	83.0	1.3617	µg/L	1.3617	ppb	19:56:46
1	Sn 189.927†	7.8	5.5	0.3882	µg/L	0.3882	ppb	19:56:46
1	Ti 334.940†	798.2	129.1	0.1285	µg/L	0.1285	ppb	19:56:26
1	Tl 190.801†	-105.6	19.0	2.5510	µg/L	2.5510	ppb	19:56:46
1	U 409.014†	-340.6	152.4	9.3589	µg/L	9.3589	ppb	19:56:26
1	V 292.402†	251.4	-190.7	-1.0454	µg/L	-1.0454	ppb	19:56:26
1	Zn 213.857†	524.6	38.6	0.2408	µg/L	0.2408	ppb	19:56:46
2	Sc RADIAL	153604.9	153604.9	105	%			19:55:38
2	Al 396.153Radial†	-40.7	-6.7	-1.5003	µg/L	-1.5003	ppb	19:55:58
2	Ca 317.933Radial†	698.2	46.3	2.7145	µg/L	2.7145	ppb	19:55:58
2	Fe 238.204 Radial†	160.1	38.6	2.5686	µg/L	2.5686	ppb	19:55:58
2	K 766.490 Radial†	1640.2	101.4	41.741	µg/L	41.741	ppb	19:55:38
2	Mg 279.077 IEC†	170.0	-25.4	-10.448	µg/L	-10.448	ppb	19:55:58
2	Na 589.592 Radial†	1652.3	-126.9	-19.447	µg/L	-19.447	ppb	19:55:38
2	Sr 421.552†	-170.5	116.2	0.2723	µg/L	0.2723	ppb	19:55:38
2	Sc 361.383	1769862.2	1769862.2	105.80	%			19:56:48
2	Y 371.029	1086957.3	1086957.3	106.30	%			19:56:48
2	Ag 328.068†	3055.4	-79.2	-0.3279	µg/L	-0.3279	ppb	19:56:50
2	As 188.979†	-3.9	10.5	4.3943	µg/L	4.3943	ppb	19:57:10
2	B 249.677†	3116.6	-410.1	-6.8860	µg/L	-6.8860	ppb	19:57:10
2	Ba 233.527†	-159.5	24.3	0.1105	µg/L	0.1105	ppb	19:57:10
2	Be 313.107†	-578.9	112.9	0.0378	µg/L	0.0378	ppb	19:56:50
2	Cd 226.502†	-100.7	-0.8	-0.0060	µg/L	-0.0060	ppb	19:57:10
2	Co 228.616†	-154.1	30.9	0.4233	µg/L	0.4233	ppb	19:57:10
2	Cr 267.716†	158.7	-10.2	-0.0909	µg/L	-0.0909	ppb	19:57:10
2	Cu 324.752†	2676.8	105.1	0.4602	µg/L	0.4602	ppb	19:56:50
2	Mn 257.610†	145.1	57.2	0.0785	µg/L	0.0785	ppb	19:57:10
2	Mo 202.031†	-36.1	21.0	0.6639	µg/L	0.6639	ppb	19:57:10
2	Ni 231.604†	-68.7	-24.1	-0.3078	µg/L	-0.3078	ppb	19:57:10
2	P 214.914†	59.6	-23.2	-5.5807	µg/L	-5.5807	ppb	19:57:10
2	Pb 220.353†	97.2	-20.5	-1.2440	µg/L	-1.2440	ppb	19:57:10

2	S 181.975 Axial†	84.9	-14.6	-11.787 µg/L	-11.787 ppb	19:57:10
2	Sb 206.836†	96.3	4.4	0.6052 µg/L	0.6052 ppb	19:57:10
2	Se 196.026†	0.8	-10.2	-4.02 µg/L	-4.02 ppb	19:57:10
2	SiO2†	1672.2	7.6	0.8120 µg/L	0.8120 ppb	19:57:10
2	Si 251.611†	794.7	74.7	1.2254 µg/L	1.2254 ppb	19:57:10
2	Sn 189.927†	4.2	1.9	0.1385 µg/L	0.1385 ppb	19:57:10
2	Ti 334.940†	903.8	217.9	0.2217 µg/L	0.2217 ppb	19:56:50
2	Tl 190.801†	-111.2	15.2	2.0307 µg/L	2.0307 ppb	19:57:10
2	U 409.014†	-447.5	56.1	3.4153 µg/L	3.4153 ppb	19:56:50
2	V 292.402†	287.1	-160.5	-0.8820 µg/L	-0.8820 ppb	19:56:50
2	Zn 213.857†	515.3	22.6	0.1440 µg/L	0.1440 ppb	19:57:10
3	Sc RADIAL	153703.8	153703.8	105 %		19:56:00
3	Al 396.153Radial†	-49.3	-14.8	-3.2844 µg/L	-3.2844 ppb	19:56:20
3	Ca 317.933Radial†	710.1	57.2	3.3512 µg/L	3.3512 ppb	19:56:20
3	Fe 238.204 Radial†	142.7	22.1	1.4665 µg/L	1.4665 ppb	19:56:20
3	K 766.490 Radial†	1683.5	141.5	58.243 µg/L	58.243 ppb	19:56:00
3	Mg 279.077 IEC†	155.1	-39.6	-16.319 µg/L	-16.319 ppb	19:56:20
3	Na 589.592 Radial†	1574.2	-202.0	-30.955 µg/L	-30.955 ppb	19:56:00
3	Sr 421.552†	-284.4	8.3	0.0193 µg/L	0.0193 ppb	19:56:00
3	Sc 361.383	1752547.4	1752547.4	104.77 %		19:57:12
3	Y 371.029	1077428.7	1077428.7	105.36 %		19:57:12
3	Ag 328.068†	3055.4	-50.7	-0.2129 µg/L	-0.2129 ppb	19:57:14
3	As 188.979†	-12.7	2.2	0.9041 µg/L	0.9041 ppb	19:57:35
3	B 249.677†	3085.6	-410.5	-6.8921 µg/L	-6.8921 ppb	19:57:35
3	Ba 233.527†	-169.6	13.1	0.0597 µg/L	0.0597 ppb	19:57:35
3	Be 313.107†	-482.0	200.1	0.0664 µg/L	0.0664 ppb	19:57:14
3	Cd 226.502†	-116.9	-17.2	-0.1188 µg/L	-0.1188 ppb	19:57:35
3	Co 228.616†	-195.4	-9.9	-0.1357 µg/L	-0.1357 ppb	19:57:35
3	Cr 267.716†	143.5	-23.2	-0.2031 µg/L	-0.2031 ppb	19:57:35
3	Cu 324.752†	2562.2	20.7	0.0929 µg/L	0.0929 ppb	19:57:14
3	Mn 257.610†	158.6	71.4	0.0982 µg/L	0.0982 ppb	19:57:35
3	Mo 202.031†	-25.3	31.1	0.9808 µg/L	0.9808 ppb	19:57:35
3	Ni 231.604†	-42.1	0.8	0.0099 µg/L	0.0099 ppb	19:57:35
3	P 214.914†	71.3	-11.5	-2.7700 µg/L	-2.7700 ppb	19:57:35
3	Pb 220.353†	104.0	-13.2	-0.8002 µg/L	-0.8002 ppb	19:57:35
3	S 181.975 Axial†	83.8	-14.8	-11.977 µg/L	-11.977 ppb	19:57:35
3	Sb 206.836†	75.3	-14.7	-1.9710 µg/L	-1.9710 ppb	19:57:35
3	Se 196.026†	23.6	11.6	4.60 µg/L	4.60 ppb	19:57:35
3	SiO2†	1653.5	5.4	0.5590 µg/L	0.5590 ppb	19:57:35
3	Si 251.611†	763.9	52.8	0.8589 µg/L	0.8589 ppb	19:57:35
3	Sn 189.927†	2.7	0.5	0.0386 µg/L	0.0386 ppb	19:57:35
3	Ti 334.940†	894.4	217.4	0.2215 µg/L	0.2215 ppb	19:57:14
3	Tl 190.801†	-118.7	7.0	0.9364 µg/L	0.9364 ppb	19:57:35
3	U 409.014†	-431.7	67.1	4.0863 µg/L	4.0863 ppb	19:57:14
3	V 292.402†	259.2	-184.4	-1.0115 µg/L	-1.0115 ppb	19:57:14
3	Zn 213.857†	491.0	4.2	0.0263 µg/L	0.0263 ppb	19:57:35

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Sc 361.383	1755594.3	104.95	%	0.778				0.74%
Sc RADIAL	154844.2	106	%	1.4				1.33%
Y 371.029	1078781.4	105.50	%	0.742				0.70%
Ag 328.068†	-60.0	-0.2482	µg/L	0.06913	-0.2482	ppb	0.06913	27.85%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-6.6	-1.4676	µg/L	1.83335	-1.4676	ppb	1.83335	124.92%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.6	1.5198	µg/L	2.62149	1.5198	ppb	2.62149	172.49%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-396.2	-6.6511	µg/L	0.41221	-6.6511	ppb	0.41221	6.20%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	15.6	0.0707	µg/L	0.03556	0.0707	ppb	0.03556	50.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	161.2	0.0542	µg/L	0.01474	0.0542	ppb	0.01474	27.20%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	48.5	2.8406	µg/L	0.46071	2.8406	ppb	0.46071	16.22%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-3.7	-0.0257	µg/L	0.08491	-0.0257	ppb	0.08491	330.30%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	1.7	0.0235	µg/L	0.34867	0.0235	ppb	0.34867	>999.9%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	-2.8	-0.0289 µg/L	0.21215	-0.0289 ppb	0.21215	734.89%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	56.3	0.2495 µg/L	0.18957	0.2495 ppb	0.18957	75.99%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	34.6	2.3004 µg/L	0.73735	2.3004 ppb	0.73735	32.05%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	54.2	22.323 µg/L	48.6295	22.323 ppb	48.6295	217.84%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-28.4	-11.693 µg/L	4.1454	-11.693 ppb	4.1454	35.45%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	62.9	0.0864 µg/L	0.01044	0.0864 ppb	0.01044	12.09%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	23.4	0.7368 µg/L	0.21697	0.7368 ppb	0.21697	29.45%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-147.6	-22.610 µg/L	7.2970	-22.610 ppb	7.2970	32.27%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	0.8	0.0104 µg/L	0.31844	0.0104 ppb	0.31844	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-25.1	-6.0172 µg/L	3.48607	-6.0172 ppb	3.48607	57.93%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-15.2	-0.9198 µg/L	0.28391	-0.9198 ppb	0.28391	30.87%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-15.7	-12.716 µg/L	1.4469	-12.716 ppb	1.4469	11.38%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-7.2	-0.9580 µg/L	1.37341	-0.9580 ppb	1.37341	143.36%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	5.2	2.08 µg/L	5.305	2.08 ppb	5.305	255.01%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	6.9	0.7311 µg/L	0.14916	0.7311 ppb	0.14916	20.40%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	70.1	1.1487 µg/L	0.26000	1.1487 ppb	0.26000	22.64%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.6	0.1884 µg/L	0.18007	0.1884 ppb	0.18007	95.55%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	96.4	0.2258 µg/L	0.18764	0.2258 ppb	0.18764	83.09%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	188.1	0.1905 µg/L	0.05374	0.1905 ppb	0.05374	28.21%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	13.7	1.8394 µg/L	0.82412	1.8394 ppb	0.82412	44.80%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	91.9	5.6202 µg/L	3.25513	5.6202 ppb	3.25513	57.92%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-178.5	-0.9796 µg/L	0.08622	-0.9796 ppb	0.08622	8.80%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	21.8	0.1370 µg/L	0.10743	0.1370 ppb	0.10743	78.42%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 28
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/29/2010 20:14:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	158830.4	158830.4	109	%			20:15:13
1	Al 396.153Radial†	25834.9	23739.9	5159.6	µg/L	5159.6	ppb	20:15:13
1	Ca 317.933Radial†	92141.6	83939.6	4918.5	µg/L	4918.5	ppb	20:15:13
1	Fe 238.204 Radial†	80227.4	73509.2	4887.1	µg/L	4887.1	ppb	20:15:13
1	K 766.490 Radial†	14250.9	11622.7	4780.8	µg/L	4780.8	ppb	20:15:13
1	Mg 279.077 IEC†	13509.5	12210.6	5042.2	µg/L	5042.2	ppb	20:15:13
1	Na 589.592 Radial†	71473.6	63894.6	9772.4	µg/L	9772.4	ppb	20:15:13
1	Sr 421.552†	233067.3	214157.3	501.89	µg/L	501.89	ppb	20:15:11
1	Sc 361.383	1758890.2	1758890.2	105.15	%			20:15:40
1	Y 371.029	1068006.2	1068006.2	104.44	%			20:15:40
1	Ag 328.068†	130795.7	121424.9	498.97	µg/L	498.97	ppb	20:15:40
1	As 188.979†	1305.1	1255.5	531.78	µg/L	531.78	ppb	20:16:00
1	B 249.677†	33757.2	28748.7	480.95	µg/L	480.95	ppb	20:15:40
1	Ba 233.527†	115387.0	109912.7	502.52	µg/L	502.52	ppb	20:15:40
1	Be 313.107†	1647211.3	1567223.6	510.30	µg/L	510.30	ppb	20:15:40
1	Cd 226.502†	73776.2	70258.5	484.88	µg/L	484.88	ppb	20:15:40
1	Co 228.616†	37405.4	35750.6	489.80	µg/L	489.80	ppb	20:15:40
1	Cr 267.716†	60425.3	57306.6	492.09	µg/L	492.09	ppb	20:15:40
1	Cu 324.752†	122063.0	113661.9	495.62	µg/L	495.62	ppb	20:15:40
1	Mn 257.610†	380412.8	361707.7	494.04	µg/L	494.04	ppb	20:15:40
1	Mo 202.031†	16080.3	15348.2	484.94	µg/L	484.94	ppb	20:16:00
1	Ni 231.604†	40320.7	38387.5	491.02	µg/L	491.02	ppb	20:15:40
1	P 214.914†	10614.3	10015.1	2390.0	µg/L	2390.0	ppb	20:16:00
1	Pb 220.353†	8478.6	7951.1	483.21	µg/L	483.21	ppb	20:16:00
1	S 181.975 Axial†	1339.7	1179.2	959.49	µg/L	959.49	ppb	20:16:00
1	Sb 206.836†	3893.5	3616.2	488.83	µg/L	488.83	ppb	20:16:00
1	Se 196.026†	1283.0	1209.3	480	µg/L	480	ppb	20:16:00
1	SiO2†	52444.4	48303.9	5258.8	µg/L	5258.8	ppb	20:15:40
1	Si 251.611†	157396.1	149013.5	2454.2	µg/L	2454.2	ppb	20:15:40
1	Sn 189.927†	7240.5	6884.0	491.06	µg/L	491.06	ppb	20:16:00
1	Ti 334.940†	511382.1	485708.4	494.63	µg/L	494.63	ppb	20:15:40
1	Tl 190.801†	3660.5	3601.6	490.88	µg/L	490.88	ppb	20:16:00
1	U 409.014†	7375.4	7493.4	493.30	µg/L	493.30	ppb	20:15:40
1	V 292.402†	94413.5	89359.2	501.88	µg/L	501.88	ppb	20:15:40
1	Zn 213.857†	81706.6	77241.8	482.36	µg/L	482.36	ppb	20:15:40
2	Sc RADIAL	157495.3	157495.3	108	%			20:15:18
2	Al 396.153Radial†	25706.5	23822.0	5177.5	µg/L	5177.5	ppb	20:15:18
2	Ca 317.933Radial†	91510.6	84072.4	4926.3	µg/L	4926.3	ppb	20:15:18
2	Fe 238.204 Radial†	79745.5	73687.3	4899.0	µg/L	4899.0	ppb	20:15:18
2	K 766.490 Radial†	14109.0	11602.1	4772.3	µg/L	4772.3	ppb	20:15:18
2	Mg 279.077 IEC†	13430.6	12242.7	5055.5	µg/L	5055.5	ppb	20:15:18
2	Na 589.592 Radial†	70962.0	63977.1	9785.1	µg/L	9785.1	ppb	20:15:18
2	Sr 421.552†	232192.9	215161.2	504.24	µg/L	504.24	ppb	20:15:16
2	Sc 361.383	1762035.0	1762035.0	105.34	%			20:16:04
2	Y 371.029	1068713.1	1068713.1	104.51	%			20:16:04
2	Ag 328.068†	130782.3	121190.1	498.00	µg/L	498.00	ppb	20:16:04
2	As 188.979†	1306.9	1255.0	531.56	µg/L	531.56	ppb	20:16:24
2	B 249.677†	33992.4	28914.7	483.74	µg/L	483.74	ppb	20:16:04
2	Ba 233.527†	115511.3	109834.8	502.16	µg/L	502.16	ppb	20:16:04
2	Be 313.107†	1645684.7	1562978.3	508.91	µg/L	508.91	ppb	20:16:04
2	Cd 226.502†	74022.3	70366.9	485.63	µg/L	485.63	ppb	20:16:04
2	Co 228.616†	37443.2	35723.0	489.42	µg/L	489.42	ppb	20:16:04
2	Cr 267.716†	60364.6	57146.4	490.71	µg/L	490.71	ppb	20:16:04
2	Cu 324.752†	122082.7	113473.4	494.80	µg/L	494.80	ppb	20:16:04
2	Mn 257.610†	380150.5	360813.0	492.82	µg/L	492.82	ppb	20:16:04
2	Mo 202.031†	16156.3	15393.1	486.35	µg/L	486.35	ppb	20:16:24
2	Ni 231.604†	40290.4	38290.3	489.78	µg/L	489.78	ppb	20:16:04
2	P 214.914†	10621.1	10003.5	2387.2	µg/L	2387.2	ppb	20:16:24
2	Pb 220.353†	8535.7	7990.8	485.62	µg/L	485.62	ppb	20:16:24

2	S 181.975 Axial†	1326.2	1164.2	947.33 µg/L	947.33 ppb	20:16:24
2	Sb 206.836†	3900.6	3616.4	488.88 µg/L	488.88 ppb	20:16:24
2	Se 196.026†	1284.8	1208.8	480 µg/L	480 ppb	20:16:24
2	SiO2†	52491.8	48259.9	5253.9 µg/L	5253.9 ppb	20:16:04
2	Si 251.611†	157382.7	148733.6	2449.6 µg/L	2449.6 ppb	20:16:04
2	Sn 189.927†	7227.9	6859.8	489.33 µg/L	489.33 ppb	20:16:24
2	Ti 334.940†	511020.6	484497.1	493.40 µg/L	493.40 ppb	20:16:04
2	Tl 190.801†	3689.6	3623.0	493.72 µg/L	493.72 ppb	20:16:24
2	U 409.014†	7356.3	7462.8	491.32 µg/L	491.32 ppb	20:16:04
2	V 292.402†	94327.3	89117.0	500.55 µg/L	500.55 ppb	20:16:04
2	Zn 213.857†	81870.2	77258.4	482.47 µg/L	482.47 ppb	20:16:04
3	Sc RADIAL	156537.6	156537.6	107 %		20:15:22
3	Al 396.153Radial†	25645.9	23911.1	5196.9 µg/L	5196.9 ppb	20:15:22
3	Ca 317.933Radial†	91188.8	84290.9	4939.1 µg/L	4939.1 ppb	20:15:22
3	Fe 238.204 Radial†	79529.7	73937.9	4915.6 µg/L	4915.6 ppb	20:15:22
3	K 766.490 Radial†	14092.0	11666.3	4798.7 µg/L	4798.7 ppb	20:15:22
3	Mg 279.077 IEC†	13237.8	12139.2	5012.8 µg/L	5012.8 ppb	20:15:22
3	Na 589.592 Radial†	70964.3	64381.0	9846.9 µg/L	9846.9 ppb	20:15:22
3	Sr 421.552†	233615.3	217800.3	510.43 µg/L	510.43 ppb	20:15:20
3	Sc 361.383	1760601.0	1760601.0	105.25 %		20:16:27
3	Y 371.029	1068160.3	1068160.3	104.46 %		20:16:27
3	Ag 328.068†	130523.2	121045.1	497.39 µg/L	497.39 ppb	20:16:27
3	As 188.979†	1312.2	1261.0	534.08 µg/L	534.08 ppb	20:16:47
3	B 249.677†	33684.6	28648.5	479.28 µg/L	479.28 ppb	20:16:27
3	Ba 233.527†	115155.8	109586.4	501.03 µg/L	501.03 ppb	20:16:27
3	Be 313.107†	1645527.7	1564101.6	509.28 µg/L	509.28 ppb	20:16:27
3	Cd 226.502†	73929.1	70335.6	485.41 µg/L	485.41 ppb	20:16:27
3	Co 228.616†	37338.0	35652.0	488.45 µg/L	488.45 ppb	20:16:27
3	Cr 267.716†	60447.8	57272.2	491.80 µg/L	491.80 ppb	20:16:27
3	Cu 324.752†	121740.8	113243.0	493.79 µg/L	493.79 ppb	20:16:27
3	Mn 257.610†	379672.2	360652.5	492.60 µg/L	492.60 ppb	20:16:27
3	Mo 202.031†	16168.3	15416.9	487.10 µg/L	487.10 ppb	20:16:47
3	Ni 231.604†	40268.9	38301.0	489.91 µg/L	489.91 ppb	20:16:27
3	P 214.914†	10675.3	10063.2	2401.6 µg/L	2401.6 ppb	20:16:47
3	Pb 220.353†	8520.4	7982.9	485.15 µg/L	485.15 ppb	20:16:47
3	S 181.975 Axial†	1321.3	1160.6	944.41 µg/L	944.41 ppb	20:16:47
3	Sb 206.836†	3929.7	3647.1	493.02 µg/L	493.02 ppb	20:16:47
3	Se 196.026†	1275.2	1200.7	477 µg/L	477 ppb	20:16:47
3	SiO2†	52357.5	48172.8	5244.4 µg/L	5244.4 ppb	20:16:27
3	Si 251.611†	157210.8	148692.0	2448.9 µg/L	2448.9 ppb	20:16:27
3	Sn 189.927†	7259.6	6895.4	491.87 µg/L	491.87 ppb	20:16:47
3	Ti 334.940†	509954.6	483879.4	492.77 µg/L	492.77 ppb	20:16:27
3	Tl 190.801†	3695.1	3631.0	494.80 µg/L	494.80 ppb	20:16:47
3	U 409.014†	7240.3	7358.2	484.82 µg/L	484.82 ppb	20:16:27
3	V 292.402†	94156.3	89027.6	500.06 µg/L	500.06 ppb	20:16:27
3	Zn 213.857†	81777.8	77234.0	482.31 µg/L	482.31 ppb	20:16:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1760508.7	105.24	%	0.094				0.09%
Sc RADIAL	157621.1	108	%	0.8				0.73%
Y 371.029	1068293.2	104.47	%	0.036				0.03%
Ag 328.068†	121220.0	498.12	µg/L	0.794	498.12	ppb	0.794	0.16%
QC value within limits for Ag 328.068 Recovery = 99.62%								
Al 396.153Radial†	23824.3	5178.0	µg/L	18.65	5178.0	ppb	18.65	0.36%
QC value within limits for Al 396.153Radial Recovery = 103.56%								
As 188.979†	1257.1	532.47	µg/L	1.398	532.47	ppb	1.398	0.26%
QC value within limits for As 188.979 Recovery = 106.49%								
B 249.677†	28770.7	481.32	µg/L	2.255	481.32	ppb	2.255	0.47%
QC value within limits for B 249.677 Recovery = 96.26%								
Ba 233.527†	109778.0	501.91	µg/L	0.779	501.91	ppb	0.779	0.16%
QC value within limits for Ba 233.527 Recovery = 100.38%								
Be 313.107†	1564767.8	509.50	µg/L	0.717	509.50	ppb	0.717	0.14%
QC value within limits for Be 313.107 Recovery = 101.90%								
Ca 317.933Radial†	84101.0	4928.0	µg/L	10.39	4928.0	ppb	10.39	0.21%
QC value within limits for Ca 317.933Radial Recovery = 98.56%								
Cd 226.502†	70320.3	485.30	µg/L	0.384	485.30	ppb	0.384	0.08%
QC value within limits for Cd 226.502 Recovery = 97.06%								
Co 228.616†	35708.6	489.22	µg/L	0.698	489.22	ppb	0.698	0.14%

QC value within limits for Co 228.616 Recovery = 97.84%

Cr 267.716†	57241.7	491.53 µg/L	0.725	491.53 ppb	0.725	0.15%

QC value within limits for Cr 267.716 Recovery = 98.31%

Cu 324.752†	113459.4	494.74 µg/L	0.914	494.74 ppb	0.914	0.18%

QC value within limits for Cu 324.752 Recovery = 98.95%

Fe 238.204 Radial†	73711.5	4900.6 µg/L	14.32	4900.6 ppb	14.32	0.29%

QC value within limits for Fe 238.204 Radial Recovery = 98.01%

K 766.490 Radial†	11630.4	4783.9 µg/L	13.48	4783.9 ppb	13.48	0.28%

QC value within limits for K 766.490 Radial Recovery = 95.68%

Mg 279.077 IEC†	12197.5	5036.8 µg/L	21.85	5036.8 ppb	21.85	0.43%

QC value within limits for Mg 279.077 IEC Recovery = 100.74%

Mn 257.610†	361057.7	493.15 µg/L	0.777	493.15 ppb	0.777	0.16%

QC value within limits for Mn 257.610 Recovery = 98.63%

Mo 202.031†	15386.1	486.13 µg/L	1.101	486.13 ppb	1.101	0.23%

QC value within limits for Mo 202.031 Recovery = 97.23%

Na 589.592 Radial†	64084.3	9801.5 µg/L	39.82	9801.5 ppb	39.82	0.41%

QC value within limits for Na 589.592 Radial Recovery = 98.01%

Ni 231.604†	38326.3	490.24 µg/L	0.682	490.24 ppb	0.682	0.14%

QC value within limits for Ni 231.604 Recovery = 98.05%

P 214.914†	10027.2	2392.9 µg/L	7.59	2392.9 ppb	7.59	0.32%

QC value within limits for P 214.914 Recovery = 95.72%

Pb 220.353†	7974.9	484.66 µg/L	1.279	484.66 ppb	1.279	0.26%

QC value within limits for Pb 220.353 Recovery = 96.93%

S 181.975 Axial†	1168.0	950.41 µg/L	8.003	950.41 ppb	8.003	0.84%

QC value within limits for S 181.975 Axial Recovery = 95.04%

Sb 206.836†	3626.6	490.24 µg/L	2.403	490.24 ppb	2.403	0.49%

QC value within limits for Sb 206.836 Recovery = 98.05%

Se 196.026†	1206.3	479 µg/L	1.9	479 ppb	1.9	0.40%

QC value within limits for Se 196.026 Recovery = 95.86%

SiO2†	48245.5	5252.4 µg/L	7.33	5252.4 ppb	7.33	0.14%

QC value within limits for SiO2 Recovery = 98.22%

Si 251.611†	148813.1	2450.9 µg/L	2.90	2450.9 ppb	2.90	0.12%

QC value within limits for Si 251.611 Recovery = 98.04%

Sn 189.927†	6879.7	490.75 µg/L	1.293	490.75 ppb	1.293	0.26%

QC value within limits for Sn 189.927 Recovery = 98.15%

Sr 421.552†	215706.3	505.52 µg/L	4.410	505.52 ppb	4.410	0.87%

QC value within limits for Sr 421.552 Recovery = 101.10%

Ti 334.940†	484695.0	493.60 µg/L	0.946	493.60 ppb	0.946	0.19%

QC value within limits for Ti 334.940 Recovery = 98.72%

Tl 190.801†	3618.5	493.13 µg/L	2.027	493.13 ppb	2.027	0.41%

QC value within limits for Tl 190.801 Recovery = 98.63%

U 409.014†	7438.1	489.81 µg/L	4.433	489.81 ppb	4.433	0.91%

QC value within limits for U 409.014 Recovery = 97.96%

V 292.402†	89167.9	500.83 µg/L	0.945	500.83 ppb	0.945	0.19%

QC value within limits for V 292.402 Recovery = 100.17%

Zn 213.857†	77244.7	482.38 µg/L	0.080	482.38 ppb	0.080	0.02%

QC value within limits for Zn 213.857 Recovery = 96.48%

All analyte(s) passed QC.

Sequence No.: 29
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/29/2010 20:16:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	158157.7	158157.7	109	%			20:17:23
1	Al 396.153Radial†	-63.6	-26.8	-5.8638	µg/L	-5.8638	ppb	20:17:43
1	Ca 317.933Radial†	734.1	60.4	3.5365	µg/L	3.5365	ppb	20:17:43
1	Fe 238.204 Radial†	186.1	58.3	3.8728	µg/L	3.8728	ppb	20:17:43
1	K 766.490 Radial†	1649.8	65.4	26.926	µg/L	26.926	ppb	20:17:23
1	Mg 279.077 IEC†	176.6	-23.9	-9.8603	µg/L	-9.8603	ppb	20:17:43
1	Na 589.592 Radial†	1600.7	-219.6	-33.624	µg/L	-33.624	ppb	20:17:23
1	Sr 421.552†	-113.7	173.2	0.4058	µg/L	0.4058	ppb	20:17:23
1	Sc 361.383	1797162.4	1797162.4	107.44	%			20:18:45
1	Y 371.029	1101535.0	1101535.0	107.72	%			20:18:45
1	Ag 328.068†	3189.5	1.7	0.0181	µg/L	0.0181	ppb	20:18:47
1	As 188.979†	-18.7	-3.2	-1.3282	µg/L	-1.3282	ppb	20:19:07
1	B 249.677†	3164.5	-410.2	-6.8868	µg/L	-6.8868	ppb	20:19:07
1	Ba 233.527†	-166.3	20.3	0.0925	µg/L	0.0925	ppb	20:19:07
1	Be 313.107†	-796.9	-81.6	-0.0232	µg/L	-0.0232	ppb	20:18:47
1	Cd 226.502†	-88.5	12.1	0.0830	µg/L	0.0830	ppb	20:19:07
1	Co 228.616†	-182.6	6.7	0.0913	µg/L	0.0913	ppb	20:19:07
1	Cr 267.716†	146.8	-23.6	-0.2111	µg/L	-0.2111	ppb	20:19:07
1	Cu 324.752†	2533.1	-67.1	-0.2822	µg/L	-0.2822	ppb	20:18:47
1	Mn 257.610†	189.2	96.1	0.1316	µg/L	0.1316	ppb	20:19:07
1	Mo 202.031†	-43.6	14.6	0.4617	µg/L	0.4617	ppb	20:19:07
1	Ni 231.604†	-36.3	7.1	0.0912	µg/L	0.0912	ppb	20:19:07
1	P 214.914†	33.9	-48.0	-11.496	µg/L	-11.496	ppb	20:19:07
1	Pb 220.353†	106.6	-13.2	-0.8080	µg/L	-0.8080	ppb	20:19:07
1	S 181.975 Axial†	94.0	-7.3	-5.9118	µg/L	-5.9118	ppb	20:19:07
1	Sb 206.836†	77.5	-14.5	-1.9423	µg/L	-1.9423	ppb	20:19:07
1	Se 196.026†	26.1	13.3	5.29	µg/L	5.29	ppb	20:19:07
1	SiO2†	1703.2	12.4	1.3407	µg/L	1.3407	ppb	20:19:07
1	Si 251.611†	757.0	28.3	0.4592	µg/L	0.4592	ppb	20:19:07
1	Sn 189.927†	6.4	3.9	0.2796	µg/L	0.2796	ppb	20:19:07
1	Ti 334.940†	1092.2	380.2	0.3841	µg/L	0.3841	ppb	20:18:47
1	Tl 190.801†	-110.1	17.8	2.3981	µg/L	2.3981	ppb	20:19:07
1	U 409.014†	-322.2	179.2	11.064	µg/L	11.064	ppb	20:18:47
1	V 292.402†	429.3	-32.2	-0.1685	µg/L	-0.1685	ppb	20:18:47
1	Zn 213.857†	497.4	-1.5	-0.0099	µg/L	-0.0099	ppb	20:19:07
2	Sc RADIAL	155691.2	155691.2	107	%			20:17:45
2	Al 396.153Radial†	-30.3	3.5	0.7196	µg/L	0.7196	ppb	20:18:05
2	Ca 317.933Radial†	713.2	51.5	3.0148	µg/L	3.0148	ppb	20:18:05
2	Fe 238.204 Radial†	162.5	38.8	2.5826	µg/L	2.5826	ppb	20:18:05
2	K 766.490 Radial†	1523.5	-28.7	-11.809	µg/L	-11.809	ppb	20:17:45
2	Mg 279.077 IEC†	195.4	-3.7	-1.5189	µg/L	-1.5189	ppb	20:18:05
2	Na 589.592 Radial†	1538.6	-254.3	-38.906	µg/L	-38.906	ppb	20:17:45
2	Sr 421.552†	-172.2	116.8	0.2737	µg/L	0.2737	ppb	20:17:45
2	Sc 361.383	1776190.8	1776190.8	106.18	%			20:19:09
2	Y 371.029	1089581.5	1089581.5	106.55	%			20:19:09
2	Ag 328.068†	3209.2	55.3	0.2233	µg/L	0.2233	ppb	20:19:11
2	As 188.979†	-18.8	-3.4	-1.4319	µg/L	-1.4319	ppb	20:19:31
2	B 249.677†	3163.9	-376.0	-6.3128	µg/L	-6.3128	ppb	20:19:31
2	Ba 233.527†	-158.5	25.8	0.1177	µg/L	0.1177	ppb	20:19:31
2	Be 313.107†	-622.2	74.1	0.0253	µg/L	0.0253	ppb	20:19:11
2	Cd 226.502†	-71.9	26.7	0.1839	µg/L	0.1839	ppb	20:19:31
2	Co 228.616†	-183.6	3.7	0.0500	µg/L	0.0500	ppb	20:19:31
2	Cr 267.716†	166.1	-3.8	-0.0355	µg/L	-0.0355	ppb	20:19:31
2	Cu 324.752†	2626.6	48.8	0.2155	µg/L	0.2155	ppb	20:19:11
2	Mn 257.610†	203.0	111.2	0.1519	µg/L	0.1519	ppb	20:19:31
2	Mo 202.031†	-29.4	27.5	0.8686	µg/L	0.8686	ppb	20:19:31
2	Ni 231.604†	-58.1	-13.8	-0.1766	µg/L	-0.1766	ppb	20:19:31
2	P 214.914†	38.3	-43.5	-10.438	µg/L	-10.438	ppb	20:19:31
2	Pb 220.353†	142.1	21.4	1.2928	µg/L	1.2928	ppb	20:19:31

2	S 181.975 Axial†	84.7	-15.1	-12.191 µg/L	-12.191 ppb	20:19:31
2	Sb 206.836†	90.2	-1.7	-0.2231 µg/L	-0.2231 ppb	20:19:31
2	Se 196.026†	16.7	4.8	1.90 µg/L	1.90 ppb	20:19:31
2	SiO2†	1687.5	16.4	1.7745 µg/L	1.7745 ppb	20:19:31
2	Si 251.611†	744.1	24.4	0.3950 µg/L	0.3950 ppb	20:19:31
2	Sn 189.927†	-5.5	-7.2	-0.5152 µg/L	-0.5152 ppb	20:19:31
2	Ti 334.940†	590.2	-80.5	-0.0834 µg/L	-0.0834 ppb	20:19:11
2	Tl 190.801†	-116.1	11.0	1.4736 µg/L	1.4736 ppb	20:19:31
2	U 409.014†	-444.6	60.4	3.7028 µg/L	3.7028 ppb	20:19:11
2	V 292.402†	365.2	-87.9	-0.4766 µg/L	-0.4766 ppb	20:19:11
2	Zn 213.857†	508.8	14.8	0.0938 µg/L	0.0938 ppb	20:19:31
3	Sc RADIAL	155889.7	155889.7	107 %		20:18:07
3	Al 396.153Radial†	-21.6	11.7	2.4989 µg/L	2.4989 ppb	20:18:27
3	Ca 317.933Radial†	710.6	48.2	2.8268 µg/L	2.8268 ppb	20:18:27
3	Fe 238.204 Radial†	176.6	51.8	3.4464 µg/L	3.4464 ppb	20:18:27
3	K 766.490 Radial†	1522.8	-31.2	-12.835 µg/L	-12.835 ppb	20:18:07
3	Mg 279.077 IEC†	169.6	-28.1	-11.582 µg/L	-11.582 ppb	20:18:27
3	Na 589.592 Radial†	1514.3	-278.9	-42.658 µg/L	-42.658 ppb	20:18:07
3	Sr 421.552†	-115.2	170.3	0.3991 µg/L	0.3991 ppb	20:18:07
3	Sc 361.383	1775735.1	1775735.1	106.16 %		20:19:33
3	Y 371.029	1090212.1	1090212.1	106.61 %		20:19:33
3	Ag 328.068†	3310.5	151.5	0.6044 µg/L	0.6044 ppb	20:19:35
3	As 188.979†	-18.3	-3.0	-1.2478 µg/L	-1.2478 ppb	20:19:55
3	B 249.677†	3162.1	-376.9	-6.3290 µg/L	-6.3290 ppb	20:19:55
3	Ba 233.527†	-165.4	19.2	0.0872 µg/L	0.0872 ppb	20:19:55
3	Be 313.107†	-659.6	38.8	0.0140 µg/L	0.0140 ppb	20:19:35
3	Cd 226.502†	-97.0	3.1	0.0206 µg/L	0.0206 ppb	20:19:55
3	Co 228.616†	-161.6	24.4	0.3340 µg/L	0.3340 ppb	20:19:55
3	Cr 267.716†	177.4	6.9	0.0553 µg/L	0.0553 ppb	20:19:55
3	Cu 324.752†	2774.4	188.7	0.8244 µg/L	0.8244 ppb	20:19:35
3	Mn 257.610†	182.4	91.8	0.1259 µg/L	0.1259 ppb	20:19:55
3	Mo 202.031†	-25.4	31.3	0.9879 µg/L	0.9879 ppb	20:19:55
3	Ni 231.604†	-68.5	-23.6	-0.3019 µg/L	-0.3019 ppb	20:19:55
3	P 214.914†	51.6	-31.0	-7.4391 µg/L	-7.4391 ppb	20:19:55
3	Pb 220.353†	84.6	-32.7	-1.9844 µg/L	-1.9844 ppb	20:19:55
3	S 181.975 Axial†	85.3	-14.4	-11.697 µg/L	-11.697 ppb	20:19:55
3	Sb 206.836†	54.5	-35.3	-4.7507 µg/L	-4.7507 ppb	20:19:55
3	Se 196.026†	0.8	-10.1	-4.01 µg/L	-4.01 ppb	20:19:55
3	SiO2†	1675.1	5.1	0.5352 µg/L	0.5352 ppb	20:19:55
3	Si 251.611†	757.0	36.7	0.5978 µg/L	0.5978 ppb	20:19:55
3	Sn 189.927†	-6.1	-7.8	-0.5522 µg/L	-0.5522 ppb	20:19:55
3	Ti 334.940†	761.4	80.9	0.0816 µg/L	0.0816 ppb	20:19:35
3	Tl 190.801†	-108.3	18.3	2.4419 µg/L	2.4419 ppb	20:19:55
3	U 409.014†	-429.2	74.8	4.5456 µg/L	4.5456 ppb	20:19:35
3	V 292.402†	201.6	-241.9	-1.3288 µg/L	-1.3288 ppb	20:19:35
3	Zn 213.857†	514.6	20.3	0.1291 µg/L	0.1291 ppb	20:19:55

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1783029.4	106.59	%	0.732				0.69%
Sc RADIAL	156579.5	107	%	0.9				0.88%
Y 371.029	1093776.2	106.96	%	0.658				0.61%
Ag 328.068†	69.5	0.2819	µg/L	0.29754	0.2819	ppb	0.29754	105.55%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-3.9	-0.8818	µg/L	4.40531	-0.8818	ppb	4.40531	499.59%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.2	-1.3360	µg/L	0.09228	-1.3360	ppb	0.09228	6.91%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-387.7	-6.5095	µg/L	0.32684	-6.5095	ppb	0.32684	5.02%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	21.7	0.0991	µg/L	0.01628	0.0991	ppb	0.01628	16.43%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	10.4	0.0053	µg/L	0.02537	0.0053	ppb	0.02537	474.55%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	53.3	3.1261	µg/L	0.36770	3.1261	ppb	0.36770	11.76%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	13.9	0.0958	µg/L	0.08241	0.0958	ppb	0.08241	85.99%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	11.6	0.1584	µg/L	0.15343	0.1584	ppb	0.15343	96.85%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -6.8     -0.0638 µg/L       0.13543     -0.0638 ppb       0.13543 212.32%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              56.8      0.2526 µg/L       0.55423      0.2526 ppb       0.55423 219.45%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       49.6      3.3006 µg/L       0.65736      3.3006 ppb       0.65736  19.92%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         1.8      0.7609 µg/L      22.66551      0.7609 ppb      22.66551 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†         -18.6     -7.6537 µg/L       5.38218     -7.6537 ppb       5.38218  70.32%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              99.7      0.1365 µg/L       0.01367      0.1365 ppb       0.01367  10.02%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              24.5      0.7728 µg/L       0.27588      0.7728 ppb       0.27588  35.70%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -250.9     -38.396 µg/L        4.5384     -38.396 ppb        4.5384  11.82%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -10.1      -0.1291 µg/L       0.20080      -0.1291 ppb       0.20080 155.54%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -40.8      -9.7910 µg/L       2.10426      -9.7910 ppb       2.10426  21.49%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -8.2      -0.4998 µg/L       1.66019      -0.4998 ppb       1.66019 332.15%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†        -12.3      -9.9332 µg/L       3.49134      -9.9332 ppb       3.49134  35.15%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†             -17.2      -2.3053 µg/L       2.28550      -2.3053 ppb       2.28550  99.14%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               2.7        1.06 µg/L         4.705        1.06 ppb         4.705 444.44%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    11.3      1.2168 µg/L       0.62889      1.2168 ppb       0.62889  51.68%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              29.8      0.4840 µg/L       0.10365      0.4840 ppb       0.10365  21.42%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -3.7      -0.2626 µg/L       0.46990      -0.2626 ppb       0.46990 178.94%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             153.4      0.3595 µg/L       0.07442      0.3595 ppb       0.07442  20.70%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             126.9      0.1275 µg/L       0.23711      0.1275 ppb       0.23711 186.03%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              15.7      2.1045 µg/L       0.54683      2.1045 ppb       0.54683  25.98%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              104.8      6.4375 µg/L       4.02889      6.4375 ppb       4.02889  62.58%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             -120.7     -0.6580 µg/L       0.60105     -0.6580 ppb       0.60105  91.35%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              11.2      0.0710 µg/L       0.07224      0.0710 ppb       0.07224 101.73%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 37
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/29/2010 20:39:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	158480.3	158480.3	109	%			20:39:46
1	Al 396.153Radial†	25899.3	23851.4	5184.2	µg/L	5184.2	ppb	20:39:46
1	Ca 317.933Radial†	91372.8	83419.3	4888.0	µg/L	4888.0	ppb	20:39:46
1	Fe 238.204 Radial†	79864.5	73338.0	4875.8	µg/L	4875.8	ppb	20:39:46
1	K 766.490 Radial†	13976.2	11398.9	4688.7	µg/L	4688.7	ppb	20:39:46
1	Mg 279.077 IEC†	13513.6	12241.7	5054.9	µg/L	5054.9	ppb	20:39:46
1	Na 589.592 Radial†	70984.5	63589.7	9725.9	µg/L	9725.9	ppb	20:39:46
1	Sr 421.552†	231158.4	212874.2	498.88	µg/L	498.88	ppb	20:39:44
1	Sc 361.383	1746203.9	1746203.9	104.39	%			20:40:13
1	Y 371.029	1060403.2	1060403.2	103.70	%			20:40:13
1	Ag 328.068†	129222.9	120821.9	496.49	µg/L	496.49	ppb	20:40:13
1	As 188.979†	1283.9	1244.1	526.99	µg/L	526.99	ppb	20:40:33
1	B 249.677†	33276.5	28521.6	477.15	µg/L	477.15	ppb	20:40:13
1	Ba 233.527†	114363.4	109729.4	501.68	µg/L	501.68	ppb	20:40:13
1	Be 313.107†	1632572.9	1564581.9	509.43	µg/L	509.43	ppb	20:40:13
1	Cd 226.502†	72628.8	69669.1	480.81	µg/L	480.81	ppb	20:40:13
1	Co 228.616†	36875.4	35501.3	486.39	µg/L	486.39	ppb	20:40:13
1	Cr 267.716†	59790.0	57115.6	490.45	µg/L	490.45	ppb	20:40:13
1	Cu 324.752†	120808.8	113303.8	494.05	µg/L	494.05	ppb	20:40:13
1	Mn 257.610†	375213.3	359355.3	490.82	µg/L	490.82	ppb	20:40:13
1	Mo 202.031†	15789.8	15181.1	479.66	µg/L	479.66	ppb	20:40:33
1	Ni 231.604†	39738.4	38108.3	487.45	µg/L	487.45	ppb	20:40:13
1	P 214.914†	10363.4	9848.0	2350.1	µg/L	2350.1	ppb	20:40:33
1	Pb 220.353†	8305.0	7843.4	476.67	µg/L	476.67	ppb	20:40:33
1	S 181.975 Axial†	1299.5	1150.0	935.75	µg/L	935.75	ppb	20:40:33
1	Sb 206.836†	3827.9	3580.3	483.91	µg/L	483.91	ppb	20:40:33
1	Se 196.026†	1246.7	1183.4	470	µg/L	470	ppb	20:40:33
1	SiO2†	51835.7	48083.1	5234.9	µg/L	5234.9	ppb	20:40:13
1	Si 251.611†	155248.2	148043.5	2438.3	µg/L	2438.3	ppb	20:40:13
1	Sn 189.927†	7083.7	6783.8	483.93	µg/L	483.93	ppb	20:40:33
1	Ti 334.940†	505298.5	483413.9	492.29	µg/L	492.29	ppb	20:40:13
1	Tl 190.801†	3587.5	3556.9	484.85	µg/L	484.85	ppb	20:40:33
1	U 409.014†	7184.1	7361.1	484.98	µg/L	484.98	ppb	20:40:13
1	V 292.402†	93312.1	88956.4	499.59	µg/L	499.59	ppb	20:40:13
1	Zn 213.857†	80758.5	76898.2	480.22	µg/L	480.22	ppb	20:40:13
2	Sc RADIAL	157839.6	157839.6	108	%			20:39:50
2	Al 396.153Radial†	25654.3	23721.9	5156.0	µg/L	5156.0	ppb	20:39:50
2	Ca 317.933Radial†	90857.8	83284.8	4880.1	µg/L	4880.1	ppb	20:39:50
2	Fe 238.204 Radial†	79351.6	73162.6	4864.1	µg/L	4864.1	ppb	20:39:50
2	K 766.490 Radial†	14108.1	11572.9	4760.3	µg/L	4760.3	ppb	20:39:50
2	Mg 279.077 IEC†	13317.1	12110.8	5000.9	µg/L	5000.9	ppb	20:39:50
2	Na 589.592 Radial†	70889.1	63766.6	9752.9	µg/L	9752.9	ppb	20:39:50
2	Sr 421.552†	232019.8	214532.6	502.77	µg/L	502.77	ppb	20:39:48
2	Sc 361.383	1748401.5	1748401.5	104.52	%			20:40:36
2	Y 371.029	1060574.0	1060574.0	103.72	%			20:40:36
2	Ag 328.068†	128320.4	119802.8	492.33	µg/L	492.33	ppb	20:40:36
2	As 188.979†	1300.9	1258.8	533.09	µg/L	533.09	ppb	20:40:56
2	B 249.677†	33199.5	28407.7	475.25	µg/L	475.25	ppb	20:40:36
2	Ba 233.527†	113312.8	108586.5	496.46	µg/L	496.46	ppb	20:40:36
2	Be 313.107†	1626044.8	1556370.4	506.76	µg/L	506.76	ppb	20:40:36
2	Cd 226.502†	71814.6	68802.6	474.82	µg/L	474.82	ppb	20:40:36
2	Co 228.616†	36702.1	35291.2	483.50	µg/L	483.50	ppb	20:40:36
2	Cr 267.716†	59191.4	56470.8	484.90	µg/L	484.90	ppb	20:40:36
2	Cu 324.752†	120253.9	112627.4	491.11	µg/L	491.11	ppb	20:40:36
2	Mn 257.610†	372516.4	356323.3	486.68	µg/L	486.68	ppb	20:40:36
2	Mo 202.031†	15750.8	15124.7	477.88	µg/L	477.88	ppb	20:40:56
2	Ni 231.604†	39612.3	37939.8	485.29	µg/L	485.29	ppb	20:40:36
2	P 214.914†	10343.5	9816.5	2342.6	µg/L	2342.6	ppb	20:40:56
2	Pb 220.353†	8312.4	7840.4	476.48	µg/L	476.48	ppb	20:40:56

2	S 181.975 Axial†	1287.8	1137.3	925.44 µg/L	925.44 ppb	20:40:56
2	Sb 206.836†	3843.7	3590.8	485.39 µg/L	485.39 ppb	20:40:56
2	Se 196.026†	1243.8	1179.1	469 µg/L	469 ppb	20:40:56
2	SiO2†	51279.8	47488.8	5170.0 µg/L	5170.0 ppb	20:40:36
2	Si 251.611†	154265.1	146916.0	2419.7 µg/L	2419.7 ppb	20:40:36
2	Sn 189.927†	7111.0	6801.4	485.17 µg/L	485.17 ppb	20:40:56
2	Ti 334.940†	501677.3	479340.9	488.14 µg/L	488.14 ppb	20:40:36
2	Tl 190.801†	3591.8	3556.8	484.78 µg/L	484.78 ppb	20:40:56
2	U 409.014†	7373.9	7534.0	495.49 µg/L	495.49 ppb	20:40:36
2	V 292.402†	92934.7	88483.0	496.93 µg/L	496.93 ppb	20:40:36
2	Zn 213.857†	80169.9	76237.8	476.08 µg/L	476.08 ppb	20:40:36
3	Sc RADIAL	156089.6	156089.6	107 %		20:39:54
3	Al 396.153Radial†	25631.8	23966.5	5209.3 µg/L	5209.3 ppb	20:39:54
3	Ca 317.933Radial†	90218.0	83628.1	4900.2 µg/L	4900.2 ppb	20:39:54
3	Fe 238.204 Radial†	78756.2	73428.1	4881.8 µg/L	4881.8 ppb	20:39:54
3	K 766.490 Radial†	13885.5	11511.0	4734.8 µg/L	4734.8 ppb	20:39:54
3	Mg 279.077 IEC†	13155.9	12098.2	4995.8 µg/L	4995.8 ppb	20:39:54
3	Na 589.592 Radial†	70406.1	64049.4	9796.2 µg/L	9796.2 ppb	20:39:54
3	Sr 421.552†	227678.4	212880.7	498.90 µg/L	498.90 ppb	20:39:52
3	Sc 361.383	1750051.7	1750051.7	104.62 %		20:40:59
3	Y 371.029	1061656.2	1061656.2	103.82 %		20:40:59
3	Ag 328.068†	129101.5	120433.7	494.92 µg/L	494.92 ppb	20:40:59
3	As 188.979†	1318.4	1274.5	539.66 µg/L	539.66 ppb	20:41:19
3	B 249.677†	33442.7	28610.3	478.64 µg/L	478.64 ppb	20:40:59
3	Ba 233.527†	114533.5	109651.1	501.32 µg/L	501.32 ppb	20:40:59
3	Be 313.107†	1637681.6	1566026.4	509.91 µg/L	509.91 ppb	20:40:59
3	Cd 226.502†	72370.3	69269.0	478.04 µg/L	478.04 ppb	20:40:59
3	Co 228.616†	36966.6	35510.9	486.52 µg/L	486.52 ppb	20:40:59
3	Cr 267.716†	59644.0	56850.1	488.16 µg/L	488.16 ppb	20:40:59
3	Cu 324.752†	121321.2	113539.1	495.08 µg/L	495.08 ppb	20:40:59
3	Mn 257.610†	375810.6	359135.9	490.53 µg/L	490.53 ppb	20:40:59
3	Mo 202.031†	15874.8	15229.0	481.17 µg/L	481.17 ppb	20:41:19
3	Ni 231.604†	39836.0	38117.9	487.57 µg/L	487.57 ppb	20:40:59
3	P 214.914†	10423.7	9883.8	2358.6 µg/L	2358.6 ppb	20:41:19
3	Pb 220.353†	8358.7	7877.1	478.72 µg/L	478.72 ppb	20:41:19
3	S 181.975 Axial†	1303.9	1151.5	936.96 µg/L	936.96 ppb	20:41:19
3	Sb 206.836†	3860.5	3603.4	487.09 µg/L	487.09 ppb	20:41:19
3	Se 196.026†	1260.6	1194.1	474 µg/L	474 ppb	20:41:19
3	SiO2†	51807.0	47946.5	5219.9 µg/L	5219.9 ppb	20:40:59
3	Si 251.611†	155533.5	147989.2	2437.4 µg/L	2437.4 ppb	20:40:59
3	Sn 189.927†	7141.0	6823.7	486.76 µg/L	486.76 ppb	20:41:19
3	Ti 334.940†	505758.7	482789.5	491.66 µg/L	491.66 ppb	20:40:59
3	Tl 190.801†	3621.3	3581.7	488.18 µg/L	488.18 ppb	20:41:19
3	U 409.014†	7328.7	7484.2	492.60 µg/L	492.60 ppb	20:40:59
3	V 292.402†	93571.4	89007.7	499.88 µg/L	499.88 ppb	20:40:59
3	Zn 213.857†	80716.3	76687.7	478.89 µg/L	478.89 ppb	20:40:59

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1748219.0	104.51	%	0.115				0.11%
Sc RADIAL	157469.8	108	%	0.8				0.79%
Y 371.029	1060877.8	103.75	%	0.066				0.06%
Ag 328.068†	120352.8	494.58	µg/L	2.097	494.58	ppb	2.097	0.42%
QC value within limits for Ag 328.068 Recovery = 98.92%								
Al 396.153Radial†	23846.6	5183.2	µg/L	26.63	5183.2	ppb	26.63	0.51%
QC value within limits for Al 396.153Radial Recovery = 103.66%								
As 188.979†	1259.1	533.25	µg/L	6.336	533.25	ppb	6.336	1.19%
QC value within limits for As 188.979 Recovery = 106.65%								
B 249.677†	28513.2	477.02	µg/L	1.699	477.02	ppb	1.699	0.36%
QC value within limits for B 249.677 Recovery = 95.40%								
Ba 233.527†	109322.4	499.82	µg/L	2.918	499.82	ppb	2.918	0.58%
QC value within limits for Ba 233.527 Recovery = 99.96%								
Be 313.107†	1562326.2	508.70	µg/L	1.694	508.70	ppb	1.694	0.33%
QC value within limits for Be 313.107 Recovery = 101.74%								
Ca 317.933Radial†	83444.1	4889.5	µg/L	10.13	4889.5	ppb	10.13	0.21%
QC value within limits for Ca 317.933Radial Recovery = 97.79%								
Cd 226.502†	69246.9	477.89	µg/L	2.994	477.89	ppb	2.994	0.63%
QC value within limits for Cd 226.502 Recovery = 95.58%								
Co 228.616†	35434.5	485.47	µg/L	1.703	485.47	ppb	1.703	0.35%

QC value within limits for Co 228.616 Recovery = 97.09%

Cr 267.716†	56812.2	487.84 µg/L	2.787	487.84 ppb	2.787	0.57%

QC value within limits for Cr 267.716 Recovery = 97.57%

Cu 324.752†	113156.8	493.41 µg/L	2.057	493.41 ppb	2.057	0.42%

QC value within limits for Cu 324.752 Recovery = 98.68%

Fe 238.204 Radial†	73309.6	4873.9 µg/L	8.98	4873.9 ppb	8.98	0.18%

QC value within limits for Fe 238.204 Radial Recovery = 97.48%

K 766.490 Radial†	11494.3	4727.9 µg/L	36.31	4727.9 ppb	36.31	0.77%

QC value within limits for K 766.490 Radial Recovery = 94.56%

Mg 279.077 IEC†	12150.2	5017.2 µg/L	32.78	5017.2 ppb	32.78	0.65%

QC value within limits for Mg 279.077 IEC Recovery = 100.34%

Mn 257.610†	358271.5	489.35 µg/L	2.310	489.35 ppb	2.310	0.47%

QC value within limits for Mn 257.610 Recovery = 97.87%

Mo 202.031†	15178.3	479.57 µg/L	1.650	479.57 ppb	1.650	0.34%

QC value within limits for Mo 202.031 Recovery = 95.91%

Na 589.592 Radial†	63801.9	9758.3 µg/L	35.47	9758.3 ppb	35.47	0.36%

QC value within limits for Na 589.592 Radial Recovery = 97.58%

Ni 231.604†	38055.3	486.77 µg/L	1.281	486.77 ppb	1.281	0.26%

QC value within limits for Ni 231.604 Recovery = 97.35%

P 214.914†	9849.4	2350.4 µg/L	8.04	2350.4 ppb	8.04	0.34%

QC value within limits for P 214.914 Recovery = 94.02%

Pb 220.353†	7853.6	477.29 µg/L	1.242	477.29 ppb	1.242	0.26%

QC value within limits for Pb 220.353 Recovery = 95.46%

S 181.975 Axial†	1146.3	932.72 µg/L	6.328	932.72 ppb	6.328	0.68%

QC value within limits for S 181.975 Axial Recovery = 93.27%

Sb 206.836†	3591.5	485.47 µg/L	1.590	485.47 ppb	1.590	0.33%

QC value within limits for Sb 206.836 Recovery = 97.09%

Se 196.026†	1185.5	471 µg/L	3.0	471 ppb	3.0	0.65%

QC value within limits for Se 196.026 Recovery = 94.21%

SiO2†	47839.5	5208.2 µg/L	33.99	5208.2 ppb	33.99	0.65%

QC value within limits for SiO2 Recovery = 97.40%

Si 251.611†	147649.6	2431.8 µg/L	10.49	2431.8 ppb	10.49	0.43%

QC value within limits for Si 251.611 Recovery = 97.27%

Sn 189.927†	6803.0	485.29 µg/L	1.421	485.29 ppb	1.421	0.29%

QC value within limits for Sn 189.927 Recovery = 97.06%

Sr 421.552†	213429.2	500.18 µg/L	2.240	500.18 ppb	2.240	0.45%

QC value within limits for Sr 421.552 Recovery = 100.04%

Ti 334.940†	481848.1	490.70 µg/L	2.236	490.70 ppb	2.236	0.46%

QC value within limits for Ti 334.940 Recovery = 98.14%

Tl 190.801†	3565.2	485.94 µg/L	1.942	485.94 ppb	1.942	0.40%

QC value within limits for Tl 190.801 Recovery = 97.19%

U 409.014†	7459.8	491.02 µg/L	5.432	491.02 ppb	5.432	1.11%

QC value within limits for U 409.014 Recovery = 98.20%

V 292.402†	88815.7	498.80 µg/L	1.625	498.80 ppb	1.625	0.33%

QC value within limits for V 292.402 Recovery = 99.76%

Zn 213.857†	76607.9	478.40 µg/L	2.115	478.40 ppb	2.115	0.44%

QC value within limits for Zn 213.857 Recovery = 95.68%

All analyte(s) passed QC.

Sequence No.: 38
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/29/2010 20:41:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	159642.2	159642.2	110	%			20:41:56
1	Al 396.153Radial†	-31.9	2.8	0.5753	µg/L	0.5753	ppb	20:42:16
1	Ca 317.933Radial†	722.9	43.8	2.5682	µg/L	2.5682	ppb	20:42:16
1	Fe 238.204 Radial†	156.5	29.6	1.9698	µg/L	1.9698	ppb	20:42:16
1	K 766.490 Radial†	1376.5	-198.2	-81.588	µg/L	-81.588	ppb	20:41:56
1	Mg 279.077 IEC†	160.5	-40.1	-16.536	µg/L	-16.536	ppb	20:42:16
1	Na 589.592 Radial†	1426.6	-392.2	-59.938	µg/L	-59.938	ppb	20:41:56
1	Sr 421.552†	-236.3	62.2	0.1458	µg/L	0.1458	ppb	20:41:56
1	Sc 361.383	1761363.3	1761363.3	105.30	%			20:43:04
1	Y 371.029	1082249.7	1082249.7	105.84	%			20:43:04
1	Ag 328.068†	2961.0	-154.9	-0.6438	µg/L	-0.6438	ppb	20:43:06
1	As 188.979†	-17.6	-2.5	-1.0426	µg/L	-1.0426	ppb	20:43:26
1	B 249.677†	3116.7	-395.7	-6.6440	µg/L	-6.6440	ppb	20:43:26
1	Ba 233.527†	-177.6	6.4	0.0281	µg/L	0.0281	ppb	20:43:26
1	Be 313.107†	-787.6	-87.9	-0.0270	µg/L	-0.0270	ppb	20:43:06
1	Cd 226.502†	-97.6	1.7	0.0116	µg/L	0.0116	ppb	20:43:26
1	Co 228.616†	-177.8	7.8	0.1062	µg/L	0.1062	ppb	20:43:26
1	Cr 267.716†	140.3	-27.0	-0.2369	µg/L	-0.2369	ppb	20:43:26
1	Cu 324.752†	2779.8	215.1	0.9395	µg/L	0.9395	ppb	20:43:06
1	Mn 257.610†	177.4	88.5	0.1216	µg/L	0.1216	ppb	20:43:26
1	Mo 202.031†	-33.7	23.2	0.7311	µg/L	0.7311	ppb	20:43:26
1	Ni 231.604†	-52.7	-9.1	-0.1163	µg/L	-0.1163	ppb	20:43:26
1	P 214.914†	64.5	-18.3	-4.4052	µg/L	-4.4052	ppb	20:43:26
1	Pb 220.353†	118.6	0.2	0.0090	µg/L	0.0090	ppb	20:43:26
1	S 181.975 Axial†	91.5	-7.9	-6.4221	µg/L	-6.4221	ppb	20:43:26
1	Sb 206.836†	85.6	-5.4	-0.7134	µg/L	-0.7134	ppb	20:43:26
1	Se 196.026†	17.8	6.0	2.38	µg/L	2.38	ppb	20:43:26
1	SiO2†	1758.9	97.6	10.643	µg/L	10.643	ppb	20:43:26
1	Si 251.611†	831.5	113.3	1.8631	µg/L	1.8631	ppb	20:43:26
1	Sn 189.927†	4.0	1.8	0.1284	µg/L	0.1284	ppb	20:43:26
1	Ti 334.940†	1053.8	364.4	0.3709	µg/L	0.3709	ppb	20:43:06
1	Tl 190.801†	-105.5	20.1	2.6847	µg/L	2.6847	ppb	20:43:26
1	U 409.014†	-413.2	86.7	5.2550	µg/L	5.2550	ppb	20:43:06
1	V 292.402†	111.6	-325.8	-1.7979	µg/L	-1.7979	ppb	20:43:06
1	Zn 213.857†	508.2	18.2	0.1146	µg/L	0.1146	ppb	20:43:26
2	Sc RADIAL	156186.9	156186.9	107	%			20:42:18
2	Al 396.153Radial†	-15.2	17.7	3.8291	µg/L	3.8291	ppb	20:42:38
2	Ca 317.933Radial†	693.6	31.0	1.8191	µg/L	1.8191	ppb	20:42:38
2	Fe 238.204 Radial†	162.9	38.7	2.5747	µg/L	2.5747	ppb	20:42:38
2	K 766.490 Radial†	1472.5	-80.8	-33.270	µg/L	-33.270	ppb	20:42:18
2	Mg 279.077 IEC†	190.1	-9.2	-3.7954	µg/L	-3.7954	ppb	20:42:38
2	Na 589.592 Radial†	1486.0	-308.0	-47.099	µg/L	-47.099	ppb	20:42:18
2	Sr 421.552†	-366.4	-64.0	-0.1499	µg/L	-0.1499	ppb	20:42:18
2	Sc 361.383	1768341.2	1768341.2	105.71	%			20:43:28
2	Y 371.029	1086167.8	1086167.8	106.22	%			20:43:28
2	Ag 328.068†	2860.7	-260.9	-1.0681	µg/L	-1.0681	ppb	20:43:30
2	As 188.979†	-12.8	2.1	0.8941	µg/L	0.8941	ppb	20:43:50
2	B 249.677†	3095.0	-428.0	-7.1869	µg/L	-7.1869	ppb	20:43:50
2	Ba 233.527†	-192.4	-6.9	-0.0315	µg/L	-0.0315	ppb	20:43:50
2	Be 313.107†	-460.5	224.5	0.0719	µg/L	0.0719	ppb	20:43:30
2	Cd 226.502†	-94.7	4.9	0.0334	µg/L	0.0334	ppb	20:43:50
2	Co 228.616†	-140.7	43.5	0.5958	µg/L	0.5958	ppb	20:43:50
2	Cr 267.716†	149.4	-18.9	-0.1596	µg/L	-0.1596	ppb	20:43:50
2	Cu 324.752†	2666.0	97.1	0.4194	µg/L	0.4194	ppb	20:43:30
2	Mn 257.610†	165.4	76.4	0.1046	µg/L	0.1046	ppb	20:43:50
2	Mo 202.031†	-30.4	26.4	0.8348	µg/L	0.8348	ppb	20:43:50
2	Ni 231.604†	-24.5	17.7	0.2263	µg/L	0.2263	ppb	20:43:50
2	P 214.914†	45.9	-36.2	-8.6751	µg/L	-8.6751	ppb	20:43:50
2	Pb 220.353†	89.4	-27.9	-1.6824	µg/L	-1.6824	ppb	20:43:50

2	S 181.975 Axial†	94.2	-5.7	-4.6425 µg/L	-4.6425 ppb	20:43:50
2	Sb 206.836†	72.8	-17.8	-2.3809 µg/L	-2.3809 ppb	20:43:50
2	Se 196.026†	8.4	-3.0	-1.17 µg/L	-1.17 ppb	20:43:50
2	SiO2†	1693.5	29.1	3.1523 µg/L	3.1523 ppb	20:43:50
2	Si 251.611†	804.4	84.5	1.3841 µg/L	1.3841 ppb	20:43:50
2	Sn 189.927†	8.2	5.7	0.4069 µg/L	0.4069 ppb	20:43:50
2	Ti 334.940†	839.4	157.7	0.1627 µg/L	0.1627 ppb	20:43:30
2	Tl 190.801†	-101.0	24.8	3.3258 µg/L	3.3258 ppb	20:43:50
2	U 409.014†	-571.5	-61.5	-3.8245 µg/L	-3.8245 ppb	20:43:30
2	V 292.402†	384.6	-68.0	-0.3725 µg/L	-0.3725 ppb	20:43:30
2	Zn 213.857†	520.5	28.0	0.1740 µg/L	0.1740 ppb	20:43:50
3	Sc RADIAL	157025.4	157025.4	108 %		20:42:40
3	Al 396.153Radial†	-41.8	-6.9	-1.5626 µg/L	-1.5626 ppb	20:43:00
3	Ca 317.933Radial†	735.1	66.2	3.8771 µg/L	3.8771 ppb	20:43:00
3	Fe 238.204 Radial†	156.0	31.5	2.0942 µg/L	2.0942 ppb	20:43:00
3	K 766.490 Radial†	1504.7	-58.3	-23.989 µg/L	-23.989 ppb	20:42:40
3	Mg 279.077 IEC†	175.7	-23.6	-9.6897 µg/L	-9.6897 ppb	20:43:00
3	Na 589.592 Radial†	1490.0	-311.7	-47.668 µg/L	-47.668 ppb	20:42:40
3	Sr 421.552†	-200.3	92.1	0.2158 µg/L	0.2158 ppb	20:42:40
3	Sc 361.383	1802169.8	1802169.8	107.74 %		20:43:52
3	Y 371.029	1105477.1	1105477.1	108.11 %		20:43:52
3	Ag 328.068†	2995.0	-187.1	-0.7466 µg/L	-0.7466 ppb	20:43:54
3	As 188.979†	-15.0	0.3	0.1424 µg/L	0.1424 ppb	20:44:15
3	B 249.677†	3108.4	-470.5	-7.8995 µg/L	-7.8995 ppb	20:44:15
3	Ba 233.527†	-173.6	13.9	0.0633 µg/L	0.0633 ppb	20:44:15
3	Be 313.107†	-686.3	23.1	0.0136 µg/L	0.0136 ppb	20:43:54
3	Cd 226.502†	-87.9	12.8	0.0881 µg/L	0.0881 ppb	20:44:15
3	Co 228.616†	-169.8	19.0	0.2599 µg/L	0.2599 ppb	20:44:15
3	Cr 267.716†	170.2	-2.2	-0.0351 µg/L	-0.0351 ppb	20:44:15
3	Cu 324.752†	2724.0	103.6	0.4670 µg/L	0.4670 ppb	20:43:54
3	Mn 257.610†	180.6	87.6	0.1201 µg/L	0.1201 ppb	20:44:15
3	Mo 202.031†	-18.7	37.8	1.1943 µg/L	1.1943 ppb	20:44:15
3	Ni 231.604†	-67.6	-21.8	-0.2790 µg/L	-0.2790 ppb	20:44:15
3	P 214.914†	48.5	-34.6	-8.3057 µg/L	-8.3057 ppb	20:44:15
3	Pb 220.353†	111.7	-8.7	-0.5419 µg/L	-0.5419 ppb	20:44:15
3	S 181.975 Axial†	82.0	-18.7	-15.128 µg/L	-15.128 ppb	20:44:15
3	Sb 206.836†	86.7	-6.1	-0.8115 µg/L	-0.8115 ppb	20:44:15
3	Se 196.026†	20.9	8.5	3.37 µg/L	3.37 ppb	20:44:15
3	SiO2†	1699.8	4.9	0.5106 µg/L	0.5106 ppb	20:44:15
3	Si 251.611†	817.9	82.8	1.3569 µg/L	1.3569 ppb	20:44:15
3	Sn 189.927†	-7.0	-8.5	-0.6027 µg/L	-0.6027 ppb	20:44:15
3	Ti 334.940†	578.4	-99.5	-0.1088 µg/L	-0.1088 ppb	20:43:54
3	Tl 190.801†	-115.5	13.1	1.7476 µg/L	1.7476 ppb	20:44:15
3	U 409.014†	-166.7	324.4	19.989 µg/L	19.989 ppb	20:43:54
3	V 292.402†	270.2	-181.0	-0.9785 µg/L	-0.9785 ppb	20:43:54
3	Zn 213.857†	519.3	17.6	0.1119 µg/L	0.1119 ppb	20:44:15

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1777291.5	106.25	%	1.305				1.23%
Sc RADIAL	157618.2	108	%	1.2				1.14%
Y 371.029	1091298.2	106.72	%	1.216				1.14%
Ag 328.068†	-201.0	-0.8195	µg/L	0.22133	-0.8195	ppb	0.22133	27.01%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	4.5	0.9472	µg/L	2.71501	0.9472	ppb	2.71501	286.62%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.0	-0.0020	µg/L	0.97639	-0.0020	ppb	0.97639	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-431.4	-7.2435	µg/L	0.62967	-7.2435	ppb	0.62967	8.69%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.5	0.0200	µg/L	0.04797	0.0200	ppb	0.04797	240.04%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	53.2	0.0195	µg/L	0.04972	0.0195	ppb	0.04972	254.94%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	47.0	2.7548	µg/L	1.04159	2.7548	ppb	1.04159	37.81%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	6.5	0.0444	µg/L	0.03942	0.0444	ppb	0.03942	88.81%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	23.4	0.3206	µg/L	0.25038	0.3206	ppb	0.25038	78.09%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -16.1     -0.1439 µg/L       0.10181     -0.1439 ppb       0.10181  70.75%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              138.6      0.6086 µg/L       0.28751      0.6086 ppb       0.28751  47.24%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        33.3      2.2129 µg/L       0.31946      2.2129 ppb       0.31946  14.44%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -112.4     -46.282 µg/L       30.9255     -46.282 ppb       30.9255  66.82%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -24.3     -10.007 µg/L        6.3764     -10.007 ppb        6.3764  63.72%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               84.2      0.1154 µg/L       0.00942      0.1154 ppb       0.00942   8.16%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               29.2      0.9200 µg/L       0.24309      0.9200 ppb       0.24309  26.42%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -337.3     -51.568 µg/L        7.2542     -51.568 ppb        7.2542  14.07%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -4.4      -0.0563 µg/L       0.25791      -0.0563 ppb       0.25791 457.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -29.7      -7.1287 µg/L       2.36584      -7.1287 ppb       2.36584  33.19%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -12.1      -0.7384 µg/L       0.86263      -0.7384 ppb       0.86263 116.82%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -10.8      -8.7308 µg/L       5.61093      -8.7308 ppb       5.61093  64.27%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -9.7      -1.3019 µg/L       0.93572      -1.3019 ppb       0.93572  71.87%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                3.8       1.53 µg/L         2.391         1.53 ppb         2.391  156.61%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     43.9      4.7687 µg/L       5.25620      4.7687 ppb       5.25620 110.22%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               93.5      1.5347 µg/L       0.28470      1.5347 ppb       0.28470  18.55%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -0.3      -0.0225 µg/L       0.52147      -0.0225 ppb       0.52147 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               30.1      0.0706 µg/L       0.19411      0.0706 ppb       0.19411 275.10%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              140.8      0.1416 µg/L       0.24052      0.1416 ppb       0.24052 169.85%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               19.3      2.5860 µg/L       0.79369      2.5860 ppb       0.79369  30.69%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               116.5      7.1397 µg/L      12.01791      7.1397 ppb      12.01791 168.33%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -191.6     -1.0496 µg/L       0.71539     -1.0496 ppb       0.71539  68.16%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               21.3      0.1335 µg/L       0.03514      0.1335 ppb       0.03514  26.32%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 46
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/29/2010 21:03:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	154851.7	154851.7	106	%			21:03:53
1	Al 396.153Radial†	25485.8	24020.4	5220.8	µg/L	5220.8	ppb	21:03:53
1	Ca 317.933Radial†	90010.8	84106.5	4928.3	µg/L	4928.3	ppb	21:03:53
1	Fe 238.204 Radial†	78533.5	73806.4	4906.9	µg/L	4906.9	ppb	21:03:53
1	K 766.490 Radial†	13939.7	11665.7	4798.5	µg/L	4798.5	ppb	21:03:53
1	Mg 279.077 IEC†	13229.3	12265.4	5064.8	µg/L	5064.8	ppb	21:03:53
1	Na 589.592 Radial†	69846.3	64048.1	9795.9	µg/L	9795.9	ppb	21:03:53
1	Sr 421.552†	228674.2	215517.6	505.08	µg/L	505.08	ppb	21:03:51
1	Sc 361.383	1713248.9	1713248.9	102.42	%			21:04:06
1	Y 371.029	1039105.6	1039105.6	101.62	%			21:04:06
1	Ag 328.068†	126578.4	120621.1	495.66	µg/L	495.66	ppb	21:04:06
1	As 188.979†	1286.8	1270.6	538.07	µg/L	538.07	ppb	21:04:26
1	B 249.677†	32552.7	28428.0	475.59	µg/L	475.59	ppb	21:04:06
1	Ba 233.527†	111768.2	109302.8	499.73	µg/L	499.73	ppb	21:04:06
1	Be 313.107†	1595894.5	1558852.6	507.57	µg/L	507.57	ppb	21:04:06
1	Cd 226.502†	71067.7	69483.2	479.52	µg/L	479.52	ppb	21:04:06
1	Co 228.616†	36010.7	35336.6	484.13	µg/L	484.13	ppb	21:04:06
1	Cr 267.716†	58430.3	56889.7	488.51	µg/L	488.51	ppb	21:04:06
1	Cu 324.752†	118439.2	113216.3	493.68	µg/L	493.68	ppb	21:04:06
1	Mn 257.610†	368025.4	359251.0	490.68	µg/L	490.68	ppb	21:04:06
1	Mo 202.031†	15706.6	15390.8	486.28	µg/L	486.28	ppb	21:04:26
1	Ni 231.604†	38854.0	37977.0	485.77	µg/L	485.77	ppb	21:04:06
1	P 214.914†	10314.2	9990.9	2384.3	µg/L	2384.3	ppb	21:04:26
1	Pb 220.353†	8262.0	7954.4	483.41	µg/L	483.41	ppb	21:04:26
1	S 181.975 Axial†	1274.3	1149.4	935.31	µg/L	935.31	ppb	21:04:26
1	Sb 206.836†	3786.5	3610.4	488.11	µg/L	488.11	ppb	21:04:26
1	Se 196.026†	1247.6	1207.2	480	µg/L	480	ppb	21:04:26
1	SiO2†	50572.1	47804.5	5204.1	µg/L	5204.1	ppb	21:04:06
1	Si 251.611†	152175.1	147903.7	2435.8	µg/L	2435.8	ppb	21:04:06
1	Sn 189.927†	7069.4	6900.4	492.22	µg/L	492.22	ppb	21:04:26
1	Ti 334.940†	495105.0	482772.1	491.64	µg/L	491.64	ppb	21:04:06
1	Tl 190.801†	3560.4	3596.6	490.17	µg/L	490.17	ppb	21:04:26
1	U 409.014†	7150.7	7460.8	491.07	µg/L	491.07	ppb	21:04:06
1	V 292.402†	91336.8	88747.2	498.49	µg/L	498.49	ppb	21:04:06
1	Zn 213.857†	78849.4	76522.2	477.86	µg/L	477.86	ppb	21:04:06
2	Sc RADIAL	153431.3	153431.3	105	%			21:03:57
2	Al 396.153Radial†	25174.7	23947.0	5204.9	µg/L	5204.9	ppb	21:03:57
2	Ca 317.933Radial†	89019.4	83949.0	4919.1	µg/L	4919.1	ppb	21:03:57
2	Fe 238.204 Radial†	77673.0	73673.3	4898.1	µg/L	4898.1	ppb	21:03:57
2	K 766.490 Radial†	13736.1	11593.9	4768.9	µg/L	4768.9	ppb	21:03:57
2	Mg 279.077 IEC†	13051.1	12211.4	5042.5	µg/L	5042.5	ppb	21:03:57
2	Na 589.592 Radial†	69569.0	64393.3	9848.8	µg/L	9848.8	ppb	21:03:57
2	Sr 421.552†	230380.7	219131.5	513.55	µg/L	513.55	ppb	21:03:55
2	Sc 361.383	1723240.0	1723240.0	103.02	%			21:04:29
2	Y 371.029	1044358.9	1044358.9	102.13	%			21:04:29
2	Ag 328.068†	127680.9	120974.7	497.13	µg/L	497.13	ppb	21:04:29
2	As 188.979†	1279.6	1256.3	532.10	µg/L	532.10	ppb	21:04:49
2	B 249.677†	32914.0	28594.4	478.37	µg/L	478.37	ppb	21:04:29
2	Ba 233.527†	112872.1	109741.6	501.74	µg/L	501.74	ppb	21:04:29
2	Be 313.107†	1612082.1	1565532.0	509.75	µg/L	509.75	ppb	21:04:29
2	Cd 226.502†	71525.6	69525.3	479.81	µg/L	479.81	ppb	21:04:29
2	Co 228.616†	36504.1	35611.7	487.90	µg/L	487.90	ppb	21:04:29
2	Cr 267.716†	58865.9	56981.8	489.29	µg/L	489.29	ppb	21:04:29
2	Cu 324.752†	119296.1	113377.7	494.39	µg/L	494.39	ppb	21:04:29
2	Mn 257.610†	370507.0	359576.6	491.13	µg/L	491.13	ppb	21:04:29
2	Mo 202.031†	15700.9	15296.3	483.30	µg/L	483.30	ppb	21:04:49
2	Ni 231.604†	39299.1	38189.1	488.48	µg/L	488.48	ppb	21:04:29
2	P 214.914†	10271.7	9891.3	2360.4	µg/L	2360.4	ppb	21:04:49
2	Pb 220.353†	8221.9	7868.7	478.21	µg/L	478.21	ppb	21:04:49

2	S 181.975 Axial†	1283.0	1150.6	936.30 µg/L	936.30 ppb	21:04:49
2	Sb 206.836†	3813.2	3614.9	488.65 µg/L	488.65 ppb	21:04:49
2	Se 196.026†	1244.9	1197.5	476 µg/L	476 ppb	21:04:49
2	SiO2†	51026.3	47959.1	5221.2 µg/L	5221.2 ppb	21:04:29
2	Si 251.611†	153367.0	148199.2	2440.8 µg/L	2440.8 ppb	21:04:29
2	Sn 189.927†	7028.6	6820.7	486.55 µg/L	486.55 ppb	21:04:49
2	Ti 334.940†	498901.8	483655.0	492.54 µg/L	492.54 ppb	21:04:29
2	Tl 190.801†	3590.9	3606.0	491.45 µg/L	491.45 ppb	21:04:49
2	U 409.014†	7310.8	7575.8	498.29 µg/L	498.29 ppb	21:04:29
2	V 292.402†	92221.6	89089.0	500.36 µg/L	500.36 ppb	21:04:29
2	Zn 213.857†	79595.3	76799.9	479.59 µg/L	479.59 ppb	21:04:29
3	Sc RADIAL	153860.9	153860.9	106 %		21:04:01
3	Al 396.153Radial†	25294.4	23993.6	5215.1 µg/L	5215.1 ppb	21:04:01
3	Ca 317.933Radial†	89754.2	84409.0	4946.0 µg/L	4946.0 ppb	21:04:01
3	Fe 238.204 Radial†	78247.7	74011.6	4920.6 µg/L	4920.6 ppb	21:04:01
3	K 766.490 Radial†	13894.4	11707.3	4815.6 µg/L	4815.6 ppb	21:04:01
3	Mg 279.077 IEC†	13234.5	12350.5	5099.8 µg/L	5099.8 ppb	21:04:01
3	Na 589.592 Radial†	69626.7	64263.4	9828.8 µg/L	9828.8 ppb	21:04:01
3	Sr 421.552†	228028.2	216291.8	506.89 µg/L	506.89 ppb	21:03:59
3	Sc 361.383	1732745.4	1732745.4	103.59 %		21:04:52
3	Y 371.029	1050125.7	1050125.7	102.69 %		21:04:52
3	Ag 328.068†	127692.6	120306.0	494.38 µg/L	494.38 ppb	21:04:52
3	As 188.979†	1285.3	1255.0	531.54 µg/L	531.54 ppb	21:05:12
3	B 249.677†	33066.4	28566.3	477.91 µg/L	477.91 ppb	21:04:52
3	Ba 233.527†	113084.6	109345.8	499.93 µg/L	499.93 ppb	21:04:52
3	Be 313.107†	1614930.2	1559697.0	507.85 µg/L	507.85 ppb	21:04:52
3	Cd 226.502†	71595.2	69211.7	477.64 µg/L	477.64 ppb	21:04:52
3	Co 228.616†	36541.6	35453.5	485.73 µg/L	485.73 ppb	21:04:52
3	Cr 267.716†	58957.8	56757.0	487.36 µg/L	487.36 ppb	21:04:52
3	Cu 324.752†	119675.9	113109.0	493.23 µg/L	493.23 ppb	21:04:52
3	Mn 257.610†	371477.0	358540.1	489.71 µg/L	489.71 ppb	21:04:52
3	Mo 202.031†	15758.3	15268.1	482.41 µg/L	482.41 ppb	21:05:12
3	Ni 231.604†	39365.4	38043.9	486.63 µg/L	486.63 ppb	21:04:52
3	P 214.914†	10350.1	9912.3	2365.5 µg/L	2365.5 ppb	21:05:12
3	Pb 220.353†	8278.4	7879.4	478.85 µg/L	478.85 ppb	21:05:12
3	S 181.975 Axial†	1296.2	1156.5	941.02 µg/L	941.02 ppb	21:05:12
3	Sb 206.836†	3820.2	3601.3	486.84 µg/L	486.84 ppb	21:05:12
3	Se 196.026†	1245.9	1191.9	474 µg/L	474 ppb	21:05:12
3	SiO2†	51139.5	47796.6	5203.5 µg/L	5203.5 ppb	21:04:52
3	Si 251.611†	153580.9	147589.1	2430.7 µg/L	2430.7 ppb	21:04:52
3	Sn 189.927†	7084.4	6837.2	487.72 µg/L	487.72 ppb	21:05:12
3	Ti 334.940†	499459.5	481536.7	490.37 µg/L	490.37 ppb	21:04:52
3	Tl 190.801†	3572.9	3569.5	486.51 µg/L	486.51 ppb	21:05:12
3	U 409.014†	7416.3	7638.8	501.99 µg/L	501.99 ppb	21:04:52
3	V 292.402†	92167.5	88545.7	497.33 µg/L	497.33 ppb	21:04:52
3	Zn 213.857†	79634.5	76413.9	477.17 µg/L	477.17 ppb	21:04:52

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1723078.1	103.01	%	0.583				0.57%
Sc RADIAL	154048.0	106	%	0.5				0.47%
Y 371.029	1044530.0	102.15	%	0.539				0.53%
Ag 328.068†	120633.9	495.73	µg/L	1.374	495.73	ppb	1.374	0.28%
QC value within limits for Ag 328.068 Recovery = 99.15%								
Al 396.153Radial†	23987.0	5213.6	µg/L	8.05	5213.6	ppb	8.05	0.15%
QC value within limits for Al 396.153Radial Recovery = 104.27%								
As 188.979†	1260.7	533.90	µg/L	3.620	533.90	ppb	3.620	0.68%
QC value within limits for As 188.979 Recovery = 106.78%								
B 249.677†	28529.6	477.29	µg/L	1.490	477.29	ppb	1.490	0.31%
QC value within limits for B 249.677 Recovery = 95.46%								
Ba 233.527†	109463.4	500.47	µg/L	1.106	500.47	ppb	1.106	0.22%
QC value within limits for Ba 233.527 Recovery = 100.09%								
Be 313.107†	1561360.5	508.39	µg/L	1.184	508.39	ppb	1.184	0.23%
QC value within limits for Be 313.107 Recovery = 101.68%								
Ca 317.933Radial†	84154.8	4931.1	µg/L	13.70	4931.1	ppb	13.70	0.28%
QC value within limits for Ca 317.933Radial Recovery = 98.62%								
Cd 226.502†	69406.7	478.99	µg/L	1.177	478.99	ppb	1.177	0.25%
QC value within limits for Cd 226.502 Recovery = 95.80%								
Co 228.616†	35467.2	485.92	µg/L	1.892	485.92	ppb	1.892	0.39%

QC value within limits for Co 228.616 Recovery = 97.18%

Cr 267.716†	56876.2	488.38 µg/L	0.973	488.38 ppb	0.973	0.20%
QC value within limits for Cr 267.716 Recovery = 97.68%						
Cu 324.752†	113234.3	493.76 µg/L	0.585	493.76 ppb	0.585	0.12%
QC value within limits for Cu 324.752 Recovery = 98.75%						
Fe 238.204 Radial†	73830.5	4908.5 µg/L	11.33	4908.5 ppb	11.33	0.23%
QC value within limits for Fe 238.204 Radial Recovery = 98.17%						
K 766.490 Radial†	11655.6	4794.3 µg/L	23.63	4794.3 ppb	23.63	0.49%
QC value within limits for K 766.490 Radial Recovery = 95.89%						
Mg 279.077 IEC†	12275.8	5069.1 µg/L	28.89	5069.1 ppb	28.89	0.57%
QC value within limits for Mg 279.077 IEC Recovery = 101.38%						
Mn 257.610†	359122.6	490.51 µg/L	0.726	490.51 ppb	0.726	0.15%
QC value within limits for Mn 257.610 Recovery = 98.10%						
Mo 202.031†	15318.4	483.99 µg/L	2.029	483.99 ppb	2.029	0.42%
QC value within limits for Mo 202.031 Recovery = 96.80%						
Na 589.592 Radial†	64235.0	9824.5 µg/L	26.69	9824.5 ppb	26.69	0.27%
QC value within limits for Na 589.592 Radial Recovery = 98.25%						
Ni 231.604†	38070.0	486.96 µg/L	1.387	486.96 ppb	1.387	0.28%
QC value within limits for Ni 231.604 Recovery = 97.39%						
P 214.914†	9931.5	2370.0 µg/L	12.59	2370.0 ppb	12.59	0.53%
QC value within limits for P 214.914 Recovery = 94.80%						
Pb 220.353†	7900.8	480.16 µg/L	2.839	480.16 ppb	2.839	0.59%
QC value within limits for Pb 220.353 Recovery = 96.03%						
S 181.975 Axial†	1152.2	937.54 µg/L	3.050	937.54 ppb	3.050	0.33%
QC value within limits for S 181.975 Axial Recovery = 93.75%						
Sb 206.836†	3608.9	487.87 µg/L	0.930	487.87 ppb	0.930	0.19%
QC value within limits for Sb 206.836 Recovery = 97.57%						
Se 196.026†	1198.9	476 µg/L	3.1	476 ppb	3.1	0.64%
QC value within limits for Se 196.026 Recovery = 95.27%						
SiO2†	47853.4	5209.6 µg/L	10.06	5209.6 ppb	10.06	0.19%
QC value within limits for SiO2 Recovery = 97.42%						
Si 251.611†	147897.3	2435.8 µg/L	5.04	2435.8 ppb	5.04	0.21%
QC value within limits for Si 251.611 Recovery = 97.43%						
Sn 189.927†	6852.8	488.83 µg/L	2.990	488.83 ppb	2.990	0.61%
QC value within limits for Sn 189.927 Recovery = 97.77%						
Sr 421.552†	216980.3	508.51 µg/L	4.460	508.51 ppb	4.460	0.88%
QC value within limits for Sr 421.552 Recovery = 101.70%						
Ti 334.940†	482654.6	491.52 µg/L	1.088	491.52 ppb	1.088	0.22%
QC value within limits for Ti 334.940 Recovery = 98.30%						
Tl 190.801†	3590.7	489.37 µg/L	2.564	489.37 ppb	2.564	0.52%
QC value within limits for Tl 190.801 Recovery = 97.87%						
U 409.014†	7558.5	497.12 µg/L	5.554	497.12 ppb	5.554	1.12%
QC value within limits for U 409.014 Recovery = 99.42%						
V 292.402†	88794.0	498.73 µg/L	1.529	498.73 ppb	1.529	0.31%
QC value within limits for V 292.402 Recovery = 99.75%						
Zn 213.857†	76578.7	478.21 µg/L	1.247	478.21 ppb	1.247	0.26%
QC value within limits for Zn 213.857 Recovery = 95.64%						

All analyte(s) passed QC.

Sequence No.: 47
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/29/2010 21:05:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	154996.4	154996.4	106	%			21:05:49
1	Al 396.153Radial†	-63.3	-27.7	-6.1097	µg/L	-6.1097	ppb	21:06:09
1	Ca 317.933Radial†	693.4	35.9	2.1034	µg/L	2.1034	ppb	21:06:09
1	Fe 238.204 Radial†	151.1	28.8	1.9138	µg/L	1.9138	ppb	21:06:09
1	K 766.490 Radial†	1597.5	47.3	19.463	µg/L	19.463	ppb	21:05:49
1	Mg 279.077 IEC†	208.9	9.8	4.0702	µg/L	4.0702	ppb	21:06:09
1	Na 589.592 Radial†	1678.5	-116.3	-17.818	µg/L	-17.818	ppb	21:05:49
1	Sr 421.552†	-227.7	63.9	0.1497	µg/L	0.1497	ppb	21:05:49
1	Sc 361.383	1725992.9	1725992.9	103.18	%			21:06:57
1	Y 371.029	1059747.2	1059747.2	103.63	%			21:06:57
1	Ag 328.068†	3051.7	-9.4	-0.0382	µg/L	-0.0382	ppb	21:06:59
1	As 188.979†	-12.6	2.0	0.8526	µg/L	0.8526	ppb	21:07:19
1	B 249.677†	3056.4	-393.5	-6.6077	µg/L	-6.6077	ppb	21:07:19
1	Ba 233.527†	-168.8	11.5	0.0524	µg/L	0.0524	ppb	21:07:19
1	Be 313.107†	-508.1	167.7	0.0571	µg/L	0.0571	ppb	21:06:59
1	Cd 226.502†	-60.4	35.9	0.2479	µg/L	0.2479	ppb	21:07:19
1	Co 228.616†	-169.8	12.0	0.1644	µg/L	0.1644	ppb	21:07:19
1	Cr 267.716†	146.1	-18.7	-0.1673	µg/L	-0.1673	ppb	21:07:19
1	Cu 324.752†	2666.8	159.7	0.7014	µg/L	0.7014	ppb	21:06:59
1	Mn 257.610†	177.8	92.3	0.1259	µg/L	0.1259	ppb	21:07:19
1	Mo 202.031†	-5.1	50.3	1.5872	µg/L	1.5872	ppb	21:07:19
1	Ni 231.604†	-16.9	24.5	0.3133	µg/L	0.3133	ppb	21:07:19
1	P 214.914†	22.6	-57.6	-13.826	µg/L	-13.826	ppb	21:07:19
1	Pb 220.353†	90.0	-25.2	-1.5281	µg/L	-1.5281	ppb	21:07:19
1	S 181.975 Axial†	71.1	-25.9	-21.007	µg/L	-21.007	ppb	21:07:19
1	Sb 206.836†	85.9	-3.3	-0.4268	µg/L	-0.4268	ppb	21:07:19
1	Se 196.026†	19.1	7.6	3.00	µg/L	3.00	ppb	21:07:19
1	SiO2†	1671.8	47.4	5.1244	µg/L	5.1244	ppb	21:07:19
1	Si 251.611†	772.8	72.6	1.1761	µg/L	1.1761	ppb	21:07:19
1	Sn 189.927†	9.7	7.4	0.5233	µg/L	0.5233	ppb	21:07:19
1	Ti 334.940†	780.1	119.7	0.1184	µg/L	0.1184	ppb	21:06:59
1	Tl 190.801†	-117.8	6.2	0.8248	µg/L	0.8248	ppb	21:07:19
1	U 409.014†	-356.1	134.0	8.2316	µg/L	8.2316	ppb	21:06:59
1	V 292.402†	287.8	-152.9	-0.8274	µg/L	-0.8274	ppb	21:06:59
1	Zn 213.857†	507.5	27.4	0.1698	µg/L	0.1698	ppb	21:07:19
2	Sc RADIAL	152412.0	152412.0	105	%			21:06:11
2	Al 396.153Radial†	-24.5	8.4	1.8014	µg/L	1.8014	ppb	21:06:31
2	Ca 317.933Radial†	694.0	47.5	2.7825	µg/L	2.7825	ppb	21:06:31
2	Fe 238.204 Radial†	146.8	27.1	1.7992	µg/L	1.7992	ppb	21:06:31
2	K 766.490 Radial†	1385.9	-129.6	-53.361	µg/L	-53.361	ppb	21:06:11
2	Mg 279.077 IEC†	168.1	-25.9	-10.680	µg/L	-10.680	ppb	21:06:31
2	Na 589.592 Radial†	1601.9	-162.8	-24.860	µg/L	-24.860	ppb	21:06:11
2	Sr 421.552†	-193.2	93.2	0.2184	µg/L	0.2184	ppb	21:06:11
2	Sc 361.383	1730228.9	1730228.9	103.43	%			21:07:21
2	Y 371.029	1062056.7	1062056.7	103.86	%			21:07:21
2	Ag 328.068†	3294.6	218.2	0.8697	µg/L	0.8697	ppb	21:07:23
2	As 188.979†	-7.8	6.7	2.7923	µg/L	2.7923	ppb	21:07:43
2	B 249.677†	3121.5	-337.9	-5.6726	µg/L	-5.6726	ppb	21:07:43
2	Ba 233.527†	-196.4	-14.9	-0.0686	µg/L	-0.0686	ppb	21:07:43
2	Be 313.107†	-630.3	50.7	0.0170	µg/L	0.0170	ppb	21:07:23
2	Cd 226.502†	-85.2	12.1	0.0830	µg/L	0.0830	ppb	21:07:43
2	Co 228.616†	-178.5	4.0	0.0551	µg/L	0.0551	ppb	21:07:43
2	Cr 267.716†	146.8	-18.3	-0.1593	µg/L	-0.1593	ppb	21:07:43
2	Cu 324.752†	2640.7	128.1	0.5583	µg/L	0.5583	ppb	21:07:23
2	Mn 257.610†	136.5	52.0	0.0714	µg/L	0.0714	ppb	21:07:43
2	Mo 202.031†	-31.2	25.1	0.7914	µg/L	0.7914	ppb	21:07:43
2	Ni 231.604†	-64.5	-21.4	-0.2741	µg/L	-0.2741	ppb	21:07:43
2	P 214.914†	43.5	-37.5	-8.9955	µg/L	-8.9955	ppb	21:07:43
2	Pb 220.353†	100.4	-15.4	-0.9295	µg/L	-0.9295	ppb	21:07:43

2	S 181.975 Axial†	84.3	-13.3	-10.766 µg/L	-10.766 ppb	21:07:43
2	Sb 206.836†	56.9	-31.6	-4.2573 µg/L	-4.2573 ppb	21:07:43
2	Se 196.026†	21.3	9.7	3.82 µg/L	3.82 ppb	21:07:43
2	SiO2†	1625.1	-1.7	-0.2117 µg/L	-0.2117 ppb	21:07:43
2	Si 251.611†	795.8	92.9	1.5262 µg/L	1.5262 ppb	21:07:43
2	Sn 189.927†	2.5	0.4	0.0269 µg/L	0.0269 ppb	21:07:43
2	Ti 334.940†	1026.5	356.1	0.3635 µg/L	0.3635 ppb	21:07:23
2	Tl 190.801†	-125.8	-1.3	-0.1808 µg/L	-0.1808 ppb	21:07:43
2	U 409.014†	-469.0	25.7	1.5015 µg/L	1.5015 ppb	21:07:23
2	V 292.402†	173.5	-264.1	-1.4569 µg/L	-1.4569 ppb	21:07:23
2	Zn 213.857†	498.1	17.1	0.1092 µg/L	0.1092 ppb	21:07:43
3	Sc RADIAL	153579.1	153579.1	105 %		21:06:33
3	Al 396.153Radial†	-58.8	-23.9	-5.2607 µg/L	-5.2607 ppb	21:06:53
3	Ca 317.933Radial†	673.1	22.6	1.3237 µg/L	1.3237 ppb	21:06:53
3	Fe 238.204 Radial†	131.8	11.8	0.7823 µg/L	0.7823 ppb	21:06:53
3	K 766.490 Radial†	1453.7	-75.3	-31.005 µg/L	-31.005 ppb	21:06:33
3	Mg 279.077 IEC†	180.2	-15.7	-6.4370 µg/L	-6.4370 ppb	21:06:53
3	Na 589.592 Radial†	1585.7	-189.9	-29.024 µg/L	-29.024 ppb	21:06:33
3	Sr 421.552†	-259.8	31.4	0.0737 µg/L	0.0737 ppb	21:06:33
3	Sc 361.383	1727714.6	1727714.6	103.28 %		21:07:45
3	Y 371.029	1060914.8	1060914.8	103.75 %		21:07:45
3	Ag 328.068†	3064.7	0.2	-0.0004 µg/L	-0.0004 ppb	21:07:47
3	As 188.979†	-17.3	-2.5	-1.0488 µg/L	-1.0488 ppb	21:08:08
3	B 249.677†	3076.5	-377.0	-6.3309 µg/L	-6.3309 ppb	21:08:08
3	Ba 233.527†	-187.7	-6.7	-0.0307 µg/L	-0.0307 ppb	21:08:08
3	Be 313.107†	-530.7	146.3	0.0497 µg/L	0.0497 ppb	21:07:47
3	Cd 226.502†	-118.4	-20.2	-0.1396 µg/L	-0.1396 ppb	21:08:08
3	Co 228.616†	-159.8	21.9	0.3001 µg/L	0.3001 ppb	21:08:08
3	Cr 267.716†	166.1	0.6	-0.0009 µg/L	-0.0009 ppb	21:08:08
3	Cu 324.752†	2799.8	285.9	1.2487 µg/L	1.2487 ppb	21:07:47
3	Mn 257.610†	156.9	71.9	0.0985 µg/L	0.0985 ppb	21:08:08
3	Mo 202.031†	-29.4	26.7	0.8435 µg/L	0.8435 ppb	21:08:08
3	Ni 231.604†	-49.4	-6.9	-0.0885 µg/L	-0.0885 ppb	21:08:08
3	P 214.914†	34.7	-45.9	-11.027 µg/L	-11.027 ppb	21:08:08
3	Pb 220.353†	99.2	-16.4	-0.9975 µg/L	-0.9975 ppb	21:08:08
3	S 181.975 Axial†	91.1	-6.6	-5.3466 µg/L	-5.3466 ppb	21:08:08
3	Sb 206.836†	84.8	-4.6	-0.6054 µg/L	-0.6054 ppb	21:08:08
3	Se 196.026†	15.6	4.2	1.65 µg/L	1.65 ppb	21:08:08
3	SiO2†	1696.3	69.5	7.5803 µg/L	7.5803 ppb	21:08:08
3	Si 251.611†	783.8	82.5	1.3544 µg/L	1.3544 ppb	21:08:08
3	Sn 189.927†	-1.7	-3.7	-0.2629 µg/L	-0.2629 ppb	21:08:08
3	Ti 334.940†	938.9	272.7	0.2758 µg/L	0.2758 ppb	21:07:47
3	Tl 190.801†	-117.7	6.3	0.8448 µg/L	0.8448 ppb	21:08:08
3	U 409.014†	-379.0	112.2	6.8863 µg/L	6.8863 ppb	21:07:47
3	V 292.402†	296.9	-144.3	-0.7876 µg/L	-0.7876 ppb	21:07:47
3	Zn 213.857†	483.2	3.5	0.0213 µg/L	0.0213 ppb	21:08:08

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1727978.8	103.30	%	0.127				0.12%
Sc RADIAL	153662.5	105	%	0.9				0.84%
Y 371.029	1060906.2	103.75	%	0.113				0.11%
Ag 328.068†	69.6	0.2771	µg/L	0.51363	0.2771	ppb	0.51363	185.39%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-14.4	-3.1897	µg/L	4.34321	-3.1897	ppb	4.34321	136.17%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.1	0.8654	µg/L	1.92055	0.8654	ppb	1.92055	221.93%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-369.5	-6.2037	µg/L	0.48034	-6.2037	ppb	0.48034	7.74%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.3	-0.0156	µg/L	0.06185	-0.0156	ppb	0.06185	395.65%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	121.6	0.0413	µg/L	0.02134	0.0413	ppb	0.02134	51.70%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	35.3	2.0699	µg/L	0.72997	2.0699	ppb	0.72997	35.27%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	9.3	0.0638	µg/L	0.19446	0.0638	ppb	0.19446	304.95%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	12.7	0.1732	µg/L	0.12276	0.1732	ppb	0.12276	70.87%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -12.2     -0.1092 µg/L       0.09382     -0.1092 ppb        0.09382  85.93%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              191.2      0.8362 µg/L       0.36438      0.8362 ppb        0.36438  43.58%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        22.5      1.4984 µg/L       0.62279      1.4984 ppb        0.62279  41.56%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        -52.6     -21.634 µg/L       37.3056     -21.634 ppb        37.3056 172.44%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -10.6     -4.3490 µg/L       7.59366     -4.3490 ppb        7.59366 174.61%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               72.1      0.0986 µg/L       0.02726      0.0986 ppb        0.02726  27.63%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               34.0      1.0741 µg/L       0.44518      1.0741 ppb        0.44518  41.45%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -156.3     -23.901 µg/L        5.6641     -23.901 ppb         5.6641  23.70%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -1.3     -0.0164 µg/L       0.30026     -0.0164 ppb        0.30026 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -47.0     -11.283 µg/L        2.4255     -11.283 ppb         2.4255  21.50%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -19.0     -1.1517 µg/L       0.32775     -1.1517 ppb        0.32775  28.46%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -15.3     -12.373 µg/L        7.9530     -12.373 ppb         7.9530  64.28%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -13.2     -1.7632 µg/L       2.16182     -1.7632 ppb        2.16182 122.61%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               7.1        2.83 µg/L         1.094        2.83 ppb          1.094  38.72%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     38.4      4.1643 µg/L       3.98373      4.1643 ppb        3.98373  95.66%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               82.7      1.3522 µg/L       0.17505      1.3522 ppb        0.17505  12.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               1.3       0.0958 µg/L       0.39756      0.0958 ppb        0.39756 415.11%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               62.8      0.1473 µg/L       0.07240      0.1473 ppb        0.07240  49.16%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              249.5      0.2525 µg/L       0.12417      0.2525 ppb        0.12417  49.17%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               3.7       0.4963 µg/L       0.58643      0.4963 ppb        0.58643 118.16%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                90.6      5.5398 µg/L       3.56137      5.5398 ppb        3.56137  64.29%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -187.1     -1.0240 µg/L       0.37548     -1.0240 ppb        0.37548  36.67%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               16.0      0.1001 µg/L       0.07465      0.1001 ppb        0.07465  74.57%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 55
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/29/2010 21:21:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	154714.0	154714.0	106	%			21:21:59
1	Al 396.153Radial†	25548.1	24100.5	5238.5	µg/L	5238.5	ppb	21:21:59
1	Ca 317.933Radial†	89497.2	83698.1	4904.3	µg/L	4904.3	ppb	21:21:59
1	Fe 238.204 Radial†	78346.3	73695.8	4899.6	µg/L	4899.6	ppb	21:21:59
1	K 766.490 Radial†	13948.1	11685.3	4806.5	µg/L	4806.5	ppb	21:21:59
1	Mg 279.077 IEC†	13187.8	12237.4	5053.2	µg/L	5053.2	ppb	21:21:59
1	Na 589.592 Radial†	69758.3	64023.7	9792.2	µg/L	9792.2	ppb	21:21:59
1	Sr 421.552†	228178.1	215241.9	504.43	µg/L	504.43	ppb	21:21:57
1	Sc 361.383	1735452.7	1735452.7	103.75	%			21:22:12
1	Y 371.029	1050791.1	1050791.1	102.76	%			21:22:12
1	Ag 328.068†	128429.5	120824.1	496.54	µg/L	496.54	ppb	21:22:12
1	As 188.979†	1304.3	1271.4	538.44	µg/L	538.44	ppb	21:22:32
1	B 249.677†	33357.7	28797.2	481.77	µg/L	481.77	ppb	21:22:12
1	Ba 233.527†	114396.7	110440.2	504.93	µg/L	504.93	ppb	21:22:12
1	Be 313.107†	1635862.4	1577441.1	513.62	µg/L	513.62	ppb	21:22:12
1	Cd 226.502†	72815.3	70279.9	485.02	µg/L	485.02	ppb	21:22:12
1	Co 228.616†	36981.4	35822.4	490.78	µg/L	490.78	ppb	21:22:12
1	Cr 267.716†	59642.9	57328.5	492.28	µg/L	492.28	ppb	21:22:12
1	Cu 324.752†	120492.9	113716.2	495.85	µg/L	495.85	ppb	21:22:12
1	Mn 257.610†	375406.7	361768.4	494.12	µg/L	494.12	ppb	21:22:12
1	Mo 202.031†	15724.6	15211.9	480.63	µg/L	480.63	ppb	21:22:32
1	Ni 231.604†	39726.7	38332.8	490.32	µg/L	490.32	ppb	21:22:12
1	P 214.914†	10354.3	9900.7	2362.7	µg/L	2362.7	ppb	21:22:32
1	Pb 220.353†	8256.8	7846.2	476.85	µg/L	476.85	ppb	21:22:32
1	S 181.975 Axial†	1288.8	1147.5	933.70	µg/L	933.70	ppb	21:22:32
1	Sb 206.836†	3841.8	3616.4	488.79	µg/L	488.79	ppb	21:22:32
1	Se 196.026†	1256.4	1200.2	477	µg/L	477	ppb	21:22:32
1	SiO2†	51655.1	48216.6	5249.4	µg/L	5249.4	ppb	21:22:12
1	Si 251.611†	155313.5	149027.7	2454.5	µg/L	2454.5	ppb	21:22:12
1	Sn 189.927†	7082.5	6824.6	486.84	µg/L	486.84	ppb	21:22:32
1	Ti 334.940†	504215.8	485369.0	494.29	µg/L	494.29	ppb	21:22:12
1	Tl 190.801†	3584.2	3575.1	487.32	µg/L	487.32	ppb	21:22:32
1	U 409.014†	7243.0	7460.5	491.31	µg/L	491.31	ppb	21:22:12
1	V 292.402†	93303.5	89501.9	502.63	µg/L	502.63	ppb	21:22:12
1	Zn 213.857†	80568.9	77194.6	482.06	µg/L	482.06	ppb	21:22:12
2	Sc RADIAL	155802.8	155802.8	107	%			21:22:03
2	Al 396.153Radial†	25671.7	24047.8	5226.9	µg/L	5226.9	ppb	21:22:03
2	Ca 317.933Radial†	90704.0	84237.8	4936.0	µg/L	4936.0	ppb	21:22:03
2	Fe 238.204 Radial†	79350.7	74119.7	4927.7	µg/L	4927.7	ppb	21:22:03
2	K 766.490 Radial†	14028.1	11668.4	4799.6	µg/L	4799.6	ppb	21:22:03
2	Mg 279.077 IEC†	13391.2	12340.9	5095.9	µg/L	5095.9	ppb	21:22:03
2	Na 589.592 Radial†	70468.8	64229.1	9823.6	µg/L	9823.6	ppb	21:22:03
2	Sr 421.552†	228226.2	213784.6	501.02	µg/L	501.02	ppb	21:22:01
2	Sc 361.383	1718458.2	1718458.2	102.73	%			21:22:35
2	Y 371.029	1040541.3	1040541.3	101.76	%			21:22:35
2	Ag 328.068†	127122.8	120776.3	496.30	µg/L	496.30	ppb	21:22:35
2	As 188.979†	1315.4	1294.6	548.12	µg/L	548.12	ppb	21:22:55
2	B 249.677†	32820.6	28592.4	478.34	µg/L	478.34	ppb	21:22:35
2	Ba 233.527†	112822.5	109998.3	502.91	µg/L	502.91	ppb	21:22:35
2	Be 313.107†	1612596.5	1570387.2	511.32	µg/L	511.32	ppb	21:22:35
2	Cd 226.502†	71251.1	69451.4	479.30	µg/L	479.30	ppb	21:22:35
2	Co 228.616†	36408.8	35617.5	487.97	µg/L	487.97	ppb	21:22:35
2	Cr 267.716†	58690.5	56970.0	489.20	µg/L	489.20	ppb	21:22:35
2	Cu 324.752†	118859.8	113275.1	493.93	µg/L	493.93	ppb	21:22:35
2	Mn 257.610†	369770.3	359860.3	491.51	µg/L	491.51	ppb	21:22:35
2	Mo 202.031†	15667.6	15306.3	483.62	µg/L	483.62	ppb	21:22:55
2	Ni 231.604†	39105.3	38106.6	487.43	µg/L	487.43	ppb	21:22:35
2	P 214.914†	10294.9	9941.7	2372.5	µg/L	2372.5	ppb	21:22:55
2	Pb 220.353†	8226.7	7895.5	479.85	µg/L	479.85	ppb	21:22:55

2	S 181.975 Axial†	1280.0	1151.2	936.74 µg/L	936.74 ppb	21:22:55
2	Sb 206.836†	3824.3	3636.0	491.52 µg/L	491.52 ppb	21:22:55
2	Se 196.026†	1243.4	1199.4	477 µg/L	477 ppb	21:22:55
2	SiO2†	50957.3	48029.8	5228.9 µg/L	5228.9 ppb	21:22:35
2	Si 251.611†	152847.9	148108.2	2439.3 µg/L	2439.3 ppb	21:22:35
2	Sn 189.927†	7068.4	6878.5	490.66 µg/L	490.66 ppb	21:22:55
2	Ti 334.940†	497011.6	483162.6	492.04 µg/L	492.04 ppb	21:22:35
2	Tl 190.801†	3575.6	3600.9	490.75 µg/L	490.75 ppb	21:22:55
2	U 409.014†	7042.3	7334.2	483.35 µg/L	483.35 ppb	21:22:35
2	V 292.402†	91957.7	89081.3	500.31 µg/L	500.31 ppb	21:22:35
2	Zn 213.857†	79391.5	76816.5	479.70 µg/L	479.70 ppb	21:22:35
3	Sc RADIAL	153629.1	153629.1	105 %		21:22:07
3	Al 396.153Radial†	25706.1	24420.3	5308.2 µg/L	5308.2 ppb	21:22:07
3	Ca 317.933Radial†	90217.9	84977.2	4979.3 µg/L	4979.3 ppb	21:22:07
3	Fe 238.204 Radial†	78896.4	74739.0	4968.9 µg/L	4968.9 ppb	21:22:07
3	K 766.490 Radial†	14006.0	11833.0	4867.3 µg/L	4867.3 ppb	21:22:07
3	Mg 279.077 IEC†	13233.2	12368.3	5107.1 µg/L	5107.1 ppb	21:22:07
3	Na 589.592 Radial†	70244.8	64949.4	9933.8 µg/L	9933.8 ppb	21:22:07
3	Sr 421.552†	231320.2	219741.0	514.98 µg/L	514.98 ppb	21:22:05
3	Sc 361.383	1729039.4	1729039.4	103.36 %		21:22:58
3	Y 371.029	1047411.6	1047411.6	102.43 %		21:22:58
3	Ag 328.068†	127427.9	120314.2	494.42 µg/L	494.42 ppb	21:22:58
3	As 188.979†	1312.7	1284.2	543.77 µg/L	543.77 ppb	21:23:18
3	B 249.677†	33004.1	28574.4	478.04 µg/L	478.04 ppb	21:22:58
3	Ba 233.527†	113024.4	109521.5	500.73 µg/L	500.73 ppb	21:22:58
3	Be 313.107†	1619574.1	1567531.4	510.39 µg/L	510.39 ppb	21:22:58
3	Cd 226.502†	71668.9	69431.2	479.16 µg/L	479.16 ppb	21:22:58
3	Co 228.616†	36487.7	35476.9	486.05 µg/L	486.05 ppb	21:22:58
3	Cr 267.716†	59071.0	56988.5	489.36 µg/L	489.36 ppb	21:22:58
3	Cu 324.752†	119482.8	113169.8	493.48 µg/L	493.48 ppb	21:22:58
3	Mn 257.610†	371130.6	358973.6	490.30 µg/L	490.30 ppb	21:22:58
3	Mo 202.031†	15756.3	15298.8	483.38 µg/L	483.38 ppb	21:23:18
3	Ni 231.604†	39442.5	38199.9	488.62 µg/L	488.62 ppb	21:22:58
3	P 214.914†	10384.3	9966.8	2378.5 µg/L	2378.5 ppb	21:23:18
3	Pb 220.353†	8281.8	7899.8	480.11 µg/L	480.11 ppb	21:23:18
3	S 181.975 Axial†	1288.9	1152.1	937.49 µg/L	937.49 ppb	21:23:18
3	Sb 206.836†	3835.5	3624.1	489.90 µg/L	489.90 ppb	21:23:18
3	Se 196.026†	1254.5	1202.8	478 µg/L	478 ppb	21:23:18
3	SiO2†	51174.5	47936.4	5218.7 µg/L	5218.7 ppb	21:22:58
3	Si 251.611†	153310.8	147645.6	2431.6 µg/L	2431.6 ppb	21:22:58
3	Sn 189.927†	7110.2	6876.8	490.54 µg/L	490.54 ppb	21:23:18
3	Ti 334.940†	498783.5	481916.1	490.77 µg/L	490.77 ppb	21:22:58
3	Tl 190.801†	3617.1	3619.7	493.26 µg/L	493.26 ppb	21:23:18
3	U 409.014†	7080.7	7329.4	482.98 µg/L	482.98 ppb	21:22:58
3	V 292.402†	92337.1	88900.5	499.30 µg/L	499.30 ppb	21:22:58
3	Zn 213.857†	79755.1	76695.4	478.93 µg/L	478.93 ppb	21:22:58

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1727650.1	103.28	%	0.513				0.50%
Sc RADIAL	154715.3	106	%	0.7				0.70%
Y 371.029	1046248.0	102.31	%	0.511				0.50%
Ag 328.068†	120638.2	495.75	µg/L	1.163	495.75	ppb	1.163	0.23%
QC value within limits for Ag 328.068 Recovery = 99.15%								
Al 396.153Radial†	24189.5	5257.9	µg/L	43.98	5257.9	ppb	43.98	0.84%
QC value within limits for Al 396.153Radial Recovery = 105.16%								
As 188.979†	1283.4	543.44	µg/L	4.846	543.44	ppb	4.846	0.89%
QC value within limits for As 188.979 Recovery = 108.69%								
B 249.677†	28654.7	479.38	µg/L	2.070	479.38	ppb	2.070	0.43%
QC value within limits for B 249.677 Recovery = 95.88%								
Ba 233.527†	109986.6	502.86	µg/L	2.100	502.86	ppb	2.100	0.42%
QC value within limits for Ba 233.527 Recovery = 100.57%								
Be 313.107†	1571786.6	511.78	µg/L	1.662	511.78	ppb	1.662	0.32%
QC value within limits for Be 313.107 Recovery = 102.36%								
Ca 317.933Radial†	84304.4	4939.9	µg/L	37.63	4939.9	ppb	37.63	0.76%
QC value within limits for Ca 317.933Radial Recovery = 98.80%								
Cd 226.502†	69720.8	481.16	µg/L	3.348	481.16	ppb	3.348	0.70%
QC value within limits for Cd 226.502 Recovery = 96.23%								
Co 228.616†	35638.9	488.27	µg/L	2.383	488.27	ppb	2.383	0.49%

QC value within limits for Co 228.616 Recovery = 97.65%

Cr 267.716†	57095.7	490.28 µg/L	1.730	490.28 ppb	1.730	0.35%

QC value within limits for Cr 267.716 Recovery = 98.06%

Cu 324.752†	113387.0	494.42 µg/L	1.260	494.42 ppb	1.260	0.25%

QC value within limits for Cu 324.752 Recovery = 98.88%

Fe 238.204 Radial†	74184.8	4932.1 µg/L	34.88	4932.1 ppb	34.88	0.71%

QC value within limits for Fe 238.204 Radial Recovery = 98.64%

K 766.490 Radial†	11728.9	4824.5 µg/L	37.26	4824.5 ppb	37.26	0.77%

QC value within limits for K 766.490 Radial Recovery = 96.49%

Mg 279.077 IEC†	12315.5	5085.4 µg/L	28.47	5085.4 ppb	28.47	0.56%

QC value within limits for Mg 279.077 IEC Recovery = 101.71%

Mn 257.610†	360200.8	491.98 µg/L	1.953	491.98 ppb	1.953	0.40%

QC value within limits for Mn 257.610 Recovery = 98.40%

Mo 202.031†	15272.3	482.54 µg/L	1.658	482.54 ppb	1.658	0.34%

QC value within limits for Mo 202.031 Recovery = 96.51%

Na 589.592 Radial†	64400.7	9849.8 µg/L	74.35	9849.8 ppb	74.35	0.75%

QC value within limits for Na 589.592 Radial Recovery = 98.50%

Ni 231.604†	38213.1	488.79 µg/L	1.454	488.79 ppb	1.454	0.30%

QC value within limits for Ni 231.604 Recovery = 97.76%

P 214.914†	9936.4	2371.2 µg/L	7.98	2371.2 ppb	7.98	0.34%

QC value within limits for P 214.914 Recovery = 94.85%

Pb 220.353†	7880.5	478.93 µg/L	1.813	478.93 ppb	1.813	0.38%

QC value within limits for Pb 220.353 Recovery = 95.79%

S 181.975 Axial†	1150.2	935.98 µg/L	2.006	935.98 ppb	2.006	0.21%

QC value within limits for S 181.975 Axial Recovery = 93.60%

Sb 206.836†	3625.5	490.07 µg/L	1.373	490.07 ppb	1.373	0.28%

QC value within limits for Sb 206.836 Recovery = 98.01%

Se 196.026†	1200.8	477 µg/L	0.7	477 ppb	0.7	0.15%

QC value within limits for Se 196.026 Recovery = 95.42%

SiO2†	48060.9	5232.3 µg/L	15.67	5232.3 ppb	15.67	0.30%

QC value within limits for SiO2 Recovery = 97.85%

Si 251.611†	148260.5	2441.8 µg/L	11.67	2441.8 ppb	11.67	0.48%

QC value within limits for Si 251.611 Recovery = 97.67%

Sn 189.927†	6860.0	489.35 µg/L	2.170	489.35 ppb	2.170	0.44%

QC value within limits for Sn 189.927 Recovery = 97.87%

Sr 421.552†	216255.8	506.81 µg/L	7.277	506.81 ppb	7.277	1.44%

QC value within limits for Sr 421.552 Recovery = 101.36%

Ti 334.940†	483482.6	492.36 µg/L	1.782	492.36 ppb	1.782	0.36%

QC value within limits for Ti 334.940 Recovery = 98.47%

Tl 190.801†	3598.6	490.44 µg/L	2.982	490.44 ppb	2.982	0.61%

QC value within limits for Tl 190.801 Recovery = 98.09%

U 409.014†	7374.7	485.88 µg/L	4.704	485.88 ppb	4.704	0.97%

QC value within limits for U 409.014 Recovery = 97.18%

V 292.402†	89161.2	500.74 µg/L	1.709	500.74 ppb	1.709	0.34%

QC value within limits for V 292.402 Recovery = 100.15%

Zn 213.857†	76902.2	480.23 µg/L	1.635	480.23 ppb	1.635	0.34%

QC value within limits for Zn 213.857 Recovery = 96.05%

All analyte(s) passed QC.

Sequence No.: 56
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/29/2010 21:23:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	155306.1	155306.1	107	%			21:23:55
1	Al 396.153Radial†	-24.3	9.1	1.9543	µg/L	1.9543	ppb	21:24:15
1	Ca 317.933Radial†	683.7	25.5	1.4938	µg/L	1.4938	ppb	21:24:15
1	Fe 238.204 Radial†	158.4	35.3	2.3500	µg/L	2.3500	ppb	21:24:15
1	K 766.490 Radial†	1643.9	87.8	36.134	µg/L	36.134	ppb	21:23:55
1	Mg 279.077 IEC†	167.4	-29.6	-12.187	µg/L	-12.187	ppb	21:24:15
1	Na 589.592 Radial†	1516.3	-271.7	-41.602	µg/L	-41.602	ppb	21:23:55
1	Sr 421.552†	-242.4	50.5	0.1183	µg/L	0.1183	ppb	21:23:55
1	Sc 361.383	1748094.6	1748094.6	104.50	%			21:25:03
1	Y 371.029	1071566.5	1071566.5	104.79	%			21:25:03
1	Ag 328.068†	3427.1	312.3	1.2793	µg/L	1.2793	ppb	21:25:05
1	As 188.979†	-13.5	1.3	0.5449	µg/L	0.5449	ppb	21:25:25
1	B 249.677†	3112.2	-377.5	-6.3385	µg/L	-6.3385	ppb	21:25:25
1	Ba 233.527†	-154.2	27.5	0.1256	µg/L	0.1256	ppb	21:25:25
1	Be 313.107†	-701.4	-11.1	0.0002	µg/L	0.0002	ppb	21:25:05
1	Cd 226.502†	-80.7	17.1	0.1180	µg/L	0.1180	ppb	21:25:25
1	Co 228.616†	-180.0	4.3	0.0591	µg/L	0.0591	ppb	21:25:25
1	Cr 267.716†	154.7	-12.2	-0.1146	µg/L	-0.1146	ppb	21:25:25
1	Cu 324.752†	2711.0	169.4	0.7467	µg/L	0.7467	ppb	21:25:05
1	Mn 257.610†	174.7	87.2	0.1196	µg/L	0.1196	ppb	21:25:25
1	Mo 202.031†	-33.7	22.9	0.7232	µg/L	0.7232	ppb	21:25:25
1	Ni 231.604†	-63.8	-20.2	-0.2580	µg/L	-0.2580	ppb	21:25:25
1	P 214.914†	25.7	-55.0	-13.175	µg/L	-13.175	ppb	21:25:25
1	Pb 220.353†	88.4	-27.8	-1.6943	µg/L	-1.6943	ppb	21:25:25
1	S 181.975 Axial†	88.7	-10.0	-8.0713	µg/L	-8.0713	ppb	21:25:25
1	Sb 206.836†	103.6	12.5	1.6953	µg/L	1.6953	ppb	21:25:25
1	Se 196.026†	29.5	17.3	6.85	µg/L	6.85	ppb	21:25:25
1	SiO2†	1690.4	44.8	4.8636	µg/L	4.8636	ppb	21:25:25
1	Si 251.611†	812.1	100.8	1.6531	µg/L	1.6531	ppb	21:25:25
1	Sn 189.927†	9.4	7.0	0.4982	µg/L	0.4982	ppb	21:25:25
1	Ti 334.940†	734.9	66.9	0.0641	µg/L	0.0641	ppb	21:25:05
1	Tl 190.801†	-117.2	8.2	1.0976	µg/L	1.0976	ppb	21:25:25
1	U 409.014†	-286.2	205.2	12.661	µg/L	12.661	ppb	21:25:05
1	V 292.402†	393.2	-55.5	-0.2928	µg/L	-0.2928	ppb	21:25:05
1	Zn 213.857†	542.6	54.8	0.3462	µg/L	0.3462	ppb	21:25:25
2	Sc RADIAL	153477.3	153477.3	105	%			21:24:17
2	Al 396.153Radial†	-47.4	-13.1	-2.9442	µg/L	-2.9442	ppb	21:24:37
2	Ca 317.933Radial†	711.1	59.1	3.4638	µg/L	3.4638	ppb	21:24:37
2	Fe 238.204 Radial†	171.6	49.7	3.3060	µg/L	3.3060	ppb	21:24:37
2	K 766.490 Radial†	1553.5	20.3	8.3817	µg/L	8.3817	ppb	21:24:17
2	Mg 279.077 IEC†	185.8	-10.2	-4.1787	µg/L	-4.1787	ppb	21:24:37
2	Na 589.592 Radial†	1510.8	-259.9	-39.777	µg/L	-39.777	ppb	21:24:17
2	Sr 421.552†	-111.6	172.0	0.4031	µg/L	0.4031	ppb	21:24:17
2	Sc 361.383	1741520.5	1741520.5	104.11	%			21:25:27
2	Y 371.029	1067626.4	1067626.4	104.41	%			21:25:27
2	Ag 328.068†	3414.4	312.6	1.2772	µg/L	1.2772	ppb	21:25:29
2	As 188.979†	-19.8	-4.8	-1.9816	µg/L	-1.9816	ppb	21:25:49
2	B 249.677†	3071.8	-405.2	-6.8037	µg/L	-6.8037	ppb	21:25:49
2	Ba 233.527†	-157.9	23.4	0.1075	µg/L	0.1075	ppb	21:25:49
2	Be 313.107†	-655.5	30.5	0.0121	µg/L	0.0121	ppb	21:25:29
2	Cd 226.502†	-93.0	5.0	0.0343	µg/L	0.0343	ppb	21:25:49
2	Co 228.616†	-157.6	25.2	0.3454	µg/L	0.3454	ppb	21:25:49
2	Cr 267.716†	146.2	-19.8	-0.1753	µg/L	-0.1753	ppb	21:25:49
2	Cu 324.752†	2664.3	134.2	0.5901	µg/L	0.5901	ppb	21:25:29
2	Mn 257.610†	201.1	113.2	0.1548	µg/L	0.1548	ppb	21:25:49
2	Mo 202.031†	-3.9	51.4	1.6241	µg/L	1.6241	ppb	21:25:49
2	Ni 231.604†	-71.2	-27.4	-0.3510	µg/L	-0.3510	ppb	21:25:49
2	P 214.914†	49.3	-32.2	-7.7507	µg/L	-7.7507	ppb	21:25:49
2	Pb 220.353†	105.7	-10.9	-0.6592	µg/L	-0.6592	ppb	21:25:49

2	S 181.975 Axial†	91.8	-6.6	-5.3552 µg/L	-5.3552 ppb	21:25:49
2	Sb 206.836†	83.1	-6.8	-0.8931 µg/L	-0.8931 ppb	21:25:49
2	Se 196.026†	11.8	0.5	0.191 µg/L	0.191 ppb	21:25:49
2	SiO2†	1682.8	43.5	4.7163 µg/L	4.7163 ppb	21:25:49
2	Si 251.611†	832.1	122.9	2.0124 µg/L	2.0124 ppb	21:25:49
2	Sn 189.927†	-2.3	-4.2	-0.2990 µg/L	-0.2990 ppb	21:25:49
2	Ti 334.940†	806.8	138.6	0.1389 µg/L	0.1389 ppb	21:25:29
2	Tl 190.801†	-103.8	20.6	2.7680 µg/L	2.7680 ppb	21:25:49
2	U 409.014†	-377.6	116.4	7.1940 µg/L	7.1940 ppb	21:25:29
2	V 292.402†	451.2	1.6	0.0290 µg/L	0.0290 ppb	21:25:29
2	Zn 213.857†	515.7	30.9	0.1963 µg/L	0.1963 ppb	21:25:49
3	Sc RADIAL	150012.7	150012.7	103 %		21:24:39
3	Al 396.153Radial†	-29.8	2.9	0.5867 µg/L	0.5867 ppb	21:24:59
3	Ca 317.933Radial†	710.4	74.0	4.3369 µg/L	4.3369 ppb	21:24:59
3	Fe 238.204 Radial†	151.9	34.3	2.2797 µg/L	2.2797 ppb	21:24:59
3	K 766.490 Radial†	1399.3	-95.4	-39.262 µg/L	-39.262 ppb	21:24:39
3	Mg 279.077 IEC†	165.1	-26.3	-10.817 µg/L	-10.817 ppb	21:24:59
3	Na 589.592 Radial†	1639.2	-102.0	-15.574 µg/L	-15.574 ppb	21:24:39
3	Sr 421.552†	-287.8	-1.6	-0.0038 µg/L	-0.0038 ppb	21:24:39
3	Sc 361.383	1723128.2	1723128.2	103.01 %		21:25:51
3	Y 371.029	1057308.7	1057308.7	103.40 %		21:25:51
3	Ag 328.068†	3346.0	281.2	1.1646 µg/L	1.1646 ppb	21:25:53
3	As 188.979†	-18.6	-3.8	-1.5909 µg/L	-1.5909 ppb	21:26:14
3	B 249.677†	3052.0	-392.9	-6.5974 µg/L	-6.5974 ppb	21:26:14
3	Ba 233.527†	-170.9	9.2	0.0418 µg/L	0.0418 ppb	21:26:14
3	Be 313.107†	-474.6	199.4	0.0725 µg/L	0.0725 ppb	21:25:53
3	Cd 226.502†	-97.7	-0.4	-0.0033 µg/L	-0.0033 ppb	21:26:14
3	Co 228.616†	-155.6	25.6	0.3503 µg/L	0.3503 ppb	21:26:14
3	Cr 267.716†	182.3	16.7	0.1237 µg/L	0.1237 ppb	21:26:14
3	Cu 324.752†	2711.9	207.8	0.9243 µg/L	0.9243 ppb	21:25:53
3	Mn 257.610†	171.1	86.1	0.1180 µg/L	0.1180 ppb	21:26:14
3	Mo 202.031†	-16.8	38.9	1.2275 µg/L	1.2275 ppb	21:26:14
3	Ni 231.604†	-81.5	-38.2	-0.4887 µg/L	-0.4887 ppb	21:26:14
3	P 214.914†	37.1	-43.6	-10.455 µg/L	-10.455 ppb	21:26:14
3	Pb 220.353†	81.7	-33.1	-2.0187 µg/L	-2.0187 ppb	21:26:14
3	S 181.975 Axial†	91.8	-5.7	-4.6479 µg/L	-4.6479 ppb	21:26:14
3	Sb 206.836†	81.4	-7.6	-1.0134 µg/L	-1.0134 ppb	21:26:14
3	Se 196.026†	21.3	9.8	3.89 µg/L	3.89 ppb	21:26:14
3	SiO2†	1680.3	58.3	6.3388 µg/L	6.3388 ppb	21:26:14
3	Si 251.611†	807.9	107.9	1.7669 µg/L	1.7669 ppb	21:26:14
3	Sn 189.927†	3.7	1.6	0.1137 µg/L	0.1137 ppb	21:26:14
3	Ti 334.940†	1049.1	382.1	0.3802 µg/L	0.3802 ppb	21:25:53
3	Tl 190.801†	-103.5	19.8	2.6620 µg/L	2.6620 ppb	21:26:14
3	U 409.014†	-71.7	409.5	25.265 µg/L	25.265 ppb	21:25:53
3	V 292.402†	327.3	-114.1	-0.6031 µg/L	-0.6031 ppb	21:25:53
3	Zn 213.857†	513.6	34.2	0.2177 µg/L	0.2177 ppb	21:26:14

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1737581.1	103.87	%	0.774				0.74%
Sc RADIAL	152932.0	105	%	1.8				1.76%
Y 371.029	1065500.5	104.20	%	0.720				0.69%
Ag 328.068†	302.0	1.2404	µg/L	0.06566	1.2404	ppb	0.06566	5.29%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.4	-0.1344	µg/L	2.52760	-0.1344	ppb	2.52760	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.4	-1.0092	µg/L	1.36000	-1.0092	ppb	1.36000	134.76%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-391.9	-6.5799	µg/L	0.23305	-6.5799	ppb	0.23305	3.54%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	20.0	0.0916	µg/L	0.04412	0.0916	ppb	0.04412	48.14%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	72.9	0.0283	µg/L	0.03879	0.0283	ppb	0.03879	137.14%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	52.9	3.0982	µg/L	1.45639	3.0982	ppb	1.45639	47.01%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	7.3	0.0497	µg/L	0.06207	0.0497	ppb	0.06207	124.90%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	18.4	0.2516	µg/L	0.16669	0.2516	ppb	0.16669	66.25%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -5.1     -0.0554 µg/L       0.15802     -0.0554 ppb       0.15802 285.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             170.5      0.7537 µg/L       0.16723      0.7537 ppb       0.16723  22.19%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       39.8      2.6452 µg/L       0.57333      2.6452 ppb       0.57333  21.67%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         4.2      1.7511 µg/L      38.13273      1.7511 ppb      38.13273 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†         -22.0     -9.0611 µg/L       4.28341     -9.0611 ppb       4.28341  47.27%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              95.5      0.1308 µg/L       0.02079      0.1308 ppb       0.02079  15.90%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              37.8      1.1916 µg/L       0.45152      1.1916 ppb       0.45152  37.89%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -211.2     -32.318 µg/L       14.5288     -32.318 ppb       14.5288  44.96%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -28.6     -0.3659 µg/L       0.11605     -0.3659 ppb       0.11605  31.72%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -43.6     -10.460 µg/L        2.7120     -10.460 ppb        2.7120  25.93%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -23.9     -1.4574 µg/L       0.70999     -1.4574 ppb       0.70999  48.72%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -7.4     -6.0248 µg/L       1.80725     -6.0248 ppb       1.80725  30.00%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -0.6     -0.0704 µg/L       1.53036     -0.0704 ppb       1.53036 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               9.2        3.64 µg/L         3.337        3.64 ppb         3.337  91.59%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    48.9      5.3062 µg/L       0.89725      5.3062 ppb       0.89725  16.91%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             110.5      1.8108 µg/L       0.18363      1.8108 ppb       0.18363  10.14%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               1.5      0.1043 µg/L       0.39868      0.1043 ppb       0.39868 382.19%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              73.6      0.1725 µg/L       0.20882      0.1725 ppb       0.20882 121.03%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             195.9      0.1944 µg/L       0.16524      0.1944 ppb       0.16524  85.00%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              16.2      2.1759 µg/L       0.93532      2.1759 ppb       0.93532  42.99%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              243.7      15.040 µg/L        9.2675      15.040 ppb        9.2675  61.62%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -56.0     -0.2890 µg/L       0.31607     -0.2890 ppb       0.31607 109.37%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              40.0      0.2534 µg/L       0.08112      0.2534 ppb       0.08112  32.01%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 64
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/29/2010 21:41:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	155141.6	155141.6	106	%			21:41:56
1	Al 396.153Radial†	25732.1	24207.0	5261.9	µg/L	5261.9	ppb	21:41:56
1	Ca 317.933Radial†	90696.3	84592.2	4956.7	µg/L	4956.7	ppb	21:41:56
1	Fe 238.204 Radial†	79315.9	74403.3	4946.6	µg/L	4946.6	ppb	21:41:56
1	K 766.490 Radial†	13939.8	11641.4	4788.4	µg/L	4788.4	ppb	21:41:56
1	Mg 279.077 IEC†	13393.7	12396.6	5118.7	µg/L	5118.7	ppb	21:41:56
1	Na 589.592 Radial†	70468.0	64509.4	9866.5	µg/L	9866.5	ppb	21:41:56
1	Sr 421.552†	232398.2	218614.1	512.33	µg/L	512.33	ppb	21:41:53
1	Sc 361.383	1769586.3	1769586.3	105.79	%			21:42:08
1	Y 371.029	1071797.7	1071797.7	104.81	%			21:42:08
1	Ag 328.068†	129603.3	119545.9	491.31	µg/L	491.31	ppb	21:42:08
1	As 188.979†	1329.3	1270.8	538.12	µg/L	538.12	ppb	21:42:28
1	B 249.677†	33677.3	28479.2	476.45	µg/L	476.45	ppb	21:42:08
1	Ba 233.527†	115439.2	109298.8	499.71	µg/L	499.71	ppb	21:42:08
1	Be 313.107†	1651472.1	1561782.3	508.53	µg/L	508.53	ppb	21:42:08
1	Cd 226.502†	73101.7	69196.8	477.54	µg/L	477.54	ppb	21:42:08
1	Co 228.616†	37176.9	35319.6	483.89	µg/L	483.89	ppb	21:42:08
1	Cr 267.716†	60164.7	56712.9	486.98	µg/L	486.98	ppb	21:42:08
1	Cu 324.752†	121865.1	112773.1	491.76	µg/L	491.76	ppb	21:42:08
1	Mn 257.610†	378134.2	357367.0	488.10	µg/L	488.10	ppb	21:42:08
1	Mo 202.031†	15933.4	15116.9	477.64	µg/L	477.64	ppb	21:42:28
1	Ni 231.604†	40031.5	37882.3	484.56	µg/L	484.56	ppb	21:42:08
1	P 214.914†	10529.6	9874.0	2356.3	µg/L	2356.3	ppb	21:42:28
1	Pb 220.353†	8381.8	7810.8	474.69	µg/L	474.69	ppb	21:42:28
1	S 181.975 Axial†	1319.0	1152.0	937.38	µg/L	937.38	ppb	21:42:28
1	Sb 206.836†	3878.6	3579.8	483.87	µg/L	483.87	ppb	21:42:28
1	Se 196.026†	1271.4	1191.0	473	µg/L	473	ppb	21:42:28
1	SiO2†	52156.9	47730.6	5196.4	µg/L	5196.4	ppb	21:42:08
1	Si 251.611†	156637.6	147391.8	2427.5	µg/L	2427.5	ppb	21:42:08
1	Sn 189.927†	7201.5	6805.5	485.46	µg/L	485.46	ppb	21:42:28
1	Ti 334.940†	508354.7	479906.9	488.71	µg/L	488.71	ppb	21:42:08
1	Tl 190.801†	3635.0	3556.4	484.75	µg/L	484.75	ppb	21:42:28
1	U 409.014†	7495.6	7564.6	497.45	µg/L	497.45	ppb	21:42:08
1	V 292.402†	94313.8	88722.2	498.25	µg/L	498.25	ppb	21:42:08
1	Zn 213.857†	81212.0	76304.6	476.49	µg/L	476.49	ppb	21:42:08
2	Sc RADIAL	152571.4	152571.4	105	%			21:42:00
2	Al 396.153Radial†	25314.1	24214.9	5263.2	µg/L	5263.2	ppb	21:42:00
2	Ca 317.933Radial†	88626.2	84050.0	4925.0	µg/L	4925.0	ppb	21:42:00
2	Fe 238.204 Radial†	77784.9	74196.0	4932.8	µg/L	4932.8	ppb	21:42:00
2	K 766.490 Radial†	13885.1	11809.7	4857.7	µg/L	4857.7	ppb	21:42:00
2	Mg 279.077 IEC†	13015.3	12247.1	5057.3	µg/L	5057.3	ppb	21:42:00
2	Na 589.592 Radial†	69451.8	64653.8	9888.5	µg/L	9888.5	ppb	21:42:00
2	Sr 421.552†	226457.0	216616.4	507.65	µg/L	507.65	ppb	21:41:58
2	Sc 361.383	1736903.3	1736903.3	103.83	%			21:42:32
2	Y 371.029	1053285.4	1053285.4	103.00	%			21:42:32
2	Ag 328.068†	128049.4	120354.6	494.59	µg/L	494.59	ppb	21:42:32
2	As 188.979†	1336.9	1301.8	551.11	µg/L	551.11	ppb	21:42:52
2	B 249.677†	32949.6	28377.4	474.74	µg/L	474.74	ppb	21:42:32
2	Ba 233.527†	113487.1	109472.1	500.51	µg/L	500.51	ppb	21:42:32
2	Be 313.107†	1622396.8	1563155.8	508.97	µg/L	508.97	ppb	21:42:32
2	Cd 226.502†	71970.0	69407.2	478.99	µg/L	478.99	ppb	21:42:32
2	Co 228.616†	36579.3	35405.4	485.07	µg/L	485.07	ppb	21:42:32
2	Cr 267.716†	59093.3	56751.3	487.32	µg/L	487.32	ppb	21:42:32
2	Cu 324.752†	119729.1	112883.6	492.24	µg/L	492.24	ppb	21:42:32
2	Mn 257.610†	371985.4	358171.2	489.21	µg/L	489.21	ppb	21:42:32
2	Mo 202.031†	15973.6	15439.0	487.80	µg/L	487.80	ppb	21:42:52
2	Ni 231.604†	39464.7	38048.6	486.69	µg/L	486.69	ppb	21:42:32
2	P 214.914†	10515.6	10047.8	2397.9	µg/L	2397.9	ppb	21:42:52
2	Pb 220.353†	8420.5	7997.2	486.01	µg/L	486.01	ppb	21:42:52

2	S 181.975 Axial†	1316.9	1173.4	954.81 µg/L	954.81 ppb	21:42:52
2	Sb 206.836†	3875.7	3646.0	492.95 µg/L	492.95 ppb	21:42:52
2	Se 196.026†	1265.9	1208.2	480 µg/L	480 ppb	21:42:52
2	SiO2†	51399.8	47929.2	5217.7 µg/L	5217.7 ppb	21:42:32
2	Si 251.611†	153711.9	147360.2	2426.8 µg/L	2426.8 ppb	21:42:32
2	Sn 189.927†	7192.7	6925.1	493.97 µg/L	493.97 ppb	21:42:52
2	Ti 334.940†	500404.8	481292.9	490.13 µg/L	490.13 ppb	21:42:32
2	Tl 190.801†	3631.2	3617.4	492.94 µg/L	492.94 ppb	21:42:52
2	U 409.014†	7251.0	7462.4	491.17 µg/L	491.17 ppb	21:42:32
2	V 292.402†	92671.4	88818.0	498.89 µg/L	498.89 ppb	21:42:32
2	Zn 213.857†	79943.3	76527.3	477.88 µg/L	477.88 ppb	21:42:32
3	Sc RADIAL	153899.6	153899.6	106 %		21:42:04
3	Al 396.153Radial†	25427.3	24113.4	5241.3 µg/L	5241.3 ppb	21:42:04
3	Ca 317.933Radial†	89584.3	84226.7	4935.3 µg/L	4935.3 ppb	21:42:04
3	Fe 238.204 Radial†	78451.3	74185.8	4932.1 µg/L	4932.1 ppb	21:42:04
3	K 766.490 Radial†	13947.9	11754.7	4835.1 µg/L	4835.1 ppb	21:42:04
3	Mg 279.077 IEC†	13129.1	12247.5	5057.3 µg/L	5057.3 ppb	21:42:04
3	Na 589.592 Radial†	69867.9	64475.3	9861.2 µg/L	9861.2 ppb	21:42:04
3	Sr 421.552†	230570.5	218645.2	512.41 µg/L	512.41 ppb	21:42:02
3	Sc 361.383	1756529.9	1756529.9	105.01 %		21:42:55
3	Y 371.029	1063628.8	1063628.8	104.01 %		21:42:55
3	Ag 328.068†	129932.1	120769.6	496.30 µg/L	496.30 ppb	21:42:55
3	As 188.979†	1327.9	1278.8	541.51 µg/L	541.51 ppb	21:43:15
3	B 249.677†	33771.3	28805.3	481.91 µg/L	481.91 ppb	21:42:55
3	Ba 233.527†	115375.4	110049.1	503.14 µg/L	503.14 ppb	21:42:55
3	Be 313.107†	1656355.2	1578036.4	513.82 µg/L	513.82 ppb	21:42:55
3	Cd 226.502†	73621.8	70205.8	484.51 µg/L	484.51 ppb	21:42:55
3	Co 228.616†	37314.4	35711.8	489.27 µg/L	489.27 ppb	21:42:55
3	Cr 267.716†	60209.2	57178.1	490.99 µg/L	490.99 ppb	21:42:55
3	Cu 324.752†	121793.5	113561.3	495.18 µg/L	495.18 ppb	21:42:55
3	Mn 257.610†	379257.5	361093.6	493.20 µg/L	493.20 ppb	21:42:55
3	Mo 202.031†	15953.4	15247.9	481.77 µg/L	481.77 ppb	21:43:15
3	Ni 231.604†	40238.5	38360.8	490.68 µg/L	490.68 ppb	21:42:55
3	P 214.914†	10528.4	9946.8	2373.7 µg/L	2373.7 ppb	21:43:15
3	Pb 220.353†	8392.4	7879.8	478.89 µg/L	478.89 ppb	21:43:15
3	S 181.975 Axial†	1322.2	1164.3	947.34 µg/L	947.34 ppb	21:43:15
3	Sb 206.836†	3881.7	3610.0	487.96 µg/L	487.96 ppb	21:43:15
3	Se 196.026†	1265.3	1194.1	474 µg/L	474 ppb	21:43:15
3	SiO2†	52227.4	48164.2	5243.6 µg/L	5243.6 ppb	21:42:55
3	Si 251.611†	156492.0	148353.7	2443.4 µg/L	2443.4 ppb	21:42:55
3	Sn 189.927†	7205.6	6860.0	489.35 µg/L	489.35 ppb	21:43:15
3	Ti 334.940†	508571.1	483684.9	492.57 µg/L	492.57 ppb	21:42:55
3	Tl 190.801†	3639.0	3585.7	488.73 µg/L	488.73 ppb	21:43:15
3	U 409.014†	7286.8	7418.4	488.63 µg/L	488.63 ppb	21:42:55
3	V 292.402†	94216.9	89292.6	501.47 µg/L	501.47 ppb	21:42:55
3	Zn 213.857†	81432.1	77084.8	481.37 µg/L	481.37 ppb	21:42:55

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1754339.8	104.88	%	0.983				0.94%
Sc RADIAL	153870.9	106	%	0.9				0.84%
Y 371.029	1062904.0	103.94	%	0.907				0.87%
Ag 328.068†	120223.3	494.06	µg/L	2.537	494.06	ppb	2.537	0.51%
QC value within limits for Ag 328.068 Recovery = 98.81%								
Al 396.153Radial†	24178.4	5255.5	µg/L	12.29	5255.5	ppb	12.29	0.23%
QC value within limits for Al 396.153Radial Recovery = 105.11%								
As 188.979†	1283.8	543.58	µg/L	6.739	543.58	ppb	6.739	1.24%
QC value within limits for As 188.979 Recovery = 108.72%								
B 249.677†	28554.0	477.70	µg/L	3.745	477.70	ppb	3.745	0.78%
QC value within limits for B 249.677 Recovery = 95.54%								
Ba 233.527†	109606.6	501.12	µg/L	1.796	501.12	ppb	1.796	0.36%
QC value within limits for Ba 233.527 Recovery = 100.22%								
Be 313.107†	1567658.2	510.44	µg/L	2.933	510.44	ppb	2.933	0.57%
QC value within limits for Be 313.107 Recovery = 102.09%								
Ca 317.933Radial†	84289.7	4939.0	µg/L	16.20	4939.0	ppb	16.20	0.33%
QC value within limits for Ca 317.933Radial Recovery = 98.78%								
Cd 226.502†	69603.2	480.35	µg/L	3.678	480.35	ppb	3.678	0.77%
QC value within limits for Cd 226.502 Recovery = 96.07%								
Co 228.616†	35478.9	486.07	µg/L	2.825	486.07	ppb	2.825	0.58%

QC value within limits for Co 228.616 Recovery = 97.21%
Cr 267.716† 56880.8 488.43 µg/L 2.221 488.43 ppb 2.221 0.45%
QC value within limits for Cr 267.716 Recovery = 97.69%
Cu 324.752† 113072.7 493.06 µg/L 1.852 493.06 ppb 1.852 0.38%
QC value within limits for Cu 324.752 Recovery = 98.61%
Fe 238.204 Radial† 74261.7 4937.2 µg/L 8.16 4937.2 ppb 8.16 0.17%
QC value within limits for Fe 238.204 Radial Recovery = 98.74%
K 766.490 Radial† 11735.3 4827.1 µg/L 35.34 4827.1 ppb 35.34 0.73%
QC value within limits for K 766.490 Radial Recovery = 96.54%
Mg 279.077 IEC† 12297.1 5077.8 µg/L 35.42 5077.8 ppb 35.42 0.70%
QC value within limits for Mg 279.077 IEC Recovery = 101.56%
Mn 257.610† 358877.3 490.17 µg/L 2.681 490.17 ppb 2.681 0.55%
QC value within limits for Mn 257.610 Recovery = 98.03%
Mo 202.031† 15267.9 482.40 µg/L 5.112 482.40 ppb 5.112 1.06%
QC value within limits for Mo 202.031 Recovery = 96.48%
Na 589.592 Radial† 64546.2 9872.1 µg/L 14.48 9872.1 ppb 14.48 0.15%
QC value within limits for Na 589.592 Radial Recovery = 98.72%
Ni 231.604† 38097.2 487.31 µg/L 3.107 487.31 ppb 3.107 0.64%
QC value within limits for Ni 231.604 Recovery = 97.46%
P 214.914† 9956.2 2376.0 µg/L 20.89 2376.0 ppb 20.89 0.88%
QC value within limits for P 214.914 Recovery = 95.04%
Pb 220.353† 7895.9 479.86 µg/L 5.722 479.86 ppb 5.722 1.19%
QC value within limits for Pb 220.353 Recovery = 95.97%
S 181.975 Axial† 1163.3 946.51 µg/L 8.747 946.51 ppb 8.747 0.92%
QC value within limits for S 181.975 Axial Recovery = 94.65%
Sb 206.836† 3611.9 488.26 µg/L 4.549 488.26 ppb 4.549 0.93%
QC value within limits for Sb 206.836 Recovery = 97.65%
Se 196.026† 1197.8 476 µg/L 3.6 476 ppb 3.6 0.76%
QC value within limits for Se 196.026 Recovery = 95.19%
SiO2† 47941.4 5219.2 µg/L 23.65 5219.2 ppb 23.65 0.45%
QC value within limits for SiO2 Recovery = 97.60%
Si 251.611† 147701.9 2432.6 µg/L 9.35 2432.6 ppb 9.35 0.38%
QC value within limits for Si 251.611 Recovery = 97.30%
Sn 189.927† 6863.5 489.59 µg/L 4.258 489.59 ppb 4.258 0.87%
QC value within limits for Sn 189.927 Recovery = 97.92%
Sr 421.552† 217958.6 510.80 µg/L 2.724 510.80 ppb 2.724 0.53%
QC value within limits for Sr 421.552 Recovery = 102.16%
Ti 334.940† 481628.2 490.47 µg/L 1.952 490.47 ppb 1.952 0.40%
QC value within limits for Ti 334.940 Recovery = 98.09%
Tl 190.801† 3586.5 488.81 µg/L 4.099 488.81 ppb 4.099 0.84%
QC value within limits for Tl 190.801 Recovery = 97.76%
U 409.014† 7481.8 492.42 µg/L 4.540 492.42 ppb 4.540 0.92%
QC value within limits for U 409.014 Recovery = 98.48%
V 292.402† 88944.2 499.54 µg/L 1.704 499.54 ppb 1.704 0.34%
QC value within limits for V 292.402 Recovery = 99.91%
Zn 213.857† 76638.9 478.58 µg/L 2.509 478.58 ppb 2.509 0.52%
QC value within limits for Zn 213.857 Recovery = 95.72%
All analyte(s) passed QC.

Sequence No.: 65
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/29/2010 21:43:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	155956.8	155956.8	107	%			21:43:51
1	Al 396.153Radial†	-16.8	16.2	3.4619	µg/L	3.4619	ppb	21:44:11
1	Ca 317.933Radial†	700.6	38.5	2.2587	µg/L	2.2587	ppb	21:44:11
1	Fe 238.204 Radial†	158.1	34.5	2.2919	µg/L	2.2919	ppb	21:44:11
1	K 766.490 Radial†	1477.7	-74.0	-30.465	µg/L	-30.465	ppb	21:43:51
1	Mg 279.077 IEC†	161.1	-36.2	-14.868	µg/L	-14.868	ppb	21:44:11
1	Na 589.592 Radial†	1643.2	-159.1	-24.311	µg/L	-24.311	ppb	21:43:51
1	Sr 421.552†	-196.3	94.6	0.2216	µg/L	0.2216	ppb	21:43:51
1	Sc 361.383	1765629.9	1765629.9	105.55	%			21:45:13
1	Y 371.029	1081668.4	1081668.4	105.78	%			21:45:13
1	Ag 328.068†	3343.9	201.0	0.8287	µg/L	0.8287	ppb	21:45:15
1	As 188.979†	-0.7	13.6	5.6736	µg/L	5.6736	ppb	21:45:35
1	B 249.677†	3087.2	-430.8	-7.2342	µg/L	-7.2342	ppb	21:45:35
1	Ba 233.527†	-174.6	9.6	0.0437	µg/L	0.0437	ppb	21:45:35
1	Be 313.107†	-668.1	27.1	0.0159	µg/L	0.0159	ppb	21:45:15
1	Cd 226.502†	-91.4	7.8	0.0536	µg/L	0.0536	ppb	21:45:35
1	Co 228.616†	-169.6	15.9	0.2174	µg/L	0.2174	ppb	21:45:35
1	Cr 267.716†	125.9	-40.9	-0.3702	µg/L	-0.3702	ppb	21:45:35
1	Cu 324.752†	2790.6	219.0	0.9713	µg/L	0.9713	ppb	21:45:15
1	Mn 257.610†	190.9	100.8	0.1384	µg/L	0.1384	ppb	21:45:35
1	Mo 202.031†	-5.1	50.4	1.5908	µg/L	1.5908	ppb	21:45:35
1	Ni 231.604†	-58.3	-14.3	-0.1833	µg/L	-0.1833	ppb	21:45:35
1	P 214.914†	44.9	-37.1	-8.9068	µg/L	-8.9068	ppb	21:45:35
1	Pb 220.353†	100.6	-17.1	-1.0500	µg/L	-1.0500	ppb	21:45:35
1	S 181.975 Axial†	88.1	-11.4	-9.1903	µg/L	-9.1903	ppb	21:45:35
1	Sb 206.836†	84.0	-7.1	-0.9269	µg/L	-0.9269	ppb	21:45:35
1	Se 196.026†	15.6	3.8	1.54	µg/L	1.54	ppb	21:45:35
1	SiO2†	1680.5	19.3	2.0584	µg/L	2.0584	ppb	21:45:35
1	Si 251.611†	824.6	104.8	1.7121	µg/L	1.7121	ppb	21:45:35
1	Sn 189.927†	2.6	0.4	0.0311	µg/L	0.0311	ppb	21:45:35
1	Ti 334.940†	807.6	128.8	0.1231	µg/L	0.1231	ppb	21:45:15
1	Tl 190.801†	-115.4	11.0	1.4674	µg/L	1.4674	ppb	21:45:35
1	U 409.014†	-105.6	379.0	23.345	µg/L	23.345	ppb	21:45:15
1	V 292.402†	205.8	-236.8	-1.2834	µg/L	-1.2834	ppb	21:45:15
1	Zn 213.857†	546.7	53.5	0.3372	µg/L	0.3372	ppb	21:45:35
2	Sc RADIAL	155375.0	155375.0	107	%			21:44:13
2	Al 396.153Radial†	-68.3	-32.2	-7.0550	µg/L	-7.0550	ppb	21:44:33
2	Ca 317.933Radial†	709.4	49.3	2.8889	µg/L	2.8889	ppb	21:44:33
2	Fe 238.204 Radial†	170.5	46.7	3.1031	µg/L	3.1031	ppb	21:44:33
2	K 766.490 Radial†	1698.0	137.8	56.753	µg/L	56.753	ppb	21:44:13
2	Mg 279.077 IEC†	155.9	-40.4	-16.664	µg/L	-16.664	ppb	21:44:33
2	Na 589.592 Radial†	1687.7	-111.6	-17.120	µg/L	-17.120	ppb	21:44:13
2	Sr 421.552†	-289.5	6.4	0.0151	µg/L	0.0151	ppb	21:44:13
2	Sc 361.383	1758365.8	1758365.8	105.12	%			21:45:38
2	Y 371.029	1078074.0	1078074.0	105.43	%			21:45:38
2	Ag 328.068†	3122.4	3.3	0.0229	µg/L	0.0229	ppb	21:45:40
2	As 188.979†	-17.5	-2.4	-0.9870	µg/L	-0.9870	ppb	21:46:00
2	B 249.677†	3114.5	-392.8	-6.5943	µg/L	-6.5943	ppb	21:46:00
2	Ba 233.527†	-174.5	9.1	0.0411	µg/L	0.0411	ppb	21:46:00
2	Be 313.107†	-678.6	14.5	0.0087	µg/L	0.0087	ppb	21:45:40
2	Cd 226.502†	-106.7	-7.1	-0.0492	µg/L	-0.0492	ppb	21:46:00
2	Co 228.616†	-181.1	4.3	0.0589	µg/L	0.0589	ppb	21:46:00
2	Cr 267.716†	186.4	17.1	0.1365	µg/L	0.1365	ppb	21:46:00
2	Cu 324.752†	2877.2	312.3	1.3685	µg/L	1.3685	ppb	21:45:40
2	Mn 257.610†	194.2	104.8	0.1438	µg/L	0.1438	ppb	21:46:00
2	Mo 202.031†	-37.8	19.2	0.6071	µg/L	0.6071	ppb	21:46:00
2	Ni 231.604†	-60.1	-16.3	-0.2082	µg/L	-0.2082	ppb	21:46:00
2	P 214.914†	32.8	-48.4	-11.617	µg/L	-11.617	ppb	21:46:00
2	Pb 220.353†	87.7	-29.0	-1.7681	µg/L	-1.7681	ppb	21:46:00

2	S 181.975 Axial†	91.7	-7.6	-6.1290 µg/L	-6.1290 ppb	21:46:00
2	Sb 206.836†	84.8	-5.9	-0.7957 µg/L	-0.7957 ppb	21:46:00
2	Se 196.026†	18.7	6.9	2.73 µg/L	2.73 ppb	21:46:00
2	SiO2†	1682.8	28.0	3.0520 µg/L	3.0520 ppb	21:46:00
2	Si 251.611†	805.7	90.1	1.4833 µg/L	1.4833 ppb	21:46:00
2	Sn 189.927†	-1.8	-3.8	-0.2671 µg/L	-0.2671 ppb	21:46:00
2	Ti 334.940†	866.0	187.5	0.1872 µg/L	0.1872 ppb	21:45:40
2	Tl 190.801†	-106.3	19.2	2.5714 µg/L	2.5714 ppb	21:46:00
2	U 409.014†	-280.2	212.6	13.103 µg/L	13.103 ppb	21:45:40
2	V 292.402†	347.0	-101.7	-0.5490 µg/L	-0.5490 ppb	21:45:40
2	Zn 213.857†	514.2	24.8	0.1559 µg/L	0.1559 ppb	21:46:00
3	Sc RADIAL	154236.9	154236.9	106 %		21:44:35
3	Al 396.153Radial†	-27.1	6.3	1.3236 µg/L	1.3236 ppb	21:44:55
3	Ca 317.933Radial†	725.7	69.6	4.0774 µg/L	4.0774 ppb	21:44:55
3	Fe 238.204 Radial†	170.1	47.5	3.1556 µg/L	3.1556 ppb	21:44:55
3	K 766.490 Radial†	1418.1	-114.9	-47.294 µg/L	-47.294 ppb	21:44:35
3	Mg 279.077 IEC†	159.9	-35.5	-14.632 µg/L	-14.632 ppb	21:44:55
3	Na 589.592 Radial†	1547.3	-232.5	-35.541 µg/L	-35.541 ppb	21:44:35
3	Sr 421.552†	-316.6	-21.2	-0.0498 µg/L	-0.0498 ppb	21:44:35
3	Sc 361.383	1753936.7	1753936.7	104.85 %		21:46:02
3	Y 371.029	1074322.0	1074322.0	105.06 %		21:46:02
3	Ag 328.068†	3311.5	191.2	0.7816 µg/L	0.7816 ppb	21:46:04
3	As 188.979†	-21.8	-6.6	-2.7393 µg/L	-2.7393 ppb	21:46:24
3	B 249.677†	3129.0	-371.5	-6.2368 µg/L	-6.2368 ppb	21:46:24
3	Ba 233.527†	-162.2	20.3	0.0929 µg/L	0.0929 ppb	21:46:24
3	Be 313.107†	-901.0	-199.2	-0.0620 µg/L	-0.0620 ppb	21:46:04
3	Cd 226.502†	-95.1	3.7	0.0249 µg/L	0.0249 ppb	21:46:24
3	Co 228.616†	-174.5	10.2	0.1392 µg/L	0.1392 ppb	21:46:24
3	Cr 267.716†	174.7	6.4	0.0473 µg/L	0.0473 ppb	21:46:24
3	Cu 324.752†	2668.6	120.3	0.5307 µg/L	0.5307 ppb	21:46:04
3	Mn 257.610†	187.9	99.2	0.1361 µg/L	0.1361 ppb	21:46:24
3	Mo 202.031†	-24.5	31.8	1.0050 µg/L	1.0050 ppb	21:46:24
3	Ni 231.604†	-80.3	-35.6	-0.4559 µg/L	-0.4559 ppb	21:46:24
3	P 214.914†	36.8	-44.4	-10.662 µg/L	-10.662 ppb	21:46:24
3	Pb 220.353†	101.1	-16.0	-0.9738 µg/L	-0.9738 ppb	21:46:24
3	S 181.975 Axial†	84.3	-14.4	-11.695 µg/L	-11.695 ppb	21:46:24
3	Sb 206.836†	73.7	-16.4	-2.1934 µg/L	-2.1934 ppb	21:46:24
3	Se 196.026†	9.7	-1.7	-0.644 µg/L	-0.644 ppb	21:46:24
3	SiO2†	1725.4	72.7	7.9170 µg/L	7.9170 ppb	21:46:24
3	Si 251.611†	849.4	133.7	2.1983 µg/L	2.1983 ppb	21:46:24
3	Sn 189.927†	1.0	-1.1	-0.0738 µg/L	-0.0738 ppb	21:46:24
3	Ti 334.940†	975.6	294.1	0.2973 µg/L	0.2973 ppb	21:46:04
3	Tl 190.801†	-110.8	14.6	1.9610 µg/L	1.9610 ppb	21:46:24
3	U 409.014†	-341.5	153.4	9.4487 µg/L	9.4487 ppb	21:46:04
3	V 292.402†	361.9	-86.7	-0.4648 µg/L	-0.4648 ppb	21:46:04
3	Zn 213.857†	519.6	31.1	0.1983 µg/L	0.1983 ppb	21:46:24

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1759310.8	105.17	%	0.353				0.34%
Sc RADIAL	155189.5	106	%	0.6				0.56%
Y 371.029	1078021.5	105.42	%	0.359				0.34%
Ag 328.068†	131.9	0.5444	µg/L	0.45227	0.5444	ppb	0.45227	83.07%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-3.2	-0.7565	µg/L	5.55848	-0.7565	ppb	5.55848	734.76%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.5	0.6491	µg/L	4.43866	0.6491	ppb	4.43866	683.80%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-398.4	-6.6884	µg/L	0.50530	-6.6884	ppb	0.50530	7.55%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	13.0	0.0592	µg/L	0.02918	0.0592	ppb	0.02918	49.24%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-52.5	-0.0125	µg/L	0.04303	-0.0125	ppb	0.04303	345.39%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	52.5	3.0750	µg/L	0.92355	3.0750	ppb	0.92355	30.03%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	1.5	0.0098	µg/L	0.05303	0.0098	ppb	0.05303	543.11%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	10.1	0.1385	µg/L	0.07927	0.1385	ppb	0.07927	57.23%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -5.8     -0.0621 µg/L       0.27051     -0.0621 ppb       0.27051 435.31%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             217.2      0.9568 µg/L       0.41909      0.9568 ppb       0.41909  43.80%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       42.9      2.8502 µg/L       0.48420      2.8502 ppb       0.48420  16.99%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -17.0     -7.0019 µg/L      55.85109     -7.0019 ppb      55.85109 797.66%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†         -37.4     -15.388 µg/L        1.1111     -15.388 ppb        1.1111   7.22%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             101.6      0.1394 µg/L       0.00394      0.1394 ppb       0.00394   2.82%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              33.8      1.0676 µg/L       0.49486      1.0676 ppb       0.49486  46.35%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -167.7     -25.657 µg/L        9.2837     -25.657 ppb        9.2837  36.18%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -22.1     -0.2825 µg/L       0.15069     -0.2825 ppb       0.15069  53.35%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -43.3     -10.395 µg/L        1.3745     -10.395 ppb        1.3745  13.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -20.7     -1.2640 µg/L       0.43823     -1.2640 ppb       0.43823  34.67%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†        -11.1     -9.0047 µg/L       2.78752     -9.0047 ppb       2.78752  30.96%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -9.8     -1.3053 µg/L       0.77187     -1.3053 ppb       0.77187  59.13%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               3.0       1.21 µg/L         1.710       1.21 ppb         1.710 141.69%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    40.0      4.3425 µg/L       3.13523      4.3425 ppb       3.13523  72.20%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             109.6      1.7979 µg/L       0.36513      1.7979 ppb       0.36513  20.31%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -1.5     -0.1033 µg/L       0.15126     -0.1033 ppb       0.15126 146.44%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              26.6      0.0623 µg/L       0.14172      0.0623 ppb       0.14172 227.53%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             203.5      0.2025 µg/L       0.08808      0.2025 ppb       0.08808  43.49%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              14.9      1.9999 µg/L       0.55303      1.9999 ppb       0.55303  27.65%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              248.3      15.299 µg/L        7.2039      15.299 ppb        7.2039  47.09%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             -141.7     -0.7657 µg/L       0.45029     -0.7657 ppb       0.45029  58.81%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              36.5      0.2305 µg/L       0.09482      0.2305 ppb       0.09482  41.14%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 73
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/29/2010 22:01:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	158049.5	158049.5	108	%			22:01:37
1	Al 396.153Radial†	26411.5	24388.7	5301.6	µg/L	5301.6	ppb	22:01:37
1	Ca 317.933Radial†	92553.1	84736.9	4965.2	µg/L	4965.2	ppb	22:01:37
1	Fe 238.204 Radial†	80932.2	74522.9	4954.5	µg/L	4954.5	ppb	22:01:37
1	K 766.490 Radial†	14535.0	11949.3	4915.2	µg/L	4915.2	ppb	22:01:37
1	Mg 279.077 IEC†	13642.6	12394.6	5117.9	µg/L	5117.9	ppb	22:01:37
1	Na 589.592 Radial†	72124.5	64818.9	9913.8	µg/L	9913.8	ppb	22:01:37
1	Sr 421.552†	236566.4	218441.0	511.93	µg/L	511.93	ppb	22:01:35
1	Sc 361.383	1796532.1	1796532.1	107.40	%			22:01:50
1	Y 371.029	1087433.5	1087433.5	106.34	%			22:01:50
1	Ag 328.068†	132761.6	120649.0	495.79	µg/L	495.79	ppb	22:01:50
1	As 188.979†	1379.4	1298.6	549.79	µg/L	549.79	ppb	22:02:10
1	B 249.677†	34327.9	28607.5	478.59	µg/L	478.59	ppb	22:01:50
1	Ba 233.527†	118329.1	110352.8	504.53	µg/L	504.53	ppb	22:01:50
1	Be 313.107†	1697099.0	1580851.1	514.73	µg/L	514.73	ppb	22:01:50
1	Cd 226.502†	75099.3	70020.3	483.23	µg/L	483.23	ppb	22:01:50
1	Co 228.616†	38144.6	35693.5	489.02	µg/L	489.02	ppb	22:01:50
1	Cr 267.716†	61551.1	57150.8	490.75	µg/L	490.75	ppb	22:01:50
1	Cu 324.752†	125230.0	114178.5	497.87	µg/L	497.87	ppb	22:01:50
1	Mn 257.610†	387183.9	360432.0	492.29	µg/L	492.29	ppb	22:01:50
1	Mo 202.031†	16175.9	15116.8	477.63	µg/L	477.63	ppb	22:02:10
1	Ni 231.604†	40995.7	38212.6	488.78	µg/L	488.78	ppb	22:01:50
1	P 214.914†	10701.6	9884.8	2358.9	µg/L	2358.9	ppb	22:02:10
1	Pb 220.353†	8517.0	7817.8	475.13	µg/L	475.13	ppb	22:02:10
1	S 181.975 Axial†	1332.8	1146.2	932.66	µg/L	932.66	ppb	22:02:10
1	Sb 206.836†	3939.5	3581.5	484.05	µg/L	484.05	ppb	22:02:10
1	Se 196.026†	1279.3	1180.3	469	µg/L	469	ppb	22:02:10
1	SiO2†	53216.1	47977.4	5223.3	µg/L	5223.3	ppb	22:01:50
1	Si 251.611†	160303.4	148584.2	2447.2	µg/L	2447.2	ppb	22:01:50
1	Sn 189.927†	7334.9	6827.6	487.05	µg/L	487.05	ppb	22:02:10
1	Ti 334.940†	519977.9	483521.9	492.40	µg/L	492.40	ppb	22:01:50
1	Tl 190.801†	3694.6	3560.4	485.32	µg/L	485.32	ppb	22:02:10
1	U 409.014†	7392.0	7361.9	485.07	µg/L	485.07	ppb	22:01:50
1	V 292.402†	96188.6	89130.7	500.52	µg/L	500.52	ppb	22:01:50
1	Zn 213.857†	83802.2	77564.9	484.40	µg/L	484.40	ppb	22:01:50
2	Sc RADIAL	156901.2	156901.2	108	%			22:01:41
2	Al 396.153Radial†	26045.7	24227.1	5266.1	µg/L	5266.1	ppb	22:01:41
2	Ca 317.933Radial†	91463.8	84349.6	4942.5	µg/L	4942.5	ppb	22:01:41
2	Fe 238.204 Radial†	80200.4	74389.3	4945.7	µg/L	4945.7	ppb	22:01:41
2	K 766.490 Radial†	14394.1	11916.4	4901.6	µg/L	4901.6	ppb	22:01:41
2	Mg 279.077 IEC†	13524.6	12377.1	5110.8	µg/L	5110.8	ppb	22:01:41
2	Na 589.592 Radial†	71678.0	64891.0	9924.8	µg/L	9924.8	ppb	22:01:41
2	Sr 421.552†	232732.3	216475.9	507.32	µg/L	507.32	ppb	22:01:39
2	Sc 361.383	1783616.2	1783616.2	106.63	%			22:02:13
2	Y 371.029	1079542.4	1079542.4	105.57	%			22:02:13
2	Ag 328.068†	131412.3	120278.7	494.27	µg/L	494.27	ppb	22:02:13
2	As 188.979†	1380.3	1308.7	554.01	µg/L	554.01	ppb	22:02:33
2	B 249.677†	34427.1	28932.0	484.03	µg/L	484.03	ppb	22:02:13
2	Ba 233.527†	116944.7	109852.3	502.24	µg/L	502.24	ppb	22:02:13
2	Be 313.107†	1678543.6	1574891.6	512.79	µg/L	512.79	ppb	22:02:13
2	Cd 226.502†	74410.0	69880.2	482.26	µg/L	482.26	ppb	22:02:13
2	Co 228.616†	37848.5	35673.1	488.73	µg/L	488.73	ppb	22:02:13
2	Cr 267.716†	60832.9	56892.2	488.54	µg/L	488.54	ppb	22:02:13
2	Cu 324.752†	123762.6	113646.6	495.55	µg/L	495.55	ppb	22:02:13
2	Mn 257.610†	383763.1	359834.4	491.48	µg/L	491.48	ppb	22:02:13
2	Mo 202.031†	16215.3	15262.8	482.24	µg/L	482.24	ppb	22:02:33
2	Ni 231.604†	40715.4	38226.1	488.96	µg/L	488.96	ppb	22:02:13
2	P 214.914†	10801.6	10050.8	2398.6	µg/L	2398.6	ppb	22:02:33
2	Pb 220.353†	8589.1	7942.9	482.72	µg/L	482.72	ppb	22:02:33

2	S 181.975 Axial†	1344.2	1165.8	948.58 µg/L	948.58 ppb	22:02:33
2	Sb 206.836†	3942.2	3610.6	488.08 µg/L	488.08 ppb	22:02:33
2	Se 196.026†	1283.6	1192.9	474 µg/L	474 ppb	22:02:33
2	SiO2†	52849.8	47992.6	5224.8 µg/L	5224.8 ppb	22:02:13
2	Si 251.611†	158621.6	148087.7	2438.9 µg/L	2438.9 ppb	22:02:13
2	Sn 189.927†	7373.6	6913.4	493.14 µg/L	493.14 ppb	22:02:33
2	Ti 334.940†	514397.9	481794.6	490.64 µg/L	490.64 ppb	22:02:13
2	Tl 190.801†	3715.3	3604.7	491.24 µg/L	491.24 ppb	22:02:33
2	U 409.014†	7243.6	7272.5	479.51 µg/L	479.51 ppb	22:02:13
2	V 292.402†	95349.6	88992.3	499.79 µg/L	499.79 ppb	22:02:13
2	Zn 213.857†	82609.2	77011.1	480.91 µg/L	480.91 ppb	22:02:13
3	Sc RADIAL	156463.7	156463.7	107 %		22:01:45
3	Al 396.153Radial†	25995.3	24247.8	5270.6 µg/L	5270.6 ppb	22:01:45
3	Ca 317.933Radial†	91157.7	84302.0	4939.7 µg/L	4939.7 ppb	22:01:45
3	Fe 238.204 Radial†	79790.6	74215.9	4934.1 µg/L	4934.1 ppb	22:01:45
3	K 766.490 Radial†	14295.4	11862.0	4879.2 µg/L	4879.2 ppb	22:01:45
3	Mg 279.077 IEC†	13441.9	12335.1	5093.5 µg/L	5093.5 ppb	22:01:45
3	Na 589.592 Radial†	71245.2	64673.9	9891.6 µg/L	9891.6 ppb	22:01:45
3	Sr 421.552†	235650.6	219799.0	515.11 µg/L	515.11 ppb	22:01:43
3	Sc 361.383	1779354.1	1779354.1	106.37 %		22:02:36
3	Y 371.029	1076400.2	1076400.2	105.26 %		22:02:36
3	Ag 328.068†	130833.4	120029.7	493.27 µg/L	493.27 ppb	22:02:36
3	As 188.979†	1382.7	1314.1	556.25 µg/L	556.25 ppb	22:02:57
3	B 249.677†	34071.7	28675.2	479.73 µg/L	479.73 ppb	22:02:36
3	Ba 233.527†	116809.2	109987.6	502.86 µg/L	502.86 ppb	22:02:36
3	Be 313.107†	1674596.4	1574951.7	512.81 µg/L	512.81 ppb	22:02:36
3	Cd 226.502†	73969.6	69633.4	480.55 µg/L	480.55 ppb	22:02:36
3	Co 228.616†	37628.2	35550.9	487.06 µg/L	487.06 ppb	22:02:36
3	Cr 267.716†	60619.6	56828.4	487.98 µg/L	487.98 ppb	22:02:36
3	Cu 324.752†	123542.2	113717.4	495.86 µg/L	495.86 ppb	22:02:36
3	Mn 257.610†	382395.5	359410.8	490.90 µg/L	490.90 ppb	22:02:36
3	Mo 202.031†	16173.8	15260.2	482.16 µg/L	482.16 ppb	22:02:57
3	Ni 231.604†	40421.3	38041.0	486.59 µg/L	486.59 ppb	22:02:36
3	P 214.914†	10736.5	10013.9	2389.8 µg/L	2389.8 ppb	22:02:57
3	Pb 220.353†	8554.5	7929.6	481.90 µg/L	481.90 ppb	22:02:57
3	S 181.975 Axial†	1335.2	1160.4	944.20 µg/L	944.20 ppb	22:02:57
3	Sb 206.836†	3941.0	3618.3	489.13 µg/L	489.13 ppb	22:02:57
3	Se 196.026†	1288.0	1199.9	477 µg/L	477 ppb	22:02:57
3	SiO2†	52993.8	48246.8	5252.6 µg/L	5252.6 ppb	22:02:36
3	Si 251.611†	158759.4	148573.6	2447.0 µg/L	2447.0 ppb	22:02:36
3	Sn 189.927†	7362.8	6919.8	493.59 µg/L	493.59 ppb	22:02:57
3	Ti 334.940†	513521.6	482126.3	490.98 µg/L	490.98 ppb	22:02:36
3	Tl 190.801†	3708.7	3606.8	491.53 µg/L	491.53 ppb	22:02:57
3	U 409.014†	7457.8	7490.2	492.90 µg/L	492.90 ppb	22:02:36
3	V 292.402†	94935.5	88817.2	498.83 µg/L	498.83 ppb	22:02:36
3	Zn 213.857†	82507.8	77101.4	481.50 µg/L	481.50 ppb	22:02:36

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1786500.8	106.80	%	0.535				0.50%
Sc RADIAL	157138.2	108	%	0.6				0.52%
Y 371.029	1081125.4	105.73	%	0.556				0.53%
Ag 328.068†	120319.2	494.45	µg/L	1.270	494.45	ppb	1.270	0.26%
QC value within limits for Ag 328.068 Recovery = 98.89%								
Al 396.153Radial†	24287.9	5279.4	µg/L	19.31	5279.4	ppb	19.31	0.37%
QC value within limits for Al 396.153Radial Recovery = 105.59%								
As 188.979†	1307.2	553.35	µg/L	3.278	553.35	ppb	3.278	0.59%
QC value greater than the upper limit for As 188.979 Recovery = 110.67%								
B 249.677†	28738.2	480.78	µg/L	2.873	480.78	ppb	2.873	0.60%
QC value within limits for B 249.677 Recovery = 96.16%								
Ba 233.527†	110064.3	503.21	µg/L	1.182	503.21	ppb	1.182	0.23%
QC value within limits for Ba 233.527 Recovery = 100.64%								
Be 313.107†	1576898.2	513.44	µg/L	1.114	513.44	ppb	1.114	0.22%
QC value within limits for Be 313.107 Recovery = 102.69%								
Ca 317.933Radial†	84462.8	4949.2	µg/L	13.98	4949.2	ppb	13.98	0.28%
QC value within limits for Ca 317.933Radial Recovery = 98.98%								
Cd 226.502†	69844.6	482.01	µg/L	1.352	482.01	ppb	1.352	0.28%
QC value within limits for Cd 226.502 Recovery = 96.40%								
Co 228.616†	35639.2	488.27	µg/L	1.056	488.27	ppb	1.056	0.22%

QC value within limits for Co 228.616 Recovery = 97.65%

Cr 267.716†	56957.1	489.09 µg/L	1.468	489.09 ppb	1.468	0.30%

QC value within limits for Cr 267.716 Recovery = 97.82%

Cu 324.752†	113847.5	496.43 µg/L	1.257	496.43 ppb	1.257	0.25%

QC value within limits for Cu 324.752 Recovery = 99.29%

Fe 238.204 Radial†	74376.0	4944.8 µg/L	10.23	4944.8 ppb	10.23	0.21%

QC value within limits for Fe 238.204 Radial Recovery = 98.90%

K 766.490 Radial†	11909.2	4898.7 µg/L	18.15	4898.7 ppb	18.15	0.37%

QC value within limits for K 766.490 Radial Recovery = 97.97%

Mg 279.077 IEC†	12368.9	5107.4 µg/L	12.54	5107.4 ppb	12.54	0.25%

QC value within limits for Mg 279.077 IEC Recovery = 102.15%

Mn 257.610†	359892.4	491.56 µg/L	0.701	491.56 ppb	0.701	0.14%

QC value within limits for Mn 257.610 Recovery = 98.31%

Mo 202.031†	15213.3	480.68 µg/L	2.637	480.68 ppb	2.637	0.55%

QC value within limits for Mo 202.031 Recovery = 96.14%

Na 589.592 Radial†	64794.6	9910.0 µg/L	16.90	9910.0 ppb	16.90	0.17%

QC value within limits for Na 589.592 Radial Recovery = 99.10%

Ni 231.604†	38159.9	488.11 µg/L	1.320	488.11 ppb	1.320	0.27%

QC value within limits for Ni 231.604 Recovery = 97.62%

P 214.914†	9983.2	2382.4 µg/L	20.89	2382.4 ppb	20.89	0.88%

QC value within limits for P 214.914 Recovery = 95.30%

Pb 220.353†	7896.8	479.91 µg/L	4.167	479.91 ppb	4.167	0.87%

QC value within limits for Pb 220.353 Recovery = 95.98%

S 181.975 Axial†	1157.5	941.82 µg/L	8.224	941.82 ppb	8.224	0.87%

QC value within limits for S 181.975 Axial Recovery = 94.18%

Sb 206.836†	3603.5	487.09 µg/L	2.680	487.09 ppb	2.680	0.55%

QC value within limits for Sb 206.836 Recovery = 97.42%

Se 196.026†	1191.0	473 µg/L	3.9	473 ppb	3.9	0.83%

QC value within limits for Se 196.026 Recovery = 94.65%

SiO2†	48072.3	5233.6 µg/L	16.47	5233.6 ppb	16.47	0.31%

QC value within limits for SiO2 Recovery = 97.87%

Si 251.611†	148415.2	2444.4 µg/L	4.72	2444.4 ppb	4.72	0.19%

QC value within limits for Si 251.611 Recovery = 97.78%

Sn 189.927†	6886.9	491.26 µg/L	3.655	491.26 ppb	3.655	0.74%

QC value within limits for Sn 189.927 Recovery = 98.25%

Sr 421.552†	218238.6	511.45 µg/L	3.916	511.45 ppb	3.916	0.77%

QC value within limits for Sr 421.552 Recovery = 102.29%

Ti 334.940†	482481.0	491.34 µg/L	0.934	491.34 ppb	0.934	0.19%

QC value within limits for Ti 334.940 Recovery = 98.27%

Tl 190.801†	3590.7	489.36 µg/L	3.506	489.36 ppb	3.506	0.72%

QC value within limits for Tl 190.801 Recovery = 97.87%

U 409.014†	7374.9	485.83 µg/L	6.730	485.83 ppb	6.730	1.39%

QC value within limits for U 409.014 Recovery = 97.17%

V 292.402†	88980.1	499.71 µg/L	0.850	499.71 ppb	0.850	0.17%

QC value within limits for V 292.402 Recovery = 99.94%

Zn 213.857†	77225.8	482.27 µg/L	1.867	482.27 ppb	1.867	0.39%

QC value within limits for Zn 213.857 Recovery = 96.45%

QC Failed. Continue with analysis.

Sequence No.: 74
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/29/2010 22:03:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	160449.4	160449.4	110	%			22:03:34
1	Al 396.153Radial†	-23.3	10.7	2.2857	µg/L	2.2857	ppb	22:03:54
1	Ca 317.933Radial†	663.3	-13.6	-0.7986	µg/L	-0.7986	ppb	22:03:54
1	Fe 238.204 Radial†	178.8	49.2	3.2692	µg/L	3.2692	ppb	22:03:54
1	K 766.490 Radial†	1550.2	-46.8	-19.248	µg/L	-19.248	ppb	22:03:34
1	Mg 279.077 IEC†	188.3	-15.6	-6.4221	µg/L	-6.4221	ppb	22:03:54
1	Na 589.592 Radial†	1720.0	-132.3	-20.226	µg/L	-20.226	ppb	22:03:34
1	Sr 421.552†	-107.7	180.2	0.4223	µg/L	0.4223	ppb	22:03:34
1	Sc 361.383	1782990.1	1782990.1	106.59	%			22:04:42
1	Y 371.029	1090676.4	1090676.4	106.66	%			22:04:42
1	Ag 328.068†	3540.4	354.5	1.4358	µg/L	1.4358	ppb	22:04:44
1	As 188.979†	-23.8	-8.1	-3.3731	µg/L	-3.3731	ppb	22:05:04
1	B 249.677†	3170.3	-381.3	-6.4031	µg/L	-6.4031	ppb	22:05:04
1	Ba 233.527†	-164.7	20.5	0.0937	µg/L	0.0937	ppb	22:05:04
1	Be 313.107†	-523.0	169.4	0.0564	µg/L	0.0564	ppb	22:04:44
1	Cd 226.502†	-92.5	7.6	0.0522	µg/L	0.0522	ppb	22:05:04
1	Co 228.616†	-166.7	20.2	0.2761	µg/L	0.2761	ppb	22:05:04
1	Cr 267.716†	144.9	-24.3	-0.2125	µg/L	-0.2125	ppb	22:05:04
1	Cu 324.752†	3308.1	678.7	2.9543	µg/L	2.9543	ppb	22:04:44
1	Mn 257.610†	226.5	132.5	0.1813	µg/L	0.1813	ppb	22:05:04
1	Mo 202.031†	-22.2	34.4	1.0857	µg/L	1.0857	ppb	22:05:04
1	Ni 231.604†	-71.5	-26.2	-0.3353	µg/L	-0.3353	ppb	22:05:04
1	P 214.914†	17.7	-63.0	-15.122	µg/L	-15.122	ppb	22:05:04
1	Pb 220.353†	110.9	-8.4	-0.5118	µg/L	-0.5118	ppb	22:05:04
1	S 181.975 Axial†	97.2	-3.6	-2.9298	µg/L	-2.9298	ppb	22:05:04
1	Sb 206.836†	92.1	-0.2	-0.0106	µg/L	-0.0106	ppb	22:05:04
1	Se 196.026†	10.0	-1.5	-0.603	µg/L	-0.603	ppb	22:05:04
1	SiO2†	1743.7	63.1	6.8545	µg/L	6.8545	ppb	22:05:04
1	Si 251.611†	838.2	110.0	1.8012	µg/L	1.8012	ppb	22:05:04
1	Sn 189.927†	10.0	7.4	0.5254	µg/L	0.5254	ppb	22:05:04
1	Ti 334.940†	839.9	151.6	0.1534	µg/L	0.1534	ppb	22:04:44
1	Tl 190.801†	-122.2	5.6	0.7511	µg/L	0.7511	ppb	22:05:04
1	U 409.014†	-437.1	69.0	4.2258	µg/L	4.2258	ppb	22:04:44
1	V 292.402†	331.6	-120.7	-0.6569	µg/L	-0.6569	ppb	22:04:44
1	Zn 213.857†	604.8	103.0	0.6478	µg/L	0.6478	ppb	22:05:04
2	Sc RADIAL	156747.2	156747.2	108	%			22:03:56
2	Al 396.153Radial†	-29.6	4.3	0.8879	µg/L	0.8879	ppb	22:04:16
2	Ca 317.933Radial†	666.7	3.7	0.2175	µg/L	0.2175	ppb	22:04:16
2	Fe 238.204 Radial†	175.2	49.7	3.3017	µg/L	3.3017	ppb	22:04:16
2	K 766.490 Radial†	1470.5	-87.7	-36.090	µg/L	-36.090	ppb	22:03:56
2	Mg 279.077 IEC†	169.6	-29.0	-11.920	µg/L	-11.920	ppb	22:04:16
2	Na 589.592 Radial†	1750.9	-66.6	-10.165	µg/L	-10.165	ppb	22:03:56
2	Sr 421.552†	-135.6	151.9	0.3559	µg/L	0.3559	ppb	22:03:56
2	Sc 361.383	1797191.3	1797191.3	107.44	%			22:05:06
2	Y 371.029	1098454.4	1098454.4	107.42	%			22:05:06
2	Ag 328.068†	3408.6	205.6	0.8469	µg/L	0.8469	ppb	22:05:08
2	As 188.979†	-12.7	2.4	1.0155	µg/L	1.0155	ppb	22:05:28
2	B 249.677†	3164.7	-410.0	-6.8848	µg/L	-6.8848	ppb	22:05:28
2	Ba 233.527†	-163.4	23.0	0.1052	µg/L	0.1052	ppb	22:05:28
2	Be 313.107†	-678.6	28.5	0.0135	µg/L	0.0135	ppb	22:05:08
2	Cd 226.502†	-87.1	13.3	0.0914	µg/L	0.0914	ppb	22:05:28
2	Co 228.616†	-175.3	13.5	0.1843	µg/L	0.1843	ppb	22:05:28
2	Cr 267.716†	187.5	14.3	0.1122	µg/L	0.1122	ppb	22:05:28
2	Cu 324.752†	3253.3	603.2	2.6341	µg/L	2.6341	ppb	22:05:08
2	Mn 257.610†	189.8	96.7	0.1326	µg/L	0.1326	ppb	22:05:28
2	Mo 202.031†	-18.9	37.7	1.1886	µg/L	1.1886	ppb	22:05:28
2	Ni 231.604†	-71.9	-26.0	-0.3327	µg/L	-0.3327	ppb	22:05:28
2	P 214.914†	32.5	-49.3	-11.863	µg/L	-11.863	ppb	22:05:28
2	Pb 220.353†	101.8	-17.6	-1.0762	µg/L	-1.0762	ppb	22:05:28

2	S 181.975 Axial†	94.3	-7.1	-5.7195 µg/L	-5.7195 ppb	22:05:28
2	Sb 206.836†	73.5	-18.2	-2.4456 µg/L	-2.4456 ppb	22:05:28
2	Se 196.026†	11.7	0.0	0.017 µg/L	0.017 ppb	22:05:28
2	SiO2†	1699.5	9.0	0.9499 µg/L	0.9499 ppb	22:05:28
2	Si 251.611†	884.5	146.9	2.4136 µg/L	2.4136 ppb	22:05:28
2	Sn 189.927†	-0.8	-2.7	-0.1939 µg/L	-0.1939 ppb	22:05:28
2	Ti 334.940†	738.9	51.4	0.0476 µg/L	0.0476 ppb	22:05:08
2	Tl 190.801†	-120.9	7.8	1.0385 µg/L	1.0385 ppb	22:05:28
2	U 409.014†	-272.9	225.1	13.889 µg/L	13.889 ppb	22:05:08
2	V 292.402†	392.8	-66.2	-0.3457 µg/L	-0.3457 ppb	22:05:08
2	Zn 213.857†	590.9	85.6	0.5385 µg/L	0.5385 ppb	22:05:28
3	Sc RADIAL	159177.1	159177.1	109 %		22:04:18
3	Al 396.153Radial†	-32.3	2.3	0.4484 µg/L	0.4484 ppb	22:04:38
3	Ca 317.933Radial†	661.7	-10.3	-0.6042 µg/L	-0.6042 ppb	22:04:38
3	Fe 238.204 Radial†	157.7	31.1	2.0666 µg/L	2.0666 ppb	22:04:38
3	K 766.490 Radial†	1654.5	60.0	24.710 µg/L	24.710 ppb	22:04:18
3	Mg 279.077 IEC†	173.1	-28.1	-11.572 µg/L	-11.572 ppb	22:04:38
3	Na 589.592 Radial†	1670.7	-164.9	-25.257 µg/L	-25.257 ppb	22:04:18
3	Sr 421.552†	-81.8	203.1	0.4761 µg/L	0.4761 ppb	22:04:18
3	Sc 361.383	1802721.6	1802721.6	107.77 %		22:05:30
3	Y 371.029	1101871.3	1101871.3	107.75 %		22:05:30
3	Ag 328.068†	3236.7	36.3	0.1614 µg/L	0.1614 ppb	22:05:33
3	As 188.979†	-14.2	1.1	0.4596 µg/L	0.4596 ppb	22:05:53
3	B 249.677†	3175.4	-409.2	-6.8698 µg/L	-6.8698 ppb	22:05:53
3	Ba 233.527†	-172.2	15.3	0.0698 µg/L	0.0698 ppb	22:05:53
3	Be 313.107†	-906.9	-181.5	-0.0538 µg/L	-0.0538 ppb	22:05:33
3	Cd 226.502†	-107.7	-5.6	-0.0386 µg/L	-0.0386 ppb	22:05:53
3	Co 228.616†	-189.6	0.7	0.0092 µg/L	0.0092 ppb	22:05:53
3	Cr 267.716†	175.9	3.0	0.0117 µg/L	0.0117 ppb	22:05:53
3	Cu 324.752†	3047.7	403.1	1.7668 µg/L	1.7668 ppb	22:05:33
3	Mn 257.610†	198.6	104.3	0.1430 µg/L	0.1430 ppb	22:05:53
3	Mo 202.031†	-19.7	36.9	1.1654 µg/L	1.1654 ppb	22:05:53
3	Ni 231.604†	-45.7	-1.5	-0.0189 µg/L	-0.0189 ppb	22:05:53
3	P 214.914†	24.9	-56.4	-13.551 µg/L	-13.551 ppb	22:05:53
3	Pb 220.353†	87.5	-31.3	-1.9030 µg/L	-1.9030 ppb	22:05:53
3	S 181.975 Axial†	90.3	-11.0	-8.9087 µg/L	-8.9087 ppb	22:05:53
3	Sb 206.836†	80.8	-11.6	-1.5550 µg/L	-1.5550 ppb	22:05:53
3	Se 196.026†	19.6	7.3	2.90 µg/L	2.90 ppb	22:05:53
3	SiO2†	1704.6	8.9	0.9407 µg/L	0.9407 ppb	22:05:53
3	Si 251.611†	850.1	112.5	1.8467 µg/L	1.8467 ppb	22:05:53
3	Sn 189.927†	-3.2	-5.0	-0.3566 µg/L	-0.3566 ppb	22:05:53
3	Ti 334.940†	849.3	151.7	0.1485 µg/L	0.1485 ppb	22:05:33
3	Tl 190.801†	-126.9	2.6	0.3427 µg/L	0.3427 ppb	22:05:53
3	U 409.014†	-211.7	282.7	17.431 µg/L	17.431 ppb	22:05:33
3	V 292.402†	343.3	-113.2	-0.6046 µg/L	-0.6046 ppb	22:05:33
3	Zn 213.857†	574.3	68.5	0.4296 µg/L	0.4296 ppb	22:05:53

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1794301.0	107.26	%	0.608				0.57%
Sc RADIAL	158791.2	109	%	1.3				1.18%
Y 371.029	1097000.7	107.28	%	0.561				0.52%
Ag 328.068†	198.8	0.8147	µg/L	0.63786	0.8147	ppb	0.63786	78.29%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	5.8	1.2073	µg/L	0.95936	1.2073	ppb	0.95936	79.46%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.5	-0.6327	µg/L	2.38947	-0.6327	ppb	2.38947	377.69%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-400.2	-6.7193	µg/L	0.27389	-6.7193	ppb	0.27389	4.08%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	19.6	0.0896	µg/L	0.01809	0.0896	ppb	0.01809	20.20%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	5.5	0.0054	µg/L	0.05556	0.0054	ppb	0.05556	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-6.7	-0.3951	µg/L	0.53934	-0.3951	ppb	0.53934	136.51%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	5.1	0.0350	µg/L	0.06666	0.0350	ppb	0.06666	190.46%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	11.4	0.1565	µg/L	0.13561	0.1565	ppb	0.13561	86.64%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -2.3     -0.0296 µg/L       0.16621     -0.0296 ppb       0.16621 562.40%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             561.7      2.4517 µg/L       0.61441      2.4517 ppb       0.61441  25.06%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       43.3      2.8792 µg/L       0.70386      2.8792 ppb       0.70386  24.45%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -24.8     -10.209 µg/L       31.3914     -10.209 ppb       31.3914 307.48%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†         -24.2     -9.9713 µg/L       3.07868     -9.9713 ppb       3.07868  30.88%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             111.1      0.1523 µg/L       0.02563      0.1523 ppb       0.02563  16.83%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              36.3      1.1466 µg/L       0.05397      1.1466 ppb       0.05397   4.71%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -121.3     -18.549 µg/L        7.6848     -18.549 ppb        7.6848  41.43%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -17.9     -0.2290 µg/L       0.18194     -0.2290 ppb       0.18194  79.46%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -56.3     -13.512 µg/L        1.6296     -13.512 ppb        1.6296  12.06%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -19.1     -1.1637 µg/L       0.69972     -1.1637 ppb       0.69972  60.13%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -7.2     -5.8527 µg/L       2.99169     -5.8527 ppb       2.99169  51.12%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†             -10.0     -1.3371 µg/L       1.23203     -1.3371 ppb       1.23203  92.14%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               1.9       0.771 µg/L        1.8678       0.771 ppb        1.8678 242.41%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    27.0      2.9150 µg/L       3.41170      2.9150 ppb       3.41170 117.04%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             123.1      2.0205 µg/L       0.34120      2.0205 ppb       0.34120  16.89%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -0.1     -0.0084 µg/L       0.46934     -0.0084 ppb       0.46934 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             178.4      0.4181 µg/L       0.06020      0.4181 ppb       0.06020  14.40%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             118.2      0.1165 µg/L       0.05971      0.1165 ppb       0.05971  51.25%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               5.3      0.7108 µg/L       0.34967      0.7108 ppb       0.34967  49.20%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              192.3      11.848 µg/L        6.8347      11.848 ppb        6.8347  57.68%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             -100.0     -0.5357 µg/L       0.16666     -0.5357 ppb       0.16666  31.11%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              85.7      0.5387 µg/L       0.10910      0.5387 ppb       0.10910  20.25%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 81
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/29/2010 22:19:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	152312.7	152312.7	104	%			22:19:45
1	Al 396.153Radial†	25257.2	24201.5	5260.5	µg/L	5260.5	ppb	22:19:45
1	Ca 317.933Radial†	88990.6	84542.6	4953.8	µg/L	4953.8	ppb	22:19:45
1	Fe 238.204 Radial†	77715.5	74255.9	4936.8	µg/L	4936.8	ppb	22:19:45
1	K 766.490 Radial†	13912.9	11858.9	4877.9	µg/L	4877.9	ppb	22:19:45
1	Mg 279.077 IEC†	13152.4	12399.4	5120.0	µg/L	5120.0	ppb	22:19:45
1	Na 589.592 Radial†	69880.5	65176.8	9968.5	µg/L	9968.5	ppb	22:19:45
1	Sr 421.552†	228320.8	218767.5	512.69	µg/L	512.69	ppb	22:19:43
1	Sc 361.383	1737411.7	1737411.7	103.86	%			22:19:58
1	Y 371.029	1050981.5	1050981.5	102.78	%			22:19:58
1	Ag 328.068†	128476.0	120729.2	496.13	µg/L	496.13	ppb	22:19:58
1	As 188.979†	1340.1	1304.5	552.24	µg/L	552.24	ppb	22:20:18
1	B 249.677†	33219.3	28627.8	478.94	µg/L	478.94	ppb	22:19:58
1	Ba 233.527†	114183.4	110110.5	503.42	µg/L	503.42	ppb	22:19:58
1	Be 313.107†	1633886.1	1573760.5	512.42	µg/L	512.42	ppb	22:19:58
1	Cd 226.502†	72231.0	69638.2	480.59	µg/L	480.59	ppb	22:19:58
1	Co 228.616†	36690.0	35501.6	486.39	µg/L	486.39	ppb	22:19:58
1	Cr 267.716†	59371.2	57002.2	489.48	µg/L	489.48	ppb	22:19:58
1	Cu 324.752†	120429.1	113523.9	495.02	µg/L	495.02	ppb	22:19:58
1	Mn 257.610†	373880.7	359891.1	491.55	µg/L	491.55	ppb	22:19:58
1	Mo 202.031†	15806.6	15273.7	482.59	µg/L	482.59	ppb	22:20:18
1	Ni 231.604†	39682.8	38247.4	489.23	µg/L	489.23	ppb	22:19:58
1	P 214.914†	10452.4	9984.0	2382.6	µg/L	2382.6	ppb	22:20:18
1	Pb 220.353†	8370.1	7946.2	482.91	µg/L	482.91	ppb	22:20:18
1	S 181.975 Axial†	1298.7	1155.6	940.31	µg/L	940.31	ppb	22:20:18
1	Sb 206.836†	3840.2	3610.7	488.09	µg/L	488.09	ppb	22:20:18
1	Se 196.026†	1269.8	1211.6	481	µg/L	481	ppb	22:20:18
1	SiO2†	51583.1	48091.2	5235.5	µg/L	5235.5	ppb	22:19:58
1	Si 251.611†	154617.6	148188.9	2440.6	µg/L	2440.6	ppb	22:19:58
1	Sn 189.927†	7196.6	6926.8	494.09	µg/L	494.09	ppb	22:20:18
1	Ti 334.940†	501274.3	481988.9	490.84	µg/L	490.84	ppb	22:19:58
1	Tl 190.801†	3622.3	3607.9	491.69	µg/L	491.69	ppb	22:20:18
1	U 409.014†	7175.0	7387.1	486.68	µg/L	486.68	ppb	22:19:58
1	V 292.402†	93168.0	89270.1	501.35	µg/L	501.35	ppb	22:19:58
1	Zn 213.857†	80276.7	76825.8	479.74	µg/L	479.74	ppb	22:19:58
2	Sc RADIAL	154831.9	154831.9	106	%			22:19:49
2	Al 396.153Radial†	25587.3	24119.0	5242.1	µg/L	5242.1	ppb	22:19:49
2	Ca 317.933Radial†	90429.6	84511.6	4952.0	µg/L	4952.0	ppb	22:19:49
2	Fe 238.204 Radial†	79228.1	74469.7	4951.0	µg/L	4951.0	ppb	22:19:49
2	K 766.490 Radial†	14006.7	11730.5	4825.1	µg/L	4825.1	ppb	22:19:49
2	Mg 279.077 IEC†	13348.5	12379.3	5111.8	µg/L	5111.8	ppb	22:19:49
2	Na 589.592 Radial†	70589.6	64756.3	9904.2	µg/L	9904.2	ppb	22:19:49
2	Sr 421.552†	229160.8	216003.2	506.22	µg/L	506.22	ppb	22:19:47
2	Sc 361.383	1714461.6	1714461.6	102.49	%			22:20:21
2	Y 371.029	1037130.3	1037130.3	101.42	%			22:20:21
2	Ag 328.068†	127395.8	121331.1	498.59	µg/L	498.59	ppb	22:20:21
2	As 188.979†	1344.4	1326.0	561.27	µg/L	561.27	ppb	22:20:41
2	B 249.677†	32990.6	28832.7	482.36	µg/L	482.36	ppb	22:20:21
2	Ba 233.527†	113263.4	110684.5	506.05	µg/L	506.05	ppb	22:20:21
2	Be 313.107†	1625203.6	1586346.8	516.52	µg/L	516.52	ppb	22:20:21
2	Cd 226.502†	71591.7	69945.4	482.71	µg/L	482.71	ppb	22:20:21
2	Co 228.616†	36606.2	35892.7	491.75	µg/L	491.75	ppb	22:20:21
2	Cr 267.716†	58947.1	57353.6	492.50	µg/L	492.50	ppb	22:20:21
2	Cu 324.752†	119611.8	114278.5	498.30	µg/L	498.30	ppb	22:20:21
2	Mn 257.610†	371366.8	362257.0	494.79	µg/L	494.79	ppb	22:20:21
2	Mo 202.031†	15850.0	15519.8	490.36	µg/L	490.36	ppb	22:20:41
2	Ni 231.604†	39310.2	38395.3	491.12	µg/L	491.12	ppb	22:20:21
2	P 214.914†	10467.4	10133.3	2418.3	µg/L	2418.3	ppb	22:20:41
2	Pb 220.353†	8392.4	8075.9	490.79	µg/L	490.79	ppb	22:20:41

2	S 181.975 Axial†	1313.6	1186.9	965.72 µg/L	965.72 ppb	22:20:41
2	Sb 206.836†	3868.7	3688.0	498.60 µg/L	498.60 ppb	22:20:41
2	Se 196.026†	1246.3	1205.1	479 µg/L	479 ppb	22:20:41
2	SiO2†	51189.2	48371.7	5265.9 µg/L	5265.9 ppb	22:20:21
2	Si 251.611†	153640.7	149228.5	2457.6 µg/L	2457.6 ppb	22:20:21
2	Sn 189.927†	7204.7	7027.5	501.26 µg/L	501.26 ppb	22:20:41
2	Ti 334.940†	498506.7	485749.2	494.67 µg/L	494.67 ppb	22:20:21
2	Tl 190.801†	3638.8	3670.6	500.15 µg/L	500.15 ppb	22:20:41
2	U 409.014†	7086.3	7393.1	487.16 µg/L	487.16 ppb	22:20:21
2	V 292.402†	92241.8	89567.1	503.08 µg/L	503.08 ppb	22:20:21
2	Zn 213.857†	79665.1	77263.6	482.48 µg/L	482.48 ppb	22:20:21
3	Sc RADIAL	154090.6	154090.6	106 %		22:19:53
3	Al 396.153Radial†	25424.6	24080.9	5233.9 µg/L	5233.9 ppb	22:19:53
3	Ca 317.933Radial†	89815.0	84339.8	4941.9 µg/L	4941.9 ppb	22:19:53
3	Fe 238.204 Radial†	78583.1	74218.4	4934.3 µg/L	4934.3 ppb	22:19:53
3	K 766.490 Radial†	13957.7	11747.6	4832.1 µg/L	4832.1 ppb	22:19:53
3	Mg 279.077 IEC†	13296.6	12390.6	5116.5 µg/L	5116.5 ppb	22:19:53
3	Na 589.592 Radial†	70420.8	64916.2	9928.7 µg/L	9928.7 ppb	22:19:53
3	Sr 421.552†	227165.2	215153.4	504.22 µg/L	504.22 ppb	22:19:51
3	Sc 361.383	1727606.5	1727606.5	103.28 %		22:20:44
3	Y 371.029	1045815.5	1045815.5	102.27 %		22:20:44
3	Ag 328.068†	127723.5	120702.7	496.03 µg/L	496.03 ppb	22:20:44
3	As 188.979†	1349.6	1321.0	559.18 µg/L	559.18 ppb	22:21:05
3	B 249.677†	33234.8	28824.3	482.23 µg/L	482.23 ppb	22:20:44
3	Ba 233.527†	114068.8	110623.4	505.77 µg/L	505.77 ppb	22:20:44
3	Be 313.107†	1634139.1	1582933.7	515.41 µg/L	515.41 ppb	22:20:44
3	Cd 226.502†	72201.5	70004.3	483.12 µg/L	483.12 ppb	22:20:44
3	Co 228.616†	36622.8	35637.0	488.24 µg/L	488.24 ppb	22:20:44
3	Cr 267.716†	59398.0	57352.5	492.49 µg/L	492.49 ppb	22:20:44
3	Cu 324.752†	119868.0	113638.7	495.52 µg/L	495.52 ppb	22:20:44
3	Mn 257.610†	373060.7	361140.2	493.26 µg/L	493.26 ppb	22:20:44
3	Mo 202.031†	15888.1	15439.1	487.81 µg/L	487.81 ppb	22:21:05
3	Ni 231.604†	39594.7	38378.9	490.91 µg/L	490.91 ppb	22:20:44
3	P 214.914†	10522.4	10108.9	2412.5 µg/L	2412.5 ppb	22:21:05
3	Pb 220.353†	8403.6	8024.5	487.67 µg/L	487.67 ppb	22:21:05
3	S 181.975 Axial†	1310.6	1174.2	955.43 µg/L	955.43 ppb	22:21:05
3	Sb 206.836†	3889.0	3678.9	497.34 µg/L	497.34 ppb	22:21:05
3	Se 196.026†	1271.0	1219.8	485 µg/L	485 ppb	22:21:05
3	SiO2†	51423.3	48218.3	5249.2 µg/L	5249.2 ppb	22:20:44
3	Si 251.611†	154582.4	148999.8	2453.9 µg/L	2453.9 ppb	22:20:44
3	Sn 189.927†	7242.6	7010.7	500.07 µg/L	500.07 ppb	22:21:05
3	Ti 334.940†	501288.0	484741.5	493.64 µg/L	493.64 ppb	22:20:44
3	Tl 190.801†	3618.0	3623.5	493.81 µg/L	493.81 ppb	22:21:05
3	U 409.014†	7090.5	7344.5	484.10 µg/L	484.10 ppb	22:20:44
3	V 292.402†	92797.7	89420.5	502.24 µg/L	502.24 ppb	22:20:44
3	Zn 213.857†	80147.9	77139.7	481.71 µg/L	481.71 ppb	22:20:44

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1726493.3	103.21	%	0.688				0.67%
Sc RADIAL	153745.1	105	%	0.9				0.84%
Y 371.029	1044642.4	102.16	%	0.685				0.67%
Ag 328.068†	120921.0	496.92	µg/L	1.451	496.92	ppb	1.451	0.29%
QC value within limits for Ag 328.068 Recovery = 99.38%								
Al 396.153Radial†	24133.8	5245.5	µg/L	13.60	5245.5	ppb	13.60	0.26%
QC value within limits for Al 396.153Radial Recovery = 104.91%								
As 188.979†	1317.2	557.56	µg/L	4.727	557.56	ppb	4.727	0.85%
QC value greater than the upper limit for As 188.979 Recovery = 111.51%								
B 249.677†	28761.6	481.17	µg/L	1.939	481.17	ppb	1.939	0.40%
QC value within limits for B 249.677 Recovery = 96.23%								
Ba 233.527†	110472.8	505.08	µg/L	1.442	505.08	ppb	1.442	0.29%
QC value within limits for Ba 233.527 Recovery = 101.02%								
Be 313.107†	1581013.7	514.78	µg/L	2.119	514.78	ppb	2.119	0.41%
QC value within limits for Be 313.107 Recovery = 102.96%								
Ca 317.933Radial†	84464.7	4949.3	µg/L	6.40	4949.3	ppb	6.40	0.13%
QC value within limits for Ca 317.933Radial Recovery = 98.99%								
Cd 226.502†	69862.6	482.14	µg/L	1.358	482.14	ppb	1.358	0.28%
QC value within limits for Cd 226.502 Recovery = 96.43%								
Co 228.616†	35677.1	488.79	µg/L	2.721	488.79	ppb	2.721	0.56%

QC value within limits for Co 228.616 Recovery = 97.76%

Cr 267.716†	57236.1	491.49 µg/L	1.741	491.49 ppb	1.741	0.35%

QC value within limits for Cr 267.716 Recovery = 98.30%

Cu 324.752†	113813.7	496.28 µg/L	1.771	496.28 ppb	1.771	0.36%

QC value within limits for Cu 324.752 Recovery = 99.26%

Fe 238.204 Radial†	74314.7	4940.7 µg/L	9.01	4940.7 ppb	9.01	0.18%

QC value within limits for Fe 238.204 Radial Recovery = 98.81%

K 766.490 Radial†	11779.0	4845.0 µg/L	28.69	4845.0 ppb	28.69	0.59%

QC value within limits for K 766.490 Radial Recovery = 96.90%

Mg 279.077 IEC†	12389.7	5116.1 µg/L	4.08	5116.1 ppb	4.08	0.08%

QC value within limits for Mg 279.077 IEC Recovery = 102.32%

Mn 257.610†	361096.1	493.20 µg/L	1.617	493.20 ppb	1.617	0.33%

QC value within limits for Mn 257.610 Recovery = 98.64%

Mo 202.031†	15410.9	486.92 µg/L	3.960	486.92 ppb	3.960	0.81%

QC value within limits for Mo 202.031 Recovery = 97.38%

Na 589.592 Radial†	64949.8	9933.8 µg/L	32.45	9933.8 ppb	32.45	0.33%

QC value within limits for Na 589.592 Radial Recovery = 99.34%

Ni 231.604†	38340.5	490.42 µg/L	1.037	490.42 ppb	1.037	0.21%

QC value within limits for Ni 231.604 Recovery = 98.08%

P 214.914†	10075.4	2404.5 µg/L	19.15	2404.5 ppb	19.15	0.80%

QC value within limits for P 214.914 Recovery = 96.18%

Pb 220.353†	8015.5	487.12 µg/L	3.967	487.12 ppb	3.967	0.81%

QC value within limits for Pb 220.353 Recovery = 97.42%

S 181.975 Axial†	1172.2	953.82 µg/L	12.785	953.82 ppb	12.785	1.34%

QC value within limits for S 181.975 Axial Recovery = 95.38%

Sb 206.836†	3659.2	494.68 µg/L	5.740	494.68 ppb	5.740	1.16%

QC value within limits for Sb 206.836 Recovery = 98.94%

Se 196.026†	1212.2	482 µg/L	2.9	482 ppb	2.9	0.60%

QC value within limits for Se 196.026 Recovery = 96.33%

SiO2†	48227.1	5250.2 µg/L	15.19	5250.2 ppb	15.19	0.29%

QC value within limits for SiO2 Recovery = 98.18%

Si 251.611†	148805.7	2450.7 µg/L	8.96	2450.7 ppb	8.96	0.37%

QC value within limits for Si 251.611 Recovery = 98.03%

Sn 189.927†	6988.3	498.47 µg/L	3.841	498.47 ppb	3.841	0.77%

QC value within limits for Sn 189.927 Recovery = 99.69%

Sr 421.552†	216641.4	507.71 µg/L	4.429	507.71 ppb	4.429	0.87%

QC value within limits for Sr 421.552 Recovery = 101.54%

Ti 334.940†	484159.9	493.05 µg/L	1.985	493.05 ppb	1.985	0.40%

QC value within limits for Ti 334.940 Recovery = 98.61%

Tl 190.801†	3634.0	495.22 µg/L	4.399	495.22 ppb	4.399	0.89%

QC value within limits for Tl 190.801 Recovery = 99.04%

U 409.014†	7374.9	485.98 µg/L	1.643	485.98 ppb	1.643	0.34%

QC value within limits for U 409.014 Recovery = 97.20%

V 292.402†	89419.2	502.22 µg/L	0.868	502.22 ppb	0.868	0.17%

QC value within limits for V 292.402 Recovery = 100.44%

Zn 213.857†	77076.4	481.31 µg/L	1.413	481.31 ppb	1.413	0.29%

QC value within limits for Zn 213.857 Recovery = 96.26%

QC Failed. Continue with analysis.

Sequence No.: 82
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/29/2010 22:21:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	153048.9	153048.9	105	%			22:21:43
1	Al 396.153Radial†	-46.2	-12.1	-2.7027	µg/L	-2.7027	ppb	22:22:03
1	Ca 317.933Radial†	641.8	-5.0	-0.2911	µg/L	-0.2911	ppb	22:22:03
1	Fe 238.204 Radial†	160.0	39.1	2.6003	µg/L	2.6003	ppb	22:22:03
1	K 766.490 Radial†	1587.0	56.4	23.221	µg/L	23.221	ppb	22:21:43
1	Mg 279.077 IEC†	160.9	-33.5	-13.768	µg/L	-13.768	ppb	22:22:03
1	Na 589.592 Radial†	1749.0	-29.1	-4.4718	µg/L	-4.4718	ppb	22:21:43
1	Sr 421.552†	-135.3	149.1	0.3494	µg/L	0.3494	ppb	22:21:43
1	Sc 361.383	1742642.1	1742642.1	104.18	%			22:23:05
1	Y 371.029	1066501.3	1066501.3	104.29	%			22:23:05
1	Ag 328.068†	3331.6	231.0	0.9172	µg/L	0.9172	ppb	22:23:07
1	As 188.979†	-18.4	-3.4	-1.4062	µg/L	-1.4062	ppb	22:23:27
1	B 249.677†	3114.2	-366.4	-6.1519	µg/L	-6.1519	ppb	22:23:27
1	Ba 233.527†	-147.0	33.9	0.1544	µg/L	0.1544	ppb	22:23:27
1	Be 313.107†	-699.4	-11.3	-0.0042	µg/L	-0.0042	ppb	22:23:07
1	Cd 226.502†	-105.1	-6.5	-0.0448	µg/L	-0.0448	ppb	22:23:27
1	Co 228.616†	-157.7	25.3	0.3459	µg/L	0.3459	ppb	22:23:27
1	Cr 267.716†	174.6	7.4	0.0642	µg/L	0.0642	ppb	22:23:27
1	Cu 324.752†	2824.4	286.3	1.2434	µg/L	1.2434	ppb	22:23:07
1	Mn 257.610†	185.8	98.4	0.1350	µg/L	0.1350	ppb	22:23:27
1	Mo 202.031†	-12.5	43.2	1.3628	µg/L	1.3628	ppb	22:23:27
1	Ni 231.604†	-33.1	9.1	0.1168	µg/L	0.1168	ppb	22:23:27
1	P 214.914†	23.7	-56.8	-13.626	µg/L	-13.626	ppb	22:23:27
1	Pb 220.353†	94.6	-21.6	-1.3058	µg/L	-1.3058	ppb	22:23:27
1	S 181.975 Axial†	90.7	-7.8	-6.2749	µg/L	-6.2749	ppb	22:23:27
1	Sb 206.836†	85.8	-4.3	-0.5625	µg/L	-0.5625	ppb	22:23:27
1	Se 196.026†	15.2	3.7	1.47	µg/L	1.47	ppb	22:23:27
1	SiO2†	1707.1	65.8	7.1504	µg/L	7.1504	ppb	22:23:27
1	Si 251.611†	834.7	124.8	2.0451	µg/L	2.0451	ppb	22:23:27
1	Sn 189.927†	4.0	1.8	0.1301	µg/L	0.1301	ppb	22:23:27
1	Ti 334.940†	654.1	-8.5	-0.0069	µg/L	-0.0069	ppb	22:23:07
1	Tl 190.801†	-117.5	7.5	0.9902	µg/L	0.9902	ppb	22:23:27
1	U 409.014†	-528.2	-28.0	-1.8141	µg/L	-1.8141	ppb	22:23:07
1	V 292.402†	165.6	-272.9	-1.5009	µg/L	-1.5009	ppb	22:23:07
1	Zn 213.857†	513.9	28.9	0.1799	µg/L	0.1799	ppb	22:23:27
2	Sc RADIAL	151679.0	151679.0	104	%			22:22:05
2	Al 396.153Radial†	-28.1	4.8	0.9816	µg/L	0.9816	ppb	22:22:25
2	Ca 317.933Radial†	626.5	-14.1	-0.8283	µg/L	-0.8283	ppb	22:22:25
2	Fe 238.204 Radial†	161.3	41.8	2.7763	µg/L	2.7763	ppb	22:22:25
2	K 766.490 Radial†	1640.2	121.1	49.867	µg/L	49.867	ppb	22:22:05
2	Mg 279.077 IEC†	170.3	-23.0	-9.4578	µg/L	-9.4578	ppb	22:22:25
2	Na 589.592 Radial†	1597.3	-159.9	-24.506	µg/L	-24.506	ppb	22:22:05
2	Sr 421.552†	-216.8	69.7	0.1633	µg/L	0.1633	ppb	22:22:05
2	Sc 361.383	1717045.6	1717045.6	102.65	%			22:23:29
2	Y 371.029	1051770.0	1051770.0	102.85	%			22:23:29
2	Ag 328.068†	3191.7	142.4	0.5609	µg/L	0.5609	ppb	22:23:31
2	As 188.979†	-14.9	-0.3	-0.1085	µg/L	-0.1085	ppb	22:23:51
2	B 249.677†	3102.8	-332.9	-5.5892	µg/L	-5.5892	ppb	22:23:51
2	Ba 233.527†	-171.7	7.8	0.0352	µg/L	0.0352	ppb	22:23:51
2	Be 313.107†	-760.6	-80.9	-0.0263	µg/L	-0.0263	ppb	22:23:31
2	Cd 226.502†	-75.1	21.3	0.1466	µg/L	0.1466	ppb	22:23:51
2	Co 228.616†	-175.4	5.7	0.0784	µg/L	0.0784	ppb	22:23:51
2	Cr 267.716†	170.4	5.8	0.0490	µg/L	0.0490	ppb	22:23:51
2	Cu 324.752†	3002.5	500.2	2.1749	µg/L	2.1749	ppb	22:23:31
2	Mn 257.610†	187.0	102.2	0.1400	µg/L	0.1400	ppb	22:23:51
2	Mo 202.031†	-6.1	49.2	1.5540	µg/L	1.5540	ppb	22:23:51
2	Ni 231.604†	-67.8	-25.2	-0.3219	µg/L	-0.3219	ppb	22:23:51
2	P 214.914†	19.7	-60.4	-14.507	µg/L	-14.507	ppb	22:23:51
2	Pb 220.353†	107.1	-8.1	-0.4886	µg/L	-0.4886	ppb	22:23:51

2	S 181.975 Axial†	88.2	-8.9	-7.1659 µg/L	-7.1659 ppb	22:23:51
2	Sb 206.836†	81.5	-7.3	-0.9613 µg/L	-0.9613 ppb	22:23:51
2	Se 196.026†	13.5	2.2	0.889 µg/L	0.889 ppb	22:23:51
2	SiO2†	1716.0	98.9	10.765 µg/L	10.765 ppb	22:23:51
2	Si 251.611†	860.2	161.6	2.6514 µg/L	2.6514 ppb	22:23:51
2	Sn 189.927†	2.5	0.4	0.0292 µg/L	0.0292 ppb	22:23:51
2	Ti 334.940†	705.6	51.1	0.0527 µg/L	0.0527 ppb	22:23:31
2	Tl 190.801†	-114.7	8.6	1.1402 µg/L	1.1402 ppb	22:23:51
2	U 409.014†	-487.9	3.8	0.1533 µg/L	0.1533 ppb	22:23:31
2	V 292.402†	179.2	-257.2	-1.4109 µg/L	-1.4109 ppb	22:23:31
2	Zn 213.857†	508.9	31.4	0.1979 µg/L	0.1979 ppb	22:23:51
3	Sc RADIAL	151305.2	151305.2	104 %		22:22:27
3	Al 396.153Radial†	-37.6	-4.4	-1.0405 µg/L	-1.0405 ppb	22:22:47
3	Ca 317.933Radial†	634.0	-5.4	-0.3182 µg/L	-0.3182 ppb	22:22:47
3	Fe 238.204 Radial†	145.7	27.0	1.7971 µg/L	1.7971 ppb	22:22:47
3	K 766.490 Radial†	1457.1	-51.4	-21.154 µg/L	-21.154 ppb	22:22:27
3	Mg 279.077 IEC†	160.0	-32.5	-13.375 µg/L	-13.375 ppb	22:22:47
3	Na 589.592 Radial†	1632.9	-121.7	-18.602 µg/L	-18.602 ppb	22:22:27
3	Sr 421.552†	-158.8	125.0	0.2930 µg/L	0.2930 ppb	22:22:27
3	Sc 361.383	1696452.4	1696452.4	101.42 %		22:23:54
3	Y 371.029	1039324.0	1039324.0	101.64 %		22:23:54
3	Ag 328.068†	3361.8	347.9	1.3916 µg/L	1.3916 ppb	22:23:56
3	As 188.979†	-22.4	-7.8	-3.2622 µg/L	-3.2622 ppb	22:24:16
3	B 249.677†	3155.6	-244.2	-4.0995 µg/L	-4.0995 ppb	22:24:16
3	Ba 233.527†	-185.2	-7.6	-0.0344 µg/L	-0.0344 ppb	22:24:16
3	Be 313.107†	-556.9	110.9	0.0329 µg/L	0.0329 ppb	22:23:56
3	Cd 226.502†	-87.0	8.7	0.0596 µg/L	0.0596 ppb	22:24:16
3	Co 228.616†	-172.6	6.4	0.0881 µg/L	0.0881 ppb	22:24:16
3	Cr 267.716†	143.3	-18.9	-0.1543 µg/L	-0.1543 ppb	22:24:16
3	Cu 324.752†	2803.5	339.5	1.4669 µg/L	1.4669 ppb	22:23:56
3	Mn 257.610†	199.4	116.6	0.1599 µg/L	0.1599 ppb	22:24:16
3	Mo 202.031†	1.4	56.6	1.7870 µg/L	1.7870 ppb	22:24:16
3	Ni 231.604†	-50.6	-8.9	-0.1143 µg/L	-0.1143 ppb	22:24:16
3	P 214.914†	39.3	-40.8	-9.8087 µg/L	-9.8087 ppb	22:24:16
3	Pb 220.353†	108.5	-5.4	-0.3153 µg/L	-0.3153 ppb	22:24:16
3	S 181.975 Axial†	90.6	-5.5	-4.4474 µg/L	-4.4474 ppb	22:24:16
3	Sb 206.836†	74.1	-13.6	-1.8066 µg/L	-1.8066 ppb	22:24:16
3	Se 196.026†	28.5	17.2	6.79 µg/L	6.79 ppb	22:24:16
3	SiO2†	1717.2	120.3	13.094 µg/L	13.094 ppb	22:24:16
3	Si 251.611†	817.8	130.0	2.1214 µg/L	2.1214 ppb	22:24:16
3	Sn 189.927†	10.4	8.2	0.5861 µg/L	0.5861 ppb	22:24:16
3	Ti 334.940†	751.3	104.5	0.1120 µg/L	0.1120 ppb	22:23:56
3	Tl 190.801†	-109.7	12.1	1.6251 µg/L	1.6251 ppb	22:24:16
3	U 409.014†	-660.7	-172.4	-10.683 µg/L	-10.683 ppb	22:23:56
3	V 292.402†	331.5	-104.9	-0.5717 µg/L	-0.5717 ppb	22:23:56
3	Zn 213.857†	511.3	39.8	0.2498 µg/L	0.2498 ppb	22:24:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1718713.4	102.75	%	1.383				1.35%
Sc RADIAL	152011.1	104	%	0.6				0.60%
Y 371.029	1052531.7	102.93	%	1.330				1.29%
Ag 328.068†	240.4	0.9566	µg/L	0.41670	0.9566	ppb	0.41670	43.56%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-3.9	-0.9205	µg/L	1.84510	-0.9205	ppb	1.84510	200.44%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.8	-1.5923	µg/L	1.58505	-1.5923	ppb	1.58505	99.54%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-314.5	-5.2802	µg/L	1.06050	-5.2802	ppb	1.06050	20.08%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.4	0.0517	µg/L	0.09546	0.0517	ppb	0.09546	184.53%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	6.3	0.0008	µg/L	0.02989	0.0008	ppb	0.02989	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-8.2	-0.4792	µg/L	0.30265	-0.4792	ppb	0.30265	63.16%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	7.8	0.0538	µg/L	0.09583	0.0538	ppb	0.09583	178.12%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	12.5	0.1708	µg/L	0.15171	0.1708	ppb	0.15171	88.81%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -1.9      -0.0137 µg/L       0.12202      -0.0137 ppb        0.12202 890.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             375.3       1.6284 µg/L       0.48629       1.6284 ppb        0.48629  29.86%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       36.0       2.3913 µg/L       0.52198       2.3913 ppb        0.52198  21.83%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        42.0       17.311 µg/L       35.8774       17.311 ppb        35.8774 207.25%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†         -29.7      -12.200 µg/L        2.3830      -12.200 ppb         2.3830  19.53%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             105.7       0.1449 µg/L       0.01317       0.1449 ppb        0.01317   9.09%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              49.7       1.5679 µg/L       0.21243       1.5679 ppb        0.21243  13.55%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -103.5      -15.860 µg/L       10.2945      -15.860 ppb        10.2945  64.91%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -8.3       -0.1065 µg/L       0.21945      -0.1065 ppb        0.21945 206.12%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -52.7      -12.647 µg/L        2.4974      -12.647 ppb         2.4974  19.75%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -11.7       -0.7032 µg/L       0.52900       -0.7032 ppb        0.52900  75.22%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -7.4       -5.9627 µg/L       1.38586       -5.9627 ppb        1.38586  23.24%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -8.4       -1.1101 µg/L       0.63531       -1.1101 ppb        0.63531  57.23%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               7.7         3.05 µg/L         3.254         3.05 ppb          3.254 106.62%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    95.0       10.336 µg/L        2.9948       10.336 ppb         2.9948  28.97%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             138.8       2.2727 µg/L       0.33024       2.2727 ppb        0.33024  14.53%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               3.5       0.2485 µg/L       0.29673       0.2485 ppb        0.29673 119.41%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             114.6       0.2685 µg/L       0.09545       0.2685 ppb        0.09545  35.54%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              49.0       0.0526 µg/L       0.05945       0.0526 ppb        0.05945 112.94%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               9.4       1.2518 µg/L       0.33186       1.2518 ppb        0.33186  26.51%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -65.5      -4.1145 µg/L       5.77269      -4.1145 ppb        5.77269 140.30%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             -211.7      -1.1612 µg/L       0.51246      -1.1612 ppb        0.51246  44.13%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              33.4       0.2092 µg/L       0.03629       0.2092 ppb        0.03629  17.35%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 90
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/29/2010 22:42:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	153670.6	153670.6	105	%			22:43:01
1	Al 396.153Radial†	25532.3	24248.9	5270.5	µg/L	5270.5	ppb	22:43:01
1	Ca 317.933Radial†	89233.6	84020.5	4923.2	µg/L	4923.2	ppb	22:43:01
1	Fe 238.204 Radial†	78366.9	74216.5	4934.2	µg/L	4934.2	ppb	22:43:01
1	K 766.490 Radial†	13951.5	11777.8	4844.6	µg/L	4844.6	ppb	22:43:01
1	Mg 279.077 IEC†	13259.2	12389.5	5116.1	µg/L	5116.1	ppb	22:43:01
1	Na 589.592 Radial†	70022.2	64720.3	9898.7	µg/L	9898.7	ppb	22:43:01
1	Sr 421.552†	229045.7	217524.4	509.78	µg/L	509.78	ppb	22:42:59
1	Sc 361.383	1713229.0	1713229.0	102.42	%			22:43:14
1	Y 371.029	1036548.2	1036548.2	101.37	%			22:43:14
1	Ag 328.068†	127511.9	121534.0	499.48	µg/L	499.48	ppb	22:43:14
1	As 188.979†	1343.6	1326.1	561.34	µg/L	561.34	ppb	22:43:34
1	B 249.677†	32986.3	28851.7	482.68	µg/L	482.68	ppb	22:43:14
1	Ba 233.527†	113774.1	111262.6	508.69	µg/L	508.69	ppb	22:43:14
1	Be 313.107†	1631598.6	1593731.7	518.93	µg/L	518.93	ppb	22:43:14
1	Cd 226.502†	71789.2	70188.4	484.39	µg/L	484.39	ppb	22:43:14
1	Co 228.616†	36461.6	35777.2	490.17	µg/L	490.17	ppb	22:43:14
1	Cr 267.716†	59082.6	57527.2	493.98	µg/L	493.98	ppb	22:43:14
1	Cu 324.752†	120035.3	114776.0	500.47	µg/L	500.47	ppb	22:43:14
1	Mn 257.610†	372176.7	363308.5	496.22	µg/L	496.22	ppb	22:43:14
1	Mo 202.031†	15824.6	15506.1	489.92	µg/L	489.92	ppb	22:43:34
1	Ni 231.604†	39287.7	38400.9	491.19	µg/L	491.19	ppb	22:43:14
1	P 214.914†	10456.8	10130.3	2417.6	µg/L	2417.6	ppb	22:43:34
1	Pb 220.353†	8326.6	8017.5	487.25	µg/L	487.25	ppb	22:43:34
1	S 181.975 Axial†	1304.8	1179.1	959.43	µg/L	959.43	ppb	22:43:34
1	Sb 206.836†	3849.6	3672.0	496.42	µg/L	496.42	ppb	22:43:34
1	Se 196.026†	1254.9	1214.3	483	µg/L	483	ppb	22:43:34
1	SiO2†	51326.3	48541.5	5284.5	µg/L	5284.5	ppb	22:43:14
1	Si 251.611†	154043.3	149729.5	2465.9	µg/L	2465.9	ppb	22:43:14
1	Sn 189.927†	7190.3	7018.5	500.63	µg/L	500.63	ppb	22:43:34
1	Ti 334.940†	500662.7	488204.2	497.17	µg/L	497.17	ppb	22:43:14
1	Tl 190.801†	3597.1	3632.4	495.09	µg/L	495.09	ppb	22:43:34
1	U 409.014†	7277.7	7584.9	499.24	µg/L	499.24	ppb	22:43:14
1	V 292.402†	92881.7	90256.7	506.92	µg/L	506.92	ppb	22:43:14
1	Zn 213.857†	79753.5	77405.8	483.38	µg/L	483.38	ppb	22:43:14
2	Sc RADIAL	153338.2	153338.2	105	%			22:43:05
2	Al 396.153Radial†	25484.3	24255.7	5272.5	µg/L	5272.5	ppb	22:43:05
2	Ca 317.933Radial†	89276.4	84244.7	4936.4	µg/L	4936.4	ppb	22:43:05
2	Fe 238.204 Radial†	78452.2	74458.8	4950.3	µg/L	4950.3	ppb	22:43:05
2	K 766.490 Radial†	14131.6	11977.7	4926.8	µg/L	4926.8	ppb	22:43:05
2	Mg 279.077 IEC†	13272.8	12429.7	5132.4	µg/L	5132.4	ppb	22:43:05
2	Na 589.592 Radial†	70049.9	64890.6	9924.7	µg/L	9924.7	ppb	22:43:05
2	Sr 421.552†	227233.2	216272.5	506.85	µg/L	506.85	ppb	22:43:03
2	Sc 361.383	1742064.1	1742064.1	104.14	%			22:43:37
2	Y 371.029	1053661.3	1053661.3	103.04	%			22:43:37
2	Ag 328.068†	128515.8	120437.1	494.94	µg/L	494.94	ppb	22:43:37
2	As 188.979†	1335.3	1296.4	548.84	µg/L	548.84	ppb	22:43:57
2	B 249.677†	33342.8	28660.9	479.49	µg/L	479.49	ppb	22:43:37
2	Ba 233.527†	114630.7	110246.4	504.04	µg/L	504.04	ppb	22:43:37
2	Be 313.107†	1643078.7	1578386.3	513.93	µg/L	513.93	ppb	22:43:37
2	Cd 226.502†	72541.4	69750.5	481.36	µg/L	481.36	ppb	22:43:37
2	Co 228.616†	36852.9	35563.7	487.24	µg/L	487.24	ppb	22:43:37
2	Cr 267.716†	59491.9	56965.4	489.16	µg/L	489.16	ppb	22:43:37
2	Cu 324.752†	120802.1	113572.4	495.23	µg/L	495.23	ppb	22:43:37
2	Mn 257.610†	375411.3	360399.5	492.25	µg/L	492.25	ppb	22:43:37
2	Mo 202.031†	15759.6	15187.9	479.88	µg/L	479.88	ppb	22:43:57
2	Ni 231.604†	39775.9	38234.8	489.07	µg/L	489.07	ppb	22:43:37
2	P 214.914†	10394.9	9901.9	2362.9	µg/L	2362.9	ppb	22:43:57
2	Pb 220.353†	8272.7	7831.2	475.94	µg/L	475.94	ppb	22:43:57

2	S 181.975 Axial†	1293.3	1147.1	933.39 µg/L	933.39 ppb	22:43:57
2	Sb 206.836†	3828.2	3589.3	485.17 µg/L	485.17 ppb	22:43:57
2	Se 196.026†	1246.5	1186.1	471 µg/L	471 ppb	22:43:57
2	SiO2†	51780.7	48148.3	5241.9 µg/L	5241.9 ppb	22:43:37
2	Si 251.611†	155219.0	148368.9	2443.6 µg/L	2443.6 ppb	22:43:37
2	Sn 189.927†	7132.8	6847.1	488.43 µg/L	488.43 ppb	22:43:57
2	Ti 334.940†	503531.9	482867.8	491.73 µg/L	491.73 ppb	22:43:37
2	Tl 190.801†	3581.7	3559.5	485.21 µg/L	485.21 ppb	22:43:57
2	U 409.014†	7146.8	7341.7	483.86 µg/L	483.86 ppb	22:43:37
2	V 292.402†	93375.5	89229.7	501.09 µg/L	501.09 ppb	22:43:37
2	Zn 213.857†	80733.7	77058.2	481.21 µg/L	481.21 ppb	22:43:37
3	Sc RADIAL	153918.1	153918.1	106 %		22:43:09
3	Al 396.153Radial†	25598.5	24272.6	5276.1 µg/L	5276.1 ppb	22:43:09
3	Ca 317.933Radial†	89923.4	84537.6	4953.5 µg/L	4953.5 ppb	22:43:09
3	Fe 238.204 Radial†	78639.1	74354.7	4943.4 µg/L	4943.4 ppb	22:43:09
3	K 766.490 Radial†	13877.1	11686.1	4806.8 µg/L	4806.8 ppb	22:43:09
3	Mg 279.077 IEC†	13270.8	12380.3	5112.0 µg/L	5112.0 ppb	22:43:09
3	Na 589.592 Radial†	70254.6	64833.6	9916.1 µg/L	9916.1 ppb	22:43:09
3	Sr 421.552†	228786.4	216929.5	508.39 µg/L	508.39 ppb	22:43:07
3	Sc 361.383	1738165.6	1738165.6	103.91 %		22:44:00
3	Y 371.029	1052043.8	1052043.8	102.88 %		22:44:00
3	Ag 328.068†	128389.3	120592.1	495.57 µg/L	495.57 ppb	22:44:00
3	As 188.979†	1343.6	1307.3	553.39 µg/L	553.39 ppb	22:44:20
3	B 249.677†	33214.1	28608.9	478.62 µg/L	478.62 ppb	22:44:00
3	Ba 233.527†	113962.7	109850.4	502.23 µg/L	502.23 ppb	22:44:00
3	Be 313.107†	1635274.2	1574414.0	512.64 µg/L	512.64 ppb	22:44:00
3	Cd 226.502†	72141.5	69521.9	479.78 µg/L	479.78 ppb	22:44:00
3	Co 228.616†	36635.4	35433.7	485.46 µg/L	485.46 ppb	22:44:00
3	Cr 267.716†	59220.7	56832.5	488.01 µg/L	488.01 ppb	22:44:00
3	Cu 324.752†	120354.6	113401.9	494.50 µg/L	494.50 ppb	22:44:00
3	Mn 257.610†	373061.4	358946.6	490.26 µg/L	490.26 ppb	22:44:00
3	Mo 202.031†	15720.2	15184.0	479.76 µg/L	479.76 ppb	22:44:20
3	Ni 231.604†	39617.8	38168.2	488.22 µg/L	488.22 ppb	22:44:00
3	P 214.914†	10370.4	9900.6	2362.7 µg/L	2362.7 ppb	22:44:20
3	Pb 220.353†	8273.8	7850.1	477.07 µg/L	477.07 ppb	22:44:20
3	S 181.975 Axial†	1305.4	1161.5	945.06 µg/L	945.06 ppb	22:44:20
3	Sb 206.836†	3838.2	3607.2	487.59 µg/L	487.59 ppb	22:44:20
3	Se 196.026†	1253.8	1195.7	475 µg/L	475 ppb	22:44:20
3	SiO2†	51493.2	47983.1	5223.9 µg/L	5223.9 ppb	22:44:00
3	Si 251.611†	154605.0	148112.3	2439.4 µg/L	2439.4 ppb	22:44:00
3	Sn 189.927†	7146.9	6876.0	490.48 µg/L	490.48 ppb	22:44:20
3	Ti 334.940†	501550.0	482044.9	490.89 µg/L	490.89 ppb	22:44:00
3	Tl 190.801†	3584.4	3569.9	486.57 µg/L	486.57 ppb	22:44:20
3	U 409.014†	7451.7	7650.5	502.82 µg/L	502.82 ppb	22:44:00
3	V 292.402†	92793.5	88870.7	499.10 µg/L	499.10 ppb	22:44:00
3	Zn 213.857†	80130.4	76651.4	478.65 µg/L	478.65 ppb	22:44:00

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1731152.9	103.49	%	0.935				0.90%
Sc RADIAL	153642.3	105	%	0.2				0.19%
Y 371.029	1047417.8	102.43	%	0.924				0.90%
Ag 328.068†	120854.4	496.66	µg/L	2.458	496.66	ppb	2.458	0.49%
QC value within limits for Ag 328.068 Recovery = 99.33%								
Al 396.153Radial†	24259.1	5273.0	µg/L	2.86	5273.0	ppb	2.86	0.05%
QC value within limits for Al 396.153Radial Recovery = 105.46%								
As 188.979†	1309.9	554.52	µg/L	6.329	554.52	ppb	6.329	1.14%
QC value greater than the upper limit for As 188.979 Recovery = 110.90%								
B 249.677†	28707.2	480.26	µg/L	2.138	480.26	ppb	2.138	0.45%
QC value within limits for B 249.677 Recovery = 96.05%								
Ba 233.527†	110453.1	504.99	µg/L	3.332	504.99	ppb	3.332	0.66%
QC value within limits for Ba 233.527 Recovery = 101.00%								
Be 313.107†	1582177.3	515.17	µg/L	3.321	515.17	ppb	3.321	0.64%
QC value within limits for Be 313.107 Recovery = 103.03%								
Ca 317.933Radial†	84267.6	4937.7	µg/L	15.19	4937.7	ppb	15.19	0.31%
QC value within limits for Ca 317.933Radial Recovery = 98.75%								
Cd 226.502†	69820.3	481.85	µg/L	2.340	481.85	ppb	2.340	0.49%
QC value within limits for Cd 226.502 Recovery = 96.37%								
Co 228.616†	35591.5	487.62	µg/L	2.378	487.62	ppb	2.378	0.49%

QC value within limits for Co 228.616 Recovery = 97.52%

Cr 267.716†	57108.4	490.38 µg/L	3.167	490.38 ppb	3.167	0.65%
QC value within limits for Cr 267.716 Recovery = 98.08%						
Cu 324.752†	113916.7	496.74 µg/L	3.258	496.74 ppb	3.258	0.66%
QC value within limits for Cu 324.752 Recovery = 99.35%						
Fe 238.204 Radial†	74343.3	4942.6 µg/L	8.08	4942.6 ppb	8.08	0.16%
QC value within limits for Fe 238.204 Radial Recovery = 98.85%						
K 766.490 Radial†	11813.8	4859.4 µg/L	61.38	4859.4 ppb	61.38	1.26%
QC value within limits for K 766.490 Radial Recovery = 97.19%						
Mg 279.077 IEC†	12399.8	5120.2 µg/L	10.79	5120.2 ppb	10.79	0.21%
QC value within limits for Mg 279.077 IEC Recovery = 102.40%						
Mn 257.610†	360884.9	492.91 µg/L	3.035	492.91 ppb	3.035	0.62%
QC value within limits for Mn 257.610 Recovery = 98.58%						
Mo 202.031†	15292.7	483.19 µg/L	5.836	483.19 ppb	5.836	1.21%
QC value within limits for Mo 202.031 Recovery = 96.64%						
Na 589.592 Radial†	64814.8	9913.2 µg/L	13.23	9913.2 ppb	13.23	0.13%
QC value within limits for Na 589.592 Radial Recovery = 99.13%						
Ni 231.604†	38268.0	489.49 µg/L	1.533	489.49 ppb	1.533	0.31%
QC value within limits for Ni 231.604 Recovery = 97.90%						
P 214.914†	9977.6	2381.1 µg/L	31.64	2381.1 ppb	31.64	1.33%
QC value within limits for P 214.914 Recovery = 95.24%						
Pb 220.353†	7899.6	480.09 µg/L	6.228	480.09 ppb	6.228	1.30%
QC value within limits for Pb 220.353 Recovery = 96.02%						
S 181.975 Axial†	1162.6	945.96 µg/L	13.047	945.96 ppb	13.047	1.38%
QC value within limits for S 181.975 Axial Recovery = 94.60%						
Sb 206.836†	3622.8	489.72 µg/L	5.923	489.72 ppb	5.923	1.21%
QC value within limits for Sb 206.836 Recovery = 97.94%						
Se 196.026†	1198.7	476 µg/L	5.7	476 ppb	5.7	1.19%
QC value within limits for Se 196.026 Recovery = 95.26%						
SiO2†	48224.3	5250.1 µg/L	31.11	5250.1 ppb	31.11	0.59%
QC value within limits for SiO2 Recovery = 98.18%						
Si 251.611†	148736.9	2449.7 µg/L	14.25	2449.7 ppb	14.25	0.58%
QC value within limits for Si 251.611 Recovery = 97.99%						
Sn 189.927†	6913.8	493.18 µg/L	6.535	493.18 ppb	6.535	1.33%
QC value within limits for Sn 189.927 Recovery = 98.64%						
Sr 421.552†	216908.8	508.34 µg/L	1.468	508.34 ppb	1.468	0.29%
QC value within limits for Sr 421.552 Recovery = 101.67%						
Ti 334.940†	484372.3	493.26 µg/L	3.408	493.26 ppb	3.408	0.69%
QC value within limits for Ti 334.940 Recovery = 98.65%						
Tl 190.801†	3587.3	488.96 µg/L	5.353	488.96 ppb	5.353	1.09%
QC value within limits for Tl 190.801 Recovery = 97.79%						
U 409.014†	7525.7	495.31 µg/L	10.074	495.31 ppb	10.074	2.03%
QC value within limits for U 409.014 Recovery = 99.06%						
V 292.402†	89452.4	502.37 µg/L	4.061	502.37 ppb	4.061	0.81%
QC value within limits for V 292.402 Recovery = 100.47%						
Zn 213.857†	77038.5	481.08 µg/L	2.367	481.08 ppb	2.367	0.49%
QC value within limits for Zn 213.857 Recovery = 96.22%						

QC Failed. Continue with analysis.

Sequence No.: 91
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/29/2010 22:44:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	154912.0	154912.0	106	%			22:44:59
1	Al 396.153Radial†	-35.0	-1.1	-0.2804	µg/L	-0.2804	ppb	22:45:19
1	Ca 317.933Radial†	642.9	-11.3	-0.6631	µg/L	-0.6631	ppb	22:45:19
1	Fe 238.204 Radial†	163.6	40.6	2.6994	µg/L	2.6994	ppb	22:45:19
1	K 766.490 Radial†	1426.7	-112.7	-46.378	µg/L	-46.378	ppb	22:44:59
1	Mg 279.077 IEC†	180.0	-17.3	-7.1267	µg/L	-7.1267	ppb	22:45:19
1	Na 589.592 Radial†	1706.5	-89.1	-13.586	µg/L	-13.586	ppb	22:44:59
1	Sr 421.552†	-175.2	113.1	0.2652	µg/L	0.2652	ppb	22:44:59
1	Sc 361.383	1763263.5	1763263.5	105.41	%			22:46:07
1	Y 371.029	1078054.6	1078054.6	105.42	%			22:46:07
1	Ag 328.068†	3459.8	315.2	1.2970	µg/L	1.2970	ppb	22:46:09
1	As 188.979†	-24.9	-9.4	-3.9329	µg/L	-3.9329	ppb	22:46:29
1	B 249.677†	3110.0	-405.3	-6.8044	µg/L	-6.8044	ppb	22:46:29
1	Ba 233.527†	-155.7	27.4	0.1251	µg/L	0.1251	ppb	22:46:29
1	Be 313.107†	-549.3	139.0	0.0510	µg/L	0.0510	ppb	22:46:09
1	Cd 226.502†	-95.9	3.4	0.0231	µg/L	0.0231	ppb	22:46:29
1	Co 228.616†	-186.7	-0.5	-0.0073	µg/L	-0.0073	ppb	22:46:29
1	Cr 267.716†	177.6	8.2	0.0553	µg/L	0.0553	ppb	22:46:29
1	Cu 324.752†	2872.9	300.6	1.3229	µg/L	1.3229	ppb	22:46:09
1	Mn 257.610†	184.1	94.6	0.1296	µg/L	0.1296	ppb	22:46:29
1	Mo 202.031†	-26.2	30.4	0.9589	µg/L	0.9589	ppb	22:46:29
1	Ni 231.604†	-47.7	-4.3	-0.0553	µg/L	-0.0553	ppb	22:46:29
1	P 214.914†	31.9	-49.3	-11.833	µg/L	-11.833	ppb	22:46:29
1	Pb 220.353†	75.9	-40.5	-2.4620	µg/L	-2.4620	ppb	22:46:29
1	S 181.975 Axial†	96.5	-3.3	-2.6691	µg/L	-2.6691	ppb	22:46:29
1	Sb 206.836†	94.3	2.8	0.3918	µg/L	0.3918	ppb	22:46:29
1	Se 196.026†	22.1	10.1	4.01	µg/L	4.01	ppb	22:46:29
1	SiO2†	1729.5	67.9	7.3789	µg/L	7.3789	ppb	22:46:29
1	Si 251.611†	852.7	132.5	2.1731	µg/L	2.1731	ppb	22:46:29
1	Sn 189.927†	14.1	11.4	0.8115	µg/L	0.8115	ppb	22:46:29
1	Ti 334.940†	920.6	237.0	0.2344	µg/L	0.2344	ppb	22:46:09
1	Tl 190.801†	-118.0	8.4	1.1222	µg/L	1.1222	ppb	22:46:29
1	U 409.014†	-177.4	310.8	19.177	µg/L	19.177	ppb	22:46:09
1	V 292.402†	364.3	-86.2	-0.4555	µg/L	-0.4555	ppb	22:46:09
1	Zn 213.857†	511.7	21.0	0.1315	µg/L	0.1315	ppb	22:46:29
2	Sc RADIAL	153548.1	153548.1	105	%			22:45:21
2	Al 396.153Radial†	-31.3	2.2	0.4081	µg/L	0.4081	ppb	22:45:41
2	Ca 317.933Radial†	642.0	-6.8	-0.3982	µg/L	-0.3982	ppb	22:45:41
2	Fe 238.204 Radial†	145.2	24.6	1.6337	µg/L	1.6337	ppb	22:45:41
2	K 766.490 Radial†	1418.9	-108.1	-44.492	µg/L	-44.492	ppb	22:45:21
2	Mg 279.077 IEC†	174.6	-20.9	-8.5921	µg/L	-8.5921	ppb	22:45:41
2	Na 589.592 Radial†	1677.9	-102.0	-15.567	µg/L	-15.567	ppb	22:45:21
2	Sr 421.552†	-164.6	121.7	0.2853	µg/L	0.2853	ppb	22:45:21
2	Sc 361.383	1742152.7	1742152.7	104.15	%			22:46:31
2	Y 371.029	1065618.3	1065618.3	104.21	%			22:46:31
2	Ag 328.068†	3303.4	204.8	0.8259	µg/L	0.8259	ppb	22:46:34
2	As 188.979†	-13.5	1.3	0.5289	µg/L	0.5289	ppb	22:46:54
2	B 249.677†	3107.7	-371.7	-6.2409	µg/L	-6.2409	ppb	22:46:54
2	Ba 233.527†	-159.2	22.2	0.1013	µg/L	0.1013	ppb	22:46:54
2	Be 313.107†	-751.4	-61.3	-0.0185	µg/L	-0.0185	ppb	22:46:34
2	Cd 226.502†	-95.8	2.4	0.0166	µg/L	0.0166	ppb	22:46:54
2	Co 228.616†	-177.5	6.1	0.0840	µg/L	0.0840	ppb	22:46:54
2	Cr 267.716†	192.1	24.2	0.2038	µg/L	0.2038	ppb	22:46:54
2	Cu 324.752†	2839.7	301.7	1.3157	µg/L	1.3157	ppb	22:46:34
2	Mn 257.610†	146.4	60.5	0.0831	µg/L	0.0831	ppb	22:46:54
2	Mo 202.031†	-13.5	42.2	1.3326	µg/L	1.3326	ppb	22:46:54
2	Ni 231.604†	-63.6	-20.2	-0.2583	µg/L	-0.2583	ppb	22:46:54
2	P 214.914†	31.2	-49.6	-11.901	µg/L	-11.901	ppb	22:46:54
2	Pb 220.353†	82.8	-32.9	-1.9932	µg/L	-1.9932	ppb	22:46:54

2	S 181.975 Axial†	81.5	-16.6	-13.406 µg/L	-13.406 ppb	22:46:54
2	Sb 206.836†	82.0	-7.9	-1.0565 µg/L	-1.0565 ppb	22:46:54
2	Se 196.026†	7.9	-3.3	-1.32 µg/L	-1.32 ppb	22:46:54
2	SiO2†	1731.4	89.6	9.7506 µg/L	9.7506 ppb	22:46:54
2	Si 251.611†	850.1	139.9	2.2935 µg/L	2.2935 ppb	22:46:54
2	Sn 189.927†	5.1	2.9	0.2036 µg/L	0.2036 ppb	22:46:54
2	Ti 334.940†	788.8	121.0	0.1220 µg/L	0.1220 ppb	22:46:34
2	Tl 190.801†	-114.7	10.2	1.3610 µg/L	1.3610 ppb	22:46:54
2	U 409.014†	-416.9	78.8	4.8158 µg/L	4.8158 ppb	22:46:34
2	V 292.402†	274.8	-168.0	-0.9142 µg/L	-0.9142 ppb	22:46:34
2	Zn 213.857†	471.1	-12.1	-0.0756 µg/L	-0.0756 ppb	22:46:54
3	Sc RADIAL	154388.4	154388.4	106 %		22:45:43
3	Al 396.153Radial†	-29.7	3.8	0.7678 µg/L	0.7678 ppb	22:46:03
3	Ca 317.933Radial†	650.1	-2.5	-0.1455 µg/L	-0.1455 ppb	22:46:03
3	Fe 238.204 Radial†	160.3	38.1	2.5315 µg/L	2.5315 ppb	22:46:03
3	K 766.490 Radial†	1386.3	-146.2	-60.200 µg/L	-60.200 ppb	22:45:43
3	Mg 279.077 IEC†	169.5	-26.7	-10.958 µg/L	-10.958 ppb	22:46:03
3	Na 589.592 Radial†	1530.6	-249.7	-38.157 µg/L	-38.157 ppb	22:45:43
3	Sr 421.552†	-237.9	53.4	0.1250 µg/L	0.1250 ppb	22:45:43
3	Sc 361.383	1750459.2	1750459.2	104.64 %		22:46:56
3	Y 371.029	1070679.8	1070679.8	104.70 %		22:46:56
3	Ag 328.068†	3084.2	-19.7	-0.0766 µg/L	-0.0766 ppb	22:46:58
3	As 188.979†	-5.5	9.0	3.7759 µg/L	3.7759 ppb	22:47:18
3	B 249.677†	3100.0	-393.3	-6.6028 µg/L	-6.6028 ppb	22:47:18
3	Ba 233.527†	-155.7	26.3	0.1198 µg/L	0.1198 ppb	22:47:18
3	Be 313.107†	-710.6	-18.9	-0.0028 µg/L	-0.0028 ppb	22:46:58
3	Cd 226.502†	-91.7	6.8	0.0466 µg/L	0.0466 ppb	22:47:18
3	Co 228.616†	-175.2	9.2	0.1261 µg/L	0.1261 ppb	22:47:18
3	Cr 267.716†	129.8	-36.2	-0.3199 µg/L	-0.3199 ppb	22:47:18
3	Cu 324.752†	2844.0	292.9	1.2827 µg/L	1.2827 ppb	22:46:58
3	Mn 257.610†	164.1	76.9	0.1055 µg/L	0.1055 ppb	22:47:18
3	Mo 202.031†	-10.2	45.5	1.4349 µg/L	1.4349 ppb	22:47:18
3	Ni 231.604†	-50.8	-7.6	-0.0975 µg/L	-0.0975 ppb	22:47:18
3	P 214.914†	34.6	-46.5	-11.157 µg/L	-11.157 ppb	22:47:18
3	Pb 220.353†	85.4	-30.8	-1.8707 µg/L	-1.8707 ppb	22:47:18
3	S 181.975 Axial†	93.1	-5.9	-4.7394 µg/L	-4.7394 ppb	22:47:18
3	Sb 206.836†	89.1	-1.5	-0.1726 µg/L	-0.1726 ppb	22:47:18
3	Se 196.026†	18.1	6.3	2.52 µg/L	2.52 ppb	22:47:18
3	SiO2†	1733.5	83.7	9.1075 µg/L	9.1075 ppb	22:47:18
3	Si 251.611†	819.6	106.9	1.7472 µg/L	1.7472 ppb	22:47:18
3	Sn 189.927†	3.7	1.6	0.1115 µg/L	0.1115 ppb	22:47:18
3	Ti 334.940†	816.3	143.8	0.1431 µg/L	0.1431 ppb	22:46:58
3	Tl 190.801†	-122.0	3.7	0.4965 µg/L	0.4965 ppb	22:47:18
3	U 409.014†	-315.7	177.4	10.912 µg/L	10.912 ppb	22:46:58
3	V 292.402†	292.4	-152.4	-0.8252 µg/L	-0.8252 ppb	22:46:58
3	Zn 213.857†	509.1	22.1	0.1383 µg/L	0.1383 ppb	22:47:18

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1751958.5	104.73	%	0.636				0.61%
Sc RADIAL	154282.8	106	%	0.5				0.45%
Y 371.029	1071450.9	104.78	%	0.612				0.58%
Ag 328.068†	166.8	0.6821	µg/L	0.69799	0.6821	ppb	0.69799	102.33%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.6	0.2985	µg/L	0.53261	0.2985	ppb	0.53261	178.41%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.3	0.1240	µg/L	3.87033	0.1240	ppb	3.87033	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-390.1	-6.5494	µg/L	0.28549	-6.5494	ppb	0.28549	4.36%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	25.3	0.1154	µg/L	0.01249	0.1154	ppb	0.01249	10.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	19.6	0.0099	µg/L	0.03648	0.0099	ppb	0.03648	368.40%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-6.9	-0.4023	µg/L	0.25879	-0.4023	ppb	0.25879	64.33%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	4.2	0.0288	µg/L	0.01577	0.0288	ppb	0.01577	54.78%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	4.9	0.0676	µg/L	0.06820	0.0676	ppb	0.06820	100.91%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -1.3     -0.0203 µg/L       0.26989     -0.0203 ppb       0.26989 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             298.4      1.3071 µg/L       0.02146      1.3071 ppb       0.02146   1.64%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       34.4      2.2882 µg/L       0.57300      2.2882 ppb       0.57300  25.04%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†      -122.3     -50.357 µg/L        8.5766     -50.357 ppb        8.5766  17.03%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†         -21.6     -8.8922 µg/L       1.93304     -8.8922 ppb       1.93304  21.74%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              77.3      0.1060 µg/L       0.02325      0.1060 ppb       0.02325  21.93%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              39.4      1.2422 µg/L       0.25054      1.2422 ppb       0.25054  20.17%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -146.9     -22.437 µg/L       13.6499     -22.437 ppb       13.6499  60.84%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -10.7     -0.1370 µg/L       0.10709     -0.1370 ppb       0.10709  78.15%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -48.5     -11.630 µg/L        0.4111     -11.630 ppb        0.4111   3.54%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -34.7     -2.1086 µg/L       0.31210     -2.1086 ppb       0.31210  14.80%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -8.6     -6.9382 µg/L       5.69617     -6.9382 ppb       5.69617  82.10%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -2.2     -0.2791 µg/L       0.73004     -0.2791 ppb       0.73004 261.58%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               4.4       1.74 µg/L         2.749       1.74 ppb         2.749 158.29%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    80.4      8.7457 µg/L       1.22656      8.7457 ppb       1.22656  14.02%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             126.4      2.0713 µg/L       0.28701      2.0713 ppb       0.28701  13.86%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               5.3      0.3755 µg/L       0.38038      0.3755 ppb       0.38038 101.29%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              96.1      0.2252 µg/L       0.08730      0.2252 ppb       0.08730  38.77%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             167.3      0.1665 µg/L       0.05972      0.1665 ppb       0.05972  35.87%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               7.4      0.9932 µg/L       0.44647      0.9932 ppb       0.44647  44.95%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              189.0      11.635 µg/L        7.2080      11.635 ppb        7.2080  61.95%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             -135.5     -0.7316 µg/L       0.24321     -0.7316 ppb       0.24321  33.24%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              10.3      0.0648 µg/L       0.12157      0.0648 ppb       0.12157 187.70%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 92
Sample ID: 1202056877|959114|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 412
Date Collected: 3/29/2010 22:47:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202056877|959114|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	153706.8	153706.8	105	%			22:47:58
1	Al 396.153Radial†	313.0	328.7	71.710	µg/L	71.710	ppb	22:48:00
1	Ca 317.933Radial†	1390.5	702.4	41.158	µg/L	41.158	ppb	22:48:00
1	Fe 238.204 Radial†	2558.9	2313.2	153.79	µg/L	153.79	ppb	22:48:00
1	K 766.490 Radial†	1427.1	-101.7	-41.901	µg/L	-41.901	ppb	22:47:58
1	Mg 279.077 IEC†	229.3	30.8	12.569	µg/L	12.569	ppb	22:48:00
1	Na 589.592 Radial†	1689.6	-92.6	-14.125	µg/L	-14.125	ppb	22:48:00
1	Sr 421.552†	40.3	316.2	0.7409	µg/L	0.7409	ppb	22:48:00
1	Sc 361.383	1723755.6	1723755.6	103.05	%			22:48:12
1	Y 371.029	1051639.9	1051639.9	102.84	%			22:48:12
1	Ag 328.068†	2889.7	-162.8	-0.6433	µg/L	-0.6433	ppb	22:48:14
1	As 188.979†	-16.8	-2.1	-0.8147	µg/L	-0.8147	ppb	22:48:34
1	B 249.677†	3188.5	-261.5	-4.3903	µg/L	-4.3903	ppb	22:48:34
1	Ba 233.527†	222.9	391.4	1.7857	µg/L	1.7857	ppb	22:48:34
1	Be 313.107†	-542.9	133.2	0.0503	µg/L	0.0503	ppb	22:48:14
1	Cd 226.502†	-84.2	12.7	0.0716	µg/L	0.0716	ppb	22:48:34
1	Co 228.616†	-164.2	17.3	0.2304	µg/L	0.2304	ppb	22:48:34
1	Cr 267.716†	242.2	74.8	0.6282	µg/L	0.6282	ppb	22:48:34
1	Cu 324.752†	2837.0	328.2	1.4686	µg/L	1.4686	ppb	22:48:14
1	Mn 257.610†	2489.3	2335.7	3.1907	µg/L	3.1907	ppb	22:48:34
1	Mo 202.031†	-34.8	21.4	0.6813	µg/L	0.6813	ppb	22:48:34
1	Ni 231.604†	-35.8	6.2	0.0790	µg/L	0.0790	ppb	22:48:34
1	P 214.914†	54.8	-26.4	-6.4254	µg/L	-6.4254	ppb	22:48:34
1	Pb 220.353†	84.5	-30.5	-1.8570	µg/L	-1.8570	ppb	22:48:34
1	S 181.975 Axial†	107.3	9.3	7.5032	µg/L	7.5032	ppb	22:48:34
1	Sb 206.836†	81.0	-8.1	-1.0893	µg/L	-1.0893	ppb	22:48:34
1	Se 196.026†	16.7	5.3	2.15	µg/L	2.15	ppb	22:48:34
1	SiO2†	3155.2	1489.0	162.72	µg/L	162.72	ppb	22:48:14
1	Si 251.611†	5296.0	4463.0	73.780	µg/L	73.780	ppb	22:48:14
1	Sn 189.927†	15.0	12.5	0.8989	µg/L	0.8989	ppb	22:48:34
1	Ti 334.940†	3887.8	3136.5	3.1887	µg/L	3.1887	ppb	22:48:14
1	Tl 190.801†	-113.8	9.9	1.3656	µg/L	1.3656	ppb	22:48:34
1	U 409.014†	-111.4	371.0	22.870	µg/L	22.870	ppb	22:48:14
1	V 292.402†	319.1	-122.2	-0.6798	µg/L	-0.6798	ppb	22:48:14
1	Zn 213.857†	901.1	410.0	2.5658	µg/L	2.5658	ppb	22:48:34
2	Sc RADIAL	153549.1	153549.1	105	%			22:48:02
2	Al 396.153Radial†	416.1	426.9	93.135	µg/L	93.135	ppb	22:48:04
2	Ca 317.933Radial†	1354.7	669.7	39.244	µg/L	39.244	ppb	22:48:04
2	Fe 238.204 Radial†	2550.7	2307.9	153.44	µg/L	153.44	ppb	22:48:04
2	K 766.490 Radial†	1589.8	54.1	22.257	µg/L	22.257	ppb	22:48:02
2	Mg 279.077 IEC†	165.4	-29.6	-12.322	µg/L	-12.322	ppb	22:48:04
2	Na 589.592 Radial†	1613.9	-162.8	-24.928	µg/L	-24.928	ppb	22:48:04
2	Sr 421.552†	43.6	319.4	0.7482	µg/L	0.7482	ppb	22:48:04
2	Sc 361.383	1738791.8	1738791.8	103.95	%			22:48:36
2	Y 371.029	1061047.8	1061047.8	103.76	%			22:48:36
2	Ag 328.068†	3212.1	123.1	0.5006	µg/L	0.5006	ppb	22:48:38
2	As 188.979†	-17.9	-3.0	-1.1969	µg/L	-1.1969	ppb	22:48:58
2	B 249.677†	3168.0	-308.0	-5.1706	µg/L	-5.1706	ppb	22:48:58
2	Ba 233.527†	241.2	407.1	1.8579	µg/L	1.8579	ppb	22:48:58
2	Be 313.107†	-674.6	11.1	0.0049	µg/L	0.0049	ppb	22:48:38
2	Cd 226.502†	-88.4	9.3	0.0485	µg/L	0.0485	ppb	22:48:58
2	Co 228.616†	-190.5	-6.6	-0.0970	µg/L	-0.0970	ppb	22:48:58
2	Cr 267.716†	251.2	81.5	0.7009	µg/L	0.7009	ppb	22:48:58
2	Cu 324.752†	2974.1	436.3	1.9222	µg/L	1.9222	ppb	22:48:38
2	Mn 257.610†	2509.4	2334.1	3.1895	µg/L	3.1895	ppb	22:48:58
2	Mo 202.031†	-26.0	30.2	0.9602	µg/L	0.9602	ppb	22:48:58
2	Ni 231.604†	-15.6	25.9	0.3314	µg/L	0.3314	ppb	22:48:58
2	P 214.914†	46.8	-34.6	-8.3885	µg/L	-8.3885	ppb	22:48:58
2	Pb 220.353†	117.5	0.6	0.0417	µg/L	0.0417	ppb	22:48:58

2	S 181.975 Axial†	115.7	16.5	13.373 µg/L	13.373 ppb	22:48:58
2	Sb 206.836†	76.2	-13.3	-1.7961 µg/L	-1.7961 ppb	22:48:58
2	Se 196.026†	15.8	4.3	1.76 µg/L	1.76 ppb	22:48:58
2	SiO2†	3200.0	1505.6	164.52 µg/L	164.52 ppb	22:48:38
2	Si 251.611†	5193.6	4320.1	71.412 µg/L	71.412 ppb	22:48:38
2	Sn 189.927†	18.2	15.5	1.1142 µg/L	1.1142 ppb	22:48:58
2	Ti 334.940†	4067.7	3276.9	3.3415 µg/L	3.3415 ppb	22:48:38
2	Tl 190.801†	-106.6	17.8	2.4275 µg/L	2.4275 ppb	22:48:58
2	U 409.014†	-425.6	69.7	4.2878 µg/L	4.2878 ppb	22:48:38
2	V 292.402†	429.3	-18.8	-0.1159 µg/L	-0.1159 ppb	22:48:38
2	Zn 213.857†	890.9	392.7	2.4549 µg/L	2.4549 ppb	22:48:58
3	Sc RADIAL	152226.6	152226.6	104 %		22:48:06
3	Al 396.153Radial†	306.6	325.4	70.998 µg/L	70.998 ppb	22:48:08
3	Ca 317.933Radial†	1361.4	687.3	40.274 µg/L	40.274 ppb	22:48:08
3	Fe 238.204 Radial†	2515.4	2295.1	152.59 µg/L	152.59 ppb	22:48:08
3	K 766.490 Radial†	1412.2	-102.8	-42.340 µg/L	-42.340 ppb	22:48:06
3	Mg 279.077 IEC†	219.9	23.9	9.7481 µg/L	9.7481 ppb	22:48:08
3	Na 589.592 Radial†	1622.2	-141.5	-21.620 µg/L	-21.620 ppb	22:48:08
3	Sr 421.552†	108.6	382.0	0.8950 µg/L	0.8950 ppb	22:48:08
3	Sc 361.383	1719221.7	1719221.7	102.78 %		22:49:00
3	Y 371.029	1049311.3	1049311.3	102.61 %		22:49:00
3	Ag 328.068†	3491.4	430.1	1.7468 µg/L	1.7468 ppb	22:49:02
3	As 188.979†	-0.1	14.1	5.9385 µg/L	5.9385 ppb	22:49:22
3	B 249.677†	3156.9	-284.0	-4.7691 µg/L	-4.7691 ppb	22:49:22
3	Ba 233.527†	223.1	392.1	1.7899 µg/L	1.7899 ppb	22:49:22
3	Be 313.107†	-943.9	-258.3	-0.0840 µg/L	-0.0840 ppb	22:49:02
3	Cd 226.502†	-103.4	-6.2	-0.0588 µg/L	-0.0588 ppb	22:49:22
3	Co 228.616†	-172.8	8.5	0.1100 µg/L	0.1100 ppb	22:49:22
3	Cr 267.716†	233.0	66.5	0.5755 µg/L	0.5755 ppb	22:49:22
3	Cu 324.752†	2667.4	170.4	0.7636 µg/L	0.7636 ppb	22:49:02
3	Mn 257.610†	2512.1	2364.2	3.2298 µg/L	3.2298 ppb	22:49:22
3	Mo 202.031†	-27.9	28.0	0.8908 µg/L	0.8908 ppb	22:49:22
3	Ni 231.604†	-49.8	-7.5	-0.0961 µg/L	-0.0961 ppb	22:49:22
3	P 214.914†	36.9	-43.6	-10.536 µg/L	-10.536 ppb	22:49:22
3	Pb 220.353†	92.4	-22.6	-1.3601 µg/L	-1.3601 ppb	22:49:22
3	S 181.975 Axial†	107.0	9.3	7.5567 µg/L	7.5567 ppb	22:49:22
3	Sb 206.836†	78.5	-10.3	-1.3771 µg/L	-1.3771 ppb	22:49:22
3	Se 196.026†	20.3	8.8	3.55 µg/L	3.55 ppb	22:49:22
3	SiO2†	3219.4	1559.5	170.40 µg/L	170.40 ppb	22:49:02
3	Si 251.611†	5299.9	4480.3	74.054 µg/L	74.054 ppb	22:49:02
3	Sn 189.927†	34.9	32.0	2.2845 µg/L	2.2845 ppb	22:49:22
3	Ti 334.940†	4036.6	3291.2	3.3560 µg/L	3.3560 ppb	22:49:02
3	Tl 190.801†	-109.3	14.0	1.9230 µg/L	1.9230 ppb	22:49:22
3	U 409.014†	-489.6	2.7	0.1754 µg/L	0.1754 ppb	22:49:02
3	V 292.402†	511.6	66.0	0.3503 µg/L	0.3503 ppb	22:49:02
3	Zn 213.857†	888.6	400.2	2.5056 µg/L	2.5056 ppb	22:49:22

Mean Data: 1202056877|959114|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1727256.4	103.26	%	0.612				0.59%
Sc RADIAL	153160.8	105	%	0.6				0.53%
Y 371.029	1053999.7	103.07	%	0.608				0.59%
Ag 328.068†	130.1	0.5347	µg/L	1.19545	0.5347	ppb	1.19545	223.56%
Al 396.153Radial†	360.3	78.614	µg/L	12.5802	78.614	ppb	12.5802	16.00%
As 188.979†	3.0	1.3090	µg/L	4.01385	1.3090	ppb	4.01385	306.64%
B 249.677†	-284.5	-4.7767	µg/L	0.39019	-4.7767	ppb	0.39019	8.17%
Ba 233.527†	396.9	1.8112	µg/L	0.04055	1.8112	ppb	0.04055	2.24%
Be 313.107†	-38.0	-0.0096	µg/L	0.06832	-0.0096	ppb	0.06832	711.49%
Ca 317.933Radial†	686.5	40.226	µg/L	0.9578	40.226	ppb	0.9578	2.38%
Cd 226.502†	5.3	0.0204	µg/L	0.06959	0.0204	ppb	0.06959	340.62%
Co 228.616†	6.4	0.0811	µg/L	0.16562	0.0811	ppb	0.16562	204.14%
Cr 267.716†	74.2	0.6349	µg/L	0.06298	0.6349	ppb	0.06298	9.92%
Cu 324.752†	311.7	1.3848	µg/L	0.58383	1.3848	ppb	0.58383	42.16%
Fe 238.204 Radial†	2305.4	153.27	µg/L	0.619	153.27	ppb	0.619	0.40%
K 766.490 Radial†	-50.1	-20.661	µg/L	37.1690	-20.661	ppb	37.1690	179.90%
Mg 279.077 IEC†	8.3	3.3317	µg/L	13.62925	3.3317	ppb	13.62925	409.08%
Mn 257.610†	2344.7	3.2033	µg/L	0.02292	3.2033	ppb	0.02292	0.72%
Mo 202.031†	26.5	0.8441	µg/L	0.14516	0.8441	ppb	0.14516	17.20%
Na 589.592 Radial†	-132.3	-20.225	µg/L	5.5348	-20.225	ppb	5.5348	27.37%

Ni 231.604†	8.2	0.1048 µg/L	0.21490	0.1048 ppb	0.21490	205.10%
P 214.914†	-34.9	-8.4499 µg/L	2.05586	-8.4499 ppb	2.05586	24.33%
Pb 220.353†	-17.5	-1.0584 µg/L	0.98464	-1.0584 ppb	0.98464	93.03%
S 181.975 Axial†	11.7	9.4776 µg/L	3.37359	9.4776 ppb	3.37359	35.60%
Sb 206.836†	-10.5	-1.4209 µg/L	0.35543	-1.4209 ppb	0.35543	25.01%
Se 196.026†	6.1	2.49 µg/L	0.944	2.49 ppb	0.944	37.92%
SiO2†	1518.1	165.88 µg/L	4.016	165.88 ppb	4.016	2.42%
Si 251.611†	4421.1	73.082 µg/L	1.4530	73.082 ppb	1.4530	1.99%
Sn 189.927†	20.0	1.4325 µg/L	0.74564	1.4325 ppb	0.74564	52.05%
Sr 421.552†	339.2	0.7947 µg/L	0.08696	0.7947 ppb	0.08696	10.94%
Ti 334.940†	3234.9	3.2954 µg/L	0.09270	3.2954 ppb	0.09270	2.81%
Tl 190.801†	13.9	1.9054 µg/L	0.53116	1.9054 ppb	0.53116	27.88%
U 409.014†	147.8	9.1110 µg/L	12.09158	9.1110 ppb	12.09158	132.71%
V 292.402†	-25.0	-0.1485 µg/L	0.51584	-0.1485 ppb	0.51584	347.44%
Zn 213.857†	401.0	2.5088 µg/L	0.05553	2.5088 ppb	0.05553	2.21%

Sequence No.: 93
Sample ID: 1202056882|959114|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 413
Date Collected: 3/29/2010 22:49:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202056882|959114|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	156540.3	156540.3	107	%			22:50:03
1	Al 396.153Radial†	504163.3	469456.9	102450	µg/L	102450	ppb	22:50:03
1	Ca 317.933Radial†	1954681.7	1819382.7	106610	µg/L	106610	ppb	22:50:00
1	Fe 238.204 Radial†	3217831.6	2996001.0	199180	µg/L	199180	ppb	22:50:00
1	K 766.490 Radial†	116415.7	106939.4	43977	µg/L	43977	ppb	22:50:03
1	Mg 279.077 IEC†	109432.9	101706.0	41777	µg/L	41777	ppb	22:50:03
1	Na 589.592 Radial†	81140.5	73855.0	11262	µg/L	11262	ppb	22:50:03
1	Sr 421.552†	1193276.2	1111334.3	2603.8	µg/L	2603.8	ppb	22:50:00
1	Sc 361.383	1741650.9	1741650.9	104.12	%			22:50:31
1	Y 371.029	1132485.7	1132485.7	110.75	%			22:50:31
1	Ag 328.068†	86352.2	79970.2	334.99	µg/L	334.99	ppb	22:50:31
1	As 188.979†	3058.9	2952.2	1304.9	µg/L	1304.9	ppb	22:50:33
1	B 249.677†	106142.1	98588.9	1651.7	µg/L	1651.7	ppb	22:50:31
1	Ba 233.527†	484373.9	465393.7	2124.5	µg/L	2124.5	ppb	22:50:31
1	Be 313.107†	2930802.2	2815559.0	916.44	µg/L	916.44	ppb	22:50:31
1	Cd 226.502†	101676.1	97749.6	654.77	µg/L	654.77	ppb	22:50:31
1	Co 228.616†	77188.1	74312.2	1009.6	µg/L	1009.6	ppb	22:50:31
1	Cr 267.716†	319865.5	307055.6	2643.2	µg/L	2643.2	ppb	22:50:31
1	Cu 324.752†	486244.4	464590.2	2050.2	µg/L	2050.2	ppb	22:50:31
1	Mn 257.610†	4428474.7	4253263.5	5809.6	µg/L	5809.6	ppb	22:50:31
1	Mo 202.031†	17301.4	16672.4	535.38	µg/L	535.38	ppb	22:50:33
1	Ni 231.604†	122128.6	117339.8	1500.9	µg/L	1500.9	ppb	22:50:31
1	P 214.914†	36583.9	35057.5	8264.9	µg/L	8264.9	ppb	22:50:33
1	Pb 220.353†	15335.6	14616.7	894.29	µg/L	894.29	ppb	22:50:33
1	S 181.975 Axial†	5332.9	5027.2	4077.4	µg/L	4077.4	ppb	22:50:33
1	Sb 206.836†	9521.4	9058.2	1190.8	µg/L	1190.8	ppb	22:50:33
1	Se 196.026†	7863.7	7541.8	3050	µg/L	3050	ppb	22:50:33
1	SiO2†	898794.5	861677.3	94151	µg/L	94151	ppb	22:50:31
1	Si 251.611†	2750796.7	2641335.6	43660	µg/L	43660	ppb	22:50:31
1	Sn 189.927†	16159.5	15518.5	1123.9	µg/L	1123.9	ppb	22:50:33
1	Ti 334.940†	6270682.0	6022061.5	6139.2	µg/L	6139.2	ppb	22:50:31
1	Tl 190.801†	9214.4	8970.3	1285.6	µg/L	1285.6	ppb	22:50:33
1	U 409.014†	-4404.7	-3751.4	-159.92	µg/L	-159.92	ppb	22:50:31
1	V 292.402†	254866.8	244355.8	1334.7	µg/L	1334.7	ppb	22:50:31
1	Zn 213.857†	1076563.6	1033524.7	6477.5	µg/L	6477.5	ppb	22:50:31
2	Sc RADIAL	158269.8	158269.8	109	%			22:50:07
2	Al 396.153Radial†	508681.2	468487.7	102240	µg/L	102240	ppb	22:50:07
2	Ca 317.933Radial†	1958528.7	1803036.5	105650	µg/L	105650	ppb	22:50:05
2	Fe 238.204 Radial†	3224602.5	2969495.0	197420	µg/L	197420	ppb	22:50:05
2	K 766.490 Radial†	117503.9	106757.0	43902	µg/L	43902	ppb	22:50:07
2	Mg 279.077 IEC†	110482.6	101559.2	41718	µg/L	41718	ppb	22:50:07
2	Na 589.592 Radial†	82008.2	73828.4	11258	µg/L	11258	ppb	22:50:07
2	Sr 421.552†	1197261.3	1102862.6	2584.0	µg/L	2584.0	ppb	22:50:05
2	Sc 361.383	1734836.2	1734836.2	103.71	%			22:50:37
2	Y 371.029	1128802.5	1128802.5	110.39	%			22:50:37
2	Ag 328.068†	86082.3	80035.7	335.28	µg/L	335.28	ppb	22:50:37
2	As 188.979†	3025.4	2931.4	1295.8	µg/L	1295.8	ppb	22:50:39
2	B 249.677†	105687.4	98550.9	1651.0	µg/L	1651.0	ppb	22:50:37
2	Ba 233.527†	482863.9	465765.1	2126.3	µg/L	2126.3	ppb	22:50:37
2	Be 313.107†	2921251.8	2817407.5	917.04	µg/L	917.04	ppb	22:50:37
2	Cd 226.502†	101330.7	97800.1	655.30	µg/L	655.30	ppb	22:50:37
2	Co 228.616†	76942.6	74366.6	1010.4	µg/L	1010.4	ppb	22:50:37
2	Cr 267.716†	318856.4	307289.4	2645.1	µg/L	2645.1	ppb	22:50:37
2	Cu 324.752†	484492.7	464735.7	2050.5	µg/L	2050.5	ppb	22:50:37
2	Mn 257.610†	4410520.4	4252659.2	5808.8	µg/L	5808.8	ppb	22:50:37
2	Mo 202.031†	17294.2	16730.7	537.15	µg/L	537.15	ppb	22:50:39
2	Ni 231.604†	121319.2	117020.1	1496.8	µg/L	1496.8	ppb	22:50:37
2	P 214.914†	36610.6	35221.3	8305.2	µg/L	8305.2	ppb	22:50:39
2	Pb 220.353†	15203.2	14546.9	890.12	µg/L	890.12	ppb	22:50:39

2	S 181.975 Axial†	5339.3	5053.5	4098.7 µg/L	4098.7 ppb	22:50:39
2	Sb 206.836†	9552.1	9123.8	1199.6 µg/L	1199.6 ppb	22:50:39
2	Se 196.026†	7957.3	7661.8	3100 µg/L	3100 ppb	22:50:39
2	SiO2†	895417.6	861812.2	94166 µg/L	94166 ppb	22:50:37
2	Si 251.611†	2740561.0	2641844.3	43668 µg/L	43668 ppb	22:50:37
2	Sn 189.927†	16036.5	15460.8	1119.9 µg/L	1119.9 ppb	22:50:39
2	Ti 334.940†	6252311.0	6028005.6	6145.2 µg/L	6145.2 ppb	22:50:37
2	Tl 190.801†	9228.0	9018.2	1292.1 µg/L	1292.1 ppb	22:50:39
2	U 409.014†	-4412.5	-3775.5	-161.09 µg/L	-161.09 ppb	22:50:37
2	V 292.402†	253787.1	244276.4	1334.6 µg/L	1334.6 ppb	22:50:37
2	Zn 213.857†	1071458.5	1032664.0	6472.3 µg/L	6472.3 ppb	22:50:37
3	Sc RADIAL	153966.6	153966.6	106 %		22:50:11
3	Al 396.153Radial†	495619.1	469215.3	102400 µg/L	102400 ppb	22:50:11
3	Ca 317.933Radial†	1927024.1	1823622.9	106860 µg/L	106860 ppb	22:50:09
3	Fe 238.204 Radial†	3171781.3	3002489.2	199620 µg/L	199620 ppb	22:50:09
3	K 766.490 Radial†	113991.2	106456.0	43778 µg/L	43778 ppb	22:50:11
3	Mg 279.077 IEC†	106515.6	100647.5	41340 µg/L	41340 ppb	22:50:11
3	Na 589.592 Radial†	79720.5	73773.6	11249 µg/L	11249 ppb	22:50:11
3	Sr 421.552†	1180516.8	1117827.5	2619.1 µg/L	2619.1 ppb	22:50:09
3	Sc 361.383	1722456.3	1722456.3	102.97 %		22:50:43
3	Y 371.029	1120682.5	1120682.5	109.59 %		22:50:43
3	Ag 328.068†	85548.8	80114.2	335.60 µg/L	335.60 ppb	22:50:43
3	As 188.979†	3056.3	2982.4	1317.7 µg/L	1317.7 ppb	22:50:45
3	B 249.677†	105167.8	98778.7	1654.8 µg/L	1654.8 ppb	22:50:43
3	Ba 233.527†	479911.5	466244.1	2128.4 µg/L	2128.4 ppb	22:50:43
3	Be 313.107†	2902704.2	2819639.9	917.77 µg/L	917.77 ppb	22:50:43
3	Cd 226.502†	100859.8	98045.1	656.76 µg/L	656.76 ppb	22:50:43
3	Co 228.616†	76505.8	74475.7	1011.8 µg/L	1011.8 ppb	22:50:43
3	Cr 267.716†	317200.6	307891.2	2650.4 µg/L	2650.4 ppb	22:50:43
3	Cu 324.752†	481922.0	465596.8	2054.6 µg/L	2054.6 ppb	22:50:43
3	Mn 257.610†	4390303.2	4263591.1	5823.8 µg/L	5823.8 ppb	22:50:43
3	Mo 202.031†	17355.0	16909.6	542.88 µg/L	542.88 ppb	22:50:45
3	Ni 231.604†	121051.6	117600.9	1504.3 µg/L	1504.3 ppb	22:50:43
3	P 214.914†	36481.1	35349.3	8334.4 µg/L	8334.4 ppb	22:50:45
3	Pb 220.353†	15338.2	14783.4	904.40 µg/L	904.40 ppb	22:50:45
3	S 181.975 Axial†	5432.3	5180.8	4201.9 µg/L	4201.9 ppb	22:50:45
3	Sb 206.836†	9519.1	9157.9	1204.2 µg/L	1204.2 ppb	22:50:45
3	Se 196.026†	8060.2	7816.8	3160 µg/L	3160 ppb	22:50:45
3	SiO2†	890711.6	863447.5	94344 µg/L	94344 ppb	22:50:43
3	Si 251.611†	2725175.7	2645895.5	43735 µg/L	43735 ppb	22:50:43
3	Sn 189.927†	16164.8	15696.5	1136.7 µg/L	1136.7 ppb	22:50:45
3	Ti 334.940†	6219089.5	6039072.3	6156.6 µg/L	6156.6 ppb	22:50:43
3	Tl 190.801†	9201.9	9056.8	1297.4 µg/L	1297.4 ppb	22:50:45
3	U 409.014†	-4231.3	-3630.1	-152.29 µg/L	-152.29 ppb	22:50:43
3	V 292.402†	252539.7	244823.7	1337.3 µg/L	1337.3 ppb	22:50:43
3	Zn 213.857†	1066957.6	1035718.3	6491.2 µg/L	6491.2 ppb	22:50:43

Mean Data: 1202056882|959114|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1732981.1	103.60	%	0.582				0.56%
Sc RADIAL	156258.9	107	%	1.5				1.39%
Y 371.029	1127323.6	110.24	%	0.591				0.54%
Ag 328.068†	80040.1	335.29	µg/L	0.306	335.29	ppb	0.306	0.09%
Al 396.153Radial†	469053.3	102360	µg/L	110.1	102360	ppb	110.1	0.11%
As 188.979†	2955.3	1306.1	µg/L	10.98	1306.1	ppb	10.98	0.84%
B 249.677†	98639.5	1652.5	µg/L	2.05	1652.5	ppb	2.05	0.12%
Ba 233.527†	465801.0	2126.4	µg/L	1.95	2126.4	ppb	1.95	0.09%
Be 313.107†	2817535.5	917.08	µg/L	0.666	917.08	ppb	0.666	0.07%
Ca 317.933Radial†	1815347.3	106370	µg/L	637.0	106370	ppb	637.0	0.60%
Cd 226.502†	97864.9	655.61	µg/L	1.034	655.61	ppb	1.034	0.16%
Co 228.616†	74384.8	1010.6	µg/L	1.12	1010.6	ppb	1.12	0.11%
Cr 267.716†	307412.1	2646.2	µg/L	3.72	2646.2	ppb	3.72	0.14%
Cu 324.752†	464974.2	2051.8	µg/L	2.46	2051.8	ppb	2.46	0.12%
Fe 238.204 Radial†	2989328.4	198740	µg/L	1162.1	198740	ppb	1162.1	0.58%
K 766.490 Radial†	106717.5	43886	µg/L	100.5	43886	ppb	100.5	0.23%
Mg 279.077 IEC†	101304.2	41611	µg/L	236.9	41611	ppb	236.9	0.57%
Mn 257.610†	4256504.6	5814.1	µg/L	8.40	5814.1	ppb	8.40	0.14%
Mo 202.031†	16770.9	538.47	µg/L	3.919	538.47	ppb	3.919	0.73%
Na 589.592 Radial†	73819.0	11256	µg/L	6.3	11256	ppb	6.3	0.06%

Ni 231.604†	117320.3	1500.7 µg/L	3.72	1500.7 ppb	3.72	0.25%
P 214.914†	35209.4	8301.5 µg/L	34.92	8301.5 ppb	34.92	0.42%
Pb 220.353†	14649.0	896.27 µg/L	7.346	896.27 ppb	7.346	0.82%
S 181.975 Axial†	5087.2	4126.0 µg/L	66.56	4126.0 ppb	66.56	1.61%
Sb 206.836†	9113.3	1198.2 µg/L	6.84	1198.2 ppb	6.84	0.57%
Se 196.026†	7673.5	3100 µg/L	54.6	3100 ppb	54.6	1.76%
SiO2†	862312.3	94220 µg/L	107.5	94220 ppb	107.5	0.11%
Si 251.611†	2643025.1	43688 µg/L	41.2	43688 ppb	41.2	0.09%
Sn 189.927†	15558.6	1126.8 µg/L	8.76	1126.8 ppb	8.76	0.78%
Sr 421.552†	1110674.8	2602.3 µg/L	17.58	2602.3 ppb	17.58	0.68%
Ti 334.940†	6029713.1	6147.0 µg/L	8.82	6147.0 ppb	8.82	0.14%
Tl 190.801†	9015.1	1291.7 µg/L	5.93	1291.7 ppb	5.93	0.46%
U 409.014†	-3719.0	-157.77 µg/L	4.781	-157.77 ppb	4.781	3.03%
Concentration less than lower limit for U 409.014.						
V 292.402†	244485.3	1335.6 µg/L	1.56	1335.6 ppb	1.56	0.12%
Zn 213.857†	1033969.0	6480.3 µg/L	9.79	6480.3 ppb	9.79	0.15%

Sequence No.: 94
Sample ID: 248110001|959114|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 414
Date Collected: 3/29/2010 22:50:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248110001|959114|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	154196.1	154196.1	106	%			22:51:25
1	Al 396.153Radial†	524231.5	495563.1	108180	µg/L	108180	ppb	22:51:23
1	Ca 317.933Radial†	565019.1	533469.6	31259	µg/L	31259	ppb	22:51:25
1	Fe 238.204 Radial†	2222785.3	2100980.2	139680	µg/L	139680	ppb	22:51:23
1	K 766.490 Radial†	46199.6	42215.3	17347	µg/L	17347	ppb	22:51:25
1	Mg 279.077 IEC†	56480.3	53201.4	21816	µg/L	21816	ppb	22:51:25
1	Na 589.592 Radial†	38601.6	34793.5	5308.4	µg/L	5308.4	ppb	22:51:25
1	Sr 421.552†	134556.5	127467.9	298.51	µg/L	298.51	ppb	22:51:25
1	Sc 361.383	1755706.5	1755706.5	104.96	%			22:51:38
1	Y 371.029	1191216.6	1191216.6	116.49	%			22:51:38
1	Ag 328.068†	3088.6	-24.3	-0.1953	µg/L	-0.1953	ppb	22:51:41
1	As 188.979†	9.5	23.3	41.938	µg/L	41.938	ppb	22:52:01
1	B 249.677†	4619.6	1045.7	17.363	µg/L	17.363	ppb	22:51:41
1	Ba 233.527†	365335.7	348253.9	1589.3	µg/L	1589.3	ppb	22:51:41
1	Be 313.107†	47837.8	46238.2	14.966	µg/L	14.966	ppb	22:51:41
1	Cd 226.502†	2042.7	2040.6	-0.5592	µg/L	-0.5592	ppb	22:52:01
1	Co 228.616†	4067.8	4052.2	49.775	µg/L	49.775	ppb	22:52:01
1	Cr 267.716†	11172.7	10484.7	94.234	µg/L	94.234	ppb	22:52:01
1	Cu 324.752†	12506.6	9491.0	61.993	µg/L	61.993	ppb	22:51:41
1	Mn 257.610†	2226688.5	2121429.3	2897.6	µg/L	2897.6	ppb	22:51:38
1	Mo 202.031†	-128.7	-67.4	3.8738	µg/L	3.8738	ppb	22:52:01
1	Ni 231.604†	6473.5	6208.6	79.416	µg/L	79.416	ppb	22:52:01
1	P 214.914†	7495.1	7061.5	1619.6	µg/L	1619.6	ppb	22:52:01
1	Pb 220.353†	1600.9	1412.8	94.136	µg/L	94.136	ppb	22:52:01
1	S 181.975 Axial†	1760.1	1582.2	1281.8	µg/L	1281.8	ppb	22:52:01
1	Sb 206.836†	60.9	-28.7	-7.3543	µg/L	-7.3543	ppb	22:52:01
1	Se 196.026†	-97.3	-103.6	7.21	µg/L	7.21	ppb	22:52:01
1	SiO2†	917609.6	872692.8	95386	µg/L	95386	ppb	22:51:38
1	Si 251.611†	2805712.5	2672506.4	44190	µg/L	44190	ppb	22:51:38
1	Sn 189.927†	9.3	6.8	16.165	µg/L	16.165	ppb	22:52:01
1	Ti 334.940†	4786961.8	4560210.0	4649.1	µg/L	4649.1	ppb	22:51:38
1	Tl 190.801†	-553.0	-406.6	1.0275	µg/L	1.0275	ppb	22:52:01
1	U 409.014†	-5301.1	-4571.6	-280.98	µg/L	-280.98	ppb	22:51:41
1	V 292.402†	43983.5	41474.1	203.72	µg/L	203.72	ppb	22:51:41
1	Zn 213.857†	49813.7	46996.3	284.48	µg/L	284.48	ppb	22:51:41
2	Sc RADIAL	155519.5	155519.5	107	%			22:51:30
2	Al 396.153Radial†	533843.9	500354.9	109220	µg/L	109220	ppb	22:51:28
2	Ca 317.933Radial†	567516.5	531265.1	31130	µg/L	31130	ppb	22:51:30
2	Fe 238.204 Radial†	2278289.7	2135119.3	141950	µg/L	141950	ppb	22:51:28
2	K 766.490 Radial†	46563.8	42185.0	17334	µg/L	17334	ppb	22:51:30
2	Mg 279.077 IEC†	56677.6	52932.1	21703	µg/L	21703	ppb	22:51:30
2	Na 589.592 Radial†	38781.1	34651.2	5286.6	µg/L	5286.6	ppb	22:51:30
2	Sr 421.552†	135007.5	126808.1	296.96	µg/L	296.96	ppb	22:51:30
2	Sc 361.383	1743587.0	1743587.0	104.23	%			22:52:03
2	Y 371.029	1183760.0	1183760.0	115.76	%			22:52:03
2	Ag 328.068†	2957.7	-129.5	-0.6014	µg/L	-0.6014	ppb	22:52:06
2	As 188.979†	29.7	42.8	50.582	µg/L	50.582	ppb	22:52:26
2	B 249.677†	4361.7	828.9	13.721	µg/L	13.721	ppb	22:52:06
2	Ba 233.527†	369514.9	354682.8	1618.6	µg/L	1618.6	ppb	22:52:06
2	Be 313.107†	48389.3	47084.2	15.236	µg/L	15.236	ppb	22:52:06
2	Cd 226.502†	2011.3	2024.0	-0.9123	µg/L	-0.9123	ppb	22:52:26
2	Co 228.616†	4081.7	4092.5	50.238	µg/L	50.238	ppb	22:52:26
2	Cr 267.716†	11207.9	10592.5	95.259	µg/L	95.259	ppb	22:52:26
2	Cu 324.752†	12707.5	9766.5	63.503	µg/L	63.503	ppb	22:52:06
2	Mn 257.610†	2202195.6	2112677.5	2885.6	µg/L	2885.6	ppb	22:52:03
2	Mo 202.031†	-123.1	-62.9	4.1071	µg/L	4.1071	ppb	22:52:26
2	Ni 231.604†	6503.0	6279.8	80.326	µg/L	80.326	ppb	22:52:26
2	P 214.914†	7535.8	7150.2	1639.6	µg/L	1639.6	ppb	22:52:26
2	Pb 220.353†	1601.3	1423.8	94.787	µg/L	94.787	ppb	22:52:26

2	S 181.975 Axial†	1761.5	1595.1	1292.3 µg/L	1292.3 ppb	22:52:26
2	Sb 206.836†	58.2	-30.8	-7.6858 µg/L	-7.6858 ppb	22:52:26
2	Se 196.026†	-100.7	-107.5	6.43 µg/L	6.43 ppb	22:52:26
2	SiO2†	907330.9	868908.5	94972 µg/L	94972 ppb	22:52:03
2	Si 251.611†	2775157.4	2661773.3	44012 µg/L	44012 ppb	22:52:03
2	Sn 189.927†	-6.7	-8.5	15.032 µg/L	15.032 ppb	22:52:26
2	Ti 334.940†	4739305.4	4546191.1	4634.8 µg/L	4634.8 ppb	22:52:03
2	Tl 190.801†	-543.0	-400.6	1.6783 µg/L	1.6783 ppb	22:52:26
2	U 409.014†	-5575.4	-4869.9	-299.76 µg/L	-299.76 ppb	22:52:06
2	V 292.402†	44484.2	42245.8	207.64 µg/L	207.64 ppb	22:52:06
2	Zn 213.857†	50473.7	47959.4	290.31 µg/L	290.31 ppb	22:52:06
3	Sc RADIAL	156264.5	156264.5	107 %		22:51:34
3	Al 396.153Radial†	521999.8	486922.3	106290 µg/L	106290 ppb	22:51:32
3	Ca 317.933Radial†	564807.6	526202.8	30833 µg/L	30833 ppb	22:51:34
3	Fe 238.204 Radial†	2212230.9	2063324.3	137180 µg/L	137180 ppb	22:51:32
3	K 766.490 Radial†	46160.8	41601.0	17094 µg/L	17094 ppb	22:51:34
3	Mg 279.077 IEC†	56369.1	52391.1	21484 µg/L	21484 ppb	22:51:34
3	Na 589.592 Radial†	38515.3	34230.1	5222.4 µg/L	5222.4 ppb	22:51:34
3	Sr 421.552†	134900.7	126105.3	295.32 µg/L	295.32 ppb	22:51:34
3	Sc 361.383	1735971.5	1735971.5	103.78 %		22:52:28
3	Y 371.029	1179367.5	1179367.5	115.33 %		22:52:28
3	Ag 328.068†	3124.5	43.7	0.1637 µg/L	0.1637 ppb	22:52:31
3	As 188.979†	16.9	30.5	44.391 µg/L	44.391 ppb	22:52:51
3	B 249.677†	4450.5	932.8	15.465 µg/L	15.465 ppb	22:52:31
3	Ba 233.527†	369645.3	356363.6	1626.4 µg/L	1626.4 ppb	22:52:31
3	Be 313.107†	48363.1	47262.6	15.296 µg/L	15.296 ppb	22:52:31
3	Cd 226.502†	2062.0	2081.3	-0.0142 µg/L	-0.0142 ppb	22:52:51
3	Co 228.616†	4080.3	4108.4	50.711 µg/L	50.711 ppb	22:52:51
3	Cr 267.716†	11242.0	10672.5	95.774 µg/L	95.774 ppb	22:52:51
3	Cu 324.752†	12651.6	9766.2	62.806 µg/L	62.806 ppb	22:52:31
3	Mn 257.610†	2208625.3	2128141.6	2906.8 µg/L	2906.8 ppb	22:52:28
3	Mo 202.031†	-111.6	-52.3	4.2487 µg/L	4.2487 ppb	22:52:51
3	Ni 231.604†	6503.8	6307.9	80.686 µg/L	80.686 ppb	22:52:51
3	P 214.914†	7534.7	7180.8	1649.5 µg/L	1649.5 ppb	22:52:51
3	Pb 220.353†	1604.7	1433.9	95.411 µg/L	95.411 ppb	22:52:51
3	S 181.975 Axial†	1767.5	1608.4	1303.1 µg/L	1303.1 ppb	22:52:51
3	Sb 206.836†	82.9	-6.7	-4.3563 µg/L	-4.3563 ppb	22:52:51
3	Se 196.026†	-112.5	-119.4	0.100 µg/L	0.100 ppb	22:52:51
3	SiO2†	909763.1	875070.9	95646 µg/L	95646 ppb	22:52:28
3	Si 251.611†	2780271.7	2678381.1	44287 µg/L	44287 ppb	22:52:28
3	Sn 189.927†	21.1	18.3	17.056 µg/L	17.056 ppb	22:52:51
3	Ti 334.940†	4754708.0	4580979.3	4670.3 µg/L	4670.3 ppb	22:52:28
3	Tl 190.801†	-551.6	-411.2	0.6776 µg/L	0.6776 ppb	22:52:51
3	U 409.014†	-5436.7	-4759.7	-291.64 µg/L	-291.64 ppb	22:52:31
3	V 292.402†	44632.0	42575.4	210.21 µg/L	210.21 ppb	22:52:31
3	Zn 213.857†	50212.6	47920.2	290.54 µg/L	290.54 ppb	22:52:31

Mean Data: 248110001|959114|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1745088.3	104.32	%	0.595				0.57%
Sc RADIAL	155326.7	107	%	0.7				0.67%
Y 371.029	1184781.4	115.86	%	0.586				0.51%
Ag 328.068†	-36.7	-0.2110	µg/L	0.38283	-0.2110	ppb	0.38283	181.43%
Al 396.153Radial†	494280.1	107900	µg/L	1486.0	107900	ppb	1486.0	1.38%
As 188.979†	32.2	45.637	µg/L	4.4549	45.637	ppb	4.4549	9.76%
B 249.677†	935.8	15.516	µg/L	1.8212	15.516	ppb	1.8212	11.74%
Ba 233.527†	353100.1	1611.4	µg/L	19.56	1611.4	ppb	19.56	1.21%
Be 313.107†	46861.7	15.166	µg/L	0.1757	15.166	ppb	0.1757	1.16%
Ca 317.933Radial†	530312.5	31074	µg/L	218.3	31074	ppb	218.3	0.70%
Cd 226.502†	2048.7	-0.4952	µg/L	0.45246	-0.4952	ppb	0.45246	91.37%
Co 228.616†	4084.4	50.241	µg/L	0.4682	50.241	ppb	0.4682	0.93%
Cr 267.716†	10583.2	95.089	µg/L	0.7843	95.089	ppb	0.7843	0.82%
Cu 324.752†	9674.5	62.767	µg/L	0.7559	62.767	ppb	0.7559	1.20%
Fe 238.204 Radial†	2099808.0	139600	µg/L	2387.5	139600	ppb	2387.5	1.71%
K 766.490 Radial†	42000.4	17258	µg/L	142.2	17258	ppb	142.2	0.82%
Mg 279.077 IEC†	52841.5	21667	µg/L	168.8	21667	ppb	168.8	0.78%
Mn 257.610†	2120749.5	2896.6	µg/L	10.61	2896.6	ppb	10.61	0.37%
Mo 202.031†	-60.9	4.0765	µg/L	0.18932	4.0765	ppb	0.18932	4.64%
Na 589.592 Radial†	34558.3	5272.5	µg/L	44.71	5272.5	ppb	44.71	0.85%

Ni 231.604†	6265.4	80.142 µg/L	0.6545	80.142 ppb	0.6545	0.82%
P 214.914†	7130.8	1636.2 µg/L	15.20	1636.2 ppb	15.20	0.93%
Pb 220.353†	1423.5	94.778 µg/L	0.6378	94.778 ppb	0.6378	0.67%
S 181.975 Axial†	1595.2	1292.4 µg/L	10.62	1292.4 ppb	10.62	0.82%
Sb 206.836†	-22.1	-6.4655 µg/L	1.83408	-6.4655 ppb	1.83408	28.37%
Se 196.026†	-110.2	4.58 µg/L	3.898	4.58 ppb	3.898	85.15%
SiO2†	872224.1	95335 µg/L	339.7	95335 ppb	339.7	0.36%
Si 251.611†	2670886.9	44163 µg/L	139.2	44163 ppb	139.2	0.32%
Sn 189.927†	5.6	16.084 µg/L	1.0143	16.084 ppb	1.0143	6.31%
Sr 421.552†	126793.8	296.93 µg/L	1.595	296.93 ppb	1.595	0.54%
Ti 334.940†	4562460.1	4651.4 µg/L	17.85	4651.4 ppb	17.85	0.38%
Tl 190.801†	-406.1	1.1278 µg/L	0.50781	1.1278 ppb	0.50781	45.03%
U 409.014†	-4733.7	-290.79 µg/L	9.422	-290.79 ppb	9.422	3.24%
Concentration less than lower limit for U 409.014.						
V 292.402†	42098.4	207.19 µg/L	3.269	207.19 ppb	3.269	1.58%
Zn 213.857†	47625.3	288.44 µg/L	3.432	288.44 ppb	3.432	1.19%

Sequence No.: 95
Sample ID: 1202056878|959114|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 415
Date Collected: 3/29/2010 22:52:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202056878|959114|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	156991.3	156991.3	108	%			22:53:29
1	Al 396.153Radial†	532899.0	494787.2	108010	µg/L	108010	ppb	22:53:27
1	Ca 317.933Radial†	530327.2	491751.5	28815	µg/L	28815	ppb	22:53:29
1	Fe 238.204 Radial†	2144947.4	1991303.9	132390	µg/L	132390	ppb	22:53:27
1	K 766.490 Radial†	42674.8	38165.3	15680	µg/L	15680	ppb	22:53:29
1	Mg 279.077 IEC†	51630.2	47747.9	19573	µg/L	19573	ppb	22:53:29
1	Na 589.592 Radial†	37188.4	32831.8	5009.7	µg/L	5009.7	ppb	22:53:29
1	Sr 421.552†	124602.5	115961.7	271.56	µg/L	271.56	ppb	22:53:29
1	Sc 361.383	1744488.8	1744488.8	104.29	%			22:53:42
1	Y 371.029	1178717.9	1178717.9	115.27	%			22:53:42
1	Ag 328.068†	3089.8	-4.2	0.1717	µg/L	0.1717	ppb	22:53:44
1	As 188.979†	12.7	26.5	41.592	µg/L	41.592	ppb	22:54:05
1	B 249.677†	4488.9	948.7	15.765	µg/L	15.765	ppb	22:53:44
1	Ba 233.527†	328800.4	315458.8	1439.6	µg/L	1439.6	ppb	22:53:44
1	Be 313.107†	45578.9	44365.3	14.356	µg/L	14.356	ppb	22:53:44
1	Cd 226.502†	1950.1	1964.3	-0.3216	µg/L	-0.3216	ppb	22:54:05
1	Co 228.616†	3364.9	3403.2	41.122	µg/L	41.122	ppb	22:54:05
1	Cr 267.716†	10916.0	10307.0	92.621	µg/L	92.621	ppb	22:54:05
1	Cu 324.752†	12208.4	9281.6	59.954	µg/L	59.954	ppb	22:53:44
1	Mn 257.610†	1792884.9	1719101.1	2347.9	µg/L	2347.9	ppb	22:53:42
1	Mo 202.031†	-139.9	-78.9	3.1825	µg/L	3.1825	ppb	22:54:05
1	Ni 231.604†	6079.7	5870.7	75.093	µg/L	75.093	ppb	22:54:05
1	P 214.914†	6946.3	6581.1	1509.5	µg/L	1509.5	ppb	22:54:05
1	Pb 220.353†	1358.8	1190.5	80.705	µg/L	80.705	ppb	22:54:05
1	S 181.975 Axial†	1610.0	1449.0	1174.0	µg/L	1174.0	ppb	22:54:05
1	Sb 206.836†	70.3	-19.2	-5.9710	µg/L	-5.9710	ppb	22:54:05
1	Se 196.026†	-112.1	-118.4	-1.19	µg/L	-1.19	ppb	22:54:05
1	SiO2†	867750.3	830505.0	90775	µg/L	90775	ppb	22:53:42
1	Si 251.611†	2654987.2	2545166.7	42084	µg/L	42084	ppb	22:53:42
1	Sn 189.927†	-12.4	-13.9	14.209	µg/L	14.209	ppb	22:54:05
1	Ti 334.940†	4610505.7	4420335.7	4506.6	µg/L	4506.6	ppb	22:53:42
1	Tl 190.801†	-529.6	-387.5	0.7915	µg/L	0.7915	ppb	22:54:05
1	U 409.014†	-5273.6	-4577.7	-283.26	µg/L	-283.26	ppb	22:53:44
1	V 292.402†	44064.5	41821.2	206.92	µg/L	206.92	ppb	22:53:44
1	Zn 213.857†	48938.0	46461.8	281.90	µg/L	281.90	ppb	22:53:44
2	Sc RADIAL	155773.1	155773.1	107	%			22:53:34
2	Al 396.153Radial†	535983.8	501542.9	109480	µg/L	109480	ppb	22:53:32
2	Ca 317.933Radial†	524186.5	489856.3	28703	µg/L	28703	ppb	22:53:34
2	Fe 238.204 Radial†	2152406.2	2013856.9	133890	µg/L	133890	ppb	22:53:32
2	K 766.490 Radial†	42324.5	38147.4	15672	µg/L	15672	ppb	22:53:34
2	Mg 279.077 IEC†	51103.8	47630.3	19524	µg/L	19524	ppb	22:53:34
2	Na 589.592 Radial†	36850.1	32785.3	5002.6	µg/L	5002.6	ppb	22:53:34
2	Sr 421.552†	123342.0	115687.0	270.92	µg/L	270.92	ppb	22:53:34
2	Sc 361.383	1734462.5	1734462.5	103.69	%			22:54:07
2	Y 371.029	1171047.6	1171047.6	114.52	%			22:54:07
2	Ag 328.068†	3159.7	80.3	0.5298	µg/L	0.5298	ppb	22:54:09
2	As 188.979†	24.1	37.5	46.559	µg/L	46.559	ppb	22:54:30
2	B 249.677†	4440.3	926.7	15.395	µg/L	15.395	ppb	22:54:09
2	Ba 233.527†	332095.2	320459.0	1462.4	µg/L	1462.4	ppb	22:54:09
2	Be 313.107†	46201.1	45218.0	14.630	µg/L	14.630	ppb	22:54:09
2	Cd 226.502†	1972.9	1997.1	-0.2525	µg/L	-0.2525	ppb	22:54:30
2	Co 228.616†	3372.3	3429.0	41.419	µg/L	41.419	ppb	22:54:30
2	Cr 267.716†	10955.1	10405.3	93.532	µg/L	93.532	ppb	22:54:30
2	Cu 324.752†	12370.0	9505.2	61.132	µg/L	61.132	ppb	22:54:09
2	Mn 257.610†	1772924.2	1709788.3	2335.2	µg/L	2335.2	ppb	22:54:07
2	Mo 202.031†	-142.1	-81.8	3.1502	µg/L	3.1502	ppb	22:54:30
2	Ni 231.604†	6077.3	5902.1	75.494	µg/L	75.494	ppb	22:54:30
2	P 214.914†	6933.6	6607.4	1515.1	µg/L	1515.1	ppb	22:54:30
2	Pb 220.353†	1397.7	1235.5	83.456	µg/L	83.456	ppb	22:54:30

2	S 181.975 Axial†	1606.9	1454.9	1178.7 µg/L	1178.7 ppb	22:54:30
2	Sb 206.836†	57.2	-31.5	-7.6633 µg/L	-7.6633 ppb	22:54:30
2	Se 196.026†	-97.9	-105.3	4.51 µg/L	4.51 ppb	22:54:30
2	SiO2†	858618.2	826507.7	90338 µg/L	90338 ppb	22:54:07
2	Si 251.611†	2624768.6	2530739.5	41845 µg/L	41845 ppb	22:54:07
2	Sn 189.927†	-7.0	-8.8	14.496 µg/L	14.496 ppb	22:54:30
2	Ti 334.940†	4560443.3	4397609.9	4483.4 µg/L	4483.4 ppb	22:54:07
2	Tl 190.801†	-543.1	-403.5	-1.5963 µg/L	-1.5963 ppb	22:54:30
2	U 409.014†	-5470.0	-4796.4	-297.03 µg/L	-297.03 ppb	22:54:09
2	V 292.402†	44356.7	42347.3	209.62 µg/L	209.62 ppb	22:54:09
2	Zn 213.857†	49319.1	47100.6	285.77 µg/L	285.77 ppb	22:54:09
3	Sc RADIAL	156720.5	156720.5	108 %		22:53:38
3	Al 396.153Radial†	532203.2	494994.8	108050 µg/L	108050 ppb	22:53:36
3	Ca 317.933Radial†	528226.0	490647.8	28750 µg/L	28750 ppb	22:53:38
3	Fe 238.204 Radial†	2141313.1	1991364.0	132390 µg/L	132390 ppb	22:53:36
3	K 766.490 Radial†	42807.8	38357.3	15759 µg/L	15759 ppb	22:53:38
3	Mg 279.077 IEC†	51381.3	47599.2	19512 µg/L	19512 ppb	22:53:38
3	Na 589.592 Radial†	37112.5	32820.9	5008.0 µg/L	5008.0 ppb	22:53:38
3	Sr 421.552†	124421.7	115993.4	271.63 µg/L	271.63 ppb	22:53:38
3	Sc 361.383	1745300.5	1745300.5	104.34 %		22:54:32
3	Y 371.029	1179003.4	1179003.4	115.30 %		22:54:32
3	Ag 328.068†	3160.1	61.7	0.4039 µg/L	0.4039 ppb	22:54:34
3	As 188.979†	13.3	27.0	41.806 µg/L	41.806 ppb	22:54:55
3	B 249.677†	4264.9	732.0	12.128 µg/L	12.128 ppb	22:54:34
3	Ba 233.527†	326901.4	313492.1	1430.6 µg/L	1430.6 ppb	22:54:34
3	Be 313.107†	45420.3	44192.9	14.296 µg/L	14.296 ppb	22:54:34
3	Cd 226.502†	1943.3	1957.0	-0.3727 µg/L	-0.3727 ppb	22:54:55
3	Co 228.616†	3360.2	3397.2	41.031 µg/L	41.031 ppb	22:54:55
3	Cr 267.716†	10862.6	10251.0	92.152 µg/L	92.152 ppb	22:54:55
3	Cu 324.752†	12062.4	9136.3	59.310 µg/L	59.310 ppb	22:54:34
3	Mn 257.610†	1788465.5	1714065.8	2341.0 µg/L	2341.0 ppb	22:54:32
3	Mo 202.031†	-142.3	-81.1	3.1101 µg/L	3.1101 ppb	22:54:55
3	Ni 231.604†	6052.8	5842.2	74.728 µg/L	74.728 ppb	22:54:55
3	P 214.914†	6869.0	6504.0	1491.1 µg/L	1491.1 ppb	22:54:55
3	Pb 220.353†	1336.6	1168.7	79.382 µg/L	79.382 ppb	22:54:55
3	S 181.975 Axial†	1597.1	1435.9	1163.3 µg/L	1163.3 ppb	22:54:55
3	Sb 206.836†	69.3	-20.2	-6.1029 µg/L	-6.1029 ppb	22:54:55
3	Se 196.026†	-104.5	-111.0	1.72 µg/L	1.72 ppb	22:54:55
3	SiO2†	865855.2	828301.8	90534 µg/L	90534 ppb	22:54:32
3	Si 251.611†	2649633.4	2538851.5	41980 µg/L	41980 ppb	22:54:32
3	Sn 189.927†	-8.3	-10.0	14.456 µg/L	14.456 ppb	22:54:55
3	Ti 334.940†	4601891.0	4410023.0	4496.1 µg/L	4496.1 ppb	22:54:32
3	Tl 190.801†	-537.6	-395.0	-0.3477 µg/L	-0.3477 ppb	22:54:55
3	U 409.014†	-5501.7	-4794.0	-296.78 µg/L	-296.78 ppb	22:54:34
3	V 292.402†	43728.7	41479.7	205.03 µg/L	205.03 ppb	22:54:34
3	Zn 213.857†	48489.9	46010.5	279.05 µg/L	279.05 ppb	22:54:34

Mean Data: 1202056878|959114|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1741417.2	104.10	%	0.361				0.35%
Sc RADIAL	156495.0	107	%	0.4				0.41%
Y 371.029	1176256.3	115.03	%	0.441				0.38%
Ag 328.068†	45.9	0.3685	µg/L	0.18165	0.3685	ppb	0.18165	49.30%
Al 396.153Radial†	497108.3	108510	µg/L	838.6	108510	ppb	838.6	0.77%
As 188.979†	30.3	43.319	µg/L	2.8076	43.319	ppb	2.8076	6.48%
B 249.677†	869.1	14.429	µg/L	2.0015	14.429	ppb	2.0015	13.87%
Ba 233.527†	316469.9	1444.2	µg/L	16.40	1444.2	ppb	16.40	1.14%
Be 313.107†	44592.1	14.427	µg/L	0.1778	14.427	ppb	0.1778	1.23%
Ca 317.933Radial†	490751.9	28756	µg/L	55.8	28756	ppb	55.8	0.19%
Cd 226.502†	1972.8	-0.3156	µg/L	0.06034	-0.3156	ppb	0.06034	19.12%
Co 228.616†	3409.8	41.190	µg/L	0.2033	41.190	ppb	0.2033	0.49%
Cr 267.716†	10321.1	92.768	µg/L	0.7020	92.768	ppb	0.7020	0.76%
Cu 324.752†	9307.7	60.132	µg/L	0.9240	60.132	ppb	0.9240	1.54%
Fe 238.204 Radial†	1998841.6	132890	µg/L	864.5	132890	ppb	864.5	0.65%
K 766.490 Radial†	38223.3	15704	µg/L	48.0	15704	ppb	48.0	0.31%
Mg 279.077 IEC†	47659.2	19536	µg/L	32.6	19536	ppb	32.6	0.17%
Mn 257.610†	1714318.4	2341.4	µg/L	6.37	2341.4	ppb	6.37	0.27%
Mo 202.031†	-80.6	3.1476	µg/L	0.03623	3.1476	ppb	0.03623	1.15%
Na 589.592 Radial†	32812.7	5006.8	µg/L	3.71	5006.8	ppb	3.71	0.07%

Ni 231.604†	5871.7	75.105 µg/L	0.3830	75.105 ppb	0.3830	0.51%
P 214.914†	6564.2	1505.2 µg/L	12.58	1505.2 ppb	12.58	0.84%
Pb 220.353†	1198.2	81.181 µg/L	2.0781	81.181 ppb	2.0781	2.56%
S 181.975 Axial†	1446.6	1172.0 µg/L	7.88	1172.0 ppb	7.88	0.67%
Sb 206.836†	-23.6	-6.5790 µg/L	0.94128	-6.5790 ppb	0.94128	14.31%
Se 196.026†	-111.6	1.68 µg/L	2.853	1.68 ppb	2.853	169.61%
SiO2†	828438.2	90549 µg/L	218.8	90549 ppb	218.8	0.24%
Si 251.611†	2538252.6	41970 µg/L	119.6	41970 ppb	119.6	0.28%
Sn 189.927†	-10.9	14.387 µg/L	0.1557	14.387 ppb	0.1557	1.08%
Sr 421.552†	115880.7	271.37 µg/L	0.395	271.37 ppb	0.395	0.15%
Ti 334.940†	4409322.9	4495.4 µg/L	11.60	4495.4 ppb	11.60	0.26%
Tl 190.801†	-395.3	-0.3842 µg/L	1.19432	-0.3842 ppb	1.19432	310.89%
U 409.014†	-4722.7	-292.35 µg/L	7.881	-292.35 ppb	7.881	2.70%
Concentration less than lower limit for U 409.014.						
V 292.402†	41882.7	207.19 µg/L	2.308	207.19 ppb	2.308	1.11%
Zn 213.857†	46524.3	282.24 µg/L	3.371	282.24 ppb	3.371	1.19%

Sequence No.: 96
Sample ID: 1202056880|959114|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 416
Date Collected: 3/29/2010 22:55:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202056880|959114|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	152274.7	152274.7	104	%			22:55:34
1	Al 396.153Radial†	855266.5	818675.2	178690	µg/L	178690	ppb	22:55:32
1	Ca 317.933Radial†	656361.3	627639.2	36777	µg/L	36777	ppb	22:55:34
1	Fe 238.204 Radial†	2445145.4	2340329.1	155590	µg/L	155590	ppb	22:55:32
1	K 766.490 Radial†	61389.6	57305.8	23541	µg/L	23541	ppb	22:55:34
1	Mg 279.077 IEC†	72525.0	69232.8	28423	µg/L	28423	ppb	22:55:34
1	Na 589.592 Radial†	68335.9	63715.0	9728.2	µg/L	9728.2	ppb	22:55:34
1	Sr 421.552†	333993.6	319969.7	749.64	µg/L	749.64	ppb	22:55:34
1	Sc 361.383	1719268.3	1719268.3	102.78	%			22:55:49
1	Y 371.029	1161275.3	1161275.3	113.56	%			22:55:49
1	Ag 328.068†	111760.2	105770.9	435.44	µg/L	435.44	ppb	22:55:49
1	As 188.979†	1210.9	1192.4	539.99	µg/L	539.99	ppb	22:55:51
1	B 249.677†	30893.7	26702.6	446.67	µg/L	446.67	ppb	22:55:49
1	Ba 233.527†	457093.7	444907.6	2031.1	µg/L	2031.1	ppb	22:55:49
1	Be 313.107†	1507001.6	1466908.1	477.54	µg/L	477.54	ppb	22:55:49
1	Cd 226.502†	64719.7	63063.9	419.38	µg/L	419.38	ppb	22:55:49
1	Co 228.616†	35019.7	34249.3	462.91	µg/L	462.91	ppb	22:55:51
1	Cr 267.716†	70355.3	68292.5	591.14	µg/L	591.14	ppb	22:55:49
1	Cu 324.752†	135786.8	129689.8	587.59	µg/L	587.59	ppb	22:55:49
1	Mn 257.610†	2215486.3	2155493.3	2943.8	µg/L	2943.8	ppb	22:55:49
1	Mo 202.031†	14341.0	14008.4	449.11	µg/L	449.11	ppb	22:55:51
1	Ni 231.604†	45190.9	44009.7	562.94	µg/L	562.94	ppb	22:55:51
1	P 214.914†	9675.7	9334.5	2162.5	µg/L	2162.5	ppb	22:55:51
1	Pb 220.353†	8418.6	8078.5	503.96	µg/L	503.96	ppb	22:55:51
1	S 181.975 Axial†	7712.4	7409.0	6006.4	µg/L	6006.4	ppb	22:55:51
1	Sb 206.836†	2363.2	2212.7	294.77	µg/L	294.77	ppb	22:55:51
1	Se 196.026†	1111.0	1070.0	477	µg/L	477	ppb	22:55:51
1	SiO2†	913975.7	887686.4	97005	µg/L	97005	ppb	22:55:49
1	Si 251.611†	2795508.2	2719233.4	44953	µg/L	44953	ppb	22:55:49
1	Sn 189.927†	6784.3	6598.8	488.64	µg/L	488.64	ppb	22:55:51
1	Ti 334.940†	5834213.4	5675803.4	5785.9	µg/L	5785.9	ppb	22:55:49
1	Tl 190.801†	2934.4	2975.4	468.16	µg/L	468.16	ppb	22:55:51
1	U 409.014†	1750.1	2181.8	161.71	µg/L	161.71	ppb	22:55:49
1	V 292.402†	136559.8	132435.0	711.71	µg/L	711.71	ppb	22:55:49
1	Zn 213.857†	132628.6	128577.6	794.51	µg/L	794.51	ppb	22:55:49
2	Sc RADIAL	152809.6	152809.6	105	%			22:55:39
2	Al 396.153Radial†	853420.6	814049.2	177680	µg/L	177680	ppb	22:55:37
2	Ca 317.933Radial†	662541.6	631335.2	36994	µg/L	36994	ppb	22:55:39
2	Fe 238.204 Radial†	2434549.1	2322030.4	154380	µg/L	154380	ppb	22:55:37
2	K 766.490 Radial†	61752.2	57446.0	23599	µg/L	23599	ppb	22:55:39
2	Mg 279.077 IEC†	73214.3	69647.2	28595	µg/L	28595	ppb	22:55:39
2	Na 589.592 Radial†	68870.0	63995.5	9771.1	µg/L	9771.1	ppb	22:55:39
2	Sr 421.552†	337539.9	322233.4	754.94	µg/L	754.94	ppb	22:55:39
2	Sc 361.383	1750707.9	1750707.9	104.66	%			22:55:55
2	Y 371.029	1180983.6	1180983.6	115.49	%			22:55:55
2	Ag 328.068†	114066.1	106021.3	436.45	µg/L	436.45	ppb	22:55:55
2	As 188.979†	1239.3	1198.4	542.26	µg/L	542.26	ppb	22:55:57
2	B 249.677†	31559.2	26798.6	448.29	µg/L	448.29	ppb	22:55:55
2	Ba 233.527†	467203.3	446580.7	2038.7	µg/L	2038.7	ppb	22:55:55
2	Be 313.107†	1543276.9	1475237.5	480.25	µg/L	480.25	ppb	22:55:55
2	Cd 226.502†	66445.9	63582.5	423.09	µg/L	423.09	ppb	22:55:55
2	Co 228.616†	35571.9	34165.0	461.82	µg/L	461.82	ppb	22:55:57
2	Cr 267.716†	72017.6	68651.4	594.18	µg/L	594.18	ppb	22:55:55
2	Cu 324.752†	138957.3	130346.7	590.27	µg/L	590.27	ppb	22:55:55
2	Mn 257.610†	2264005.5	2163142.5	2954.3	µg/L	2954.3	ppb	22:55:55
2	Mo 202.031†	14562.1	13969.1	447.83	µg/L	447.83	ppb	22:55:57
2	Ni 231.604†	45792.2	43794.6	560.18	µg/L	560.18	ppb	22:55:57
2	P 214.914†	9866.4	9347.6	2166.2	µg/L	2166.2	ppb	22:55:57
2	Pb 220.353†	8550.1	8057.0	502.66	µg/L	502.66	ppb	22:55:57

2	S 181.975 Axial†	7907.4	7460.6	6048.2 µg/L	6048.2 ppb	22:55:57
2	Sb 206.836†	2439.9	2244.6	299.04 µg/L	299.04 ppb	22:55:57
2	Se 196.026†	1094.5	1034.8	463 µg/L	463 ppb	22:55:57
2	SiO2†	933993.9	890843.9	97351 µg/L	97351 ppb	22:55:55
2	Si 251.611†	2857650.7	2729765.0	45127 µg/L	45127 ppb	22:55:55
2	Sn 189.927†	6888.6	6579.9	487.35 µg/L	487.35 ppb	22:55:57
2	Ti 334.940†	5958897.9	5692999.1	5803.4 µg/L	5803.4 ppb	22:55:55
2	Tl 190.801†	3001.5	2988.2	470.10 µg/L	470.10 ppb	22:55:57
2	U 409.014†	1686.6	2090.6	156.45 µg/L	156.45 ppb	22:55:55
2	V 292.402†	139128.2	132503.0	712.26 µg/L	712.26 ppb	22:55:55
2	Zn 213.857†	135549.2	129050.8	797.62 µg/L	797.62 ppb	22:55:55
3	Sc RADIAL	153791.6	153791.6	106 %		22:55:43
3	Al 396.153Radial†	859718.8	814820.6	177840 µg/L	177840 ppb	22:55:41
3	Ca 317.933Radial†	663973.6	628657.2	36837 µg/L	36837 ppb	22:55:43
3	Fe 238.204 Radial†	2452785.3	2324486.1	154540 µg/L	154540 ppb	22:55:41
3	K 766.490 Radial†	61857.6	57169.9	23485 µg/L	23485 ppb	22:55:43
3	Mg 279.077 IEC†	73456.4	69430.8	28505 µg/L	28505 ppb	22:55:43
3	Na 589.592 Radial†	69130.5	63822.9	9744.8 µg/L	9744.8 ppb	22:55:43
3	Sr 421.552†	337787.3	320412.0	750.67 µg/L	750.67 ppb	22:55:43
3	Sc 361.383	1728119.0	1728119.0	103.31 %		22:56:01
3	Y 371.029	1166957.9	1166957.9	114.12 %		22:56:01
3	Ag 328.068†	112660.7	106085.6	436.71 µg/L	436.71 ppb	22:56:01
3	As 188.979†	1237.6	1212.2	548.07 µg/L	548.07 ppb	22:56:03
3	B 249.677†	31172.1	26818.1	448.62 µg/L	448.62 ppb	22:56:01
3	Ba 233.527†	460447.4	445876.2	2035.5 µg/L	2035.5 ppb	22:56:01
3	Be 313.107†	1521944.3	1473862.8	479.80 µg/L	479.80 ppb	22:56:01
3	Cd 226.502†	65582.0	63576.1	423.03 µg/L	423.03 ppb	22:56:01
3	Co 228.616†	35019.7	34074.7	460.58 µg/L	460.58 ppb	22:56:03
3	Cr 267.716†	71032.3	68597.2	593.73 µg/L	593.73 ppb	22:56:01
3	Cu 324.752†	137027.1	130213.8	589.70 µg/L	589.70 ppb	22:56:01
3	Mn 257.610†	2233191.2	2161591.3	2952.1 µg/L	2952.1 ppb	22:56:01
3	Mo 202.031†	14528.4	14118.4	452.54 µg/L	452.54 ppb	22:56:03
3	Ni 231.604†	45078.7	43675.9	558.67 µg/L	558.67 ppb	22:56:03
3	P 214.914†	9678.4	9288.9	2152.0 µg/L	2152.0 ppb	22:56:03
3	Pb 220.353†	8431.8	8049.3	502.21 µg/L	502.21 ppb	22:56:03
3	S 181.975 Axial†	7812.3	7467.3	6053.6 µg/L	6053.6 ppb	22:56:03
3	Sb 206.836†	2431.3	2266.8	302.10 µg/L	302.10 ppb	22:56:03
3	Se 196.026†	1040.0	995.8	448 µg/L	448 ppb	22:56:03
3	SiO2†	920640.3	889583.1	97213 µg/L	97213 ppb	22:56:01
3	Si 251.611†	2817190.4	2726291.0	45070 µg/L	45070 ppb	22:56:01
3	Sn 189.927†	6742.2	6524.2	483.39 µg/L	483.39 ppb	22:56:03
3	Ti 334.940†	5880893.9	5691916.7	5802.3 µg/L	5802.3 ppb	22:56:01
3	Tl 190.801†	2925.2	2951.8	465.21 µg/L	465.21 ppb	22:56:03
3	U 409.014†	1530.1	1960.2	148.34 µg/L	148.34 ppb	22:56:01
3	V 292.402†	137356.7	132525.9	712.40 µg/L	712.40 ppb	22:56:01
3	Zn 213.857†	133661.9	128916.9	796.78 µg/L	796.78 ppb	22:56:01

Mean Data: 1202056880|959114|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1732698.4	103.58	%	0.969				0.94%
Sc RADIAL	152958.6	105	%	0.5				0.50%
Y 371.029	1169739.0	114.39	%	0.992				0.87%
Ag 328.068†	105959.3	436.20	µg/L	0.671	436.20	ppb	0.671	0.15%
Al 396.153Radial†	815848.3	178070	µg/L	541.0	178070	ppb	541.0	0.30%
As 188.979†	1201.0	543.44	µg/L	4.163	543.44	ppb	4.163	0.77%
B 249.677†	26773.1	447.86	µg/L	1.042	447.86	ppb	1.042	0.23%
Ba 233.527†	445788.2	2035.1	µg/L	3.85	2035.1	ppb	3.85	0.19%
Be 313.107†	1472002.8	479.20	µg/L	1.452	479.20	ppb	1.452	0.30%
Ca 317.933Radial†	629210.5	36869	µg/L	111.9	36869	ppb	111.9	0.30%
Cd 226.502†	63407.5	421.84	µg/L	2.123	421.84	ppb	2.123	0.50%
Co 228.616†	34163.0	461.77	µg/L	1.166	461.77	ppb	1.166	0.25%
Cr 267.716†	68513.7	593.01	µg/L	1.641	593.01	ppb	1.641	0.28%
Cu 324.752†	130083.5	589.19	µg/L	1.412	589.19	ppb	1.412	0.24%
Fe 238.204 Radial†	2328948.5	154840	µg/L	660.3	154840	ppb	660.3	0.43%
K 766.490 Radial†	57307.2	23542	µg/L	56.8	23542	ppb	56.8	0.24%
Mg 279.077 IEC†	69436.9	28508	µg/L	86.0	28508	ppb	86.0	0.30%
Mn 257.610†	2160075.7	2950.1	µg/L	5.52	2950.1	ppb	5.52	0.19%
Mo 202.031†	14031.9	449.83	µg/L	2.438	449.83	ppb	2.438	0.54%
Na 589.592 Radial†	63844.5	9748.0	µg/L	21.62	9748.0	ppb	21.62	0.22%

Ni 231.604†	43826.7	560.59 µg/L	2.164	560.59 ppb	2.164	0.39%
P 214.914†	9323.6	2160.2 µg/L	7.38	2160.2 ppb	7.38	0.34%
Pb 220.353†	8061.6	502.94 µg/L	0.907	502.94 ppb	0.907	0.18%
S 181.975 Axial†	7445.6	6036.1 µg/L	25.85	6036.1 ppb	25.85	0.43%
Sb 206.836†	2241.4	298.64 µg/L	3.680	298.64 ppb	3.680	1.23%
Se 196.026†	1033.5	463 µg/L	14.9	463 ppb	14.9	3.22%
SiO2†	889371.1	97190 µg/L	173.7	97190 ppb	173.7	0.18%
Si 251.611†	2725096.5	45050 µg/L	88.7	45050 ppb	88.7	0.20%
Sn 189.927†	6567.6	486.46 µg/L	2.736	486.46 ppb	2.736	0.56%
Sr 421.552†	320871.7	751.75 µg/L	2.811	751.75 ppb	2.811	0.37%
Ti 334.940†	5686906.4	5797.2 µg/L	9.82	5797.2 ppb	9.82	0.17%
Tl 190.801†	2971.8	467.83 µg/L	2.465	467.83 ppb	2.465	0.53%
U 409.014†	2077.5	155.50 µg/L	6.738	155.50 ppb	6.738	4.33%
V 292.402†	132488.0	712.13 µg/L	0.366	712.13 ppb	0.366	0.05%
Zn 213.857†	128848.4	796.30 µg/L	1.610	796.30 ppb	1.610	0.20%

Sequence No.: 97
Sample ID: 1202056881|959114|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 417
Date Collected: 3/29/2010 22:56:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202056881|959114|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	153962.4	153962.4	106	%			22:56:43
1	Al 396.153Radial†	901543.0	853511.2	186290	µg/L	186290	ppb	22:56:40
1	Ca 317.933Radial†	639676.3	604957.2	35448	µg/L	35448	ppb	22:56:43
1	Fe 238.204 Radial†	2322942.0	2198986.5	146200	µg/L	146200	ppb	22:56:40
1	K 766.490 Radial†	62053.2	57290.0	23533	µg/L	23533	ppb	22:56:43
1	Mg 279.077 IEC†	73981.9	69851.1	28686	µg/L	28686	ppb	22:56:43
1	Na 589.592 Radial†	71197.8	65707.3	10033	µg/L	10033	ppb	22:56:43
1	Sr 421.552†	342567.7	324582.5	760.46	µg/L	760.46	ppb	22:56:43
1	Sc 361.383	1711574.5	1711574.5	102.32	%			22:56:57
1	Y 371.029	1144656.2	1144656.2	111.94	%			22:56:57
1	Ag 328.068†	113743.7	108198.2	445.27	µg/L	445.27	ppb	22:56:57
1	As 188.979†	1230.3	1216.7	548.08	µg/L	548.08	ppb	22:56:59
1	B 249.677†	31201.1	27138.2	453.92	µg/L	453.92	ppb	22:56:57
1	Ba 233.527†	456543.6	446369.1	2037.9	µg/L	2037.9	ppb	22:56:57
1	Be 313.107†	1532299.4	1498223.5	487.74	µg/L	487.74	ppb	22:56:57
1	Cd 226.502†	65553.9	64162.2	427.96	µg/L	427.96	ppb	22:56:57
1	Co 228.616†	36219.6	35575.1	481.55	µg/L	481.55	ppb	22:56:59
1	Cr 267.716†	70082.7	68333.7	591.08	µg/L	591.08	ppb	22:56:57
1	Cu 324.752†	137256.7	131720.3	595.08	µg/L	595.08	ppb	22:56:57
1	Mn 257.610†	2396999.8	2342581.7	3199.5	µg/L	3199.5	ppb	22:56:57
1	Mo 202.031†	14574.1	14298.9	457.92	µg/L	457.92	ppb	22:56:59
1	Ni 231.604†	45983.2	44981.7	575.37	µg/L	575.37	ppb	22:56:59
1	P 214.914†	9734.9	9434.7	2194.4	µg/L	2194.4	ppb	22:56:59
1	Pb 220.353†	8734.2	8423.7	525.55	µg/L	525.55	ppb	22:56:59
1	S 181.975 Axial†	7916.1	7641.8	6195.1	µg/L	6195.1	ppb	22:56:59
1	Sb 206.836†	2408.8	2267.6	302.37	µg/L	302.37	ppb	22:56:59
1	Se 196.026†	1107.6	1071.6	475	µg/L	475	ppb	22:56:59
1	SiO2†	950355.6	927239.0	101330	µg/L	101330	ppb	22:56:57
1	Si 251.611†	2906780.9	2840210.0	46953	µg/L	46953	ppb	22:56:57
1	Sn 189.927†	6812.4	6656.0	492.45	µg/L	492.45	ppb	22:56:59
1	Ti 334.940†	5732918.0	5602320.9	5710.9	µg/L	5710.9	ppb	22:56:57
1	Tl 190.801†	3041.8	3093.1	483.75	µg/L	483.75	ppb	22:56:59
1	U 409.014†	2085.8	2517.6	185.90	µg/L	185.90	ppb	22:56:57
1	V 292.402†	134985.7	131493.8	708.16	µg/L	708.16	ppb	22:56:57
1	Zn 213.857†	128602.5	125222.7	774.37	µg/L	774.37	ppb	22:56:57
2	Sc RADIAL	154224.9	154224.9	106	%			22:56:47
2	Al 396.153Radial†	899833.7	850442.9	185620	µg/L	185620	ppb	22:56:45
2	Ca 317.933Radial†	643817.4	607840.1	35617	µg/L	35617	ppb	22:56:47
2	Fe 238.204 Radial†	2307774.4	2180908.5	144990	µg/L	144990	ppb	22:56:45
2	K 766.490 Radial†	62735.8	57835.1	23758	µg/L	23758	ppb	22:56:47
2	Mg 279.077 IEC†	74687.3	70398.5	28913	µg/L	28913	ppb	22:56:47
2	Na 589.592 Radial†	71674.7	66043.3	10084	µg/L	10084	ppb	22:56:47
2	Sr 421.552†	343448.0	324862.4	761.11	µg/L	761.11	ppb	22:56:47
2	Sc 361.383	1727648.1	1727648.1	103.28	%			22:57:03
2	Y 371.029	1154511.5	1154511.5	112.90	%			22:57:03
2	Ag 328.068†	114185.8	107592.0	442.82	µg/L	442.82	ppb	22:57:03
2	As 188.979†	1221.4	1196.8	539.48	µg/L	539.48	ppb	22:57:05
2	B 249.677†	31498.2	27142.1	454.02	µg/L	454.02	ppb	22:57:03
2	Ba 233.527†	460200.0	445758.2	2035.1	µg/L	2035.1	ppb	22:57:03
2	Be 313.107†	1545668.3	1497234.9	487.42	µg/L	487.42	ppb	22:57:03
2	Cd 226.502†	66242.8	64233.2	428.57	µg/L	428.57	ppb	22:57:03
2	Co 228.616†	35885.5	34922.3	472.68	µg/L	472.68	ppb	22:57:05
2	Cr 267.716†	70754.4	68346.9	591.15	µg/L	591.15	ppb	22:57:03
2	Cu 324.752†	138117.3	131305.5	593.10	µg/L	593.10	ppb	22:57:03
2	Mn 257.610†	2415429.4	2338630.4	3194.1	µg/L	3194.1	ppb	22:57:03
2	Mo 202.031†	14353.6	13952.9	446.95	µg/L	446.95	ppb	22:57:05
2	Ni 231.604†	45168.2	43774.4	559.93	µg/L	559.93	ppb	22:57:05
2	P 214.914†	9611.6	9226.8	2145.4	µg/L	2145.4	ppb	22:57:05
2	Pb 220.353†	8732.7	8342.9	520.61	µg/L	520.61	ppb	22:57:05

2	S 181.975 Axial†	7772.1	7430.4	6023.7 µg/L	6023.7 ppb	22:57:05
2	Sb 206.836†	2400.1	2237.2	298.12 µg/L	298.12 ppb	22:57:05
2	Se 196.026†	1040.3	996.3	445 µg/L	445 ppb	22:57:05
2	SiO2†	958000.5	925999.6	101190 µg/L	101190 ppb	22:57:03
2	Si 251.611†	2929586.1	2835860.1	46882 µg/L	46882 ppb	22:57:03
2	Sn 189.927†	6787.6	6570.0	486.28 µg/L	486.28 ppb	22:57:05
2	Ti 334.940†	5770205.2	5586295.5	5694.6 µg/L	5694.6 ppb	22:57:03
2	Tl 190.801†	3017.1	3041.6	476.70 µg/L	476.70 ppb	22:57:05
2	U 409.014†	2073.2	2486.4	184.22 µg/L	184.22 ppb	22:57:03
2	V 292.402†	136273.8	131513.6	708.36 µg/L	708.36 ppb	22:57:03
2	Zn 213.857†	129838.2	125249.9	774.75 µg/L	774.75 ppb	22:57:03
3	Sc RADIAL	154858.0	154858.0	106 %		22:56:51
3	Al 396.153Radial†	907001.1	853712.5	186330 µg/L	186330 ppb	22:56:49
3	Ca 317.933Radial†	641913.2	603560.5	35366 µg/L	35366 ppb	22:56:51
3	Fe 238.204 Radial†	2340040.0	2202361.3	146420 µg/L	146420 ppb	22:56:49
3	K 766.490 Radial†	62482.9	57354.7	23560 µg/L	23560 ppb	22:56:51
3	Mg 279.077 IEC†	74369.6	69810.9	28669 µg/L	28669 ppb	22:56:51
3	Na 589.592 Radial†	71553.3	65652.1	10025 µg/L	10025 ppb	22:56:51
3	Sr 421.552†	343558.8	323639.8	758.25 µg/L	758.25 ppb	22:56:51
3	Sc 361.383	1734296.3	1734296.3	103.68 %		22:57:09
3	Y 371.029	1158763.8	1158763.8	113.32 %		22:57:09
3	Ag 328.068†	114971.2	107925.7	444.16 µg/L	444.16 ppb	22:57:09
3	As 188.979†	1255.9	1225.6	551.86 µg/L	551.86 ppb	22:57:11
3	B 249.677†	31556.7	27081.6	452.99 µg/L	452.99 ppb	22:57:09
3	Ba 233.527†	462786.9	446545.3	2038.7 µg/L	2038.7 ppb	22:57:09
3	Be 313.107†	1551309.1	1496938.6	487.32 µg/L	487.32 ppb	22:57:09
3	Cd 226.502†	66677.3	64406.5	429.62 µg/L	429.62 ppb	22:57:09
3	Co 228.616†	36357.0	35243.9	477.01 µg/L	477.01 ppb	22:57:11
3	Cr 267.716†	71208.1	68521.8	592.71 µg/L	592.71 ppb	22:57:09
3	Cu 324.752†	138907.3	131554.9	594.39 µg/L	594.39 ppb	22:57:09
3	Mn 257.610†	2430462.1	2344164.8	3201.6 µg/L	3201.6 ppb	22:57:09
3	Mo 202.031†	14664.8	14199.8	454.79 µg/L	454.79 ppb	22:57:11
3	Ni 231.604†	46036.2	44444.0	568.49 µg/L	568.49 ppb	22:57:11
3	P 214.914†	9647.2	9225.4	2144.2 µg/L	2144.2 ppb	22:57:11
3	Pb 220.353†	8845.0	8418.8	525.22 µg/L	525.22 ppb	22:57:11
3	S 181.975 Axial†	7934.8	7558.5	6127.6 µg/L	6127.6 ppb	22:57:11
3	Sb 206.836†	2420.6	2248.1	299.67 µg/L	299.67 ppb	22:57:11
3	Se 196.026†	1120.1	1069.4	474 µg/L	474 ppb	22:57:11
3	SiO2†	963572.6	927818.3	101390 µg/L	101390 ppb	22:57:09
3	Si 251.611†	2947179.9	2841956.2	46982 µg/L	46982 ppb	22:57:09
3	Sn 189.927†	6900.9	6654.0	492.27 µg/L	492.27 ppb	22:57:11
3	Ti 334.940†	5796127.5	5589881.3	5698.2 µg/L	5698.2 ppb	22:57:09
3	Tl 190.801†	2961.0	2976.3	467.97 µg/L	467.97 ppb	22:57:11
3	U 409.014†	2076.2	2481.7	183.63 µg/L	183.63 ppb	22:57:09
3	V 292.402†	136739.0	131456.5	707.91 µg/L	707.91 ppb	22:57:09
3	Zn 213.857†	130864.3	125757.6	777.76 µg/L	777.76 ppb	22:57:09

Mean Data: 1202056881|959114|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1724506.3	103.09	%	0.698				0.68%
Sc RADIAL	154348.4	106	%	0.3				0.30%
Y 371.029	1152643.8	112.72	%	0.708				0.63%
Ag 328.068†	107905.3	444.08	µg/L	1.230	444.08	ppb	1.230	0.28%
Al 396.153Radial†	852555.5	186080	µg/L	399.7	186080	ppb	399.7	0.21%
As 188.979†	1213.1	546.48	µg/L	6.345	546.48	ppb	6.345	1.16%
B 249.677†	27120.6	453.64	µg/L	0.570	453.64	ppb	0.570	0.13%
Ba 233.527†	446224.2	2037.2	µg/L	1.88	2037.2	ppb	1.88	0.09%
Be 313.107†	1497465.7	487.50	µg/L	0.219	487.50	ppb	0.219	0.05%
Ca 317.933Radial†	605452.6	35477	µg/L	127.9	35477	ppb	127.9	0.36%
Cd 226.502†	64267.3	428.72	µg/L	0.839	428.72	ppb	0.839	0.20%
Co 228.616†	35247.1	477.08	µg/L	4.439	477.08	ppb	4.439	0.93%
Cr 267.716†	68400.8	591.65	µg/L	0.918	591.65	ppb	0.918	0.16%
Cu 324.752†	131526.9	594.19	µg/L	1.004	594.19	ppb	1.004	0.17%
Fe 238.204 Radial†	2194085.5	145870	µg/L	766.9	145870	ppb	766.9	0.53%
K 766.490 Radial†	57493.2	23617	µg/L	122.6	23617	ppb	122.6	0.52%
Mg 279.077 IEC†	70020.2	28756	µg/L	135.9	28756	ppb	135.9	0.47%
Mn 257.610†	2341792.3	3198.4	µg/L	3.90	3198.4	ppb	3.90	0.12%
Mo 202.031†	14150.5	453.22	µg/L	5.650	453.22	ppb	5.650	1.25%
Na 589.592 Radial†	65800.9	10047	µg/L	32.3	10047	ppb	32.3	0.32%

Ni 231.604†	44400.1	567.93 µg/L	7.736	567.93 ppb	7.736	1.36%
P 214.914†	9295.6	2161.3 µg/L	28.66	2161.3 ppb	28.66	1.33%
Pb 220.353†	8395.2	523.79 µg/L	2.766	523.79 ppb	2.766	0.53%
S 181.975 Axial†	7543.6	6115.5 µg/L	86.31	6115.5 ppb	86.31	1.41%
Sb 206.836†	2250.9	300.05 µg/L	2.148	300.05 ppb	2.148	0.72%
Se 196.026†	1045.8	464 µg/L	17.2	464 ppb	17.2	3.71%
SiO2†	927018.9	101300 µg/L	101.4	101300 ppb	101.4	0.10%
Si 251.611†	2839342.1	46939 µg/L	51.8	46939 ppb	51.8	0.11%
Sn 189.927†	6626.7	490.33 µg/L	3.511	490.33 ppb	3.511	0.72%
Sr 421.552†	324361.6	759.94 µg/L	1.500	759.94 ppb	1.500	0.20%
Ti 334.940†	5592832.6	5701.2 µg/L	8.58	5701.2 ppb	8.58	0.15%
Tl 190.801†	3037.0	476.14 µg/L	7.904	476.14 ppb	7.904	1.66%
U 409.014†	2495.2	184.58 µg/L	1.179	184.58 ppb	1.179	0.64%
V 292.402†	131488.0	708.14 µg/L	0.230	708.14 ppb	0.230	0.03%
Zn 213.857†	125410.1	775.63 µg/L	1.854	775.63 ppb	1.854	0.24%

Sequence No.: 98
Sample ID: 1202056879|959114|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 418
Date Collected: 3/29/2010 22:57:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202056879|959114|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	154102.7	154102.7	106	%			22:57:49
1	Al 396.153Radial†	107633.2	101834.0	22229	µg/L	22229	ppb	22:57:49
1	Ca 317.933Radial†	114615.7	107790.2	6316.0	µg/L	6316.0	ppb	22:57:49
1	Fe 238.204 Radial†	459709.2	434691.2	28900	µg/L	28900	ppb	22:57:47
1	K 766.490 Radial†	10556.7	8529.8	3504.9	µg/L	3504.9	ppb	22:57:49
1	Mg 279.077 IEC†	11745.1	10922.1	4478.5	µg/L	4478.5	ppb	22:57:49
1	Na 589.592 Radial†	9237.2	7042.1	1074.4	µg/L	1074.4	ppb	22:57:49
1	Sr 421.552†	26897.8	25718.6	60.228	µg/L	60.228	ppb	22:57:49
1	Sc 361.383	1761156.6	1761156.6	105.28	%			22:58:02
1	Y 371.029	1092554.2	1092554.2	106.84	%			22:58:02
1	Ag 328.068†	3253.9	123.5	0.4566	µg/L	0.4566	ppb	22:58:04
1	As 188.979†	-15.3	-0.3	6.5335	µg/L	6.5335	ppb	22:58:24
1	B 249.677†	3398.1	-128.1	-2.1915	µg/L	-2.1915	ppb	22:58:04
1	Ba 233.527†	74675.8	71103.3	324.48	µg/L	324.48	ppb	22:58:04
1	Be 313.107†	9331.2	9523.0	3.0828	µg/L	3.0828	ppb	22:58:04
1	Cd 226.502†	333.3	411.0	-0.1932	µg/L	-0.1932	ppb	22:58:24
1	Co 228.616†	702.8	844.1	10.372	µg/L	10.372	ppb	22:58:24
1	Cr 267.716†	2418.7	2137.1	19.219	µg/L	19.219	ppb	22:58:24
1	Cu 324.752†	4583.7	1928.8	12.675	µg/L	12.675	ppb	22:58:04
1	Mn 257.610†	460084.1	436915.2	596.76	µg/L	596.76	ppb	22:58:02
1	Mo 202.031†	-65.3	-6.8	1.0241	µg/L	1.0241	ppb	22:58:24
1	Ni 231.604†	1275.6	1252.5	16.021	µg/L	16.021	ppb	22:58:24
1	P 214.914†	1490.1	1335.8	305.07	µg/L	305.07	ppb	22:58:24
1	Pb 220.353†	409.4	276.4	18.462	µg/L	18.462	ppb	22:58:24
1	S 181.975 Axial†	430.2	313.8	254.22	µg/L	254.22	ppb	22:58:24
1	Sb 206.836†	58.0	-31.6	-4.9746	µg/L	-4.9746	ppb	22:58:24
1	Se 196.026†	-8.2	-18.7	2.59	µg/L	2.59	ppb	22:58:24
1	SiO2†	180390.4	169764.9	18555	µg/L	18555	ppb	22:58:04
1	Si 251.611†	562405.2	533505.0	8821.4	µg/L	8821.4	ppb	22:58:02
1	Sn 189.927†	5.2	3.0	3.3525	µg/L	3.3525	ppb	22:58:24
1	Ti 334.940†	962628.4	913683.4	931.48	µg/L	931.48	ppb	22:58:02
1	Tl 190.801†	-194.6	-64.6	2.5059	µg/L	2.5059	ppb	22:58:24
1	U 409.014†	-1469.7	-916.9	-56.519	µg/L	-56.519	ppb	22:58:04
1	V 292.402†	8989.1	8106.2	39.546	µg/L	39.546	ppb	22:58:04
1	Zn 213.857†	10509.4	9517.6	57.548	µg/L	57.548	ppb	22:58:04
2	Sc RADIAL	156527.3	156527.3	107	%			22:57:53
2	Al 396.153Radial†	109574.3	102064.7	22279	µg/L	22279	ppb	22:57:53
2	Ca 317.933Radial†	117040.3	108368.7	6349.9	µg/L	6349.9	ppb	22:57:53
2	Fe 238.204 Radial†	459573.2	427829.5	28444	µg/L	28444	ppb	22:57:51
2	K 766.490 Radial†	10541.3	8360.8	3435.3	µg/L	3435.3	ppb	22:57:53
2	Mg 279.077 IEC†	11883.2	10878.6	4461.0	µg/L	4461.0	ppb	22:57:53
2	Na 589.592 Radial†	9242.3	6911.5	1054.5	µg/L	1054.5	ppb	22:57:53
2	Sr 421.552†	27400.3	25792.4	60.401	µg/L	60.401	ppb	22:57:53
2	Sc 361.383	1749389.0	1749389.0	104.58	%			22:58:26
2	Y 371.029	1085826.4	1085826.4	106.18	%			22:58:26
2	Ag 328.068†	3299.6	188.1	0.7431	µg/L	0.7431	ppb	22:58:28
2	As 188.979†	-4.1	10.4	10.886	µg/L	10.886	ppb	22:58:48
2	B 249.677†	3419.4	-86.0	-1.4836	µg/L	-1.4836	ppb	22:58:28
2	Ba 233.527†	75624.9	72487.9	330.81	µg/L	330.81	ppb	22:58:28
2	Be 313.107†	9171.1	9429.6	3.0514	µg/L	3.0514	ppb	22:58:28
2	Cd 226.502†	334.6	414.4	-0.1221	µg/L	-0.1221	ppb	22:58:48
2	Co 228.616†	681.8	828.5	10.189	µg/L	10.189	ppb	22:58:48
2	Cr 267.716†	2403.6	2138.1	19.216	µg/L	19.216	ppb	22:58:48
2	Cu 324.752†	4743.6	2111.0	13.398	µg/L	13.398	ppb	22:58:28
2	Mn 257.610†	453168.4	433241.9	591.75	µg/L	591.75	ppb	22:58:26
2	Mo 202.031†	-52.0	5.5	1.3967	µg/L	1.3967	ppb	22:58:48
2	Ni 231.604†	1283.6	1268.3	16.223	µg/L	16.223	ppb	22:58:48
2	P 214.914†	1509.4	1363.7	312.07	µg/L	312.07	ppb	22:58:48
2	Pb 220.353†	395.7	265.9	17.837	µg/L	17.837	ppb	22:58:48

2	S 181.975 Axial†	422.8	309.5	250.72 µg/L	250.72 ppb	22:58:48
2	Sb 206.836†	83.9	-6.4	-1.5691 µg/L	-1.5691 ppb	22:58:48
2	Se 196.026†	16.0	4.4	11.6 µg/L	11.6 ppb	22:58:48
2	SiO2†	182696.7	173122.6	18922 µg/L	18922 ppb	22:58:28
2	Si 251.611†	553853.5	528921.1	8745.6 µg/L	8745.6 ppb	22:58:26
2	Sn 189.927†	-8.3	-9.9	2.4108 µg/L	2.4108 ppb	22:58:48
2	Ti 334.940†	948573.5	906394.4	924.05 µg/L	924.05 ppb	22:58:26
2	Tl 190.801†	-213.3	-83.6	-0.1274 µg/L	-0.1274 ppb	22:58:48
2	U 409.014†	-1512.2	-966.8	-59.414 µg/L	-59.414 ppb	22:58:28
2	V 292.402†	9321.2	8481.2	41.707 µg/L	41.707 ppb	22:58:28
2	Zn 213.857†	10622.2	9692.5	58.692 µg/L	58.692 ppb	22:58:28
3	Sc RADIAL	153123.5	153123.5	105 %		22:57:57
3	Al 396.153Radial†	107138.4	102014.1	22268 µg/L	22268 ppb	22:57:57
3	Ca 317.933Radial†	113967.3	107866.2	6320.5 µg/L	6320.5 ppb	22:57:57
3	Fe 238.204 Radial†	462650.4	440271.4	29271 µg/L	29271 ppb	22:57:55
3	K 766.490 Radial†	10510.8	8549.9	3513.2 µg/L	3513.2 ppb	22:57:57
3	Mg 279.077 IEC†	11548.9	10806.4	4430.5 µg/L	4430.5 ppb	22:57:57
3	Na 589.592 Radial†	9144.0	7009.2	1069.4 µg/L	1069.4 ppb	22:57:57
3	Sr 421.552†	26759.9	25750.1	60.302 µg/L	60.302 ppb	22:57:57
3	Sc 361.383	1740300.9	1740300.9	104.04 %		22:58:51
3	Y 371.029	1080533.8	1080533.8	105.67 %		22:58:51
3	Ag 328.068†	3189.3	98.5	0.3890 µg/L	0.3890 ppb	22:58:53
3	As 188.979†	-11.9	2.8	7.9261 µg/L	7.9261 ppb	22:59:13
3	B 249.677†	3350.8	-134.9	-2.3054 µg/L	-2.3054 ppb	22:58:53
3	Ba 233.527†	75955.6	73183.5	333.98 µg/L	333.98 ppb	22:58:53
3	Be 313.107†	9459.7	9752.8	3.1625 µg/L	3.1625 ppb	22:58:53
3	Cd 226.502†	323.3	405.2	-0.2728 µg/L	-0.2728 ppb	22:59:13
3	Co 228.616†	695.5	845.1	10.375 µg/L	10.375 ppb	22:59:13
3	Cr 267.716†	2443.9	2188.9	19.665 µg/L	19.665 ppb	22:59:13
3	Cu 324.752†	4676.0	2069.7	13.354 µg/L	13.354 ppb	22:58:53
3	Mn 257.610†	453887.0	436195.5	595.78 µg/L	595.78 ppb	22:58:51
3	Mo 202.031†	-73.8	-15.7	0.7584 µg/L	0.7584 ppb	22:59:13
3	Ni 231.604†	1239.6	1232.4	15.764 µg/L	15.764 ppb	22:59:13
3	P 214.914†	1512.4	1374.1	314.01 µg/L	314.01 ppb	22:59:13
3	Pb 220.353†	405.7	277.5	18.504 µg/L	18.504 ppb	22:59:13
3	S 181.975 Axial†	419.2	308.1	249.60 µg/L	249.60 ppb	22:59:13
3	Sb 206.836†	68.9	-20.4	-3.4869 µg/L	-3.4869 ppb	22:59:13
3	Se 196.026†	-9.5	-20.1	2.17 µg/L	2.17 ppb	22:59:13
3	SiO2†	183703.0	175002.2	19128 µg/L	19128 ppb	22:58:53
3	Si 251.611†	554457.7	532267.5	8801.0 µg/L	8801.0 ppb	22:58:51
3	Sn 189.927†	14.9	12.3	4.0110 µg/L	4.0110 ppb	22:59:13
3	Ti 334.940†	948950.2	911493.1	929.25 µg/L	929.25 ppb	22:58:51
3	Tl 190.801†	-207.2	-78.9	0.5661 µg/L	0.5661 ppb	22:59:13
3	U 409.014†	-1176.1	-651.4	-40.130 µg/L	-40.130 ppb	22:58:53
3	V 292.402†	9131.1	8345.0	40.824 µg/L	40.824 ppb	22:58:53
3	Zn 213.857†	10654.1	9776.3	59.138 µg/L	59.138 ppb	22:58:53

Mean Data: 1202056879|959114|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1750282.2	104.63	%	0.625				0.60%
Sc RADIAL	154584.5	106	%	1.2				1.13%
Y 371.029	1086304.8	106.23	%	0.589				0.55%
Ag 328.068†	136.7	0.5296	µg/L	0.18797	0.5296	ppb	0.18797	35.50%
Al 396.153Radial†	101970.9	22259	µg/L	26.5	22259	ppb	26.5	0.12%
As 188.979†	4.3	8.4487	µg/L	2.22301	8.4487	ppb	2.22301	26.31%
B 249.677†	-116.4	-1.9935	µg/L	0.44526	-1.9935	ppb	0.44526	22.34%
Ba 233.527†	72258.3	329.76	µg/L	4.837	329.76	ppb	4.837	1.47%
Be 313.107†	9568.5	3.0989	µg/L	0.05727	3.0989	ppb	0.05727	1.85%
Ca 317.933Radial†	108008.4	6328.8	µg/L	18.42	6328.8	ppb	18.42	0.29%
Cd 226.502†	410.2	-0.1960	µg/L	0.07541	-0.1960	ppb	0.07541	38.47%
Co 228.616†	839.2	10.312	µg/L	0.1068	10.312	ppb	0.1068	1.04%
Cr 267.716†	2154.7	19.367	µg/L	0.2584	19.367	ppb	0.2584	1.33%
Cu 324.752†	2036.5	13.142	µg/L	0.4051	13.142	ppb	0.4051	3.08%
Fe 238.204 Radial†	434264.0	28871	µg/L	414.3	28871	ppb	414.3	1.44%
K 766.490 Radial†	8480.2	3484.5	µg/L	42.76	3484.5	ppb	42.76	1.23%
Mg 279.077 IEC†	10869.0	4456.7	µg/L	24.31	4456.7	ppb	24.31	0.55%
Mn 257.610†	435450.9	594.76	µg/L	2.659	594.76	ppb	2.659	0.45%
Mo 202.031†	-5.7	1.0597	µg/L	0.32063	1.0597	ppb	0.32063	30.26%
Na 589.592 Radial†	6987.6	1066.1	µg/L	10.36	1066.1	ppb	10.36	0.97%

Ni 231.604†	1251.1	16.003	µg/L	0.2303	16.003	ppb	0.2303	1.44%
P 214.914†	1357.9	310.39	µg/L	4.702	310.39	ppb	4.702	1.51%
Pb 220.353†	273.3	18.268	µg/L	0.3733	18.268	ppb	0.3733	2.04%
S 181.975 Axial†	310.4	251.51	µg/L	2.409	251.51	ppb	2.409	0.96%
Sb 206.836†	-19.5	-3.3435	µg/L	1.70727	-3.3435	ppb	1.70727	51.06%
Se 196.026†	-11.5	5.44	µg/L	5.301	5.44	ppb	5.301	97.50%
SiO2†	172629.9	18869	µg/L	290.0	18869	ppb	290.0	1.54%
Si 251.611†	531564.5	8789.3	µg/L	39.21	8789.3	ppb	39.21	0.45%
Sn 189.927†	1.8	3.2581	µg/L	0.80425	3.2581	ppb	0.80425	24.68%
Sr 421.552†	25753.7	60.310	µg/L	0.0867	60.310	ppb	0.0867	0.14%
Ti 334.940†	910523.6	928.26	µg/L	3.811	928.26	ppb	3.811	0.41%
Tl 190.801†	-75.7	0.9815	µg/L	1.36491	0.9815	ppb	1.36491	139.06%
U 409.014†	-845.0	-52.021	µg/L	10.3992	-52.021	ppb	10.3992	19.99%
Concentration less than lower limit for U 409.014.								
V 292.402†	8310.8	40.692	µg/L	1.0868	40.692	ppb	1.0868	2.67%
Zn 213.857†	9662.1	58.459	µg/L	0.8203	58.459	ppb	0.8203	1.40%

Sequence No.: 99
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/29/2010 22:59:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	153187.4	153187.4	105	%			22:59:54
1	Al 396.153Radial†	25521.6	24315.0	5285.2	µg/L	5285.2	ppb	22:59:54
1	Ca 317.933Radial†	89994.9	85011.8	4981.3	µg/L	4981.3	ppb	22:59:54
1	Fe 238.204 Radial†	79073.5	75123.3	4994.5	µg/L	4994.5	ppb	22:59:54
1	K 766.490 Radial†	14176.6	12033.7	4949.9	µg/L	4949.9	ppb	22:59:54
1	Mg 279.077 IEC†	13414.9	12577.3	5193.3	µg/L	5193.3	ppb	22:59:54
1	Na 589.592 Radial†	70293.6	65188.0	9970.2	µg/L	9970.2	ppb	22:59:54
1	Sr 421.552†	228379.3	217575.5	509.90	µg/L	509.90	ppb	22:59:51
1	Sc 361.383	1745783.8	1745783.8	104.36	%			23:00:20
1	Y 371.029	1054187.4	1054187.4	103.09	%			23:00:20
1	Ag 328.068†	129606.4	121219.2	498.16	µg/L	498.16	ppb	23:00:20
1	As 188.979†	1356.6	1314.1	556.30	µg/L	556.30	ppb	23:00:40
1	B 249.677†	33639.8	28877.3	483.11	µg/L	483.11	ppb	23:00:20
1	Ba 233.527†	115645.9	110984.6	507.42	µg/L	507.42	ppb	23:00:20
1	Be 313.107†	1663973.6	1595045.7	519.35	µg/L	519.35	ppb	23:00:20
1	Cd 226.502†	73436.0	70459.3	486.25	µg/L	486.25	ppb	23:00:20
1	Co 228.616†	37283.3	35900.7	491.85	µg/L	491.85	ppb	23:00:20
1	Cr 267.716†	60081.4	57408.5	492.96	µg/L	492.96	ppb	23:00:20
1	Cu 324.752†	121728.4	114212.8	498.03	µg/L	498.03	ppb	23:00:20
1	Mn 257.610†	378188.7	362292.8	494.83	µg/L	494.83	ppb	23:00:20
1	Mo 202.031†	15943.5	15331.9	484.43	µg/L	484.43	ppb	23:00:40
1	Ni 231.604†	40193.6	38553.6	493.15	µg/L	493.15	ppb	23:00:20
1	P 214.914†	10567.7	10046.2	2397.5	µg/L	2397.5	ppb	23:00:40
1	Pb 220.353†	8429.4	7964.5	484.02	µg/L	484.02	ppb	23:00:40
1	S 181.975 Axial†	1321.8	1171.7	953.34	µg/L	953.34	ppb	23:00:40
1	Sb 206.836†	3888.6	3639.3	491.93	µg/L	491.93	ppb	23:00:40
1	Se 196.026†	1285.4	1220.8	485	µg/L	485	ppb	23:00:40
1	SiO2†	52174.1	48419.3	5271.3	µg/L	5271.3	ppb	23:00:20
1	Si 251.611†	157031.6	149788.1	2467.0	µg/L	2467.0	ppb	23:00:20
1	Sn 189.927†	7242.6	6937.7	494.88	µg/L	494.88	ppb	23:00:40
1	Ti 334.940†	506991.5	485152.6	494.06	µg/L	494.06	ppb	23:00:20
1	Tl 190.801†	3627.5	3596.1	490.15	µg/L	490.15	ppb	23:00:40
1	U 409.014†	7292.7	7466.8	491.80	µg/L	491.80	ppb	23:00:20
1	V 292.402†	94247.3	89874.1	504.72	µg/L	504.72	ppb	23:00:20
1	Zn 213.857†	81526.3	77652.4	484.91	µg/L	484.91	ppb	23:00:20
2	Sc RADIAL	152753.8	152753.8	105	%			22:59:58
2	Al 396.153Radial†	25361.9	24231.6	5266.7	µg/L	5266.7	ppb	22:59:58
2	Ca 317.933Radial†	89359.1	84648.2	4960.0	µg/L	4960.0	ppb	22:59:58
2	Fe 238.204 Radial†	78661.4	74943.6	4982.5	µg/L	4982.5	ppb	22:59:58
2	K 766.490 Radial†	14004.3	11907.6	4898.0	µg/L	4898.0	ppb	22:59:58
2	Mg 279.077 IEC†	13300.6	12504.4	5163.4	µg/L	5163.4	ppb	22:59:58
2	Na 589.592 Radial†	69798.5	64905.4	9927.0	µg/L	9927.0	ppb	22:59:58
2	Sr 421.552†	228787.1	218581.4	512.26	µg/L	512.26	ppb	22:59:56
2	Sc 361.383	1730259.3	1730259.3	103.44	%			23:00:44
2	Y 371.029	1046508.0	1046508.0	102.34	%			23:00:44
2	Ag 328.068†	128748.1	121503.7	499.30	µg/L	499.30	ppb	23:00:44
2	As 188.979†	1365.2	1334.1	564.68	µg/L	564.68	ppb	23:01:04
2	B 249.677†	33448.5	28981.6	484.86	µg/L	484.86	ppb	23:00:44
2	Ba 233.527†	114240.3	110620.0	505.75	µg/L	505.75	ppb	23:00:44
2	Be 313.107†	1642115.1	1588218.9	517.13	µg/L	517.13	ppb	23:00:44
2	Cd 226.502†	72778.9	70455.4	486.23	µg/L	486.23	ppb	23:00:44
2	Co 228.616†	36814.1	35767.6	490.03	µg/L	490.03	ppb	23:00:44
2	Cr 267.716†	59621.8	57480.7	493.59	µg/L	493.59	ppb	23:00:44
2	Cu 324.752†	120547.8	114118.0	497.61	µg/L	497.61	ppb	23:00:44
2	Mn 257.610†	374569.2	362044.8	494.50	µg/L	494.50	ppb	23:00:44
2	Mo 202.031†	15997.4	15521.1	490.40	µg/L	490.40	ppb	23:01:04
2	Ni 231.604†	39787.6	38506.6	492.54	µg/L	492.54	ppb	23:00:44
2	P 214.914†	10598.8	10167.1	2426.4	µg/L	2426.4	ppb	23:01:04
2	Pb 220.353†	8438.9	8046.1	488.99	µg/L	488.99	ppb	23:01:04

2	S 181.975 Axial†	1326.3	1187.4	966.15 µg/L	966.15 ppb	23:01:04
2	Sb 206.836†	3908.3	3691.8	499.10 µg/L	499.10 ppb	23:01:04
2	Se 196.026†	1273.7	1220.5	485 µg/L	485 ppb	23:01:04
2	SiO2†	51794.9	48501.2	5280.0 µg/L	5280.0 ppb	23:00:44
2	Si 251.611†	155273.5	149438.5	2461.1 µg/L	2461.1 ppb	23:00:44
2	Sn 189.927†	7271.5	7027.9	501.29 µg/L	501.29 ppb	23:01:04
2	Ti 334.940†	502012.3	484697.4	493.59 µg/L	493.59 ppb	23:00:44
2	Tl 190.801†	3633.1	3632.7	495.06 µg/L	495.06 ppb	23:01:04
2	U 409.014†	7140.3	7382.2	486.53 µg/L	486.53 ppb	23:00:44
2	V 292.402†	93260.9	89730.7	503.99 µg/L	503.99 ppb	23:00:44
2	Zn 213.857†	80757.9	77610.5	484.66 µg/L	484.66 ppb	23:00:44
3	Sc RADIAL	153154.6	153154.6	105 %		23:00:02
3	Al 396.153Radial†	25368.9	24175.0	5254.4 µg/L	5254.4 ppb	23:00:02
3	Ca 317.933Radial†	89319.3	84387.2	4944.7 µg/L	4944.7 ppb	23:00:02
3	Fe 238.204 Radial†	78269.7	74374.5	4944.7 µg/L	4944.7 ppb	23:00:02
3	K 766.490 Radial†	14084.9	11949.3	4915.2 µg/L	4915.2 ppb	23:00:02
3	Mg 279.077 IEC†	13224.5	12398.9	5119.9 µg/L	5119.9 ppb	23:00:02
3	Na 589.592 Radial†	69824.0	64755.4	9904.0 µg/L	9904.0 ppb	23:00:02
3	Sr 421.552†	228293.2	217540.2	509.82 µg/L	509.82 ppb	23:00:00
3	Sc 361.383	1733972.1	1733972.1	103.66 %		23:01:07
3	Y 371.029	1048931.9	1048931.9	102.58 %		23:01:07
3	Ag 328.068†	129263.4	121734.2	500.23 µg/L	500.23 ppb	23:01:07
3	As 188.979†	1370.6	1336.4	565.64 µg/L	565.64 ppb	23:01:27
3	B 249.677†	33479.7	28942.4	484.20 µg/L	484.20 ppb	23:01:07
3	Ba 233.527†	114984.6	111101.5	507.95 µg/L	507.95 ppb	23:01:07
3	Be 313.107†	1650571.4	1592977.4	518.68 µg/L	518.68 ppb	23:01:07
3	Cd 226.502†	72958.6	70478.1	486.39 µg/L	486.39 ppb	23:01:07
3	Co 228.616†	36929.1	35802.4	490.51 µg/L	490.51 ppb	23:01:07
3	Cr 267.716†	59712.4	57444.7	493.28 µg/L	493.28 ppb	23:01:07
3	Cu 324.752†	120840.0	114150.3	497.74 µg/L	497.74 ppb	23:01:07
3	Mn 257.610†	375967.2	362618.1	495.28 µg/L	495.28 ppb	23:01:07
3	Mo 202.031†	15997.1	15487.8	489.34 µg/L	489.34 ppb	23:01:27
3	Ni 231.604†	39901.0	38533.6	492.89 µg/L	492.89 ppb	23:01:07
3	P 214.914†	10572.2	10119.5	2415.0 µg/L	2415.0 ppb	23:01:27
3	Pb 220.353†	8447.8	8037.2	488.45 µg/L	488.45 ppb	23:01:27
3	S 181.975 Axial†	1325.8	1184.2	963.54 µg/L	963.54 ppb	23:01:27
3	Sb 206.836†	3902.5	3678.1	497.24 µg/L	497.24 ppb	23:01:27
3	Se 196.026†	1282.6	1226.4	487 µg/L	487 ppb	23:01:27
3	SiO2†	51885.3	48481.2	5277.9 µg/L	5277.9 ppb	23:01:07
3	Si 251.611†	155674.6	149503.9	2462.2 µg/L	2462.2 ppb	23:01:07
3	Sn 189.927†	7251.3	6993.4	498.84 µg/L	498.84 ppb	23:01:27
3	Ti 334.940†	504044.2	485618.4	494.54 µg/L	494.54 ppb	23:01:07
3	Tl 190.801†	3649.3	3640.8	496.16 µg/L	496.16 ppb	23:01:27
3	U 409.014†	7071.7	7301.3	481.55 µg/L	481.55 ppb	23:01:07
3	V 292.402†	93512.7	89780.5	504.26 µg/L	504.26 ppb	23:01:07
3	Zn 213.857†	81160.7	77831.9	486.05 µg/L	486.05 ppb	23:01:07

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1736671.7	103.82	%	0.485				0.47%
Sc RADIAL	153031.9	105	%	0.2				0.16%
Y 371.029	1049875.8	102.67	%	0.384				0.37%
Ag 328.068†	121485.7	499.23	µg/L	1.038	499.23	ppb	1.038	0.21%
QC value within limits for Ag 328.068 Recovery = 99.85%								
Al 396.153Radial†	24240.5	5268.8	µg/L	15.50	5268.8	ppb	15.50	0.29%
QC value within limits for Al 396.153Radial Recovery = 105.38%								
As 188.979†	1328.2	562.21	µg/L	5.136	562.21	ppb	5.136	0.91%
QC value greater than the upper limit for As 188.979 Recovery = 112.44%								
B 249.677†	28933.8	484.06	µg/L	0.887	484.06	ppb	0.887	0.18%
QC value within limits for B 249.677 Recovery = 96.81%								
Ba 233.527†	110902.0	507.04	µg/L	1.147	507.04	ppb	1.147	0.23%
QC value within limits for Ba 233.527 Recovery = 101.41%								
Be 313.107†	1592080.7	518.39	µg/L	1.140	518.39	ppb	1.140	0.22%
QC value within limits for Be 313.107 Recovery = 103.68%								
Ca 317.933Radial†	84682.4	4962.0	µg/L	18.38	4962.0	ppb	18.38	0.37%
QC value within limits for Ca 317.933Radial Recovery = 99.24%								
Cd 226.502†	70464.3	486.29	µg/L	0.086	486.29	ppb	0.086	0.02%
QC value within limits for Cd 226.502 Recovery = 97.26%								
Co 228.616†	35823.6	490.80	µg/L	0.945	490.80	ppb	0.945	0.19%

QC value within limits for Co 228.616 Recovery = 98.16%

Cr 267.716†	57444.6	493.28 µg/L	0.312	493.28 ppb	0.312	0.06%

QC value within limits for Cr 267.716 Recovery = 98.66%

Cu 324.752†	114160.4	497.79 µg/L	0.215	497.79 ppb	0.215	0.04%

QC value within limits for Cu 324.752 Recovery = 99.56%

Fe 238.204 Radial†	74813.8	4973.9 µg/L	25.99	4973.9 ppb	25.99	0.52%

QC value within limits for Fe 238.204 Radial Recovery = 99.48%

K 766.490 Radial†	11963.5	4921.0 µg/L	26.43	4921.0 ppb	26.43	0.54%

QC value within limits for K 766.490 Radial Recovery = 98.42%

Mg 279.077 IEC†	12493.5	5158.9 µg/L	36.92	5158.9 ppb	36.92	0.72%

QC value within limits for Mg 279.077 IEC Recovery = 103.18%

Mn 257.610†	362318.6	494.87 µg/L	0.394	494.87 ppb	0.394	0.08%

QC value within limits for Mn 257.610 Recovery = 98.97%

Mo 202.031†	15446.9	488.06 µg/L	3.187	488.06 ppb	3.187	0.65%

QC value within limits for Mo 202.031 Recovery = 97.61%

Na 589.592 Radial†	64949.6	9933.7 µg/L	33.59	9933.7 ppb	33.59	0.34%

QC value within limits for Na 589.592 Radial Recovery = 99.34%

Ni 231.604†	38531.3	492.86 µg/L	0.302	492.86 ppb	0.302	0.06%

QC value within limits for Ni 231.604 Recovery = 98.57%

P 214.914†	10110.9	2413.0 µg/L	14.58	2413.0 ppb	14.58	0.60%

QC value within limits for P 214.914 Recovery = 96.52%

Pb 220.353†	8015.9	487.15 µg/L	2.725	487.15 ppb	2.725	0.56%

QC value within limits for Pb 220.353 Recovery = 97.43%

S 181.975 Axial†	1181.1	961.01 µg/L	6.770	961.01 ppb	6.770	0.70%

QC value within limits for S 181.975 Axial Recovery = 96.10%

Sb 206.836†	3669.7	496.09 µg/L	3.716	496.09 ppb	3.716	0.75%

QC value within limits for Sb 206.836 Recovery = 99.22%

Se 196.026†	1222.6	486 µg/L	1.3	486 ppb	1.3	0.27%

QC value within limits for Se 196.026 Recovery = 97.15%

SiO2†	48467.2	5276.4 µg/L	4.53	5276.4 ppb	4.53	0.09%

QC value within limits for SiO2 Recovery = 98.67%

Si 251.611†	149576.8	2463.4 µg/L	3.14	2463.4 ppb	3.14	0.13%

QC value within limits for Si 251.611 Recovery = 98.54%

Sn 189.927†	6986.3	498.34 µg/L	3.237	498.34 ppb	3.237	0.65%

QC value within limits for Sn 189.927 Recovery = 99.67%

Sr 421.552†	217899.0	510.66 µg/L	1.386	510.66 ppb	1.386	0.27%

QC value within limits for Sr 421.552 Recovery = 102.13%

Ti 334.940†	485156.2	494.06 µg/L	0.472	494.06 ppb	0.472	0.10%

QC value within limits for Ti 334.940 Recovery = 98.81%

Tl 190.801†	3623.2	493.79 µg/L	3.199	493.79 ppb	3.199	0.65%

QC value within limits for Tl 190.801 Recovery = 98.76%

U 409.014†	7383.4	486.63 µg/L	5.126	486.63 ppb	5.126	1.05%

QC value within limits for U 409.014 Recovery = 97.33%

V 292.402†	89795.1	504.32 µg/L	0.371	504.32 ppb	0.371	0.07%

QC value within limits for V 292.402 Recovery = 100.86%

Zn 213.857†	77698.3	485.21 µg/L	0.743	485.21 ppb	0.743	0.15%

QC value within limits for Zn 213.857 Recovery = 97.04%

QC Failed. Continue with analysis.

Sequence No.: 100
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/29/2010 23:01:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	155434.4	155434.4	107	%			23:02:04
1	Al 396.153Radial†	-51.2	-16.1	-3.5513	µg/L	-3.5513	ppb	23:02:24
1	Ca 317.933Radial†	649.2	-7.4	-0.4325	µg/L	-0.4325	ppb	23:02:24
1	Fe 238.204 Radial†	156.2	33.2	2.2058	µg/L	2.2058	ppb	23:02:24
1	K 766.490 Radial†	1684.9	124.9	51.442	µg/L	51.442	ppb	23:02:04
1	Mg 279.077 IEC†	192.9	-5.7	-2.3512	µg/L	-2.3512	ppb	23:02:24
1	Na 589.592 Radial†	1531.9	-258.2	-39.556	µg/L	-39.556	ppb	23:02:04
1	Sr 421.552†	-266.4	28.1	0.0660	µg/L	0.0660	ppb	23:02:04
1	Sc 361.383	1773084.5	1773084.5	106.00	%			23:03:26
1	Y 371.029	1083665.8	1083665.8	105.97	%			23:03:26
1	Ag 328.068†	3188.1	40.7	0.1603	µg/L	0.1603	ppb	23:03:28
1	As 188.979†	-12.9	2.0	0.8500	µg/L	0.8500	ppb	23:03:48
1	B 249.677†	3155.7	-378.5	-6.3560	µg/L	-6.3560	ppb	23:03:48
1	Ba 233.527†	-168.6	16.0	0.0729	µg/L	0.0729	ppb	23:03:48
1	Be 313.107†	-602.7	91.5	0.0297	µg/L	0.0297	ppb	23:03:28
1	Cd 226.502†	-90.7	8.9	0.0609	µg/L	0.0609	ppb	23:03:48
1	Co 228.616†	-165.9	20.1	0.2751	µg/L	0.2751	ppb	23:03:48
1	Cr 267.716†	163.5	-6.0	-0.0511	µg/L	-0.0511	ppb	23:03:48
1	Cu 324.752†	2830.0	245.1	1.0654	µg/L	1.0654	ppb	23:03:28
1	Mn 257.610†	187.4	96.8	0.1324	µg/L	0.1324	ppb	23:03:48
1	Mo 202.031†	-32.8	24.3	0.7669	µg/L	0.7669	ppb	23:03:48
1	Ni 231.604†	-57.6	-13.4	-0.1720	µg/L	-0.1720	ppb	23:03:48
1	P 214.914†	34.6	-46.9	-11.266	µg/L	-11.266	ppb	23:03:48
1	Pb 220.353†	92.6	-25.1	-1.5171	µg/L	-1.5171	ppb	23:03:48
1	S 181.975 Axial†	93.3	-6.8	-5.4826	µg/L	-5.4826	ppb	23:03:48
1	Sb 206.836†	100.9	8.6	1.1678	µg/L	1.1678	ppb	23:03:48
1	Se 196.026†	13.1	1.4	0.557	µg/L	0.557	ppb	23:03:48
1	SiO2†	1733.6	62.6	6.8345	µg/L	6.8345	ppb	23:03:48
1	Si 251.611†	908.9	181.1	2.9879	µg/L	2.9879	ppb	23:03:28
1	Sn 189.927†	-7.8	-9.4	-0.6637	µg/L	-0.6637	ppb	23:03:48
1	Ti 334.940†	999.5	306.7	0.3130	µg/L	0.3130	ppb	23:03:28
1	Tl 190.801†	-111.5	15.1	2.0276	µg/L	2.0276	ppb	23:03:48
1	U 409.014†	-514.2	-6.0	-0.3902	µg/L	-0.3902	ppb	23:03:28
1	V 292.402†	390.8	-63.1	-0.3432	µg/L	-0.3432	ppb	23:03:28
1	Zn 213.857†	504.5	11.6	0.0731	µg/L	0.0731	ppb	23:03:48
2	Sc RADIAL	154078.8	154078.8	106	%			23:02:26
2	Al 396.153Radial†	-47.5	-13.0	-2.8946	µg/L	-2.8946	ppb	23:02:46
2	Ca 317.933Radial†	651.0	-0.4	-0.0219	µg/L	-0.0219	ppb	23:02:46
2	Fe 238.204 Radial†	154.8	33.2	2.2069	µg/L	2.2069	ppb	23:02:46
2	K 766.490 Radial†	1545.5	7.0	2.8751	µg/L	2.8751	ppb	23:02:26
2	Mg 279.077 IEC†	165.9	-29.7	-12.225	µg/L	-12.225	ppb	23:02:46
2	Na 589.592 Radial†	1707.0	-80.0	-12.240	µg/L	-12.240	ppb	23:02:26
2	Sr 421.552†	-357.1	-59.8	-0.1402	µg/L	-0.1402	ppb	23:02:26
2	Sc 361.383	1744785.0	1744785.0	104.30	%			23:03:50
2	Y 371.029	1066249.8	1066249.8	104.27	%			23:03:50
2	Ag 328.068†	3202.9	103.6	0.4168	µg/L	0.4168	ppb	23:03:52
2	As 188.979†	-24.6	-9.4	-3.9138	µg/L	-3.9138	ppb	23:04:12
2	B 249.677†	3188.7	-298.6	-5.0148	µg/L	-5.0148	ppb	23:04:12
2	Ba 233.527†	-157.1	24.4	0.1114	µg/L	0.1114	ppb	23:04:12
2	Be 313.107†	-703.8	-14.6	-0.0039	µg/L	-0.0039	ppb	23:03:52
2	Cd 226.502†	-119.9	-20.6	-0.1424	µg/L	-0.1424	ppb	23:04:12
2	Co 228.616†	-137.8	44.5	0.6093	µg/L	0.6093	ppb	23:04:12
2	Cr 267.716†	196.6	28.2	0.2400	µg/L	0.2400	ppb	23:04:12
2	Cu 324.752†	2589.8	58.0	0.2551	µg/L	0.2551	ppb	23:03:52
2	Mn 257.610†	196.2	108.1	0.1482	µg/L	0.1482	ppb	23:04:12
2	Mo 202.031†	-24.7	31.6	0.9959	µg/L	0.9959	ppb	23:04:12
2	Ni 231.604†	-50.1	-7.1	-0.0910	µg/L	-0.0910	ppb	23:04:12
2	P 214.914†	27.6	-53.1	-12.727	µg/L	-12.727	ppb	23:04:12
2	Pb 220.353†	102.2	-14.5	-0.8747	µg/L	-0.8747	ppb	23:04:12

2	S 181.975 Axial†	102.1	3.0	2.4780 µg/L	2.4780 ppb	23:04:12
2	Sb 206.836†	86.8	-3.5	-0.4576 µg/L	-0.4576 ppb	23:04:12
2	Se 196.026†	28.9	16.8	6.65 µg/L	6.65 ppb	23:04:12
2	SiO2†	1738.7	94.1	10.252 µg/L	10.252 ppb	23:04:12
2	Si 251.611†	925.9	211.3	3.4804 µg/L	3.4804 ppb	23:03:52
2	Sn 189.927†	2.9	0.7	0.0523 µg/L	0.0523 ppb	23:04:12
2	Ti 334.940†	1025.7	347.0	0.3535 µg/L	0.3535 ppb	23:03:52
2	Tl 190.801†	-111.6	13.3	1.7870 µg/L	1.7870 ppb	23:04:12
2	U 409.014†	-449.9	47.7	2.9140 µg/L	2.9140 ppb	23:03:52
2	V 292.402†	335.3	-110.4	-0.5996 µg/L	-0.5996 ppb	23:03:52
2	Zn 213.857†	495.5	10.6	0.0670 µg/L	0.0670 ppb	23:04:12
3	Sc RADIAL	153417.2	153417.2	105 %		23:02:48
3	Al 396.153Radial†	-43.3	-9.2	-2.0663 µg/L	-2.0663 ppb	23:03:08
3	Ca 317.933Radial†	638.3	-9.8	-0.5721 µg/L	-0.5721 ppb	23:03:08
3	Fe 238.204 Radial†	157.4	36.2	2.4086 µg/L	2.4086 ppb	23:03:08
3	K 766.490 Radial†	1629.7	93.3	38.407 µg/L	38.407 ppb	23:02:48
3	Mg 279.077 IEC†	176.0	-19.5	-8.0003 µg/L	-8.0003 ppb	23:03:08
3	Na 589.592 Radial†	1673.7	-104.6	-16.036 µg/L	-16.036 ppb	23:02:48
3	Sr 421.552†	-102.9	180.2	0.4224 µg/L	0.4224 ppb	23:02:48
3	Sc 361.383	1744530.6	1744530.6	104.29 %		23:04:15
3	Y 371.029	1066508.8	1066508.8	104.30 %		23:04:15
3	Ag 328.068†	3132.1	36.2	0.1410 µg/L	0.1410 ppb	23:04:17
3	As 188.979†	-26.4	-11.1	-4.6173 µg/L	-4.6173 ppb	23:04:37
3	B 249.677†	3123.5	-360.6	-6.0559 µg/L	-6.0559 ppb	23:04:37
3	Ba 233.527†	-146.6	34.5	0.1572 µg/L	0.1572 ppb	23:04:37
3	Be 313.107†	-721.4	-31.6	-0.0085 µg/L	-0.0085 ppb	23:04:17
3	Cd 226.502†	-107.7	-8.9	-0.0617 µg/L	-0.0617 ppb	23:04:37
3	Co 228.616†	-161.1	22.1	0.3028 µg/L	0.3028 ppb	23:04:37
3	Cr 267.716†	126.1	-39.3	-0.3430 µg/L	-0.3430 ppb	23:04:37
3	Cu 324.752†	2834.0	292.6	1.2771 µg/L	1.2771 ppb	23:04:17
3	Mn 257.610†	184.8	97.2	0.1331 µg/L	0.1331 ppb	23:04:37
3	Mo 202.031†	-21.1	35.0	1.1038 µg/L	1.1038 ppb	23:04:37
3	Ni 231.604†	-44.5	-1.8	-0.0230 µg/L	-0.0230 ppb	23:04:37
3	P 214.914†	38.2	-42.9	-10.301 µg/L	-10.301 ppb	23:04:37
3	Pb 220.353†	87.9	-28.2	-1.7095 µg/L	-1.7095 ppb	23:04:37
3	S 181.975 Axial†	83.2	-15.1	-12.203 µg/L	-12.203 ppb	23:04:37
3	Sb 206.836†	88.6	-1.7	-0.2140 µg/L	-0.2140 ppb	23:04:37
3	Se 196.026†	16.2	4.6	1.83 µg/L	1.83 ppb	23:04:37
3	SiO2†	1727.7	83.7	9.1129 µg/L	9.1129 ppb	23:04:37
3	Si 251.611†	815.2	105.3	1.7226 µg/L	1.7226 ppb	23:04:17
3	Sn 189.927†	10.3	7.9	0.5602 µg/L	0.5602 ppb	23:04:37
3	Ti 334.940†	751.1	83.8	0.0838 µg/L	0.0838 ppb	23:04:17
3	Tl 190.801†	-126.3	-0.8	-0.1124 µg/L	-0.1124 ppb	23:04:37
3	U 409.014†	-400.2	95.3	5.8276 µg/L	5.8276 ppb	23:04:17
3	V 292.402†	244.7	-197.2	-1.0803 µg/L	-1.0803 ppb	23:04:17
3	Zn 213.857†	492.6	7.9	0.0488 µg/L	0.0488 ppb	23:04:37

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1754133.4	104.86	%	0.981				0.94%
Sc RADIAL	154310.2	106	%	0.7				0.67%
Y 371.029	1072141.4	104.85	%	0.976				0.93%
Ag 328.068†	60.2	0.2394	µg/L	0.15400	0.2394	ppb	0.15400	64.34%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-12.8	-2.8374	µg/L	0.74415	-2.8374	ppb	0.74415	26.23%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-6.1	-2.5604	µg/L	2.97431	-2.5604	ppb	2.97431	116.17%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-345.9	-5.8089	µg/L	0.70385	-5.8089	ppb	0.70385	12.12%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	25.0	0.1138	µg/L	0.04218	0.1138	ppb	0.04218	37.06%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	15.1	0.0058	µg/L	0.02083	0.0058	ppb	0.02083	361.45%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-5.8	-0.3422	µg/L	0.28598	-0.3422	ppb	0.28598	83.58%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-6.9	-0.0477	µg/L	0.10238	-0.0477	ppb	0.10238	214.53%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	28.9	0.3958	µg/L	0.18544	0.3958	ppb	0.18544	46.86%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -5.7     -0.0513 µg/L       0.29150     -0.0513 ppb       0.29150 567.93%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             198.6      0.8659 µg/L       0.53941      0.8659 ppb       0.53941  62.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       34.2      2.2738 µg/L       0.11675      2.2738 ppb       0.11675   5.13%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        75.1      30.908 µg/L       25.1368      30.908 ppb       25.1368  81.33%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†         -18.3     -7.5254 µg/L       4.95395     -7.5254 ppb       4.95395  65.83%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             100.7      0.1379 µg/L       0.00890      0.1379 ppb       0.00890   6.45%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              30.3      0.9555 µg/L       0.17201      0.9555 ppb       0.17201  18.00%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -147.6     -22.611 µg/L       14.7972     -22.611 ppb       14.7972  65.44%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -7.5     -0.0953 µg/L       0.07457     -0.0953 ppb       0.07457  78.22%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -47.6     -11.432 µg/L        1.2217     -11.432 ppb        1.2217  10.69%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -22.6     -1.3671 µg/L       0.43713     -1.3671 ppb       0.43713  31.98%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -6.3     -5.0693 µg/L       7.34945     -5.0693 ppb       7.34945 144.98%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               1.1      0.1654 µg/L       0.87661      0.1654 ppb       0.87661 530.04%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               7.6       3.01 µg/L         3.211        3.01 ppb         3.211 106.64%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    80.1      8.7333 µg/L       1.74025      8.7333 ppb       1.74025  19.93%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             165.9      2.7303 µg/L       0.90677      2.7303 ppb       0.90677  33.21%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -0.3     -0.0171 µg/L       0.61490     -0.0171 ppb       0.61490 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              49.5      0.1161 µg/L       0.28462      0.1161 ppb       0.28462 245.24%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             245.8      0.2501 µg/L       0.14545      0.2501 ppb       0.14545  58.15%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               9.2      1.2341 µg/L       1.17229      1.2341 ppb       1.17229  94.99%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               45.7      2.7838 µg/L       3.11096      2.7838 ppb       3.11096 111.75%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†            -123.5     -0.6744 µg/L       0.37421     -0.6744 ppb       0.37421  55.49%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              10.0      0.0630 µg/L       0.01264      0.0630 ppb       0.01264  20.07%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 101
Sample ID: 248110002|959114|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 419
Date Collected: 3/29/2010 23:04:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248110002|959114|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	154164.9	154164.9	106	%			23:05:19
1	Al 396.153Radial†	520708.5	492332.4	107470	µg/L	107470	ppb	23:05:17
1	Ca 317.933Radial†	546018.5	515613.4	30213	µg/L	30213	ppb	23:05:19
1	Fe 238.204 Radial†	2052914.7	1940801.4	129030	µg/L	129030	ppb	23:05:17
1	K 766.490 Radial†	41462.8	37745.7	15507	µg/L	15507	ppb	23:05:19
1	Mg 279.077 IEC†	49849.8	46943.5	19245	µg/L	19245	ppb	23:05:19
1	Na 589.592 Radial†	37205.7	33481.1	5109.2	µg/L	5109.2	ppb	23:05:19
1	Sr 421.552†	129351.6	122572.6	287.04	µg/L	287.04	ppb	23:05:19
1	Sc 361.383	1737389.4	1737389.4	103.86	%			23:05:32
1	Y 371.029	1168451.4	1168451.4	114.26	%			23:05:32
1	Ag 328.068†	3003.3	-75.5	-0.4656	µg/L	-0.4656	ppb	23:05:34
1	As 188.979†	11.7	25.5	40.497	µg/L	40.497	ppb	23:05:54
1	B 249.677†	4589.9	1063.5	17.671	µg/L	17.671	ppb	23:05:34
1	Ba 233.527†	365536.2	352116.7	1607.1	µg/L	1607.1	ppb	23:05:34
1	Be 313.107†	44390.3	43399.5	14.047	µg/L	14.047	ppb	23:05:34
1	Cd 226.502†	1881.2	1905.7	-0.3704	µg/L	-0.3704	ppb	23:05:54
1	Co 228.616†	3839.2	3873.0	47.895	µg/L	47.895	ppb	23:05:54
1	Cr 267.716†	11550.5	10960.7	97.936	µg/L	97.936	ppb	23:05:54
1	Cu 324.752†	12674.8	9778.6	61.634	µg/L	61.634	ppb	23:05:34
1	Mn 257.610†	2300156.5	2214531.9	3024.9	µg/L	3024.9	ppb	23:05:32
1	Mo 202.031†	-130.9	-70.9	3.2930	µg/L	3.2930	ppb	23:05:54
1	Ni 231.604†	6558.3	6355.3	81.292	µg/L	81.292	ppb	23:05:54
1	P 214.914†	6586.2	6261.7	1435.2	µg/L	1435.2	ppb	23:05:54
1	Pb 220.353†	1545.7	1375.8	91.579	µg/L	91.579	ppb	23:05:54
1	S 181.975 Axial†	1707.1	1548.8	1254.8	µg/L	1254.8	ppb	23:05:54
1	Sb 206.836†	60.8	-28.1	-7.2287	µg/L	-7.2287	ppb	23:05:54
1	Se 196.026†	-113.6	-120.3	-3.08	µg/L	-3.08	ppb	23:05:54
1	SiO2†	977282.8	939364.0	102670	µg/L	102670	ppb	23:05:32
1	Si 251.611†	2987986.0	2876184.1	47557	µg/L	47557	ppb	23:05:32
1	Sn 189.927†	15.4	12.8	15.071	µg/L	15.071	ppb	23:05:54
1	Ti 334.940†	4276942.8	4117243.6	4197.6	µg/L	4197.6	ppb	23:05:32
1	Tl 190.801†	-526.4	-386.5	-0.5674	µg/L	-0.5674	ppb	23:05:54
1	U 409.014†	-4987.4	-4322.8	-263.09	µg/L	-263.09	ppb	23:05:34
1	V 292.402†	41314.9	39346.6	194.05	µg/L	194.05	ppb	23:05:34
1	Zn 213.857†	47320.1	45095.8	273.36	µg/L	273.36	ppb	23:05:34
2	Sc RADIAL	156703.4	156703.4	108	%			23:05:23
2	Al 396.153Radial†	524076.3	487489.8	106410	µg/L	106410	ppb	23:05:21
2	Ca 317.933Radial†	552588.5	513361.8	30081	µg/L	30081	ppb	23:05:23
2	Fe 238.204 Radial†	2067629.5	1923046.5	127850	µg/L	127850	ppb	23:05:21
2	K 766.490 Radial†	41870.5	37489.9	15402	µg/L	15402	ppb	23:05:23
2	Mg 279.077 IEC†	50551.7	46832.8	19200	µg/L	19200	ppb	23:05:23
2	Na 589.592 Radial†	37463.3	33151.0	5058.8	µg/L	5058.8	ppb	23:05:23
2	Sr 421.552†	130333.3	121504.6	284.54	µg/L	284.54	ppb	23:05:23
2	Sc 361.383	1741758.1	1741758.1	104.12	%			23:05:57
2	Y 371.029	1170463.4	1170463.4	114.46	%			23:05:57
2	Ag 328.068†	3516.5	410.2	1.5215	µg/L	1.5215	ppb	23:05:59
2	As 188.979†	15.3	28.9	41.662	µg/L	41.662	ppb	23:06:19
2	B 249.677†	4367.4	838.7	13.897	µg/L	13.897	ppb	23:05:59
2	Ba 233.527†	365614.4	351309.0	1603.4	µg/L	1603.4	ppb	23:05:59
2	Be 313.107†	44203.4	43112.8	13.954	µg/L	13.954	ppb	23:05:59
2	Cd 226.502†	1868.8	1889.2	-0.3606	µg/L	-0.3606	ppb	23:06:19
2	Co 228.616†	3846.9	3871.1	47.927	µg/L	47.927	ppb	23:06:19
2	Cr 267.716†	11519.3	10902.8	97.397	µg/L	97.397	ppb	23:06:19
2	Cu 324.752†	12654.1	9728.0	61.244	µg/L	61.244	ppb	23:05:59
2	Mn 257.610†	2300373.2	2209185.2	3017.6	µg/L	3017.6	ppb	23:05:57
2	Mo 202.031†	-116.1	-56.3	3.7057	µg/L	3.7057	ppb	23:06:19
2	Ni 231.604†	6482.3	6266.5	80.156	µg/L	80.156	ppb	23:06:19
2	P 214.914†	6549.2	6210.2	1423.4	µg/L	1423.4	ppb	23:06:19
2	Pb 220.353†	1513.9	1341.5	89.466	µg/L	89.466	ppb	23:06:19

2	S 181.975 Axial†	1699.6	1537.5	1245.6 µg/L	1245.6 ppb	23:06:19
2	Sb 206.836†	70.2	-19.3	-5.9948 µg/L	-5.9948 ppb	23:06:19
2	Se 196.026†	-95.2	-102.4	3.62 µg/L	3.62 ppb	23:06:19
2	SiO2†	977494.2	937207.0	102440 µg/L	102440 ppb	23:05:57
2	Si 251.611†	2987228.7	2868240.9	47426 µg/L	47426 ppb	23:05:57
2	Sn 189.927†	11.1	8.6	14.747 µg/L	14.747 ppb	23:06:19
2	Ti 334.940†	4279994.9	4109846.2	4190.0 µg/L	4190.0 ppb	23:05:57
2	Tl 190.801†	-523.8	-382.8	-0.1594 µg/L	-0.1594 ppb	23:06:19
2	U 409.014†	-4937.2	-4262.6	-259.16 µg/L	-259.16 ppb	23:05:59
2	V 292.402†	41400.5	39329.0	194.16 µg/L	194.16 ppb	23:05:59
2	Zn 213.857†	47333.3	44994.2	272.84 µg/L	272.84 ppb	23:05:59
3	Sc RADIAL	157529.7	157529.7	108 %		23:05:27
3	Al 396.153Radial†	529042.8	489528.1	106860 µg/L	106860 ppb	23:05:25
3	Ca 317.933Radial†	559148.6	516735.4	30278 µg/L	30278 ppb	23:05:27
3	Fe 238.204 Radial†	2084646.5	1928703.5	128230 µg/L	128230 ppb	23:05:25
3	K 766.490 Radial†	42251.8	37638.4	15463 µg/L	15463 ppb	23:05:27
3	Mg 279.077 IEC†	51067.1	47063.1	19295 µg/L	19295 ppb	23:05:27
3	Na 589.592 Radial†	37887.2	33360.4	5090.8 µg/L	5090.8 ppb	23:05:27
3	Sr 421.552†	132005.7	122416.2	286.67 µg/L	286.67 ppb	23:05:27
3	Sc 361.383	1762240.5	1762240.5	105.35 %		23:06:22
3	Y 371.029	1183646.7	1183646.7	115.75 %		23:06:22
3	Ag 328.068†	3265.2	132.4	0.3601 µg/L	0.3601 ppb	23:06:24
3	As 188.979†	24.0	37.1	45.125 µg/L	45.125 ppb	23:06:44
3	B 249.677†	4432.5	851.7	14.119 µg/L	14.119 ppb	23:06:24
3	Ba 233.527†	364911.5	346560.6	1581.7 µg/L	1581.7 ppb	23:06:24
3	Be 313.107†	44250.2	42663.8	13.810 µg/L	13.810 ppb	23:06:24
3	Cd 226.502†	1868.4	1867.9	-0.5475 µg/L	-0.5475 ppb	23:06:44
3	Co 228.616†	3818.3	3801.1	46.927 µg/L	46.927 ppb	23:06:44
3	Cr 267.716†	11520.7	10775.5	96.312 µg/L	96.312 ppb	23:06:44
3	Cu 324.752†	12432.7	9376.6	59.779 µg/L	59.779 ppb	23:06:24
3	Mn 257.610†	2317597.8	2199857.2	3004.9 µg/L	3004.9 ppb	23:06:22
3	Mo 202.031†	-130.1	-68.3	3.3434 µg/L	3.3434 ppb	23:06:44
3	Ni 231.604†	6497.1	6208.1	79.409 µg/L	79.409 ppb	23:06:44
3	P 214.914†	6548.8	6136.8	1405.7 µg/L	1405.7 ppb	23:06:44
3	Pb 220.353†	1503.3	1314.5	87.814 µg/L	87.814 ppb	23:06:44
3	S 181.975 Axial†	1693.7	1512.9	1225.7 µg/L	1225.7 ppb	23:06:44
3	Sb 206.836†	63.4	-26.4	-6.9668 µg/L	-6.9668 ppb	23:06:44
3	Se 196.026†	-89.6	-95.9	6.30 µg/L	6.30 ppb	23:06:44
3	SiO2†	985443.6	933841.5	102070 µg/L	102070 ppb	23:06:22
3	Si 251.611†	3011320.9	2857764.8	47253 µg/L	47253 ppb	23:06:22
3	Sn 189.927†	-6.7	-8.4	13.471 µg/L	13.471 ppb	23:06:44
3	Ti 334.940†	4310223.4	4090764.2	4170.6 µg/L	4170.6 ppb	23:06:22
3	Tl 190.801†	-509.8	-363.6	2.1729 µg/L	2.1729 ppb	23:06:44
3	U 409.014†	-4879.8	-4153.0	-252.73 µg/L	-252.73 ppb	23:06:24
3	V 292.402†	41278.4	38750.9	190.90 µg/L	190.90 ppb	23:06:24
3	Zn 213.857†	47113.7	44257.4	268.16 µg/L	268.16 ppb	23:06:24

Mean Data: 248110002|959114|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1747129.3	104.45	%	0.793				0.76%
Sc RADIAL	156132.7	107	%	1.2				1.12%
Y 371.029	1174187.2	114.83	%	0.807				0.70%
Ag 328.068†	155.7	0.4720	µg/L	0.99828	0.4720	ppb	0.99828	211.50%
Al 396.153Radial†	489783.4	106910	µg/L	530.7	106910	ppb	530.7	0.50%
As 188.979†	30.5	42.428	µg/L	2.4075	42.428	ppb	2.4075	5.67%
B 249.677†	918.0	15.229	µg/L	2.1175	15.229	ppb	2.1175	13.90%
Ba 233.527†	349995.4	1597.4	µg/L	13.71	1597.4	ppb	13.71	0.86%
Be 313.107†	43058.7	13.937	µg/L	0.1191	13.937	ppb	0.1191	0.85%
Ca 317.933Radial†	515236.9	30191	µg/L	100.7	30191	ppb	100.7	0.33%
Cd 226.502†	1887.6	-0.4262	µg/L	0.10516	-0.4262	ppb	0.10516	24.67%
Co 228.616†	3848.4	47.583	µg/L	0.5685	47.583	ppb	0.5685	1.19%
Cr 267.716†	10879.7	97.215	µg/L	0.8271	97.215	ppb	0.8271	0.85%
Cu 324.752†	9627.7	60.885	µg/L	0.9781	60.885	ppb	0.9781	1.61%
Fe 238.204 Radial†	1930850.5	128370	µg/L	603.0	128370	ppb	603.0	0.47%
K 766.490 Radial†	37624.7	15458	µg/L	52.8	15458	ppb	52.8	0.34%
Mg 279.077 IEC†	46946.5	19246	µg/L	47.3	19246	ppb	47.3	0.25%
Mn 257.610†	2207858.1	3015.8	µg/L	10.15	3015.8	ppb	10.15	0.34%
Mo 202.031†	-65.1	3.4473	µg/L	0.22517	3.4473	ppb	0.22517	6.53%
Na 589.592 Radial†	33330.8	5086.3	µg/L	25.52	5086.3	ppb	25.52	0.50%

Ni 231.604†	6276.7	80.286	µg/L	0.9479	80.286	ppb	0.9479	1.18%
P 214.914†	6202.9	1421.4	µg/L	14.85	1421.4	ppb	14.85	1.04%
Pb 220.353†	1343.9	89.620	µg/L	1.8872	89.620	ppb	1.8872	2.11%
S 181.975 Axial†	1533.1	1242.0	µg/L	14.86	1242.0	ppb	14.86	1.20%
Sb 206.836†	-24.6	-6.7301	µg/L	0.65012	-6.7301	ppb	0.65012	9.66%
Se 196.026†	-106.2	2.28	µg/L	4.832	2.28	ppb	4.832	212.21%
SiO2†	936804.1	102390	µg/L	304.2	102390	ppb	304.2	0.30%
Si 251.611†	2867396.6	47412	µg/L	152.8	47412	ppb	152.8	0.32%
Sn 189.927†	4.4	14.430	µg/L	0.8462	14.430	ppb	0.8462	5.86%
Sr 421.552†	122164.4	286.08	µg/L	1.351	286.08	ppb	1.351	0.47%
Ti 334.940†	4105951.3	4186.1	µg/L	13.93	4186.1	ppb	13.93	0.33%
Tl 190.801†	-377.6	0.4820	µg/L	1.47850	0.4820	ppb	1.47850	306.72%
U 409.014†	-4246.1	-258.32	µg/L	5.230	-258.32	ppb	5.230	2.02%
Concentration less than lower limit for U 409.014.								
V 292.402†	39142.2	193.04	µg/L	1.849	193.04	ppb	1.849	0.96%
Zn 213.857†	44782.5	271.45	µg/L	2.865	271.45	ppb	2.865	1.06%

Sequence No.: 102
Sample ID: 248110003|959114|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 420
Date Collected: 3/29/2010 23:06:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248110003|959114|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	154528.6	154528.6	106	%			23:07:23
1	Al 396.153Radial†	247642.4	233612.9	50994	µg/L	50994	ppb	23:07:21
1	Ca 317.933Radial†	312687.0	294316.1	17246	µg/L	17246	ppb	23:07:23
1	Fe 238.204 Radial†	1861529.4	1755716.1	116730	µg/L	116730	ppb	23:07:21
1	K 766.490 Radial†	22189.2	19474.3	8001.2	µg/L	8001.2	ppb	23:07:23
1	Mg 279.077 IEC†	26604.3	24907.0	10170	µg/L	10170	ppb	23:07:23
1	Na 589.592 Radial†	27507.2	24250.6	3703.5	µg/L	3703.5	ppb	23:07:23
1	Sr 421.552†	53341.5	50590.7	118.44	µg/L	118.44	ppb	23:07:23
1	Sc 361.383	1759174.7	1759174.7	105.17	%			23:07:36
1	Y 371.029	1245866.3	1245866.3	121.84	%			23:07:36
1	Ag 328.068†	3306.3	176.9	-0.2878	µg/L	-0.2878	ppb	23:07:38
1	As 188.979†	-9.1	5.6	31.630	µg/L	31.630	ppb	23:07:58
1	B 249.677†	3818.8	275.5	4.5267	µg/L	4.5267	ppb	23:07:38
1	Ba 233.527†	148122.4	141022.5	642.81	µg/L	642.81	ppb	23:07:38
1	Be 313.107†	29739.9	28939.4	9.3015	µg/L	9.3015	ppb	23:07:38
1	Cd 226.502†	1670.4	1682.8	-0.5678	µg/L	-0.5678	ppb	23:07:58
1	Co 228.616†	2002.7	2081.0	23.095	µg/L	23.095	ppb	23:07:58
1	Cr 267.716†	39775.3	37661.5	327.19	µg/L	327.19	ppb	23:07:38
1	Cu 324.752†	5889.5	3175.4	30.773	µg/L	30.773	ppb	23:07:38
1	Mn 257.610†	1771900.8	1684795.6	2301.5	µg/L	2301.5	ppb	23:07:36
1	Mo 202.031†	261.5	303.9	14.433	µg/L	14.433	ppb	23:07:58
1	Ni 231.604†	14763.7	14079.5	180.09	µg/L	180.09	ppb	23:07:58
1	P 214.914†	8256.6	7771.5	1792.9	µg/L	1792.9	ppb	23:07:58
1	Pb 220.353†	583.8	442.7	31.173	µg/L	31.173	ppb	23:07:58
1	S 181.975 Axial†	270.1	162.0	131.33	µg/L	131.33	ppb	23:07:58
1	Sb 206.836†	86.6	-4.3	-6.9118	µg/L	-6.9118	ppb	23:07:58
1	Se 196.026†	-85.2	-91.9	3.77	µg/L	3.77	ppb	23:07:58
1	SiO2†	737741.8	699935.5	76503	µg/L	76503	ppb	23:07:36
1	Si 251.611†	2258768.2	2147154.6	35503	µg/L	35503	ppb	23:07:36
1	Sn 189.927†	110.6	103.1	19.145	µg/L	19.145	ppb	23:07:58
1	Ti 334.940†	3613389.4	3435284.8	3502.6	µg/L	3502.6	ppb	23:07:36
1	Tl 190.801†	-455.0	-312.4	-0.1550	µg/L	-0.1550	ppb	23:07:58
1	U 409.014†	-7187.0	-6354.9	-397.76	µg/L	-397.76	ppb	23:07:38
1	V 292.402†	20837.1	19381.9	86.934	µg/L	86.934	ppb	23:07:38
1	Zn 213.857†	49789.3	46879.5	284.10	µg/L	284.10	ppb	23:07:38
2	Sc RADIAL	158014.6	158014.6	108	%			23:07:28
2	Al 396.153Radial†	249498.8	230172.0	50243	µg/L	50243	ppb	23:07:25
2	Ca 317.933Radial†	319067.5	293694.8	17209	µg/L	17209	ppb	23:07:28
2	Fe 238.204 Radial†	1871481.1	1726159.4	114760	µg/L	114760	ppb	23:07:25
2	K 766.490 Radial†	22490.1	19290.1	7925.5	µg/L	7925.5	ppb	23:07:28
2	Mg 279.077 IEC†	27233.5	24933.7	10182	µg/L	10182	ppb	23:07:28
2	Na 589.592 Radial†	28097.3	24222.5	3699.3	µg/L	3699.3	ppb	23:07:28
2	Sr 421.552†	54318.3	50381.7	117.95	µg/L	117.95	ppb	23:07:28
2	Sc 361.383	1769999.8	1769999.8	105.81	%			23:08:01
2	Y 371.029	1253523.3	1253523.3	122.58	%			23:08:01
2	Ag 328.068†	3201.5	58.6	-0.7573	µg/L	-0.7573	ppb	23:08:03
2	As 188.979†	4.7	18.7	36.624	µg/L	36.624	ppb	23:08:23
2	B 249.677†	3663.8	106.9	1.6962	µg/L	1.6962	ppb	23:08:03
2	Ba 233.527†	147716.8	139777.8	637.15	µg/L	637.15	ppb	23:08:03
2	Be 313.107†	29878.3	28897.2	9.2891	µg/L	9.2891	ppb	23:08:03
2	Cd 226.502†	1671.8	1674.4	-0.4197	µg/L	-0.4197	ppb	23:08:23
2	Co 228.616†	1993.5	2060.6	22.912	µg/L	22.912	ppb	23:08:23
2	Cr 267.716†	39585.6	37250.9	323.60	µg/L	323.60	ppb	23:08:03
2	Cu 324.752†	5826.3	3081.4	30.082	µg/L	30.082	ppb	23:08:03
2	Mn 257.610†	1774079.6	1676550.2	2290.2	µg/L	2290.2	ppb	23:08:01
2	Mo 202.031†	261.0	301.9	14.291	µg/L	14.291	ppb	23:08:23
2	Ni 231.604†	14774.6	14003.9	179.13	µg/L	179.13	ppb	23:08:23
2	P 214.914†	8268.3	7734.6	1785.2	µg/L	1785.2	ppb	23:08:23
2	Pb 220.353†	577.0	432.9	30.569	µg/L	30.569	ppb	23:08:23

2	S 181.975 Axial†	266.8	157.3	127.50 µg/L	127.50 ppb	23:08:23
2	Sb 206.836†	93.3	1.6	-6.0450 µg/L	-6.0450 ppb	23:08:23
2	Se 196.026†	-76.0	-82.7	6.71 µg/L	6.71 ppb	23:08:23
2	SiO2†	739489.5	697296.9	76215 µg/L	76215 ppb	23:08:01
2	Si 251.611†	2264261.9	2139210.6	35371 µg/L	35371 ppb	23:08:01
2	Sn 189.927†	111.2	103.1	19.087 µg/L	19.087 ppb	23:08:23
2	Ti 334.940†	3618174.2	3418793.1	3485.8 µg/L	3485.8 ppb	23:08:01
2	Tl 190.801†	-472.3	-326.0	-2.1913 µg/L	-2.1913 ppb	23:08:23
2	U 409.014†	-7157.3	-6285.1	-393.12 µg/L	-393.12 ppb	23:08:03
2	V 292.402†	20787.9	19214.2	86.319 µg/L	86.319 ppb	23:08:03
2	Zn 213.857†	49530.5	46345.4	280.93 µg/L	280.93 ppb	23:08:03
3	Sc RADIAL	155396.0	155396.0	107 %		23:07:32
3	Al 396.153Radial†	249857.7	234386.8	51163 µg/L	51163 ppb	23:07:30
3	Ca 317.933Radial†	312282.3	292290.1	17127 µg/L	17127 ppb	23:07:32
3	Fe 238.204 Radial†	1877002.6	1760428.1	117040 µg/L	117040 ppb	23:07:30
3	K 766.490 Radial†	22158.8	19328.9	7941.3 µg/L	7941.3 ppb	23:07:32
3	Mg 279.077 IEC†	26531.2	24698.3	10083 µg/L	10083 ppb	23:07:32
3	Na 589.592 Radial†	27640.7	24231.0	3700.6 µg/L	3700.6 ppb	23:07:32
3	Sr 421.552†	53270.3	50243.0	117.62 µg/L	117.62 ppb	23:07:32
3	Sc 361.383	1768244.5	1768244.5	105.71 %		23:08:26
3	Y 371.029	1252208.3	1252208.3	122.46 %		23:08:26
3	Ag 328.068†	3496.1	340.3	0.3851 µg/L	0.3851 ppb	23:08:28
3	As 188.979†	2.2	16.3	36.192 µg/L	36.192 ppb	23:08:49
3	B 249.677†	3512.3	-33.0	-0.6540 µg/L	-0.6540 ppb	23:08:28
3	Ba 233.527†	149044.4	141172.4	643.49 µg/L	643.49 ppb	23:08:28
3	Be 313.107†	30133.0	29166.2	9.3775 µg/L	9.3775 ppb	23:08:28
3	Cd 226.502†	1649.0	1654.4	-0.7976 µg/L	-0.7976 ppb	23:08:49
3	Co 228.616†	2019.5	2087.1	23.163 µg/L	23.163 ppb	23:08:49
3	Cr 267.716†	39992.5	37673.0	327.30 µg/L	327.30 ppb	23:08:28
3	Cu 324.752†	6075.0	3322.1	31.460 µg/L	31.460 ppb	23:08:28
3	Mn 257.610†	1777361.6	1681319.3	2296.7 µg/L	2296.7 ppb	23:08:26
3	Mo 202.031†	264.2	305.1	14.483 µg/L	14.483 ppb	23:08:49
3	Ni 231.604†	14721.6	13967.7	178.66 µg/L	178.66 ppb	23:08:49
3	P 214.914†	8222.3	7698.8	1775.3 µg/L	1775.3 ppb	23:08:49
3	Pb 220.353†	552.1	409.8	29.169 µg/L	29.169 ppb	23:08:49
3	S 181.975 Axial†	271.4	161.9	131.24 µg/L	131.24 ppb	23:08:49
3	Sb 206.836†	80.6	-10.4	-7.7476 µg/L	-7.7476 ppb	23:08:49
3	Se 196.026†	-82.7	-89.1	4.98 µg/L	4.98 ppb	23:08:49
3	SiO2†	740622.1	699062.0	76408 µg/L	76408 ppb	23:08:26
3	Si 251.611†	2266682.4	2143624.6	35444 µg/L	35444 ppb	23:08:26
3	Sn 189.927†	105.8	98.0	18.765 µg/L	18.765 ppb	23:08:49
3	Ti 334.940†	3626363.5	3429934.6	3497.1 µg/L	3497.1 ppb	23:08:26
3	Tl 190.801†	-452.4	-307.7	0.4003 µg/L	0.4003 ppb	23:08:49
3	U 409.014†	-7102.3	-6239.8	-390.76 µg/L	-390.76 ppb	23:08:28
3	V 292.402†	20923.8	19362.3	86.787 µg/L	86.787 ppb	23:08:28
3	Zn 213.857†	49935.1	46774.6	283.41 µg/L	283.41 ppb	23:08:28

Mean Data: 248110003|959114|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1765806.3	105.56	%	0.347				0.33%
Sc RADIAL	155979.7	107	%	1.2				1.16%
Y 371.029	1250532.7	122.29	%	0.400				0.33%
Ag 328.068†	191.9	-0.2200	µg/L	0.57425	-0.2200	ppb	0.57425	261.01%
Al 396.153Radial†	232723.9	50800	µg/L	489.8	50800	ppb	489.8	0.96%
As 188.979†	13.5	34.815	µg/L	2.7668	34.815	ppb	2.7668	7.95%
B 249.677†	116.5	1.8563	µg/L	2.59409	1.8563	ppb	2.59409	139.74%
Ba 233.527†	140657.6	641.15	µg/L	3.482	641.15	ppb	3.482	0.54%
Be 313.107†	29000.9	9.3227	µg/L	0.04785	9.3227	ppb	0.04785	0.51%
Ca 317.933Radial†	293433.7	17194	µg/L	60.8	17194	ppb	60.8	0.35%
Cd 226.502†	1670.5	-0.5950	µg/L	0.19043	-0.5950	ppb	0.19043	32.00%
Co 228.616†	2076.2	23.057	µg/L	0.1297	23.057	ppb	0.1297	0.56%
Cr 267.716†	37528.5	326.03	µg/L	2.108	326.03	ppb	2.108	0.65%
Cu 324.752†	3193.0	30.772	µg/L	0.6890	30.772	ppb	0.6890	2.24%
Fe 238.204 Radial†	1747434.5	116180	µg/L	1234.9	116180	ppb	1234.9	1.06%
K 766.490 Radial†	19364.4	7956.0	µg/L	39.91	7956.0	ppb	39.91	0.50%
Mg 279.077 IEC†	24846.4	10145	µg/L	53.9	10145	ppb	53.9	0.53%
Mn 257.610†	1680888.4	2296.1	µg/L	5.65	2296.1	ppb	5.65	0.25%
Mo 202.031†	303.6	14.402	µg/L	0.0996	14.402	ppb	0.0996	0.69%
Na 589.592 Radial†	24234.7	3701.1	µg/L	2.17	3701.1	ppb	2.17	0.06%

Ni 231.604†	14017.0	179.29	µg/L	0.730	179.29	ppb	0.730	0.41%
P 214.914†	7735.0	1784.5	µg/L	8.82	1784.5	ppb	8.82	0.49%
Pb 220.353†	428.5	30.304	µg/L	1.0279	30.304	ppb	1.0279	3.39%
S 181.975 Axial†	160.4	130.02	µg/L	2.182	130.02	ppb	2.182	1.68%
Sb 206.836†	-4.4	-6.9015	µg/L	0.85134	-6.9015	ppb	0.85134	12.34%
Se 196.026†	-87.9	5.16	µg/L	1.477	5.16	ppb	1.477	28.65%
SiO2†	698764.8	76375	µg/L	146.9	76375	ppb	146.9	0.19%
Si 251.611†	2143329.9	35439	µg/L	65.8	35439	ppb	65.8	0.19%
Sn 189.927†	101.4	18.999	µg/L	0.2048	18.999	ppb	0.2048	1.08%
Sr 421.552†	50405.1	118.00	µg/L	0.410	118.00	ppb	0.410	0.35%
Ti 334.940†	3428004.2	3495.1	µg/L	8.58	3495.1	ppb	8.58	0.25%
Tl 190.801†	-315.4	-0.6487	µg/L	1.36450	-0.6487	ppb	1.36450	210.35%
U 409.014†	-6293.2	-393.88	µg/L	3.562	-393.88	ppb	3.562	0.90%
Concentration less than lower limit for U 409.014.								
V 292.402†	19319.4	86.680	µg/L	0.3211	86.680	ppb	0.3211	0.37%
Zn 213.857†	46666.5	282.81	µg/L	1.668	282.81	ppb	1.668	0.59%

Sequence No.: 103
Sample ID: 248110004|959114|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 421
Date Collected: 3/29/2010 23:08:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248110004|959114|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	158171.4	158171.4	109	%			23:09:27
1	Al 396.153Radial†	170257.1	156923.1	34254	µg/L	34254	ppb	23:09:27
1	Ca 317.933Radial†	194023.3	178175.4	10440	µg/L	10440	ppb	23:09:27
1	Fe 238.204 Radial†	1976669.3	1821379.0	121090	µg/L	121090	ppb	23:09:25
1	K 766.490 Radial†	33295.7	29226.9	12020	µg/L	12020	ppb	23:09:27
1	Mg 279.077 IEC†	35473.7	32502.2	13297	µg/L	13297	ppb	23:09:27
1	Na 589.592 Radial†	75090.1	67500.5	10318	µg/L	10318	ppb	23:09:27
1	Sr 421.552†	36384.5	33806.2	79.151	µg/L	79.151	ppb	23:09:27
1	Sc 361.383	1771417.6	1771417.6	105.90	%			23:09:40
1	Y 371.029	1282111.8	1282111.8	125.38	%			23:09:40
1	Ag 328.068†	3335.8	183.0	-0.4221	µg/L	-0.4221	ppb	23:09:42
1	As 188.979†	-5.4	9.2	32.764	µg/L	32.764	ppb	23:10:02
1	B 249.677†	3450.0	-97.8	-1.7261	µg/L	-1.7261	ppb	23:09:42
1	Ba 233.527†	91214.4	86310.1	392.80	µg/L	392.80	ppb	23:09:42
1	Be 313.107†	33827.9	32604.2	10.470	µg/L	10.470	ppb	23:09:42
1	Cd 226.502†	1795.3	1789.7	-0.3222	µg/L	-0.3222	ppb	23:10:02
1	Co 228.616†	1685.5	1768.2	18.314	µg/L	18.314	ppb	23:10:02
1	Cr 267.716†	22848.4	21415.9	187.77	µg/L	187.77	ppb	23:10:02
1	Cu 324.752†	4407.0	1736.7	25.170	µg/L	25.170	ppb	23:09:42
1	Mn 257.610†	1957538.8	1848451.3	2525.0	µg/L	2525.0	ppb	23:09:40
1	Mo 202.031†	184.8	229.7	12.316	µg/L	12.316	ppb	23:10:02
1	Ni 231.604†	9098.4	8632.6	110.42	µg/L	110.42	ppb	23:10:02
1	P 214.914†	9926.9	9294.6	2151.1	µg/L	2151.1	ppb	23:10:02
1	Pb 220.353†	561.8	418.1	29.068	µg/L	29.068	ppb	23:10:02
1	S 181.975 Axial†	348.3	234.0	189.68	µg/L	189.68	ppb	23:10:02
1	Sb 206.836†	78.6	-12.4	-5.8911	µg/L	-5.8911	ppb	23:10:02
1	Se 196.026†	-106.5	-111.5	-2.54	µg/L	-2.54	ppb	23:10:02
1	SiO2†	774197.9	729513.1	79736	µg/L	79736	ppb	23:09:40
1	Si 251.611†	2370904.3	2238201.8	37008	µg/L	37008	ppb	23:09:40
1	Sn 189.927†	245.7	230.0	29.464	µg/L	29.464	ppb	23:10:02
1	Ti 334.940†	4038727.6	3813190.7	3887.6	µg/L	3887.6	ppb	23:09:40
1	Tl 190.801†	-516.8	-367.7	-3.1951	µg/L	-3.1951	ppb	23:10:02
1	U 409.014†	-8628.2	-7668.6	-479.24	µg/L	-479.24	ppb	23:09:42
1	V 292.402†	18861.5	17379.4	74.096	µg/L	74.096	ppb	23:10:02
1	Zn 213.857†	68977.2	64671.7	396.10	µg/L	396.10	ppb	23:09:42
2	Sc RADIAL	158522.1	158522.1	109	%			23:09:32
2	Al 396.153Radial†	170026.9	156364.3	34132	µg/L	34132	ppb	23:09:32
2	Ca 317.933Radial†	194211.9	177953.3	10427	µg/L	10427	ppb	23:09:32
2	Fe 238.204 Radial†	1966692.8	1808176.2	120210	µg/L	120210	ppb	23:09:29
2	K 766.490 Radial†	33372.0	29229.2	12021	µg/L	12021	ppb	23:09:32
2	Mg 279.077 IEC†	35603.2	32548.9	13317	µg/L	13317	ppb	23:09:32
2	Na 589.592 Radial†	75231.5	67477.4	10314	µg/L	10314	ppb	23:09:32
2	Sr 421.552†	36346.1	33696.7	78.894	µg/L	78.894	ppb	23:09:32
2	Sc 361.383	1787895.4	1787895.4	106.88	%			23:10:05
2	Y 371.029	1291106.6	1291106.6	126.26	%			23:10:05
2	Ag 328.068†	3324.1	143.0	-0.5844	µg/L	-0.5844	ppb	23:10:07
2	As 188.979†	-3.4	11.1	33.370	µg/L	33.370	ppb	23:10:27
2	B 249.677†	3353.4	-218.2	-3.7495	µg/L	-3.7495	ppb	23:10:07
2	Ba 233.527†	92477.2	86697.8	394.58	µg/L	394.58	ppb	23:10:07
2	Be 313.107†	34087.5	32552.7	10.451	µg/L	10.451	ppb	23:10:07
2	Cd 226.502†	1771.1	1751.5	-0.4940	µg/L	-0.4940	ppb	23:10:27
2	Co 228.616†	1745.8	1810.0	18.934	µg/L	18.934	ppb	23:10:27
2	Cr 267.716†	23064.5	21419.2	187.77	µg/L	187.77	ppb	23:10:27
2	Cu 324.752†	4452.7	1741.1	25.057	µg/L	25.057	ppb	23:10:07
2	Mn 257.610†	1967755.4	1840973.5	2514.7	µg/L	2514.7	ppb	23:10:05
2	Mo 202.031†	201.1	243.4	12.713	µg/L	12.713	ppb	23:10:27
2	Ni 231.604†	9142.1	8594.4	109.93	µg/L	109.93	ppb	23:10:27
2	P 214.914†	10039.9	9313.9	2156.3	µg/L	2156.3	ppb	23:10:27
2	Pb 220.353†	488.2	344.3	24.603	µg/L	24.603	ppb	23:10:27

2	S 181.975 Axial†	366.6	248.2	201.14 µg/L	201.14 ppb	23:10:27
2	Sb 206.836†	66.9	-24.0	-7.4452 µg/L	-7.4452 ppb	23:10:27
2	Se 196.026†	-87.7	-92.9	4.48 µg/L	4.48 ppb	23:10:27
2	SiO2†	778379.7	726687.7	79427 µg/L	79427 ppb	23:10:05
2	Si 251.611†	2384063.7	2229879.6	36871 µg/L	36871 ppb	23:10:05
2	Sn 189.927†	248.9	230.8	29.459 µg/L	29.459 ppb	23:10:27
2	Ti 334.940†	4056746.7	3794900.2	3868.9 µg/L	3868.9 ppb	23:10:05
2	Tl 190.801†	-509.6	-356.5	-1.9142 µg/L	-1.9142 ppb	23:10:27
2	U 409.014†	-8816.8	-7770.0	-485.38 µg/L	-485.38 ppb	23:10:07
2	V 292.402†	19017.9	17361.6	74.155 µg/L	74.155 ppb	23:10:27
2	Zn 213.857†	69845.3	64883.6	397.52 µg/L	397.52 ppb	23:10:07
3	Sc RADIAL	157041.5	157041.5	108 %		23:09:36
3	Al 396.153Radial†	169584.3	157427.4	34364 µg/L	34364 ppb	23:09:36
3	Ca 317.933Radial†	192606.2	178146.5	10439 µg/L	10439 ppb	23:09:36
3	Fe 238.204 Radial†	1963581.4	1822336.3	121160 µg/L	121160 ppb	23:09:34
3	K 766.490 Radial†	33270.3	29424.0	12101 µg/L	12101 ppb	23:09:36
3	Mg 279.077 IEC†	35336.5	32610.0	13342 µg/L	13342 ppb	23:09:36
3	Na 589.592 Radial†	74717.3	67652.3	10341 µg/L	10341 ppb	23:09:36
3	Sr 421.552†	36362.3	34026.7	79.668 µg/L	79.668 ppb	23:09:36
3	Sc 361.383	1768534.2	1768534.2	105.72 %		23:10:30
3	Y 371.029	1279674.8	1279674.8	125.14 %		23:10:30
3	Ag 328.068†	3160.3	22.2	-1.0909 µg/L	-1.0909 ppb	23:10:32
3	As 188.979†	-19.8	-4.5	27.072 µg/L	27.072 ppb	23:10:53
3	B 249.677†	3200.3	-328.7	-5.6034 µg/L	-5.6034 ppb	23:10:32
3	Ba 233.527†	91365.8	86593.7	394.10 µg/L	394.10 ppb	23:10:32
3	Be 313.107†	33729.2	32563.0	10.453 µg/L	10.453 ppb	23:10:32
3	Cd 226.502†	1762.3	1761.3	-0.5250 µg/L	-0.5250 ppb	23:10:53
3	Co 228.616†	1715.3	1799.1	18.734 µg/L	18.734 ppb	23:10:53
3	Cr 267.716†	22793.1	21398.7	187.63 µg/L	187.63 ppb	23:10:53
3	Cu 324.752†	4486.3	1818.5	25.527 µg/L	25.527 ppb	23:10:32
3	Mn 257.610†	1953793.2	1847922.4	2524.2 µg/L	2524.2 ppb	23:10:30
3	Mo 202.031†	188.9	233.9	12.453 µg/L	12.453 ppb	23:10:53
3	Ni 231.604†	9060.7	8611.0	110.14 µg/L	110.14 ppb	23:10:53
3	P 214.914†	9873.7	9259.5	2142.7 µg/L	2142.7 ppb	23:10:53
3	Pb 220.353†	508.7	368.7	26.094 µg/L	26.094 ppb	23:10:53
3	S 181.975 Axial†	366.3	251.7	203.97 µg/L	203.97 ppb	23:10:53
3	Sb 206.836†	63.6	-26.5	-7.7906 µg/L	-7.7906 ppb	23:10:53
3	Se 196.026†	-78.3	-84.9	7.97 µg/L	7.97 ppb	23:10:53
3	SiO2†	772674.8	729264.4	79709 µg/L	79709 ppb	23:10:30
3	Si 251.611†	2365229.0	2236484.1	36980 µg/L	36980 ppb	23:10:30
3	Sn 189.927†	251.6	235.9	29.893 µg/L	29.893 ppb	23:10:53
3	Ti 334.940†	4034390.2	3815306.3	3889.7 µg/L	3889.7 ppb	23:10:30
3	Tl 190.801†	-489.6	-342.8	0.1665 µg/L	0.1665 ppb	23:10:53
3	U 409.014†	-8809.2	-7853.2	-490.68 µg/L	-490.68 ppb	23:10:32
3	V 292.402†	18797.9	17348.2	73.904 µg/L	73.904 ppb	23:10:53
3	Zn 213.857†	69130.6	64923.0	397.68 µg/L	397.68 ppb	23:10:32

Mean Data: 248110004|959114|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1775949.1	106.17	%	0.624				0.59%
Sc RADIAL	157911.6	108	%	0.5				0.49%
Y 371.029	1284297.8	125.59	%	0.589				0.47%
Ag 328.068†	116.0	-0.6991	µg/L	0.34884	-0.6991	ppb	0.34884	49.90%
Al 396.153Radial†	156904.9	34250	µg/L	116.1	34250	ppb	116.1	0.34%
As 188.979†	5.3	31.069	µg/L	3.4743	31.069	ppb	3.4743	11.18%
B 249.677†	-214.9	-3.6930	µg/L	1.93929	-3.6930	ppb	1.93929	52.51%
Ba 233.527†	86533.9	393.83	µg/L	0.921	393.83	ppb	0.921	0.23%
Be 313.107†	32573.3	10.458	µg/L	0.0103	10.458	ppb	0.0103	0.10%
Ca 317.933Radial†	178091.7	10435	µg/L	7.1	10435	ppb	7.1	0.07%
Cd 226.502†	1767.5	-0.4471	µg/L	0.10922	-0.4471	ppb	0.10922	24.43%
Co 228.616†	1792.4	18.661	µg/L	0.3166	18.661	ppb	0.3166	1.70%
Cr 267.716†	21411.3	187.72	µg/L	0.081	187.72	ppb	0.081	0.04%
Cu 324.752†	1765.5	25.251	µg/L	0.2454	25.251	ppb	0.2454	0.97%
Fe 238.204 Radial†	1817297.2	120820	µg/L	526.1	120820	ppb	526.1	0.44%
K 766.490 Radial†	29293.3	12047	µg/L	46.6	12047	ppb	46.6	0.39%
Mg 279.077 IEC†	32553.7	13319	µg/L	22.2	13319	ppb	22.2	0.17%
Mn 257.610†	1845782.4	2521.3	µg/L	5.70	2521.3	ppb	5.70	0.23%
Mo 202.031†	235.7	12.494	µg/L	0.2019	12.494	ppb	0.2019	1.62%
Na 589.592 Radial†	67543.4	10324	µg/L	14.5	10324	ppb	14.5	0.14%

Ni 231.604†	8612.7	110.17	µg/L	0.246	110.17	ppb	0.246	0.22%
P 214.914†	9289.3	2150.0	µg/L	6.87	2150.0	ppb	6.87	0.32%
Pb 220.353†	377.0	26.588	µg/L	2.2731	26.588	ppb	2.2731	8.55%
S 181.975 Axial†	244.6	198.26	µg/L	7.568	198.26	ppb	7.568	3.82%
Sb 206.836†	-21.0	-7.0423	µg/L	1.01186	-7.0423	ppb	1.01186	14.37%
Se 196.026†	-96.5	3.30	µg/L	5.353	3.30	ppb	5.353	162.04%
SiO2†	728488.4	79624	µg/L	171.0	79624	ppb	171.0	0.21%
Si 251.611†	2234855.2	36953	µg/L	72.7	36953	ppb	72.7	0.20%
Sn 189.927†	232.3	29.606	µg/L	0.2489	29.606	ppb	0.2489	0.84%
Sr 421.552†	33843.2	79.238	µg/L	0.3940	79.238	ppb	0.3940	0.50%
Ti 334.940†	3807799.1	3882.1	µg/L	11.44	3882.1	ppb	11.44	0.29%
Tl 190.801†	-355.7	-1.6476	µg/L	1.69658	-1.6476	ppb	1.69658	102.97%
U 409.014†	-7763.9	-485.10	µg/L	5.721	-485.10	ppb	5.721	1.18%
Concentration less than lower 1imit for U 409.014.								
V 292.402†	17363.1	74.052	µg/L	0.1309	74.052	ppb	0.1309	0.18%
Zn 213.857†	64826.1	397.10	µg/L	0.869	397.10	ppb	0.869	0.22%

Sequence No.: 104
Sample ID: 248110005|959114|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 422
Date Collected: 3/29/2010 23:11:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248110005|959114|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	157034.7	157034.7	108	%			23:11:31
1	Al 396.153Radial†	527560.2	489695.3	106890	µg/L	106890	ppb	23:11:29
1	Ca 317.933Radial†	546535.4	506659.4	29688	µg/L	29688	ppb	23:11:31
1	Fe 238.204 Radial†	2447723.6	2271780.5	151040	µg/L	151040	ppb	23:11:29
1	K 766.490 Radial†	44805.0	40131.5	16490	µg/L	16490	ppb	23:11:31
1	Mg 279.077 IEC†	53400.9	49378.2	20230	µg/L	20230	ppb	23:11:31
1	Na 589.592 Radial†	21121.7	17909.7	2725.7	µg/L	2725.7	ppb	23:11:31
1	Sr 421.552†	137267.7	127685.2	299.03	µg/L	299.03	ppb	23:11:31
1	Sc 361.383	1762845.1	1762845.1	105.38	%			23:11:44
1	Y 371.029	1163538.0	1163538.0	113.78	%			23:11:44
1	Ag 328.068†	3467.6	323.4	1.1773	µg/L	1.1773	ppb	23:11:46
1	As 188.979†	3.8	17.9	42.429	µg/L	42.429	ppb	23:12:06
1	B 249.677†	4506.9	921.0	15.254	µg/L	15.254	ppb	23:11:46
1	Ba 233.527†	320493.8	304293.6	1388.3	µg/L	1388.3	ppb	23:11:46
1	Be 313.107†	42384.9	40879.4	13.220	µg/L	13.220	ppb	23:11:46
1	Cd 226.502†	2183.6	2166.5	-0.8827	µg/L	-0.8827	ppb	23:12:06
1	Co 228.616†	4420.6	4371.4	53.359	µg/L	53.359	ppb	23:12:06
1	Cr 267.716†	14117.9	13236.3	118.35	µg/L	118.35	ppb	23:12:06
1	Cu 324.752†	12227.1	9177.5	62.239	µg/L	62.239	ppb	23:11:46
1	Mn 257.610†	2031370.5	1927499.9	2632.6	µg/L	2632.6	ppb	23:11:44
1	Mo 202.031†	-103.1	-42.6	5.0752	µg/L	5.0752	ppb	23:12:06
1	Ni 231.604†	6768.1	6463.2	82.672	µg/L	82.672	ppb	23:12:06
1	P 214.914†	5844.9	5466.7	1229.7	µg/L	1229.7	ppb	23:12:06
1	Pb 220.353†	1470.4	1282.9	84.859	µg/L	84.859	ppb	23:12:06
1	S 181.975 Axial†	693.7	563.4	456.48	µg/L	456.48	ppb	23:12:06
1	Sb 206.836†	59.8	-29.9	-8.0105	µg/L	-8.0105	ppb	23:12:06
1	Se 196.026†	-116.9	-121.9	3.91	µg/L	3.91	ppb	23:12:06
1	SiO2†	966026.1	915095.2	100020	µg/L	100020	ppb	23:11:44
1	Si 251.611†	2956536.1	2804798.8	46377	µg/L	46377	ppb	23:11:44
1	Sn 189.927†	12.1	9.5	13.905	µg/L	13.905	ppb	23:12:06
1	Ti 334.940†	4055800.4	3847937.4	3922.9	µg/L	3922.9	ppb	23:11:44
1	Tl 190.801†	-472.0	-327.5	3.5888	µg/L	3.5888	ppb	23:12:06
1	U 409.014†	-5415.5	-4659.7	-291.19	µg/L	-291.19	ppb	23:11:46
1	V 292.402†	42959.6	40332.8	196.36	µg/L	196.36	ppb	23:11:46
1	Zn 213.857†	47319.9	44437.7	266.75	µg/L	266.75	ppb	23:11:46
2	Sc RADIAL	155211.5	155211.5	106	%			23:11:36
2	Al 396.153Radial†	525370.7	493390.8	107700	µg/L	107700	ppb	23:11:34
2	Ca 317.933Radial†	538522.5	505093.2	29596	µg/L	29596	ppb	23:11:36
2	Fe 238.204 Radial†	2423249.5	2275483.2	151280	µg/L	151280	ppb	23:11:34
2	K 766.490 Radial†	44273.0	40120.4	16485	µg/L	16485	ppb	23:11:36
2	Mg 279.077 IEC†	52541.9	49153.7	20137	µg/L	20137	ppb	23:11:36
2	Na 589.592 Radial†	20651.0	17698.0	2693.3	µg/L	2693.3	ppb	23:11:36
2	Sr 421.552†	135786.7	127790.9	299.28	µg/L	299.28	ppb	23:11:36
2	Sc 361.383	1773429.9	1773429.9	106.02	%			23:12:09
2	Y 371.029	1169674.7	1169674.7	114.38	%			23:12:09
2	Ag 328.068†	3610.6	438.6	1.6365	µg/L	1.6365	ppb	23:12:11
2	As 188.979†	-4.5	10.0	39.203	µg/L	39.203	ppb	23:12:31
2	B 249.677†	4474.9	865.3	14.320	µg/L	14.320	ppb	23:12:11
2	Ba 233.527†	320352.0	302344.7	1379.4	µg/L	1379.4	ppb	23:12:11
2	Be 313.107†	43004.7	41224.0	13.332	µg/L	13.332	ppb	23:12:11
2	Cd 226.502†	2147.0	2119.6	-1.2327	µg/L	-1.2327	ppb	23:12:31
2	Co 228.616†	4424.1	4349.6	53.039	µg/L	53.039	ppb	23:12:31
2	Cr 267.716†	14167.6	13203.2	118.07	µg/L	118.07	ppb	23:12:31
2	Cu 324.752†	12165.3	9050.0	61.717	µg/L	61.717	ppb	23:12:11
2	Mn 257.610†	2046430.4	1930200.1	2636.3	µg/L	2636.3	ppb	23:12:09
2	Mo 202.031†	-111.8	-50.3	4.8414	µg/L	4.8414	ppb	23:12:31
2	Ni 231.604†	6781.4	6437.4	82.342	µg/L	82.342	ppb	23:12:31
2	P 214.914†	5859.7	5447.5	1225.2	µg/L	1225.2	ppb	23:12:31
2	Pb 220.353†	1493.2	1296.0	85.700	µg/L	85.700	ppb	23:12:31

2	S 181.975 Axial†	679.2	545.8	442.17 µg/L	442.17 ppb	23:12:31
2	Sb 206.836†	55.6	-34.2	-8.5948 µg/L	-8.5948 ppb	23:12:31
2	Se 196.026†	-98.1	-103.5	11.3 µg/L	11.3 ppb	23:12:31
2	SiO2†	973621.4	916788.3	100210 µg/L	100210 ppb	23:12:09
2	Si 251.611†	2978657.5	2808920.0	46445 µg/L	46445 ppb	23:12:09
2	Sn 189.927†	26.8	23.2	14.895 µg/L	14.895 ppb	23:12:31
2	Ti 334.940†	4083609.5	3851197.8	3926.2 µg/L	3926.2 ppb	23:12:09
2	Tl 190.801†	-469.5	-322.6	4.2934 µg/L	4.2934 ppb	23:12:31
2	U 409.014†	-5470.9	-4681.3	-292.58 µg/L	-292.58 ppb	23:12:11
2	V 292.402†	43114.0	40235.1	195.77 µg/L	195.77 ppb	23:12:11
2	Zn 213.857†	47411.4	44256.1	265.60 µg/L	265.60 ppb	23:12:11
3	Sc RADIAL	155709.5	155709.5	107 %		23:11:40
3	Al 396.153Radial†	520368.2	487130.4	106330 µg/L	106330 ppb	23:11:38
3	Ca 317.933Radial†	542797.9	507477.9	29736 µg/L	29736 ppb	23:11:40
3	Fe 238.204 Radial†	2401802.1	2248129.7	149460 µg/L	149460 ppb	23:11:38
3	K 766.490 Radial†	44598.7	40292.2	16556 µg/L	16556 ppb	23:11:40
3	Mg 279.077 IEC†	52948.1	49376.1	20230 µg/L	20230 ppb	23:11:40
3	Na 589.592 Radial†	21048.7	18008.2	2740.7 µg/L	2740.7 ppb	23:11:40
3	Sr 421.552†	136868.2	128395.5	300.69 µg/L	300.69 ppb	23:11:40
3	Sc 361.383	1766716.9	1766716.9	105.62 %		23:12:34
3	Y 371.029	1164011.1	1164011.1	113.83 %		23:12:34
3	Ag 328.068†	3320.7	177.1	0.5492 µg/L	0.5492 ppb	23:12:36
3	As 188.979†	9.3	23.0	44.241 µg/L	44.241 ppb	23:12:56
3	B 249.677†	4379.6	791.1	13.071 µg/L	13.071 ppb	23:12:36
3	Ba 233.527†	315970.1	299344.0	1365.7 µg/L	1365.7 ppb	23:12:36
3	Be 313.107†	41919.2	40350.4	13.047 µg/L	13.047 ppb	23:12:36
3	Cd 226.502†	2189.7	2167.7	-0.7091 µg/L	-0.7091 ppb	23:12:56
3	Co 228.616†	4462.4	4401.7	53.834 µg/L	53.834 ppb	23:12:56
3	Cr 267.716†	14213.8	13297.8	118.82 µg/L	118.82 ppb	23:12:56
3	Cu 324.752†	12108.4	9039.7	61.409 µg/L	61.409 ppb	23:12:36
3	Mn 257.610†	2028894.7	1920931.4	2623.6 µg/L	2623.6 ppb	23:12:34
3	Mo 202.031†	-126.0	-64.1	4.3340 µg/L	4.3340 ppb	23:12:56
3	Ni 231.604†	6824.7	6502.7	83.177 µg/L	83.177 ppb	23:12:56
3	P 214.914†	5913.2	5519.2	1243.3 µg/L	1243.3 ppb	23:12:56
3	Pb 220.353†	1510.1	1317.3	86.945 µg/L	86.945 ppb	23:12:56
3	S 181.975 Axial†	704.4	572.1	463.48 µg/L	463.48 ppb	23:12:56
3	Sb 206.836†	75.0	-15.7	-6.0867 µg/L	-6.0867 ppb	23:12:56
3	Se 196.026†	-117.6	-122.2	3.23 µg/L	3.23 ppb	23:12:56
3	SiO2†	965251.6	912353.0	99721 µg/L	99721 ppb	23:12:34
3	Si 251.611†	2952178.5	2794524.6	46207 µg/L	46207 ppb	23:12:34
3	Sn 189.927†	15.9	13.1	14.117 µg/L	14.117 ppb	23:12:56
3	Ti 334.940†	4051509.0	3835440.0	3910.1 µg/L	3910.1 ppb	23:12:34
3	Tl 190.801†	-503.2	-356.1	-0.4273 µg/L	-0.4273 ppb	23:12:56
3	U 409.014†	-5465.5	-4695.8	-293.32 µg/L	-293.32 ppb	23:12:36
3	V 292.402†	42368.6	39683.9	193.02 µg/L	193.02 ppb	23:12:36
3	Zn 213.857†	46876.1	43919.2	263.64 µg/L	263.64 ppb	23:12:36

Mean Data: 248110005|959114|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1767664.0	105.67	%	0.320				0.30%
Sc RADIAL	155985.2	107	%	0.6				0.60%
Y 371.029	1165741.3	114.00	%	0.334				0.29%
Ag 328.068†	313.0	1.1210	µg/L	0.54581	1.1210	ppb	0.54581	48.69%
Al 396.153Radial†	490072.2	106980	µg/L	687.0	106980	ppb	687.0	0.64%
As 188.979†	17.0	41.958	µg/L	2.5518	41.958	ppb	2.5518	6.08%
B 249.677†	859.1	14.215	µg/L	1.0950	14.215	ppb	1.0950	7.70%
Ba 233.527†	301994.1	1377.8	µg/L	11.38	1377.8	ppb	11.38	0.83%
Be 313.107†	40817.9	13.199	µg/L	0.1434	13.199	ppb	0.1434	1.09%
Ca 317.933Radial†	506410.2	29673	µg/L	71.0	29673	ppb	71.0	0.24%
Cd 226.502†	2151.2	-0.9415	µg/L	0.26671	-0.9415	ppb	0.26671	28.33%
Co 228.616†	4374.2	53.411	µg/L	0.4001	53.411	ppb	0.4001	0.75%
Cr 267.716†	13245.8	118.42	µg/L	0.380	118.42	ppb	0.380	0.32%
Cu 324.752†	9089.0	61.789	µg/L	0.4195	61.789	ppb	0.4195	0.68%
Fe 238.204 Radial†	2265131.1	150590	µg/L	986.6	150590	ppb	986.6	0.66%
K 766.490 Radial†	40181.4	16510	µg/L	39.7	16510	ppb	39.7	0.24%
Mg 279.077 IEC†	49302.7	20199	µg/L	53.7	20199	ppb	53.7	0.27%
Mn 257.610†	1926210.5	2630.9	µg/L	6.51	2630.9	ppb	6.51	0.25%
Mo 202.031†	-52.3	4.7502	µg/L	0.37893	4.7502	ppb	0.37893	7.98%
Na 589.592 Radial†	17872.0	2719.9	µg/L	24.23	2719.9	ppb	24.23	0.89%

Ni 231.604†	6467.8	82.731	µg/L	0.4204	82.731	ppb	0.4204	0.51%
P 214.914†	5477.8	1232.7	µg/L	9.42	1232.7	ppb	9.42	0.76%
Pb 220.353†	1298.7	85.835	µg/L	1.0496	85.835	ppb	1.0496	1.22%
S 181.975 Axial†	560.4	454.04	µg/L	10.864	454.04	ppb	10.864	2.39%
Sb 206.836†	-26.6	-7.5640	µg/L	1.31231	-7.5640	ppb	1.31231	17.35%
Se 196.026†	-115.9	6.14	µg/L	4.468	6.14	ppb	4.468	72.74%
SiO2†	914745.5	99982	µg/L	244.6	99982	ppb	244.6	0.24%
Si 251.611†	2802747.8	46343	µg/L	122.6	46343	ppb	122.6	0.26%
Sn 189.927†	15.2	14.305	µg/L	0.5213	14.305	ppb	0.5213	3.64%
Sr 421.552†	127957.2	299.67	µg/L	0.898	299.67	ppb	0.898	0.30%
Ti 334.940†	3844858.4	3919.7	µg/L	8.48	3919.7	ppb	8.48	0.22%
Tl 190.801†	-335.4	2.4850	µg/L	2.54660	2.4850	ppb	2.54660	102.48%
U 409.014†	-4678.9	-292.36	µg/L	1.085	-292.36	ppb	1.085	0.37%
Concentration less than lower limit for U 409.014.								
V 292.402†	40083.9	195.05	µg/L	1.785	195.05	ppb	1.785	0.92%
Zn 213.857†	44204.3	265.33	µg/L	1.577	265.33	ppb	1.577	0.59%

Sequence No.: 105
Sample ID: 248110006|959114|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 423
Date Collected: 3/29/2010 23:13:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248110006|959114|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	160515.1	160515.1	110	%			23:13:35
1	Al 396.153Radial†	310265.8	281765.9	61506	µg/L	61506	ppb	23:13:33
1	Ca 317.933Radial†	248901.2	225396.2	13207	µg/L	13207	ppb	23:13:35
1	Fe 238.204 Radial†	2031221.8	1844318.6	122620	µg/L	122620	ppb	23:13:33
1	K 766.490 Radial†	27395.1	23420.9	9623.6	µg/L	9623.6	ppb	23:13:35
1	Mg 279.077 IEC†	32703.3	29509.3	12062	µg/L	12062	ppb	23:13:35
1	Na 589.592 Radial†	55193.6	48423.3	7400.8	µg/L	7400.8	ppb	23:13:35
1	Sr 421.552†	61077.5	55738.8	130.53	µg/L	130.53	ppb	23:13:35
1	Sc 361.383	1790003.7	1790003.7	107.01	%			23:13:48
1	Y 371.029	1247001.7	1247001.7	121.95	%			23:13:48
1	Ag 328.068†	3464.5	270.6	0.5183	µg/L	0.5183	ppb	23:13:48
1	As 188.979†	14.2	27.5	40.244	µg/L	40.244	ppb	23:14:08
1	B 249.677†	3607.1	15.2	0.1436	µg/L	0.1436	ppb	23:13:48
1	Ba 233.527†	236355.4	221051.3	1008.3	µg/L	1008.3	ppb	23:13:48
1	Be 313.107†	34741.5	33126.3	10.662	µg/L	10.662	ppb	23:13:48
1	Cd 226.502†	1752.9	1732.5	-0.8879	µg/L	-0.8879	ppb	23:14:08
1	Co 228.616†	2315.9	2340.8	26.669	µg/L	26.669	ppb	23:14:08
1	Cr 267.716†	16332.5	15102.7	133.75	µg/L	133.75	ppb	23:14:08
1	Cu 324.752†	9061.5	6043.2	44.144	µg/L	44.144	ppb	23:13:48
1	Mn 257.610†	1398857.7	1307165.1	1785.4	µg/L	1785.4	ppb	23:13:48
1	Mo 202.031†	55.2	106.8	8.4865	µg/L	8.4865	ppb	23:14:08
1	Ni 231.604†	7398.1	6954.5	88.956	µg/L	88.956	ppb	23:14:08
1	P 214.914†	7696.1	7112.5	1633.3	µg/L	1633.3	ppb	23:14:08
1	Pb 220.353†	782.3	618.6	41.485	µg/L	41.485	ppb	23:14:08
1	S 181.975 Axial†	668.2	529.6	429.10	µg/L	429.10	ppb	23:14:08
1	Sb 206.836†	70.0	-21.2	-6.4898	µg/L	-6.4898	ppb	23:14:08
1	Se 196.026†	-99.3	-103.7	1.15	µg/L	1.15	ppb	23:14:08
1	SiO2†	946057.0	882525.9	96461	µg/L	96461	ppb	23:13:48
1	Si 251.611†	2877407.4	2688286.6	44450	µg/L	44450	ppb	23:13:48
1	Sn 189.927†	163.0	150.3	20.504	µg/L	20.504	ppb	23:14:08
1	Ti 334.940†	3056135.9	2855350.1	2911.0	µg/L	2911.0	ppb	23:13:48
1	Tl 190.801†	-407.6	-260.6	-0.3515	µg/L	-0.3515	ppb	23:14:08
1	U 409.014†	-7451.7	-6484.6	-409.24	µg/L	-409.24	ppb	23:13:48
1	V 292.402†	25074.2	23000.2	105.71	µg/L	105.71	ppb	23:13:48
1	Zn 213.857†	49349.4	45653.0	276.26	µg/L	276.26	ppb	23:13:48
2	Sc RADIAL	157905.6	157905.6	108	%			23:13:40
2	Al 396.153Radial†	305206.0	281751.2	61503	µg/L	61503	ppb	23:13:37
2	Ca 317.933Radial†	243050.8	223730.9	13110	µg/L	13110	ppb	23:13:40
2	Fe 238.204 Radial†	1993731.1	1840193.0	122340	µg/L	122340	ppb	23:13:37
2	K 766.490 Radial†	26695.0	23185.7	9526.8	µg/L	9526.8	ppb	23:13:40
2	Mg 279.077 IEC†	31730.3	29101.8	11894	µg/L	11894	ppb	23:13:40
2	Na 589.592 Radial†	54273.8	48402.5	7397.7	µg/L	7397.7	ppb	23:13:40
2	Sr 421.552†	59798.0	55474.3	129.91	µg/L	129.91	ppb	23:13:40
2	Sc 361.383	1798271.2	1798271.2	107.50	%			23:14:11
2	Y 371.029	1253599.2	1253599.2	122.59	%			23:14:11
2	Ag 328.068†	3034.3	-144.5	-1.1558	µg/L	-1.1558	ppb	23:14:11
2	As 188.979†	6.5	20.3	37.172	µg/L	37.172	ppb	23:14:31
2	B 249.677†	3714.3	99.4	1.5574	µg/L	1.5574	ppb	23:14:11
2	Ba 233.527†	237296.2	220911.0	1007.7	µg/L	1007.7	ppb	23:14:11
2	Be 313.107†	34918.8	33142.0	10.672	µg/L	10.672	ppb	23:14:11
2	Cd 226.502†	1776.5	1746.9	-0.7596	µg/L	-0.7596	ppb	23:14:31
2	Co 228.616†	2341.3	2354.5	26.871	µg/L	26.871	ppb	23:14:31
2	Cr 267.716†	16373.0	15070.1	133.45	µg/L	133.45	ppb	23:14:31
2	Cu 324.752†	9047.5	5991.3	43.887	µg/L	43.887	ppb	23:14:11
2	Mn 257.610†	1406606.2	1308362.7	1787.0	µg/L	1787.0	ppb	23:14:11
2	Mo 202.031†	60.1	111.1	8.6068	µg/L	8.6068	ppb	23:14:31
2	Ni 231.604†	7388.6	6913.9	88.436	µg/L	88.436	ppb	23:14:31
2	P 214.914†	7706.5	7089.1	1627.9	µg/L	1627.9	ppb	23:14:31
2	Pb 220.353†	778.7	611.9	41.079	µg/L	41.079	ppb	23:14:31

2	S 181.975 Axial†	676.0	534.0	432.68 µg/L	432.68 ppb	23:14:31
2	Sb 206.836†	74.7	-17.2	-5.9351 µg/L	-5.9351 ppb	23:14:31
2	Se 196.026†	-97.7	-101.8	1.82 µg/L	1.82 ppb	23:14:31
2	SiO2†	951725.2	883733.9	96593 µg/L	96593 ppb	23:14:11
2	Si 251.611†	2894103.6	2691455.1	44503 µg/L	44503 ppb	23:14:11
2	Sn 189.927†	147.9	135.5	19.460 µg/L	19.460 ppb	23:14:31
2	Ti 334.940†	3072489.8	2857432.2	2913.2 µg/L	2913.2 ppb	23:14:11
2	Tl 190.801†	-419.3	-269.8	-1.5624 µg/L	-1.5624 ppb	23:14:31
2	U 409.014†	-7212.5	-6230.1	-393.51 µg/L	-393.51 ppb	23:14:11
2	V 292.402†	24981.8	22806.6	104.69 µg/L	104.69 ppb	23:14:11
2	Zn 213.857†	49794.6	45855.2	277.57 µg/L	277.57 ppb	23:14:11
3	Sc RADIAL	158968.5	158968.5	109 %		23:13:44
3	Al 396.153Radial†	307946.3	282380.1	61640 µg/L	61640 ppb	23:13:42
3	Ca 317.933Radial†	247228.2	226061.2	13246 µg/L	13246 ppb	23:13:44
3	Fe 238.204 Radial†	2018618.8	1850707.8	123040 µg/L	123040 ppb	23:13:42
3	K 766.490 Radial†	27221.5	23503.7	9657.7 µg/L	9657.7 ppb	23:13:44
3	Mg 279.077 IEC†	32456.1	29571.5	12087 µg/L	12087 ppb	23:13:44
3	Na 589.592 Radial†	54804.9	48554.5	7420.9 µg/L	7420.9 ppb	23:13:44
3	Sr 421.552†	60589.7	55831.2	130.75 µg/L	130.75 ppb	23:13:44
3	Sc 361.383	1781960.9	1781960.9	106.53 %		23:14:34
3	Y 371.029	1241777.4	1241777.4	121.44 %		23:14:34
3	Ag 328.068†	3209.0	45.3	-0.3927 µg/L	-0.3927 ppb	23:14:34
3	As 188.979†	8.0	21.8	37.959 µg/L	37.959 ppb	23:14:54
3	B 249.677†	3807.1	218.1	3.5502 µg/L	3.5502 ppb	23:14:34
3	Ba 233.527†	235453.9	221202.0	1009.0 µg/L	1009.0 ppb	23:14:34
3	Be 313.107†	34535.9	33079.9	10.649 µg/L	10.649 ppb	23:14:34
3	Cd 226.502†	1781.9	1767.2	-0.6929 µg/L	-0.6929 ppb	23:14:54
3	Co 228.616†	2304.7	2340.1	26.638 µg/L	26.638 ppb	23:14:54
3	Cr 267.716†	16319.5	15159.3	134.25 µg/L	134.25 ppb	23:14:54
3	Cu 324.752†	8989.0	6013.3	44.082 µg/L	44.082 ppb	23:14:34
3	Mn 257.610†	1394170.1	1308664.9	1787.4 µg/L	1787.4 ppb	23:14:34
3	Mo 202.031†	51.1	103.2	8.3879 µg/L	8.3879 ppb	23:14:54
3	Ni 231.604†	7432.7	7018.2	89.771 µg/L	89.771 ppb	23:14:54
3	P 214.914†	7673.3	7123.6	1635.7 µg/L	1635.7 ppb	23:14:54
3	Pb 220.353†	745.2	587.1	39.570 µg/L	39.570 ppb	23:14:54
3	S 181.975 Axial†	664.1	528.6	428.26 µg/L	428.26 ppb	23:14:54
3	Sb 206.836†	71.4	-19.6	-6.2834 µg/L	-6.2834 ppb	23:14:54
3	Se 196.026†	-98.5	-103.4	1.42 µg/L	1.42 ppb	23:14:54
3	SiO2†	942341.7	883028.6	96516 µg/L	96516 ppb	23:14:34
3	Si 251.611†	2866143.4	2689849.3	44476 µg/L	44476 ppb	23:14:34
3	Sn 189.927†	150.3	139.1	19.713 µg/L	19.713 ppb	23:14:54
3	Ti 334.940†	3045276.0	2858046.0	2913.8 µg/L	2913.8 ppb	23:14:34
3	Tl 190.801†	-401.1	-256.2	0.2746 µg/L	0.2746 ppb	23:14:54
3	U 409.014†	-7313.9	-6386.6	-403.27 µg/L	-403.27 ppb	23:14:34
3	V 292.402†	24960.3	22999.1	105.64 µg/L	105.64 ppb	23:14:34
3	Zn 213.857†	49024.6	45556.3	275.61 µg/L	275.61 ppb	23:14:34

Mean Data: 248110006|959114|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1790078.6	107.01	%	0.488				0.46%
Sc RADIAL	159129.7	109	%	0.9				0.82%
Y 371.029	1247459.4	121.99	%	0.579				0.47%
Ag 328.068†	57.1	-0.3434	µg/L	0.83816	-0.3434	ppb	0.83816	244.09%
Al 396.153Radial†	281965.7	61549	µg/L	78.4	61549	ppb	78.4	0.13%
As 188.979†	23.2	38.458	µg/L	1.5954	38.458	ppb	1.5954	4.15%
B 249.677†	110.9	1.7504	µg/L	1.71152	1.7504	ppb	1.71152	97.78%
Ba 233.527†	221054.8	1008.4	µg/L	0.66	1008.4	ppb	0.66	0.07%
Be 313.107†	33116.1	10.661	µg/L	0.0116	10.661	ppb	0.0116	0.11%
Ca 317.933Radial†	225062.8	13188	µg/L	70.3	13188	ppb	70.3	0.53%
Cd 226.502†	1748.9	-0.7801	µg/L	0.09910	-0.7801	ppb	0.09910	12.70%
Co 228.616†	2345.1	26.726	µg/L	0.1263	26.726	ppb	0.1263	0.47%
Cr 267.716†	15110.7	133.81	µg/L	0.402	133.81	ppb	0.402	0.30%
Cu 324.752†	6015.9	44.038	µg/L	0.1341	44.038	ppb	0.1341	0.30%
Fe 238.204 Radial†	1845073.1	122670	µg/L	352.2	122670	ppb	352.2	0.29%
K 766.490 Radial†	23370.1	9602.7	µg/L	67.88	9602.7	ppb	67.88	0.71%
Mg 279.077 IEC†	29394.2	12014	µg/L	104.9	12014	ppb	104.9	0.87%
Mn 257.610†	1308064.2	1786.6	µg/L	1.08	1786.6	ppb	1.08	0.06%
Mo 202.031†	107.0	8.4937	µg/L	0.10963	8.4937	ppb	0.10963	1.29%
Na 589.592 Radial†	48460.1	7406.5	µg/L	12.56	7406.5	ppb	12.56	0.17%

Ni 231.604†	6962.2	89.054	µg/L	0.6727	89.054	ppb	0.6727	0.76%
P 214.914†	7108.4	1632.3	µg/L	4.01	1632.3	ppb	4.01	0.25%
Pb 220.353†	605.9	40.711	µg/L	1.0094	40.711	ppb	1.0094	2.48%
S 181.975 Axial†	530.7	430.02	µg/L	2.345	430.02	ppb	2.345	0.55%
Sb 206.836†	-19.3	-6.2361	µg/L	0.28035	-6.2361	ppb	0.28035	4.50%
Se 196.026†	-102.9	1.46	µg/L	0.338	1.46	ppb	0.338	23.12%
SiO2†	883096.1	96523	µg/L	66.3	96523	ppb	66.3	0.07%
Si 251.611†	2689863.7	44476	µg/L	26.2	44476	ppb	26.2	0.06%
Sn 189.927†	141.6	19.892	µg/L	0.5443	19.892	ppb	0.5443	2.74%
Sr 421.552†	55681.4	130.40	µg/L	0.434	130.40	ppb	0.434	0.33%
Ti 334.940†	2856942.8	2912.7	µg/L	1.44	2912.7	ppb	1.44	0.05%
Tl 190.801†	-262.2	-0.5464	µg/L	0.93392	-0.5464	ppb	0.93392	170.91%
U 409.014†	-6367.1	-402.01	µg/L	7.942	-402.01	ppb	7.942	1.98%
Concentration less than lower limit for U 409.014.								
V 292.402†	22935.3	105.35	µg/L	0.570	105.35	ppb	0.570	0.54%
Zn 213.857†	45688.2	276.48	µg/L	0.999	276.48	ppb	0.999	0.36%

Sequence No.: 106
Sample ID: 248110007|959114|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 424
Date Collected: 3/29/2010 23:15:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248110007|959114|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	160613.1	160613.1	110	%			23:15:33
1	Al 396.153Radial†	499837.5	453627.6	99021	µg/L	99021	ppb	23:15:31
1	Ca 317.933Radial†	538810.5	488347.0	28615	µg/L	28615	ppb	23:15:33
1	Fe 238.204 Radial†	2263330.4	2053828.1	136550	µg/L	136550	ppb	23:15:31
1	K 766.490 Radial†	38591.5	33566.3	13789	µg/L	13789	ppb	23:15:33
1	Mg 279.077 IEC†	48950.9	44235.6	18122	µg/L	18122	ppb	23:15:33
1	Na 589.592 Radial†	28486.0	24155.9	3683.9	µg/L	3683.9	ppb	23:15:33
1	Sr 421.552†	111125.8	101123.1	236.78	µg/L	236.78	ppb	23:15:33
1	Sc 361.383	1791919.9	1791919.9	107.12	%			23:15:46
1	Y 371.029	1205321.9	1205321.9	117.87	%			23:15:46
1	Ag 328.068†	3414.4	220.4	0.1947	µg/L	0.1947	ppb	23:15:48
1	As 188.979†	-5.1	9.5	36.528	µg/L	36.528	ppb	23:16:08
1	B 249.677†	4112.3	483.1	7.9694	µg/L	7.9694	ppb	23:15:48
1	Ba 233.527†	233320.9	217982.3	994.16	µg/L	994.16	ppb	23:15:48
1	Be 313.107†	41216.2	39135.9	12.623	µg/L	12.623	ppb	23:15:48
1	Cd 226.502†	1986.6	1948.9	-0.8433	µg/L	-0.8433	ppb	23:16:08
1	Co 228.616†	3006.4	2983.1	34.737	µg/L	34.737	ppb	23:16:08
1	Cr 267.716†	25553.9	23694.6	207.86	µg/L	207.86	ppb	23:15:48
1	Cu 324.752†	10367.3	7253.1	51.615	µg/L	51.615	ppb	23:15:48
1	Mn 257.610†	1712676.5	1598720.0	2183.5	µg/L	2183.5	ppb	23:15:46
1	Mo 202.031†	-36.4	21.2	6.4581	µg/L	6.4581	ppb	23:16:08
1	Ni 231.604†	10029.5	9403.6	120.28	µg/L	120.28	ppb	23:16:08
1	P 214.914†	6552.0	6036.8	1374.5	µg/L	1374.5	ppb	23:16:08
1	Pb 220.353†	1129.1	941.6	63.529	µg/L	63.529	ppb	23:16:08
1	S 181.975 Axial†	546.9	415.7	336.83	µg/L	336.83	ppb	23:16:08
1	Sb 206.836†	108.7	14.8	-3.1467	µg/L	-3.1467	ppb	23:16:08
1	Se 196.026†	-116.0	-119.2	-0.158	µg/L	-0.158	ppb	23:16:08
1	SiO2†	998999.5	931002.7	101760	µg/L	101760	ppb	23:15:46
1	Si 251.611†	3053575.2	2849865.4	47122	µg/L	47122	ppb	23:15:46
1	Sn 189.927†	117.9	108.1	19.086	µg/L	19.086	ppb	23:16:08
1	Ti 334.940†	3553180.1	3316291.4	3380.9	µg/L	3380.9	ppb	23:15:46
1	Tl 190.801†	-469.5	-318.0	-2.0729	µg/L	-2.0729	ppb	23:16:08
1	U 409.014†	-7182.0	-6225.3	-391.06	µg/L	-391.06	ppb	23:15:48
1	V 292.402†	32382.6	29797.7	141.07	µg/L	141.07	ppb	23:15:48
1	Zn 213.857†	55001.0	50879.5	308.20	µg/L	308.20	ppb	23:15:48
2	Sc RADIAL	159275.5	159275.5	109	%			23:15:38
2	Al 396.153Radial†	502694.0	460051.1	100420	µg/L	100420	ppb	23:15:36
2	Ca 317.933Radial†	529948.7	484344.1	28380	µg/L	28380	ppb	23:15:38
2	Fe 238.204 Radial†	2273982.9	2080826.3	138340	µg/L	138340	ppb	23:15:36
2	K 766.490 Radial†	37996.5	33315.9	13686	µg/L	13686	ppb	23:15:38
2	Mg 279.077 IEC†	47826.5	43579.7	17850	µg/L	17850	ppb	23:15:38
2	Na 589.592 Radial†	28201.4	24112.6	3677.3	µg/L	3677.3	ppb	23:15:38
2	Sr 421.552†	109655.8	100624.9	235.62	µg/L	235.62	ppb	23:15:38
2	Sc 361.383	1763208.2	1763208.2	105.41	%			23:16:11
2	Y 371.029	1186297.4	1186297.4	116.01	%			23:16:11
2	Ag 328.068†	3083.6	-41.6	-0.8331	µg/L	-0.8331	ppb	23:16:13
2	As 188.979†	4.4	18.4	40.687	µg/L	40.687	ppb	23:16:34
2	B 249.677†	4198.8	627.8	10.397	µg/L	10.397	ppb	23:16:13
2	Ba 233.527†	232439.3	220692.7	1006.5	µg/L	1006.5	ppb	23:16:13
2	Be 313.107†	41315.7	39856.8	12.861	µg/L	12.861	ppb	23:16:13
2	Cd 226.502†	2007.3	1998.8	-0.6864	µg/L	-0.6864	ppb	23:16:34
2	Co 228.616†	2969.1	2993.4	34.796	µg/L	34.796	ppb	23:16:34
2	Cr 267.716†	25570.8	24099.1	211.40	µg/L	211.40	ppb	23:16:13
2	Cu 324.752†	10475.2	7513.1	53.008	µg/L	53.008	ppb	23:16:13
2	Mn 257.610†	1687334.8	1600712.6	2186.2	µg/L	2186.2	ppb	23:16:11
2	Mo 202.031†	-14.2	41.8	7.1742	µg/L	7.1742	ppb	23:16:34
2	Ni 231.604†	10042.4	9568.3	122.39	µg/L	122.39	ppb	23:16:34
2	P 214.914†	6557.4	6141.5	1398.6	µg/L	1398.6	ppb	23:16:34
2	Pb 220.353†	1142.2	971.1	65.352	µg/L	65.352	ppb	23:16:34

2	S 181.975 Axial†	542.4	419.7	340.07 µg/L	340.07 ppb	23:16:34
2	Sb 206.836†	86.7	-4.4	-5.8077 µg/L	-5.8077 ppb	23:16:34
2	Se 196.026†	-127.0	-131.4	-4.33 µg/L	-4.33 ppb	23:16:34
2	SiO2†	983080.6	931086.2	101770 µg/L	101770 ppb	23:16:11
2	Si 251.611†	3005196.8	2850386.0	47131 µg/L	47131 ppb	23:16:11
2	Sn 189.927†	114.8	106.9	19.029 µg/L	19.029 ppb	23:16:34
2	Ti 334.940†	3504919.8	3324518.6	3389.3 µg/L	3389.3 ppb	23:16:11
2	Tl 190.801†	-450.3	-306.9	-0.4717 µg/L	-0.4717 ppb	23:16:34
2	U 409.014†	-6881.2	-6049.2	-380.45 µg/L	-380.45 ppb	23:16:13
2	V 292.402†	32303.1	30214.5	143.12 µg/L	143.12 ppb	23:16:13
2	Zn 213.857†	54732.5	51460.9	311.69 µg/L	311.69 ppb	23:16:13
3	Sc RADIAL	158569.4	158569.4	109 %		23:15:42
3	Al 396.153Radial†	499485.2	459150.0	100230 µg/L	100230 ppb	23:15:40
3	Ca 317.933Radial†	528059.9	484767.2	28405 µg/L	28405 ppb	23:15:42
3	Fe 238.204 Radial†	2249664.1	2067738.8	137470 µg/L	137470 ppb	23:15:40
3	K 766.490 Radial†	38002.6	33476.4	13752 µg/L	13752 ppb	23:15:42
3	Mg 279.077 IEC†	47669.1	43629.9	17871 µg/L	17871 ppb	23:15:42
3	Na 589.592 Radial†	27983.6	24027.3	3664.2 µg/L	3664.2 ppb	23:15:42
3	Sr 421.552†	109543.9	100968.9	236.42 µg/L	236.42 ppb	23:15:42
3	Sc 361.383	1803835.2	1803835.2	107.83 %		23:16:36
3	Y 371.029	1213255.5	1213255.5	118.65 %		23:16:36
3	Ag 328.068†	3491.6	270.9	0.4025 µg/L	0.4025 ppb	23:16:38
3	As 188.979†	8.4	22.1	42.010 µg/L	42.010 ppb	23:16:59
3	B 249.677†	4046.9	397.2	6.5302 µg/L	6.5302 ppb	23:16:38
3	Ba 233.527†	236842.2	219809.1	1002.5 µg/L	1002.5 ppb	23:16:38
3	Be 313.107†	41961.2	39572.5	12.764 µg/L	12.764 ppb	23:16:38
3	Cd 226.502†	1995.2	1944.7	-0.9704 µg/L	-0.9704 ppb	23:16:59
3	Co 228.616†	2943.2	2906.0	33.641 µg/L	33.641 ppb	23:16:59
3	Cr 267.716†	25892.6	23851.1	209.24 µg/L	209.24 ppb	23:16:38
3	Cu 324.752†	10636.0	7438.4	52.545 µg/L	52.545 ppb	23:16:38
3	Mn 257.610†	1730155.0	1604367.7	2191.2 µg/L	2191.2 ppb	23:16:36
3	Mo 202.031†	-33.4	24.3	6.5873 µg/L	6.5873 ppb	23:16:59
3	Ni 231.604†	9984.5	9299.9	118.96 µg/L	118.96 ppb	23:16:59
3	P 214.914†	6501.3	5949.4	1353.2 µg/L	1353.2 ppb	23:16:59
3	Pb 220.353†	1126.9	932.6	63.041 µg/L	63.041 ppb	23:16:59
3	S 181.975 Axial†	535.4	401.7	325.45 µg/L	325.45 ppb	23:16:59
3	Sb 206.836†	73.8	-18.2	-7.6352 µg/L	-7.6352 ppb	23:16:59
3	Se 196.026†	-95.0	-99.0	8.16 µg/L	8.16 ppb	23:16:59
3	SiO2†	1008379.0	933540.7	102040 µg/L	102040 ppb	23:16:36
3	Si 251.611†	3082979.9	2858304.4	47262 µg/L	47262 ppb	23:16:36
3	Sn 189.927†	119.2	108.6	19.145 µg/L	19.145 ppb	23:16:59
3	Ti 334.940†	3584158.7	3323109.2	3387.9 µg/L	3387.9 ppb	23:16:36
3	Tl 190.801†	-467.2	-312.9	-1.2866 µg/L	-1.2866 ppb	23:16:59
3	U 409.014†	-7274.9	-6267.3	-393.79 µg/L	-393.79 ppb	23:16:38
3	V 292.402†	32735.7	29925.4	141.63 µg/L	141.63 ppb	23:16:38
3	Zn 213.857†	55878.9	51354.6	311.13 µg/L	311.13 ppb	23:16:38

Mean Data: 248110007|959114|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1786321.1	106.79	%	1.248				1.17%
Sc RADIAL	159486.0	109	%	0.7				0.65%
Y 371.029	1201624.9	117.51	%	1.355				1.15%
Ag 328.068†	149.9	-0.0786	µg/L	0.66161	-0.0786	ppb	0.66161	841.23%
Al 396.153Radial†	457609.6	99890	µg/L	759.2	99890	ppb	759.2	0.76%
As 188.979†	16.6	39.742	µg/L	2.8611	39.742	ppb	2.8611	7.20%
B 249.677†	502.7	8.2988	µg/L	1.95425	8.2988	ppb	1.95425	23.55%
Ba 233.527†	219494.7	1001.1	µg/L	6.30	1001.1	ppb	6.30	0.63%
Be 313.107†	39521.7	12.750	µg/L	0.1197	12.750	ppb	0.1197	0.94%
Ca 317.933Radial†	485819.4	28467	µg/L	128.9	28467	ppb	128.9	0.45%
Cd 226.502†	1964.1	-0.8334	µg/L	0.14229	-0.8334	ppb	0.14229	17.07%
Co 228.616†	2960.8	34.391	µg/L	0.6507	34.391	ppb	0.6507	1.89%
Cr 267.716†	23881.6	209.50	µg/L	1.780	209.50	ppb	1.780	0.85%
Cu 324.752†	7401.5	52.390	µg/L	0.7095	52.390	ppb	0.7095	1.35%
Fe 238.204 Radial†	2067464.4	137450	µg/L	897.6	137450	ppb	897.6	0.65%
K 766.490 Radial†	33452.8	13742	µg/L	52.3	13742	ppb	52.3	0.38%
Mg 279.077 IEC†	43815.1	17948	µg/L	151.2	17948	ppb	151.2	0.84%
Mn 257.610†	1601266.7	2187.0	µg/L	3.92	2187.0	ppb	3.92	0.18%
Mo 202.031†	29.1	6.7399	µg/L	0.38166	6.7399	ppb	0.38166	5.66%
Na 589.592 Radial†	24098.6	3675.2	µg/L	10.00	3675.2	ppb	10.00	0.27%

Ni 231.604†	9423.9	120.54 µg/L	1.731	120.54 ppb	1.731	1.44%
P 214.914†	6042.6	1375.4 µg/L	22.74	1375.4 ppb	22.74	1.65%
Pb 220.353†	948.4	63.974 µg/L	1.2178	63.974 ppb	1.2178	1.90%
S 181.975 Axial†	412.4	334.12 µg/L	7.675	334.12 ppb	7.675	2.30%
Sb 206.836†	-2.6	-5.5299 µg/L	2.25710	-5.5299 ppb	2.25710	40.82%
Se 196.026†	-116.5	1.22 µg/L	6.357	1.22 ppb	6.357	520.34%
SiO2†	931876.6	101850 µg/L	157.6	101850 ppb	157.6	0.15%
Si 251.611†	2852851.9	47171 µg/L	78.2	47171 ppb	78.2	0.17%
Sn 189.927†	107.8	19.087 µg/L	0.0582	19.087 ppb	0.0582	0.30%
Sr 421.552†	100905.6	236.27 µg/L	0.597	236.27 ppb	0.597	0.25%
Ti 334.940†	3321306.4	3386.0 µg/L	4.49	3386.0 ppb	4.49	0.13%
Tl 190.801†	-312.6	-1.2771 µg/L	0.80064	-1.2771 ppb	0.80064	62.69%
U 409.014†	-6180.6	-388.43 µg/L	7.046	-388.43 ppb	7.046	1.81%
Concentration less than lower limit for U 409.014.						
V 292.402†	29979.2	141.94 µg/L	1.058	141.94 ppb	1.058	0.75%
Zn 213.857†	51231.7	310.34 µg/L	1.872	310.34 ppb	1.872	0.60%

Sequence No.: 107
Sample ID: 248110008|959114|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 425
Date Collected: 3/29/2010 23:17:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248110008|959114|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	153422.3	153422.3	105	%			23:17:39
1	Al 396.153Radial†	434889.5	413185.5	90193	µg/L	90193	ppb	23:17:37
1	Ca 317.933Radial†	8114684.2	7708493.5	451680	µg/L	451680	ppb	23:17:37
1	Fe 238.204 Radial†	1992823.9	1893108.7	125860	µg/L	125860	ppb	23:17:37
1	K 766.490 Radial†	38194.2	34830.2	14231	µg/L	14231	ppb	23:17:39
1	Mg 279.077 IEC†	52436.4	49629.0	20355	µg/L	20355	ppb	23:17:39
1	Na 589.592 Radial†	33428.8	30063.3	4587.3	µg/L	4587.3	ppb	23:17:39
1	Sr 421.552†	1015481.6	965005.5	2258.2	µg/L	2258.2	ppb	23:17:37
1	Sc 361.383	1690227.8	1690227.8	101.04	%			23:17:52
1	Y 371.029	1144296.4	1144296.4	111.90	%			23:17:52
1	Ag 328.068†	5373.2	2350.7	-1.5456	µg/L	-1.5456	ppb	23:17:54
1	As 188.979†	16.4	30.5	42.114	µg/L	42.114	ppb	23:18:15
1	B 249.677†	4057.2	659.6	10.927	µg/L	10.927	ppb	23:17:54
1	Ba 233.527†	268168.3	265574.3	1211.7	µg/L	1211.7	ppb	23:17:54
1	Be 313.107†	39637.4	39888.2	12.904	µg/L	12.904	ppb	23:17:54
1	Cd 226.502†	1746.7	1823.1	-0.6048	µg/L	-0.6048	ppb	23:18:15
1	Co 228.616†	2942.0	3088.3	36.932	µg/L	36.932	ppb	23:18:15
1	Cr 267.716†	14215.0	13908.0	123.17	µg/L	123.17	ppb	23:18:15
1	Cu 324.752†	12633.7	10078.4	62.499	µg/L	62.499	ppb	23:17:54
1	Mn 257.610†	2081442.8	2059869.8	2813.5	µg/L	2813.5	ppb	23:17:52
1	Mo 202.031†	-63.2	-7.4	5.1865	µg/L	5.1865	ppb	23:18:15
1	Ni 231.604†	6811.7	6782.3	86.754	µg/L	86.754	ppb	23:18:15
1	P 214.914†	7098.3	6945.4	1597.2	µg/L	1597.2	ppb	23:18:15
1	Pb 220.353†	1229.2	1104.0	73.208	µg/L	73.208	ppb	23:18:15
1	S 181.975 Axial†	1440.1	1330.4	1077.9	µg/L	1077.9	ppb	23:18:15
1	Sb 206.836†	83.9	-3.6	-4.1424	µg/L	-4.1424	ppb	23:18:15
1	Se 196.026†	-99.4	-109.3	0.179	µg/L	0.179	ppb	23:18:15
1	SiO2†	947381.2	936025.6	102310	µg/L	102310	ppb	23:17:52
1	Si 251.611†	2900399.4	2869773.4	47451	µg/L	47451	ppb	23:17:52
1	Sn 189.927†	14.6	12.4	12.636	µg/L	12.636	ppb	23:18:15
1	Ti 334.940†	3453825.8	3417525.2	3495.0	µg/L	3495.0	ppb	23:17:52
1	Tl 190.801†	-445.4	-320.5	0.5109	µg/L	0.5109	ppb	23:18:15
1	U 409.014†	-4834.9	-4305.9	-245.64	µg/L	-245.64	ppb	23:17:54
1	V 292.402†	36959.1	36145.7	177.59	µg/L	177.59	ppb	23:17:54
1	Zn 213.857†	47083.2	46132.6	275.42	µg/L	275.42	ppb	23:17:54
2	Sc RADIAL	153256.4	153256.4	105	%			23:17:43
2	Al 396.153Radial†	441769.4	420175.8	91719	µg/L	91719	ppb	23:17:41
2	Ca 317.933Radial†	8270198.2	7864738.9	460840	µg/L	460840	ppb	23:17:41
2	Fe 238.204 Radial†	2030901.2	1931371.1	128400	µg/L	128400	ppb	23:17:41
2	K 766.490 Radial†	38126.3	34804.9	14218	µg/L	14218	ppb	23:17:43
2	Mg 279.077 IEC†	52239.7	49495.8	20298	µg/L	20298	ppb	23:17:43
2	Na 589.592 Radial†	33391.4	30062.1	4587.1	µg/L	4587.1	ppb	23:17:43
2	Sr 421.552†	1032062.9	981819.3	2297.5	µg/L	2297.5	ppb	23:17:41
2	Sc 361.383	1700142.7	1700142.7	101.64	%			23:18:17
2	Y 371.029	1150869.0	1150869.0	112.55	%			23:18:17
2	Ag 328.068†	6027.9	2963.8	0.7067	µg/L	0.7067	ppb	23:18:19
2	As 188.979†	23.6	37.4	45.565	µg/L	45.565	ppb	23:18:40
2	B 249.677†	4106.6	684.8	11.353	µg/L	11.353	ppb	23:18:19
2	Ba 233.527†	272209.2	268002.3	1222.8	µg/L	1222.8	ppb	23:18:19
2	Be 313.107†	40723.8	40728.4	13.175	µg/L	13.175	ppb	23:18:19
2	Cd 226.502†	1704.4	1771.4	-1.2295	µg/L	-1.2295	ppb	23:18:40
2	Co 228.616†	2898.8	3028.7	35.995	µg/L	35.995	ppb	23:18:40
2	Cr 267.716†	14034.0	13647.8	121.04	µg/L	121.04	ppb	23:18:40
2	Cu 324.752†	12768.2	10137.8	63.119	µg/L	63.119	ppb	23:18:19
2	Mn 257.610†	2086659.4	2052989.1	2804.1	µg/L	2804.1	ppb	23:18:17
2	Mo 202.031†	-91.3	-34.7	4.4246	µg/L	4.4246	ppb	23:18:40
2	Ni 231.604†	6737.7	6670.1	85.319	µg/L	85.319	ppb	23:18:40
2	P 214.914†	7021.7	6829.1	1568.0	µg/L	1568.0	ppb	23:18:40
2	Pb 220.353†	1197.5	1065.8	70.892	µg/L	70.892	ppb	23:18:40

2	S 181.975 Axial†	1411.1	1293.6	1048.0 µg/L	1048.0 ppb	23:18:40
2	Sb 206.836†	59.9	-27.7	-7.4056 µg/L	-7.4056 ppb	23:18:40
2	Se 196.026†	-107.2	-116.4	-1.74 µg/L	-1.74 ppb	23:18:40
2	SiO2†	949305.1	932450.7	101920 µg/L	101920 ppb	23:18:17
2	Si 251.611†	2906492.8	2859028.8	47274 µg/L	47274 ppb	23:18:17
2	Sn 189.927†	36.1	33.5	14.091 µg/L	14.091 ppb	23:18:40
2	Ti 334.940†	3461197.3	3404844.0	3482.3 µg/L	3482.3 ppb	23:18:17
2	Tl 190.801†	-449.8	-322.3	0.1326 µg/L	0.1326 ppb	23:18:40
2	U 409.014†	-5005.6	-4446.0	-254.42 µg/L	-254.42 ppb	23:18:19
2	V 292.402†	37530.1	36494.2	179.11 µg/L	179.11 ppb	23:18:19
2	Zn 213.857†	47791.8	46558.1	277.77 µg/L	277.77 ppb	23:18:19
3	Sc RADIAL	152673.6	152673.6	105 %		23:17:48
3	Al 396.153Radial†	438387.5	418551.2	91365 µg/L	91365 ppb	23:17:46
3	Ca 317.933Radial†	8199750.1	7827512.0	458660 µg/L	458660 ppb	23:17:46
3	Fe 238.204 Radial†	2013811.0	1922429.6	127810 µg/L	127810 ppb	23:17:46
3	K 766.490 Radial†	38057.9	34878.1	14249 µg/L	14249 ppb	23:17:48
3	Mg 279.077 IEC†	52062.8	49516.6	20307 µg/L	20307 ppb	23:17:48
3	Na 589.592 Radial†	33312.3	30107.8	4594.1 µg/L	4594.1 ppb	23:17:48
3	Sr 421.552†	1025779.4	979567.9	2292.3 µg/L	2292.3 ppb	23:17:46
3	Sc 361.383	1670148.9	1670148.9	99.843 %		23:18:42
3	Y 371.029	1131032.7	1131032.7	110.61 %		23:18:42
3	Ag 328.068†	5242.1	2283.3	-2.0013 µg/L	-2.0013 ppb	23:18:44
3	As 188.979†	13.4	27.7	41.368 µg/L	41.368 ppb	23:19:05
3	B 249.677†	3972.0	622.6	10.308 µg/L	10.308 ppb	23:18:44
3	Ba 233.527†	264585.8	265176.8	1209.9 µg/L	1209.9 ppb	23:18:44
3	Be 313.107†	39288.1	40010.0	12.942 µg/L	12.942 ppb	23:18:44
3	Cd 226.502†	1710.2	1807.3	-0.9190 µg/L	-0.9190 ppb	23:19:05
3	Co 228.616†	2848.3	3029.3	36.021 µg/L	36.021 ppb	23:19:05
3	Cr 267.716†	13844.7	13706.3	121.52 µg/L	121.52 ppb	23:19:05
3	Cu 324.752†	12420.8	10015.5	62.505 µg/L	62.505 ppb	23:18:44
3	Mn 257.610†	2038524.8	2041649.5	2788.6 µg/L	2788.6 ppb	23:18:42
3	Mo 202.031†	-69.4	-14.3	5.0438 µg/L	5.0438 ppb	23:19:05
3	Ni 231.604†	6617.1	6668.4	85.297 µg/L	85.297 ppb	23:19:05
3	P 214.914†	6889.9	6821.1	1566.4 µg/L	1566.4 ppb	23:19:05
3	Pb 220.353†	1191.2	1080.6	71.772 µg/L	71.772 ppb	23:19:05
3	S 181.975 Axial†	1371.2	1278.6	1035.9 µg/L	1035.9 ppb	23:19:05
3	Sb 206.836†	63.5	-23.0	-6.7660 µg/L	-6.7660 ppb	23:19:05
3	Se 196.026†	-86.7	-97.8	5.40 µg/L	5.40 ppb	23:19:05
3	SiO2†	927704.5	927590.0	101390 µg/L	101390 ppb	23:18:42
3	Si 251.611†	2841517.4	2845308.1	47047 µg/L	47047 ppb	23:18:42
3	Sn 189.927†	28.9	26.9	13.589 µg/L	13.589 ppb	23:19:05
3	Ti 334.940†	3390709.9	3395403.9	3472.6 µg/L	3472.6 ppb	23:18:42
3	Tl 190.801†	-427.7	-308.0	1.9025 µg/L	1.9025 ppb	23:19:05
3	U 409.014†	-4847.3	-4375.8	-250.23 µg/L	-250.23 ppb	23:18:44
3	V 292.402†	36629.6	36255.4	177.90 µg/L	177.90 ppb	23:18:44
3	Zn 213.857†	46202.7	45810.9	273.14 µg/L	273.14 ppb	23:18:44

Mean Data: 248110008|959114|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1686839.8	100.84	%	0.914				0.91%
Sc RADIAL	153117.4	105	%	0.3				0.26%
Y 371.029	1142066.0	111.68	%	0.988				0.88%
Ag 328.068†	2532.6	-0.9467	µg/L	1.44992	-0.9467	ppb	1.44992	153.15%
Al 396.153Radial†	417304.1	91092	µg/L	798.6	91092	ppb	798.6	0.88%
As 188.979†	31.9	43.016	µg/L	2.2389	43.016	ppb	2.2389	5.20%
B 249.677†	655.7	10.863	µg/L	0.5252	10.863	ppb	0.5252	4.83%
Ba 233.527†	266251.1	1214.8	µg/L	6.98	1214.8	ppb	6.98	0.57%
Be 313.107†	40208.9	13.007	µg/L	0.1466	13.007	ppb	0.1466	1.13%
Ca 317.933Radial†	7800248.2	457060	µg/L	4782.2	457060	ppb	4782.2	1.05%
Cd 226.502†	1800.6	-0.9178	µg/L	0.31239	-0.9178	ppb	0.31239	34.04%
Co 228.616†	3048.8	36.316	µg/L	0.5335	36.316	ppb	0.5335	1.47%
Cr 267.716†	13754.0	121.91	µg/L	1.120	121.91	ppb	1.120	0.92%
Cu 324.752†	10077.2	62.708	µg/L	0.3563	62.708	ppb	0.3563	0.57%
Fe 238.204 Radial†	1915636.5	127360	µg/L	1330.7	127360	ppb	1330.7	1.04%
K 766.490 Radial†	34837.7	14233	µg/L	15.4	14233	ppb	15.4	0.11%
Mg 279.077 IEC†	49547.1	20320	µg/L	30.7	20320	ppb	30.7	0.15%
Mn 257.610†	2051502.8	2802.1	µg/L	12.57	2802.1	ppb	12.57	0.45%
Mo 202.031†	-18.8	4.8850	µg/L	0.40501	4.8850	ppb	0.40501	8.29%
Na 589.592 Radial†	30077.7	4589.5	µg/L	3.97	4589.5	ppb	3.97	0.09%

Ni 231.604†	6707.0	85.790 µg/L	0.8348	85.790 ppb	0.8348	0.97%
P 214.914†	6865.2	1577.2 µg/L	17.35	1577.2 ppb	17.35	1.10%
Pb 220.353†	1083.5	71.957 µg/L	1.1688	71.957 ppb	1.1688	1.62%
S 181.975 Axial†	1300.8	1053.9 µg/L	21.60	1053.9 ppb	21.60	2.05%
Sb 206.836†	-18.1	-6.1047 µg/L	1.72924	-6.1047 ppb	1.72924	28.33%
Se 196.026†	-107.8	1.28 µg/L	3.695	1.28 ppb	3.695	288.53%
SiO2†	932022.1	101870 µg/L	462.8	101870 ppb	462.8	0.45%
Si 251.611†	2858036.8	47257 µg/L	202.8	47257 ppb	202.8	0.43%
Sn 189.927†	24.3	13.439 µg/L	0.7389	13.439 ppb	0.7389	5.50%
Sr 421.552†	975464.2	2282.7 µg/L	21.35	2282.7 ppb	21.35	0.94%
Ti 334.940†	3405924.4	3483.3 µg/L	11.22	3483.3 ppb	11.22	0.32%
Tl 190.801†	-316.9	0.8486 µg/L	0.93204	0.8486 ppb	0.93204	109.83%
U 409.014†	-4375.9	-250.10 µg/L	4.396	-250.10 ppb	4.396	1.76%
Concentration less than lower limit for U 409.014.						
V 292.402†	36298.4	178.20 µg/L	0.802	178.20 ppb	0.802	0.45%
Zn 213.857†	46167.2	275.45 µg/L	2.315	275.45 ppb	2.315	0.84%

Sequence No.: 108
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/29/2010 23:19:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	154136.4	154136.4	106	%			23:19:45
1	Al 396.153Radial†	25647.9	24285.0	5278.5	µg/L	5278.5	ppb	23:19:45
1	Ca 317.933Radial†	90627.7	85083.0	4985.5	µg/L	4985.5	ppb	23:19:45
1	Fe 238.204 Radial†	79120.2	74704.2	4966.6	µg/L	4966.6	ppb	23:19:45
1	K 766.490 Radial†	14323.3	12089.4	4972.8	µg/L	4972.8	ppb	23:19:45
1	Mg 279.077 IEC†	13368.7	12455.0	5143.0	µg/L	5143.0	ppb	23:19:45
1	Na 589.592 Radial†	70549.2	65017.9	9944.2	µg/L	9944.2	ppb	23:19:45
1	Sr 421.552†	227955.0	215836.4	505.82	µg/L	505.82	ppb	23:19:43
1	Sc 361.383	1718341.7	1718341.7	102.72	%			23:19:58
1	Y 371.029	1038520.8	1038520.8	101.56	%			23:19:58
1	Ag 328.068†	127024.8	120689.3	495.96	µg/L	495.96	ppb	23:19:58
1	As 188.979†	1330.3	1309.3	554.29	µg/L	554.29	ppb	23:20:18
1	B 249.677†	32912.7	28684.3	479.88	µg/L	479.88	ppb	23:19:58
1	Ba 233.527†	113367.1	110535.8	505.37	µg/L	505.37	ppb	23:19:58
1	Be 313.107†	1628068.3	1585555.0	516.26	µg/L	516.26	ppb	23:19:58
1	Cd 226.502†	71621.3	69816.4	481.82	µg/L	481.82	ppb	23:19:58
1	Co 228.616†	36326.5	35539.8	486.91	µg/L	486.91	ppb	23:19:58
1	Cr 267.716†	59120.7	57392.7	492.84	µg/L	492.84	ppb	23:19:58
1	Cu 324.752†	119452.9	113860.4	496.48	µg/L	496.48	ppb	23:19:58
1	Mn 257.610†	371120.9	361199.5	493.34	µg/L	493.34	ppb	23:19:58
1	Mo 202.031†	15768.0	15405.0	486.73	µg/L	486.73	ppb	23:20:18
1	Ni 231.604†	39236.7	38237.2	489.10	µg/L	489.10	ppb	23:19:58
1	P 214.914†	10424.7	10068.7	2402.9	µg/L	2402.9	ppb	23:20:18
1	Pb 220.353†	8314.7	7981.8	485.09	µg/L	485.09	ppb	23:20:18
1	S 181.975 Axial†	1298.5	1169.2	951.40	µg/L	951.40	ppb	23:20:18
1	Sb 206.836†	3855.1	3666.2	495.59	µg/L	495.59	ppb	23:20:18
1	Se 196.026†	1258.8	1214.5	483	µg/L	483	ppb	23:20:18
1	SiO2†	51076.3	48149.0	5241.7	µg/L	5241.7	ppb	23:19:58
1	Si 251.611†	153567.5	148818.8	2450.9	µg/L	2450.9	ppb	23:19:58
1	Sn 189.927†	7143.2	6951.8	495.88	µg/L	495.88	ppb	23:20:18
1	Ti 334.940†	498664.1	484804.1	493.71	µg/L	493.71	ppb	23:19:58
1	Tl 190.801†	3600.2	3625.0	494.03	µg/L	494.03	ppb	23:20:18
1	U 409.014†	6923.6	7219.1	476.32	µg/L	476.32	ppb	23:19:58
1	V 292.402†	92215.1	89337.9	501.76	µg/L	501.76	ppb	23:19:58
1	Zn 213.857†	79897.0	77313.8	482.81	µg/L	482.81	ppb	23:19:58
2	Sc RADIAL	152383.6	152383.6	105	%			23:19:49
2	Al 396.153Radial†	25403.6	24330.3	5288.3	µg/L	5288.3	ppb	23:19:49
2	Ca 317.933Radial†	89336.3	84833.6	4970.9	µg/L	4970.9	ppb	23:19:49
2	Fe 238.204 Radial†	78325.9	74805.1	4973.3	µg/L	4973.3	ppb	23:19:49
2	K 766.490 Radial†	14050.2	11983.9	4929.4	µg/L	4929.4	ppb	23:19:49
2	Mg 279.077 IEC†	13136.7	12378.5	5111.5	µg/L	5111.5	ppb	23:19:49
2	Na 589.592 Radial†	69754.8	65025.4	9945.3	µg/L	9945.3	ppb	23:19:49
2	Sr 421.552†	229433.2	219729.8	514.95	µg/L	514.95	ppb	23:19:47
2	Sc 361.383	1706795.5	1706795.5	102.03	%			23:20:21
2	Y 371.029	1031761.7	1031761.7	100.90	%			23:20:21
2	Ag 328.068†	126284.7	120800.5	496.45	µg/L	496.45	ppb	23:20:21
2	As 188.979†	1338.5	1326.0	561.27	µg/L	561.27	ppb	23:20:41
2	B 249.677†	32737.1	28728.9	480.62	µg/L	480.62	ppb	23:20:21
2	Ba 233.527†	112574.8	110505.9	505.23	µg/L	505.23	ppb	23:20:21
2	Be 313.107†	1615813.9	1584266.5	515.85	µg/L	515.85	ppb	23:20:21
2	Cd 226.502†	70950.5	69630.7	480.53	µg/L	480.53	ppb	23:20:21
2	Co 228.616†	36281.3	35734.7	489.58	µg/L	489.58	ppb	23:20:21
2	Cr 267.716†	58468.1	57142.5	490.67	µg/L	490.67	ppb	23:20:21
2	Cu 324.752†	118730.4	113938.9	496.84	µg/L	496.84	ppb	23:20:21
2	Mn 257.610†	368844.5	361412.5	493.63	µg/L	493.63	ppb	23:20:21
2	Mo 202.031†	15740.2	15481.6	489.15	µg/L	489.15	ppb	23:20:41
2	Ni 231.604†	38994.0	38257.6	489.36	µg/L	489.36	ppb	23:20:21
2	P 214.914†	10374.8	10088.4	2407.6	µg/L	2407.6	ppb	23:20:41
2	Pb 220.353†	8268.2	7990.9	485.63	µg/L	485.63	ppb	23:20:41

2	S 181.975 Axial†	1289.1	1168.5	950.85 µg/L	950.85 ppb	23:20:41
2	Sb 206.836†	3830.6	3667.6	495.84 µg/L	495.84 ppb	23:20:41
2	Se 196.026†	1246.5	1210.8	481 µg/L	481 ppb	23:20:41
2	SiO2†	50868.9	48282.0	5256.2 µg/L	5256.2 ppb	23:20:21
2	Si 251.611†	152572.9	148855.3	2451.5 µg/L	2451.5 ppb	23:20:21
2	Sn 189.927†	7087.8	6944.5	495.36 µg/L	495.36 ppb	23:20:41
2	Ti 334.940†	495538.2	485024.4	493.93 µg/L	493.93 ppb	23:20:21
2	Tl 190.801†	3597.6	3646.2	496.87 µg/L	496.87 ppb	23:20:41
2	U 409.014†	7226.1	7561.2	497.52 µg/L	497.52 ppb	23:20:21
2	V 292.402†	91787.2	89525.8	502.84 µg/L	502.84 ppb	23:20:21
2	Zn 213.857†	79187.7	77144.8	481.75 µg/L	481.75 ppb	23:20:21
3	Sc RADIAL	151273.8	151273.8	104 %		23:19:53
3	Al 396.153Radial†	25453.8	24556.9	5338.2 µg/L	5338.2 ppb	23:19:53
3	Ca 317.933Radial†	88670.2	84818.7	4970.0 µg/L	4970.0 ppb	23:19:53
3	Fe 238.204 Radial†	77670.3	74723.0	4967.8 µg/L	4967.8 ppb	23:19:53
3	K 766.490 Radial†	14141.9	12170.9	5006.4 µg/L	5006.4 ppb	23:19:53
3	Mg 279.077 IEC†	13129.4	12463.7	5146.4 µg/L	5146.4 ppb	23:19:53
3	Na 589.592 Radial†	69306.4	65082.8	9954.1 µg/L	9954.1 ppb	23:19:53
3	Sr 421.552†	228139.7	220093.5	515.80 µg/L	515.80 ppb	23:19:51
3	Sc 361.383	1748522.6	1748522.6	104.53 %		23:20:44
3	Y 371.029	1056889.5	1056889.5	103.36 %		23:20:44
3	Ag 328.068†	129108.4	120548.2	495.40 µg/L	495.40 ppb	23:20:44
3	As 188.979†	1335.1	1291.5	546.81 µg/L	546.81 ppb	23:21:04
3	B 249.677†	33757.7	28939.6	484.16 µg/L	484.16 ppb	23:20:44
3	Ba 233.527†	115066.6	110256.8	504.09 µg/L	504.09 ppb	23:20:44
3	Be 313.107†	1654579.2	1583560.9	515.61 µg/L	515.61 ppb	23:20:44
3	Cd 226.502†	73134.2	70060.3	483.50 µg/L	483.50 ppb	23:20:44
3	Co 228.616†	37181.3	35747.1	489.75 µg/L	489.75 ppb	23:20:44
3	Cr 267.716†	59785.9	57035.7	489.77 µg/L	489.77 ppb	23:20:44
3	Cu 324.752†	121249.3	113571.8	495.23 µg/L	495.23 ppb	23:20:44
3	Mn 257.610†	377108.6	360691.8	492.65 µg/L	492.65 ppb	23:20:44
3	Mo 202.031†	15828.9	15198.4	480.21 µg/L	480.21 ppb	23:21:04
3	Ni 231.604†	40152.2	38453.7	491.87 µg/L	491.87 ppb	23:20:44
3	P 214.914†	10441.2	9909.3	2364.7 µg/L	2364.7 ppb	23:21:04
3	Pb 220.353†	8353.9	7879.6	478.88 µg/L	478.88 ppb	23:21:04
3	S 181.975 Axial†	1305.7	1154.3	939.27 µg/L	939.27 ppb	23:21:04
3	Sb 206.836†	3855.8	3602.1	486.88 µg/L	486.88 ppb	23:21:04
3	Se 196.026†	1256.0	1190.7	473 µg/L	473 ppb	23:21:04
3	SiO2†	52044.0	48216.6	5249.4 µg/L	5249.4 ppb	23:20:44
3	Si 251.611†	156313.0	148865.0	2451.9 µg/L	2451.9 ppb	23:20:44
3	Sn 189.927†	7153.9	6841.9	488.06 µg/L	488.06 ppb	23:21:04
3	Ti 334.940†	506029.3	483471.1	492.35 µg/L	492.35 ppb	23:20:44
3	Tl 190.801†	3606.4	3570.4	486.68 µg/L	486.68 ppb	23:21:04
3	U 409.014†	7134.5	7304.5	481.66 µg/L	481.66 ppb	23:20:44
3	V 292.402†	94029.7	89524.4	502.72 µg/L	502.72 ppb	23:20:44
3	Zn 213.857†	81320.7	77333.4	482.92 µg/L	482.92 ppb	23:20:44

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1724553.3	103.10	%	1.288				1.25%
Sc RADIAL	152597.9	105	%	1.0				0.95%
Y 371.029	1042390.7	101.94	%	1.272				1.25%
Ag 328.068†	120679.3	495.94	µg/L	0.522	495.94	ppb	0.522	0.11%
QC value within limits for Ag 328.068 Recovery = 99.19%								
Al 396.153Radial†	24390.7	5301.7	µg/L	32.00	5301.7	ppb	32.00	0.60%
QC value within limits for Al 396.153Radial Recovery = 106.03%								
As 188.979†	1308.9	554.12	µg/L	7.234	554.12	ppb	7.234	1.31%
QC value greater than the upper limit for As 188.979 Recovery = 110.82%								
B 249.677†	28784.3	481.55	µg/L	2.286	481.55	ppb	2.286	0.47%
QC value within limits for B 249.677 Recovery = 96.31%								
Ba 233.527†	110432.8	504.90	µg/L	0.701	504.90	ppb	0.701	0.14%
QC value within limits for Ba 233.527 Recovery = 100.98%								
Be 313.107†	1584460.8	515.91	µg/L	0.328	515.91	ppb	0.328	0.06%
QC value within limits for Be 313.107 Recovery = 103.18%								
Ca 317.933Radial†	84911.8	4975.5	µg/L	8.70	4975.5	ppb	8.70	0.17%
QC value within limits for Ca 317.933Radial Recovery = 99.51%								
Cd 226.502†	69835.8	481.95	µg/L	1.489	481.95	ppb	1.489	0.31%
QC value within limits for Cd 226.502 Recovery = 96.39%								
Co 228.616†	35673.9	488.75	µg/L	1.591	488.75	ppb	1.591	0.33%

QC value within limits for Co 228.616 Recovery = 97.75%

Cr 267.716†	57190.3	491.09 µg/L	1.578	491.09 ppb	1.578	0.32%
QC value within limits for Cr 267.716 Recovery = 98.22%						
Cu 324.752†	113790.4	496.18 µg/L	0.844	496.18 ppb	0.844	0.17%
QC value within limits for Cu 324.752 Recovery = 99.24%						
Fe 238.204 Radial†	74744.1	4969.2 µg/L	3.57	4969.2 ppb	3.57	0.07%
QC value within limits for Fe 238.204 Radial Recovery = 99.38%						
K 766.490 Radial†	12081.4	4969.5 µg/L	38.58	4969.5 ppb	38.58	0.78%
QC value within limits for K 766.490 Radial Recovery = 99.39%						
Mg 279.077 IEC†	12432.4	5133.6 µg/L	19.23	5133.6 ppb	19.23	0.37%
QC value within limits for Mg 279.077 IEC Recovery = 102.67%						
Mn 257.610†	361101.2	493.21 µg/L	0.507	493.21 ppb	0.507	0.10%
QC value within limits for Mn 257.610 Recovery = 98.64%						
Mo 202.031†	15361.7	485.37 µg/L	4.625	485.37 ppb	4.625	0.95%
QC value within limits for Mo 202.031 Recovery = 97.07%						
Na 589.592 Radial†	65042.1	9947.8 µg/L	5.41	9947.8 ppb	5.41	0.05%
QC value within limits for Na 589.592 Radial Recovery = 99.48%						
Ni 231.604†	38316.2	490.11 µg/L	1.529	490.11 ppb	1.529	0.31%
QC value within limits for Ni 231.604 Recovery = 98.02%						
P 214.914†	10022.2	2391.7 µg/L	23.50	2391.7 ppb	23.50	0.98%
QC value within limits for P 214.914 Recovery = 95.67%						
Pb 220.353†	7950.8	483.20 µg/L	3.751	483.20 ppb	3.751	0.78%
QC value within limits for Pb 220.353 Recovery = 96.64%						
S 181.975 Axial†	1164.0	947.18 µg/L	6.849	947.18 ppb	6.849	0.72%
QC value within limits for S 181.975 Axial Recovery = 94.72%						
Sb 206.836†	3645.3	492.77 µg/L	5.101	492.77 ppb	5.101	1.04%
QC value within limits for Sb 206.836 Recovery = 98.55%						
Se 196.026†	1205.3	479 µg/L	5.1	479 ppb	5.1	1.06%
QC value within limits for Se 196.026 Recovery = 95.79%						
SiO2†	48215.9	5249.1 µg/L	7.25	5249.1 ppb	7.25	0.14%
QC value within limits for SiO2 Recovery = 98.16%						
Si 251.611†	148846.4	2451.4 µg/L	0.46	2451.4 ppb	0.46	0.02%
QC value within limits for Si 251.611 Recovery = 98.06%						
Sn 189.927†	6912.8	493.10 µg/L	4.370	493.10 ppb	4.370	0.89%
QC value within limits for Sn 189.927 Recovery = 98.62%						
Sr 421.552†	218553.2	512.19 µg/L	5.531	512.19 ppb	5.531	1.08%
QC value within limits for Sr 421.552 Recovery = 102.44%						
Ti 334.940†	484433.2	493.33 µg/L	0.856	493.33 ppb	0.856	0.17%
QC value within limits for Ti 334.940 Recovery = 98.67%						
Tl 190.801†	3613.9	492.52 µg/L	5.258	492.52 ppb	5.258	1.07%
QC value within limits for Tl 190.801 Recovery = 98.50%						
U 409.014†	7361.6	485.16 µg/L	11.027	485.16 ppb	11.027	2.27%
QC value within limits for U 409.014 Recovery = 97.03%						
V 292.402†	89462.7	502.44 µg/L	0.589	502.44 ppb	0.589	0.12%
QC value within limits for V 292.402 Recovery = 100.49%						
Zn 213.857†	77264.0	482.49 µg/L	0.648	482.49 ppb	0.648	0.13%
QC value within limits for Zn 213.857 Recovery = 96.50%						

QC Failed. Continue with analysis.

Sequence No.: 109
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/29/2010 23:21:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	154345.7	154345.7	106	%			23:21:42
1	Al 396.153Radial†	-6.9	25.4	5.4993	µg/L	5.4993	ppb	23:22:02
1	Ca 317.933Radial†	672.1	18.5	1.0834	µg/L	1.0834	ppb	23:22:02
1	Fe 238.204 Radial†	187.1	63.4	4.2178	µg/L	4.2178	ppb	23:22:02
1	K 766.490 Radial†	1653.7	106.6	43.891	µg/L	43.891	ppb	23:21:42
1	Mg 279.077 IEC†	187.6	-9.5	-3.8883	µg/L	-3.8883	ppb	23:22:02
1	Na 589.592 Radial†	1576.9	-205.6	-31.494	µg/L	-31.494	ppb	23:21:42
1	Sr 421.552†	-216.9	73.1	0.1714	µg/L	0.1714	ppb	23:21:42
1	Sc 361.383	1744594.7	1744594.7	104.29	%			23:22:50
1	Y 371.029	1066117.2	1066117.2	104.26	%			23:22:50
1	Ag 328.068†	3419.8	312.0	1.2788	µg/L	1.2788	ppb	23:22:52
1	As 188.979†	-13.4	1.4	0.5838	µg/L	0.5838	ppb	23:23:12
1	B 249.677†	3118.6	-365.4	-6.1363	µg/L	-6.1363	ppb	23:23:12
1	Ba 233.527†	-165.9	16.0	0.0725	µg/L	0.0725	ppb	23:23:12
1	Be 313.107†	-693.3	-4.6	0.0041	µg/L	0.0041	ppb	23:22:52
1	Cd 226.502†	-87.2	10.8	0.0738	µg/L	0.0738	ppb	23:23:12
1	Co 228.616†	-161.0	22.2	0.3042	µg/L	0.3042	ppb	23:23:12
1	Cr 267.716†	163.4	-3.5	-0.0453	µg/L	-0.0453	ppb	23:23:12
1	Cu 324.752†	2554.7	24.6	0.1231	µg/L	0.1231	ppb	23:22:52
1	Mn 257.610†	272.5	181.3	0.2479	µg/L	0.2479	ppb	23:23:12
1	Mo 202.031†	-31.7	24.8	0.7836	µg/L	0.7836	ppb	23:23:12
1	Ni 231.604†	-48.3	-5.4	-0.0688	µg/L	-0.0688	ppb	23:23:12
1	P 214.914†	32.3	-48.6	-11.656	µg/L	-11.656	ppb	23:23:12
1	Pb 220.353†	80.7	-35.0	-2.1336	µg/L	-2.1336	ppb	23:23:12
1	S 181.975 Axial†	94.0	-4.7	-3.7789	µg/L	-3.7789	ppb	23:23:12
1	Sb 206.836†	77.0	-12.8	-1.7137	µg/L	-1.7137	ppb	23:23:12
1	Se 196.026†	8.9	-2.4	-0.921	µg/L	-0.921	ppb	23:23:12
1	SiO2†	1705.7	62.6	6.8216	µg/L	6.8216	ppb	23:23:12
1	Si 251.611†	894.1	180.9	2.9798	µg/L	2.9798	ppb	23:22:52
1	Sn 189.927†	2.8	0.6	0.0455	µg/L	0.0455	ppb	23:23:12
1	Ti 334.940†	969.2	293.0	0.2915	µg/L	0.2915	ppb	23:22:52
1	Tl 190.801†	-123.6	1.8	0.2358	µg/L	0.2358	ppb	23:23:12
1	U 409.014†	-185.5	301.2	18.564	µg/L	18.564	ppb	23:22:52
1	V 292.402†	291.9	-151.9	-0.8231	µg/L	-0.8231	ppb	23:22:52
1	Zn 213.857†	511.2	25.7	0.1620	µg/L	0.1620	ppb	23:23:12
2	Sc RADIAL	153540.0	153540.0	105	%			23:22:04
2	Al 396.153Radial†	-62.1	-27.0	-5.9210	µg/L	-5.9210	ppb	23:22:24
2	Ca 317.933Radial†	679.6	29.0	1.6973	µg/L	1.6973	ppb	23:22:24
2	Fe 238.204 Radial†	188.0	65.2	4.3352	µg/L	4.3352	ppb	23:22:24
2	K 766.490 Radial†	1646.4	107.9	44.427	µg/L	44.427	ppb	23:22:04
2	Mg 279.077 IEC†	158.0	-36.7	-15.119	µg/L	-15.119	ppb	23:22:24
2	Na 589.592 Radial†	1599.5	-176.3	-27.023	µg/L	-27.023	ppb	23:22:04
2	Sr 421.552†	-265.3	26.1	0.0613	µg/L	0.0613	ppb	23:22:04
2	Sc 361.383	1765889.6	1765889.6	105.57	%			23:23:14
2	Y 371.029	1078417.8	1078417.8	105.46	%			23:23:14
2	Ag 328.068†	3351.5	207.7	0.8714	µg/L	0.8714	ppb	23:23:16
2	As 188.979†	-7.9	6.7	2.8228	µg/L	2.8228	ppb	23:23:36
2	B 249.677†	3111.0	-408.7	-6.8623	µg/L	-6.8623	ppb	23:23:36
2	Ba 233.527†	-163.4	20.3	0.0928	µg/L	0.0928	ppb	23:23:36
2	Be 313.107†	-604.1	87.9	0.0354	µg/L	0.0354	ppb	23:23:16
2	Cd 226.502†	-96.7	2.8	0.0187	µg/L	0.0187	ppb	23:23:36
2	Co 228.616†	-177.5	8.5	0.1163	µg/L	0.1163	ppb	23:23:36
2	Cr 267.716†	183.6	13.6	0.0998	µg/L	0.0998	ppb	23:23:36
2	Cu 324.752†	2609.4	47.0	0.2231	µg/L	0.2231	ppb	23:23:16
2	Mn 257.610†	280.3	185.5	0.2541	µg/L	0.2541	ppb	23:23:36
2	Mo 202.031†	-45.5	12.1	0.3817	µg/L	0.3817	ppb	23:23:36
2	Ni 231.604†	-58.4	-14.4	-0.1841	µg/L	-0.1841	ppb	23:23:36
2	P 214.914†	42.0	-39.8	-9.5428	µg/L	-9.5428	ppb	23:23:36
2	Pb 220.353†	75.9	-40.5	-2.4705	µg/L	-2.4705	ppb	23:23:36

2	S 181.975 Axial†	93.6	-6.1	-4.9583 µg/L	-4.9583 ppb	23:23:36
2	Sb 206.836†	72.9	-17.5	-2.3614 µg/L	-2.3614 ppb	23:23:36
2	Se 196.026†	12.6	1.0	0.433 µg/L	0.433 ppb	23:23:36
2	SiO2†	1700.2	37.7	4.1002 µg/L	4.1002 ppb	23:23:36
2	Si 251.611†	818.2	98.7	1.6238 µg/L	1.6238 ppb	23:23:16
2	Sn 189.927†	9.6	7.1	0.5049 µg/L	0.5049 ppb	23:23:36
2	Ti 334.940†	981.8	293.6	0.2914 µg/L	0.2914 ppb	23:23:16
2	Tl 190.801†	-108.9	17.2	2.3083 µg/L	2.3083 ppb	23:23:36
2	U 409.014†	-120.2	365.3	22.575 µg/L	22.575 ppb	23:23:16
2	V 292.402†	468.2	11.6	0.0833 µg/L	0.0833 ppb	23:23:16
2	Zn 213.857†	496.0	5.4	0.0348 µg/L	0.0348 ppb	23:23:36
3	Sc RADIAL	153171.1	153171.1	105 %		23:22:26
3	Al 396.153Radial†	-25.1	8.0	1.7102 µg/L	1.7102 ppb	23:22:46
3	Ca 317.933Radial†	656.9	8.9	0.5193 µg/L	0.5193 ppb	23:22:46
3	Fe 238.204 Radial†	208.0	84.6	5.6278 µg/L	5.6278 ppb	23:22:46
3	K 766.490 Radial†	1550.8	20.7	8.5363 µg/L	8.5363 ppb	23:22:26
3	Mg 279.077 IEC†	175.6	-19.6	-8.0671 µg/L	-8.0671 ppb	23:22:46
3	Na 589.592 Radial†	1513.4	-254.6	-38.970 µg/L	-38.970 ppb	23:22:26
3	Sr 421.552†	-202.7	85.1	0.1995 µg/L	0.1995 ppb	23:22:26
3	Sc 361.383	1729956.0	1729956.0	103.42 %		23:23:39
3	Y 371.029	1058943.9	1058943.9	103.56 %		23:23:39
3	Ag 328.068†	3273.0	197.7	0.8051 µg/L	0.8051 ppb	23:23:41
3	As 188.979†	-19.7	-4.8	-1.9868 µg/L	-1.9868 ppb	23:24:01
3	B 249.677†	3141.9	-317.6	-5.3328 µg/L	-5.3328 ppb	23:24:01
3	Ba 233.527†	-150.9	29.2	0.1330 µg/L	0.1330 ppb	23:24:01
3	Be 313.107†	-661.5	20.4	0.0091 µg/L	0.0091 ppb	23:23:41
3	Cd 226.502†	-86.1	11.1	0.0762 µg/L	0.0762 ppb	23:24:01
3	Co 228.616†	-170.6	11.6	0.1590 µg/L	0.1590 ppb	23:24:01
3	Cr 267.716†	152.9	-12.4	-0.1130 µg/L	-0.1130 ppb	23:24:01
3	Cu 324.752†	2631.1	119.2	0.5258 µg/L	0.5258 ppb	23:23:41
3	Mn 257.610†	268.4	179.6	0.2457 µg/L	0.2457 ppb	23:24:01
3	Mo 202.031†	-29.2	27.0	0.8519 µg/L	0.8519 ppb	23:24:01
3	Ni 231.604†	-67.5	-24.4	-0.3117 µg/L	-0.3117 ppb	23:24:01
3	P 214.914†	41.0	-39.9	-9.5795 µg/L	-9.5795 ppb	23:24:01
3	Pb 220.353†	109.7	-6.4	-0.3889 µg/L	-0.3889 ppb	23:24:01
3	S 181.975 Axial†	96.4	-1.7	-1.3370 µg/L	-1.3370 ppb	23:24:01
3	Sb 206.836†	87.9	-1.7	-0.2168 µg/L	-0.2168 ppb	23:24:01
3	Se 196.026†	9.9	-1.3	-0.511 µg/L	-0.511 ppb	23:24:01
3	SiO2†	1682.8	54.3	5.9216 µg/L	5.9216 ppb	23:24:01
3	Si 251.611†	803.9	101.0	1.6624 µg/L	1.6624 ppb	23:23:41
3	Sn 189.927†	-7.9	-9.7	-0.6878 µg/L	-0.6878 ppb	23:24:01
3	Ti 334.940†	739.1	78.3	0.0772 µg/L	0.0772 ppb	23:23:41
3	Tl 190.801†	-133.0	-8.3	-1.1198 µg/L	-1.1198 ppb	23:24:01
3	U 409.014†	-358.2	132.8	8.1685 µg/L	8.1685 ppb	23:23:41
3	V 292.402†	332.1	-110.7	-0.6012 µg/L	-0.6012 ppb	23:23:41
3	Zn 213.857†	499.0	18.1	0.1151 µg/L	0.1151 ppb	23:24:01

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Sc 361.383	1746813.4	104.43	%	1.080				1.03%
Sc RADIAL	153685.6	105	%	0.4				0.39%
Y 371.029	1067826.3	104.42	%	0.963				0.92%
Ag 328.068†	239.2	0.9851	µg/L	0.25651	0.9851	ppb	0.25651	26.04%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.1	0.4295	µg/L	5.81688	0.4295	ppb	5.81688	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.1	0.4733	µg/L	2.40671	0.4733	ppb	2.40671	508.55%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-363.9	-6.1105	µg/L	0.76505	-6.1105	ppb	0.76505	12.52%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	21.8	0.0995	µg/L	0.03078	0.0995	ppb	0.03078	30.95%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	34.6	0.0162	µg/L	0.01682	0.0162	ppb	0.01682	103.65%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	18.8	1.1000	µg/L	0.58920	1.1000	ppb	0.58920	53.56%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	8.2	0.0562	µg/L	0.03251	0.0562	ppb	0.03251	57.82%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	14.1	0.1932	µg/L	0.09852	0.1932	ppb	0.09852	51.00%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -0.8     -0.0195 µg/L       0.10874     -0.0195 ppb       0.10874 557.14%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              63.6      0.2907 µg/L       0.20967      0.2907 ppb       0.20967  72.13%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       71.1      4.7269 µg/L       0.78237      4.7269 ppb       0.78237  16.55%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        78.4      32.285 µg/L       20.5687      32.285 ppb       20.5687  63.71%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†         -21.9     -9.0247 µg/L       5.67609     -9.0247 ppb       5.67609  62.90%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             182.1      0.2492 µg/L       0.00435      0.2492 ppb       0.00435   1.75%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              21.3      0.6724 µg/L       0.25409      0.6724 ppb       0.25409  37.79%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -212.2     -32.496 µg/L        6.0363     -32.496 ppb        6.0363  18.58%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -14.7     -0.1882 µg/L       0.12151     -0.1882 ppb       0.12151  64.57%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -42.8     -10.260 µg/L        1.2097     -10.260 ppb        1.2097  11.79%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -27.3     -1.6643 µg/L       1.11729     -1.6643 ppb       1.11729  67.13%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -4.2     -3.3581 µg/L       1.84693     -3.3581 ppb       1.84693  55.00%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -10.7     -1.4306 µg/L       1.09994     -1.4306 ppb       1.09994  76.88%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.9      -0.333 µg/L        0.6940      -0.333 ppb        0.6940 208.39%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     51.5      5.6145 µg/L       1.38643      5.6145 ppb       1.38643  24.69%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              126.8      2.0887 µg/L       0.77200      2.0887 ppb       0.77200  36.96%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -0.7     -0.0458 µg/L       0.60155     -0.0458 ppb       0.60155 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               61.5      0.1441 µg/L       0.07307      0.1441 ppb       0.07307  50.72%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              221.6      0.2200 µg/L       0.12370      0.2200 ppb       0.12370  56.22%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               3.5       0.4748 µg/L       1.72648      0.4748 ppb       1.72648 363.65%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               266.4      16.436 µg/L        7.4353      16.436 ppb        7.4353  45.24%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -83.7     -0.4470 µg/L       0.47245     -0.4470 ppb       0.47245 105.69%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               16.4      0.1040 µg/L       0.06433      0.1040 ppb       0.06433  61.87%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS #6 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Wednesday, March 24, 2010 02:25:40
Sample Description:
Method File: C:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.1799
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	1960.5	1960.535	50.160	2.6
	Mg	24.0	18238.6	18238.636	157.642	0.9
	Co	58.9	26360.7	26360.699	121.159	0.5
	Rh	102.9	49939.1	49939.138	319.670	0.6
	In	114.9	59742.3	59742.266	511.459	0.9
	Pb	208.0	29263.3	29263.344	310.071	1.1
⌈>	Ba	137.9	51164.7	51164.674	342.892	0.7
⌊	Ba++	69.0	1582.2	0.031	0.001	2.3
⌈>	Ce	139.9	66984.3	66984.282	548.113	0.8
⌊	CeO	155.9	980.7	0.015	0.000	2.4
	Bkgd	220.0	29.5	29.500	3.162	10.7

Current Optimization File Data

Current Value	Description
0.83	Nebulizer Gas Flow
8.75	Lens Voltage
1450.00	ICP RF Power
-1800.00	Analog Stage Voltage
900.00	Pulse Stage Voltage
30.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	7.0	2131.8
Co	59	21	7.5	26323.6
In	115	21	8.3	56990.8

ICPMS #6 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	591	2080	0.650
Be	9.0	9.0	2026	2080	0.701
Mg	24.0	23.9	5678	2120	0.660
Mg	25.0	25.0	5922	2080	0.759
Mg	26.0	26.0	6155	2120	0.730
Co	58.9	59.0	14164	2170	0.668
Rh	102.9	103.0	24873	2230	0.725
In	114.9	114.9	27778	2260	0.713
Ce	139.9	140.0	33862	2280	0.769
Pb	206.0	205.9	49936	2420	0.779
Pb	207.0	207.0	50147	2385	0.743
Pb	208.0	208.0	50439	2430	0.734
U	238.1	238.0	57729	2470	0.727

ICPMS#6 - Summary Report

Sample ID: Blank
Sample Date/Time: Wednesday, March 24, 2010 15:58:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\Blank.201

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9		ug/L		11	
>	Sc	45		ug/L		947107	
	Ni	60		ug/L		101	
>	Ge	74		ug/L		167037	
	As	75		ug/L		319	
	Se	77		ug/L		5187	
	Se	82		ug/L		-11	
	Kr	83		ug/L		110	
>	Lu	175		ug/L		102819	
	Tl	205		ug/L		167	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45					
	Ni	60					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175					
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Wednesday, March 24, 2010 16:02:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\Standard 1.202

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**10.000**	**ug/L**	1.731	2064	0.002
|>	Sc	45		**ug/L**		962124	962123.799
⌊	Ni	60	**10.000**	**ug/L**	0.562	5358	0.005
⌈>	Ge	74		**ug/L**		168454	168453.807
|	As	75	**10.000**	**ug/L**	6.673	5444	0.030
|	Se	77		**ug/L**		6854	0.010
|	Se	82	**10.000**	**ug/L**	6.006	395	0.002
⌊	Kr	83		**ug/L**		112	0.000
⌈>	Lu	175		**ug/L**		102403	102402.739
⌊	Tl	205	**10.000**	**ug/L**	1.354	36107	0.351

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45					
⌊	Ni	60					
⌈>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈>	Lu	175					
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Wednesday, March 24, 2010 16:06:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\benlassetl.mth
Dataset File: C:\elandata\Dataset\100323\Standard 2.203

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**100.023**	**ug/L**	0.743	21003	0.022
|>	Sc	45		**ug/L**		960946	960946.402
⌊	Ni	60	**100.037**	**ug/L**	0.864	54601	0.057
⌈>	Ge	74		**ug/L**		170378	170377.518
|	As	75	**100.036**	**ug/L**	3.119	54039	0.315
|	Se	77		**ug/L**		10172	0.029
|	Se	82	**100.060**	**ug/L**	3.931	4350	0.026
⌊	Kr	83		**ug/L**		105	-0.000
⌈>	Lu	175		**ug/L**		103331	103331.127
⌊	Tl	205	**99.987**	**ug/L**	1.784	358056	3.464

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45					
⌊	Ni	60					
⌈>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈>	Lu	175					
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Wednesday, March 24, 2010 16:10:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\benlassetl.mth
Dataset File: C:\elandata\Dataset\100323\QC Std 1.204

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**50.580**	**ug/L**	1.501	10888	0.011
>	Sc	45		**ug/L**		984611	984610.629
	Ni	60	**51.493**	**ug/L**	0.960	28847	0.029
>	Ge	74		**ug/L**		173187	173186.886
	As	75	**51.401**	**ug/L**	0.722	28396	0.162
	Se	77		**ug/L**		8915	0.020
	Se	82	**51.917**	**ug/L**	2.191	2290	0.013
	Kr	83		**ug/L**		129	0.000
>	Lu	175		**ug/L**		103697	103696.709
	Tl	205	**50.416**	**ug/L**	1.101	181301	1.747

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9	101.161				
>	Sc	45		104.0			
	Ni	60	102.986				
>	Ge	74		103.7			
	As	75	102.802				
	Se	77					
	Se	82	103.834				
	Kr	83					
>	Lu	175		100.9			
	Tl	205	100.832				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Wednesday, March 24, 2010 16:14:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\QC Std 2.205

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.007**	**ug/L**	364.026	12	0.000
>	Sc	45		**ug/L**		962655	962654.980
	Ni	60	**0.011**	**ug/L**	255.267	109	0.000
>	Ge	74		**ug/L**		173338	173338.416
	As	75	**0.322**	**ug/L**	101.556	508	0.001
	Se	77		**ug/L**		5987	0.003
	Se	82	**-0.282**	**ug/L**	147.971	-24	-0.000
	Kr	83		**ug/L**		117	0.000
>	Lu	175		**ug/L**		102774	102774.476
	Tl	205	**0.156**	**ug/L**	10.213	724	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		101.6			
	Ni	60					
>	Ge	74		103.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		100.0			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Wednesday, March 24, 2010 16:18:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\QC Std 3.206

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.591**	**ug/L**	3.472	137	0.000
|>	Sc	45		**ug/L**		979072	979072.007
⌊	Ni	60	**2.295**	**ug/L**	2.065	1378	0.001
⌈>	Ge	74		**ug/L**		174310	174310.083
|	As	75	**5.680**	**ug/L**	4.911	3455	0.018
|	Se	77		**ug/L**		7335	0.011
|	Se	82	**5.473**	**ug/L**	7.392	233	0.001
⌊	Kr	83		**ug/L**		113	-0.000
⌈>	Lu	175		**ug/L**		104013	104013.371
⌊	Tl	205	**1.159**	**ug/L**	1.982	4344	0.040

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	118.114				
|>	Sc	45		103.4			
⌊	Ni	60	114.750				
⌈>	Ge	74		104.4			
|	As	75	113.602				
|	Se	77					
|	Se	82	109.460				
⌊	Kr	83					
⌈>	Lu	175		101.2			
⌊	Tl	205	115.863				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Wednesday, March 24, 2010 16:22:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\QC Std 4.207

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.103**	**ug/L**	10.976	33	0.000
>	Sc	45		**ug/L**		987090	987090.063
	Ni	60	**2.446**	**ug/L**	3.997	1475	0.001
>	Ge	74		**ug/L**		170475	170474.667
	As	75	**0.011**	**ug/L**	8218.996	332	0.000
	Se	77		**ug/L**		8047	0.016
	Se	82	**-1.619**	**ug/L**	26.261	-81	-0.000
	Kr	83		**ug/L**		189	0.000
>	Lu	175		**ug/L**		102816	102816.094
	Tl	205	**0.022**	**ug/L**	10.014	244	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		104.2			
	Ni	60	90.611				
>	Ge	74		102.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		100.0			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Wednesday, March 24, 2010 16:26:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\QC Std 5.208

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**20.027**	**ug/L**	3.893	4312	0.004
|>	Sc	45		**ug/L**		984145	984144.841
⌊	Ni	60	**22.093**	**ug/L**	2.659	12426	0.013
⌈>	Ge	74		**ug/L**		170325	170325.468
|	As	75	**21.757**	**ug/L**	3.997	12005	0.069
|	Se	77		**ug/L**		8746	0.020
|	Se	82	**20.015**	**ug/L**	3.340	861	0.005
⌊	Kr	83		**ug/L**		180	0.000
⌈>	Lu	175		**ug/L**		102833	102832.808
⌊	Tl	205	**19.684**	**ug/L**	0.498	70296	0.682

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	100.134				
|>	Sc	45		103.9			
⌊	Ni	60	97.327				
⌈>	Ge	74		102.0			
|	As	75	108.785				
|	Se	77					
|	Se	82	100.073				
⌊	Kr	83					
⌈>	Lu	175		100.0			
⌊	Tl	205	98.421				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, March 24, 2010 16:30:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\QC Std 6.209

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**49.349**	**ug/L**	1.105	10630	0.011
|>	Sc	45		**ug/L**		985262	985261.517
⌊	Ni	60	**51.290**	**ug/L**	0.971	28756	0.029
⌈>	Ge	74		**ug/L**		175525	175524.929
|	As	75	**50.380**	**ug/L**	2.085	28209	0.159
|	Se	77		**ug/L**		9536	0.023
|	Se	82	**51.877**	**ug/L**	1.235	2319	0.013
⌊	Kr	83		**ug/L**		110	-0.000
⌈>	Lu	175		**ug/L**		103888	103888.456
⌊	Tl	205	**50.052**	**ug/L**	0.751	180310	1.734

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	98.698				
|>	Sc	45		104.0			
⌊	Ni	60	102.581				
⌈>	Ge	74		105.1			
|	As	75	100.760				
|	Se	77					
|	Se	82	103.754				
⌊	Kr	83					
⌈>	Lu	175		101.0			
⌊	Tl	205	100.104				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, March 24, 2010 16:34:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\QC Std 7.210

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.003**	**ug/L**	418.493	12	0.000
|>	Sc	45		**ug/L**		981333	981333.371
⌊	Ni	60	**0.006**	**ug/L**	292.423	108	0.000
⌈>	Ge	74		**ug/L**		174317	174316.876
|	As	75	**0.026**	**ug/L**	893.056	346	0.000
|	Se	77		**ug/L**		6724	0.008
|	Se	82	**-0.027**	**ug/L**	701.307	-12	-0.000
⌊	Kr	83		**ug/L**		113	-0.000
⌈>	Lu	175		**ug/L**		103996	103995.571
⌊	Tl	205	**0.155**	**ug/L**	2.929	726	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45		103.6			
⌊	Ni	60					
⌈>	Ge	74		104.4			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈>	Lu	175		101.1			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202056883
Sample Date/Time: Wednesday, March 24, 2010 16:39:02
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\1202056883.211

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**-0.017**	**ug/L**	89.782	8	-0.000
>	Sc	45		**ug/L**		1023163	1023163.221
	Ni	60	**0.096**	**ug/L**	5.846	165	0.000
>	Ge	74		**ug/L**		181254	181254.467
	As	75	**-0.161**	**ug/L**	24.062	254	-0.001
	Se	77		**ug/L**		5887	0.001
	Se	82	**0.099**	**ug/L**	399.554	-7	0.000
	Kr	83		**ug/L**		116	-0.000
>	Lu	175		**ug/L**		109749	109748.788
	Tl	205	**0.081**	**ug/L**	4.899	488	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		108.0			
	Ni	60					
>	Ge	74		108.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		106.7			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202056888
Sample Date/Time: Wednesday, March 24, 2010 16:43:03
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 959116|40|rm|
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\1202056888.212

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**24.107**	**ug/L**	0.273	5255	0.005
>	Sc	45		**ug/L**		995843	995842.528
	Ni	60	**42.881**	**ug/L**	1.526	24313	0.024
>	Ge	74		**ug/L**		176888	176887.568
	As	75	**33.310**	**ug/L**	3.072	18909	0.105
	Se	77		**ug/L**		10562	0.029
	Se	82	**90.084**	**ug/L**	0.682	4066	0.023
	Kr	83		**ug/L**		111	-0.000
>	Lu	175		**ug/L**		106852	106851.600
	Tl	205	**36.992**	**ug/L**	1.895	137087	1.282

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		105.1			
	Ni	60					
>	Ge	74		105.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		103.9			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, March 24, 2010 16:47:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\QC Std 6.213

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**49.744**	**ug/L**	0.607	10739	0.011
|>	Sc	45		**ug/L**		987456	987456.377
⌊	Ni	60	**51.781**	**ug/L**	1.339	29090	0.029
⌈>	Ge	74		**ug/L**		176574	176573.999
|	As	75	**50.170**	**ug/L**	1.539	28266	0.158
|	Se	77		**ug/L**		9464	0.023
|	Se	82	**51.931**	**ug/L**	2.178	2335	0.013
⌊	Kr	83		**ug/L**		112	-0.000
⌈>	Lu	175		**ug/L**		104198	104197.519
⌊	Tl	205	**50.745**	**ug/L**	1.832	183307	1.758

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9	99.488				
|>	Sc	45		104.3			
⌊	Ni	60	103.562				
⌈>	Ge	74		105.7			
|	As	75	100.341				
|	Se	77					
|	Se	82	103.862				
⌊	Kr	83					
⌈>	Lu	175		101.3			
⌊	Tl	205	101.491				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, March 24, 2010 16:51:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\QC Std 7.214

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.003**	**ug/L**	556.862	12	0.000
|>	Sc	45		**ug/L**		975851	975850.541
⌊	Ni	60	**0.001**	**ug/L**	1339.344	105	0.000
⌈>	Ge	74		**ug/L**		174852	174852.034
|	As	75	**0.564**	**ug/L**	83.958	644	0.002
|	Se	77		**ug/L**		6809	0.008
|	Se	82	**1.187**	**ug/L**	27.378	42	0.000
⌊	Kr	83		**ug/L**		124	0.000
⌈>	Lu	175		**ug/L**		103423	103422.503
⌊	Tl	205	**0.192**	**ug/L**	4.777	856	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45		103.0			
⌊	Ni	60					
⌈>	Ge	74		104.7			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈>	Lu	175		100.6			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 248110001
Sample Date/Time: Wednesday, March 24, 2010 16:55:10
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\248110001.215

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**4.940**	**ug/L**	4.525	1130	0.001
|>	Sc	45		**ug/L**		1036958	1036958.383
⌊	Ni	60	**36.178**	**ug/L**	1.729	21376	0.021
⌈>	Ge	74		**ug/L**		170057	170056.557
|	As	75	**8.424**	**ug/L**	4.302	4840	0.027
|	Se	77		**ug/L**		4865	-0.002
|	Se	82	**0.424**	**ug/L**	90.048	8	0.000
⌊	Kr	83		**ug/L**		202	0.001
⌈>	Lu	175		**ug/L**		111648	111648.391
⌊	Tl	205	**0.896**	**ug/L**	1.333	3649	0.031

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45		109.5			
⌊	Ni	60					
⌈>	Ge	74		101.8			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈>	Lu	175		108.6			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202056884
Sample Date/Time: Wednesday, March 24, 2010 16:59:12
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\beniasset.mth
Dataset File: C:\elandata\Dataset\100323\1202056884.216

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**5.145**	**ug/L**	2.168	1167	0.001
>	Sc	45		**ug/L**		1028718	1028717.607
	Ni	60	**38.172**	**ug/L**	1.683	22370	0.022
>	Ge	74		**ug/L**		167653	167653.206
	As	75	**9.509**	**ug/L**	7.776	5348	0.030
	Se	77		**ug/L**		4544	-0.004
	Se	82	**-0.049**	**ug/L**	997.446	-13	-0.000
	Kr	83		**ug/L**		220	0.001
>	Lu	175		**ug/L**		111692	111692.393
	Tl	205	**0.920**	**ug/L**	1.435	3743	0.032

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		108.6			
	Ni	60					
>	Ge	74		100.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		108.6			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202056886
Sample Date/Time: Wednesday, March 24, 2010 17:03:13
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\benlassetl.mth
Dataset File: C:\elandata\Dataset\100323\1202056886.217

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**29.756**	**ug/L**	1.023	6602	0.006
>	Sc	45		**ug/L**		1014211	1014211.090
	Ni	60	**60.960**	**ug/L**	2.203	35155	0.035
>	Ge	74		**ug/L**		166511	166511.176
	As	75	**45.854**	**ug/L**	1.684	24387	0.145
	Se	77		**ug/L**		4769	-0.002
	Se	82	**7.452**	**ug/L**	11.540	307	0.002
	Kr	83		**ug/L**		202	0.001
>	Lu	175		**ug/L**		111237	111236.842
	Tl	205	**46.441**	**ug/L**	1.063	179151	1.609

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		107.1			
	Ni	60					
>	Ge	74		99.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		108.2			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202056887
Sample Date/Time: Wednesday, March 24, 2010 17:07:15
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\1202056887.218

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**28.429**	**ug/L**	1.696	6364	0.006
>	Sc	45		**ug/L**		1023059	1023058.689
	Ni	60	**57.938**	**ug/L**	1.630	33713	0.033
>	Ge	74		**ug/L**		168277	168277.308
	As	75	**44.357**	**ug/L**	2.078	23853	0.140
	Se	77		**ug/L**		4756	-0.003
	Se	82	**7.174**	**ug/L**	8.893	298	0.002
	Kr	83		**ug/L**		210	0.001
>	Lu	175		**ug/L**		109881	109880.506
	Tl	205	**45.427**	**ug/L**	1.580	173080	1.574

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		108.0			
	Ni	60					
>	Ge	74		100.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		106.9			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202056885
Sample Date/Time: Wednesday, March 24, 2010 17:11:18
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 959116|10|rmj
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\1202056885.219

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**1.042**	**ug/L**	5.992	231	0.000
|>	Sc	45		**ug/L**		967317	967316.637
⌊	Ni	60	**7.952**	**ug/L**	2.309	4464	0.005
⌈>	Ge	74		**ug/L**		168625	168625.198
|	As	75	**2.087**	**ug/L**	27.604	1431	0.007
|	Se	77		**ug/L**		5725	0.003
|	Se	82	**0.236**	**ug/L**	78.974	-0	0.000
⌊	Kr	83		**ug/L**		128	0.000
⌈>	Lu	175		**ug/L**		104214	104213.517
⌊	Tl	205	**0.309**	**ug/L**	7.228	1283	0.011

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45		102.1			
⌊	Ni	60					
⌈>	Ge	74		101.0			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈>	Lu	175		101.4			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 248110002
Sample Date/Time: Wednesday, March 24, 2010 17:15:20
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\248110002.220

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**4.717**	**ug/L**	2.752	1054	0.001
>	Sc	45		**ug/L**		1012001	1012000.677
	Ni	60	**35.800**	**ug/L**	2.240	20645	0.020
>	Ge	74		**ug/L**		169264	169264.135
	As	75	**8.378**	**ug/L**	6.514	4792	0.026
	Se	77		**ug/L**		4327	-0.005
	Se	82	**0.423**	**ug/L**	57.116	8	0.000
	Kr	83		**ug/L**		202	0.001
>	Lu	175		**ug/L**		111320	111319.515
	Tl	205	**1.011**	**ug/L**	1.568	4079	0.035

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		106.9			
	Ni	60					
>	Ge	74		101.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		108.3			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 248110003
Sample Date/Time: Wednesday, March 24, 2010 17:19:22
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959116|2|rm|
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\248110003.221

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**2.408**	**ug/L**	3.338	545	0.001
>	Sc	45		**ug/L**		1014668	1014667.615
	Ni	60	**29.810**	**ug/L**	2.354	17255	0.017
>	Ge	74		**ug/L**		167231	167230.952
	As	75	**4.800**	**ug/L**	5.900	2852	0.015
	Se	77		**ug/L**		4216	-0.006
	Se	82	**0.942**	**ug/L**	34.366	30	0.000
	Kr	83		**ug/L**		173	0.000
>	Lu	175		**ug/L**		112917	112916.658
	Tl	205	**0.408**	**ug/L**	1.645	1778	0.014

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		107.1			
	Ni	60					
>	Ge	74		100.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		109.8			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 248110004
Sample Date/Time: Wednesday, March 24, 2010 17:23:23
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\248110004.222

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**2.927**	**ug/L**	2.016	656	0.001
|>	Sc	45		**ug/L**		1008401	1008400.547
⌊	Ni	60	**25.306**	**ug/L**	3.256	14574	0.014
⌈>	Ge	74		**ug/L**		169356	169356.127
|	As	75	**3.594**	**ug/L**	13.142	2241	0.011
|	Se	77		**ug/L**		3978	-0.008
|	Se	82	**1.809**	**ug/L**	12.040	68	0.000
⌊	Kr	83		**ug/L**		206	0.001
⌈>	Lu	175		**ug/L**		117503	117502.822
⌊	Tl	205	**0.377**	**ug/L**	4.540	1726	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45		106.5			
⌊	Ni	60					
⌈>	Ge	74		101.4			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈>	Lu	175		114.3			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, March 24, 2010 17:27:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\QC Std 6.223

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**52.518**	**ug/L**	1.120	10788	0.011
>	Sc	45		**ug/L**		939488	939488.196
	Ni	60	**51.465**	**ug/L**	2.110	27507	0.029
>	Ge	74		**ug/L**		166588	166587.528
	As	75	**51.759**	**ug/L**	1.284	27498	0.163
	Se	77		**ug/L**		8029	0.017
	Se	82	**52.571**	**ug/L**	1.571	2230	0.013
	Kr	83		**ug/L**		117	0.000
>	Lu	175		**ug/L**		102528	102528.330
	Tl	205	**50.535**	**ug/L**	1.691	179649	1.751

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9	105.036				
>	Sc	45		99.2			
	Ni	60	102.931				
>	Ge	74		99.7			
	As	75	103.518				
	Se	77					
	Se	82	105.141				
	Kr	83					
>	Lu	175		99.7			
	Tl	205	101.069				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, March 24, 2010 17:31:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\QC Std 7.224

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.017**	**ug/L**	81.777	14	0.000
>	Sc	45		**ug/L**		916851	916850.916
	Ni	60	**0.006**	**ug/L**	141.395	101	0.000
>	Ge	74		**ug/L**		164077	164077.276
	As	75	**-0.580**	**ug/L**	20.697	13	-0.002
	Se	77		**ug/L**		5736	0.004
	Se	82	**-0.149**	**ug/L**	471.759	-17	-0.000
	Kr	83		**ug/L**		118	0.000
>	Lu	175		**ug/L**		101651	101651.083
	Tl	205	**0.138**	**ug/L**	8.217	651	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		96.8			
	Ni	60					
>	Ge	74		98.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		98.9			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 248110005
Sample Date/Time: Wednesday, March 24, 2010 17:35:30
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\248110005.225

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**4.542**	**ug/L**	0.723	1025	0.001
>	Sc	45		**ug/L**		1021203	1021202.712
	Ni	60	**34.689**	**ug/L**	1.513	20190	0.020
>	Ge	74		**ug/L**		167324	167323.880
	As	75	**8.406**	**ug/L**	2.959	4754	0.027
	Se	77		**ug/L**		4400	-0.005
	Se	82	**-0.500**	**ug/L**	39.371	-32	-0.000
	Kr	83		**ug/L**		193	0.000
>	Lu	175		**ug/L**		109682	109682.257
	Tl	205	**0.932**	**ug/L**	3.277	3721	0.032

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		107.8			
	Ni	60					
>	Ge	74		100.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		106.7			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 248110006
Sample Date/Time: Wednesday, March 24, 2010 17:39:31
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\248110006.226

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**3.829**	**ug/L**	3.548	866	0.001
|>	Sc	45		**ug/L**		1022190	1022190.128
⌊	Ni	60	**27.944**	**ug/L**	2.405	16301	0.016
⌈>	Ge	74		**ug/L**		167102	167102.387
|	As	75	**6.206**	**ug/L**	10.915	3585	0.020
|	Se	77		**ug/L**		4099	-0.007
|	Se	82	**0.864**	**ug/L**	68.080	26	0.000
⌊	Kr	83		**ug/L**		189	0.000
⌈>	Lu	175		**ug/L**		113379	113379.335
⌊	Tl	205	**0.498**	**ug/L**	2.859	2141	0.017

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45		107.9			
⌊	Ni	60					
⌈>	Ge	74		100.0			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈>	Lu	175		110.3			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 248110007
Sample Date/Time: Wednesday, March 24, 2010 17:43:33
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\benlassetl.mth
Dataset File: C:\elandata\Dataset\100323\248110007.227

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**3.336**	**ug/L**	5.115	754	0.001
|>	Sc	45		**ug/L**		1018574	1018573.939
⌊	Ni	60	**31.152**	**ug/L**	0.381	18098	0.018
⌈>	Ge	74		**ug/L**		167725	167724.532
|	As	75	**6.048**	**ug/L**	3.743	3517	0.019
|	Se	77		**ug/L**		4029	-0.007
|	Se	82	**0.030**	**ug/L**	806.150	-10	0.000
⌊	Kr	83		**ug/L**		177	0.000
⌈>	Lu	175		**ug/L**		112484	112483.570
⌊	Tl	205	**0.834**	**ug/L**	1.205	3434	0.029

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45		107.5			
⌊	Ni	60					
⌈>	Ge	74		100.4			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈>	Lu	175		109.4			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 248110008
Sample Date/Time: Wednesday, March 24, 2010 17:47:36
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\benlassetl.mth
Dataset File: C:\elandata\Dataset\100323\248110008.228

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**5.353**	**ug/L**	1.429	1186	0.001
|>	Sc	45		**ug/L**		1004572	1004572.456
⌊	Ni	60	**47.900**	**ug/L**	0.991	27388	0.027
⌈>	Ge	74		**ug/L**		165523	165523.397
|	As	75	**9.874**	**ug/L**	5.851	5468	0.031
|	Se	77		**ug/L**		4076	-0.006
|	Se	82	**-0.518**	**ug/L**	68.537	-32	-0.000
⌊	Kr	83		**ug/L**		205	0.001
⌈>	Lu	175		**ug/L**		111753	111752.526
⌊	Tl	205	**0.937**	**ug/L**	0.770	3809	0.032

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45		106.1			
⌊	Ni	60					
⌈>	Ge	74		99.1			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈>	Lu	175		108.7			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, March 24, 2010 18:19:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\QC Std 6.236

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**53.112**	**ug/L**	0.824	10710	0.012
>	Sc	45		**ug/L**		922377	922376.875
	Ni	60	**51.918**	**ug/L**	0.552	27248	0.029
>	Ge	74		**ug/L**		165241	165240.813
	As	75	**50.263**	**ug/L**	3.689	26499	0.158
	Se	77		**ug/L**		7388	0.014
	Se	82	**51.178**	**ug/L**	1.064	2153	0.013
	Kr	83		**ug/L**		123	0.000
>	Lu	175		**ug/L**		101398	101397.933
	Tl	205	**51.003**	**ug/L**	1.484	179327	1.767

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9	106.223				
>	Sc	45		97.4			
	Ni	60	103.836				
>	Ge	74		98.9			
	As	75	100.527				
	Se	77					
	Se	82	102.355				
	Kr	83					
>	Lu	175		98.6			
	Tl	205	102.006				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, March 24, 2010 18:23:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\beniassetl.mth
Dataset File: C:\elandata\Dataset\100323\QC Std 7.237

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.005**	**ug/L**	359.144	11	0.000
|>	Sc	45		**ug/L**		913027	913027.117
⌊	Ni	60	**0.015**	**ug/L**	221.492	105	0.000
⌈>	Ge	74		**ug/L**		163996	163996.362
|	As	75	**0.266**	**ug/L**	78.867	450	0.001
|	Se	77		**ug/L**		5205	0.001
|	Se	82	**-0.085**	**ug/L**	380.048	-14	-0.000
⌊	Kr	83		**ug/L**		107	-0.000
⌈>	Lu	175		**ug/L**		102339	102338.735
⌊	Tl	205	**0.135**	**ug/L**	5.052	645	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45		96.4			
⌊	Ni	60					
⌈>	Ge	74		98.2			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈>	Lu	175		99.5			
⌊	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #6 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Thursday, March 25, 2010 22:43:40
Sample Description:
Method File: C:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\100318\Sample.306
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	2316.0	2315.988	46.340	2.0
	Mg	24.0	26605.8	26605.757	397.514	1.5
	Co	58.9	35612.5	35612.535	243.017	0.7
	Rh	102.9	71318.6	71318.603	927.372	1.3
	In	114.9	76348.1	76348.091	817.381	1.1
	Pb	208.0	42447.4	42447.374	415.016	1.0
⌈>	Ba	137.9	70551.7	70551.711	1034.013	1.5
⌊	Ba++	69.0	1910.1	0.027	0.001	1.9
⌈>	Ce	139.9	91805.9	91805.864	795.215	0.9
⌊	CeO	155.9	1832.9	0.020	0.000	1.5
	Bkgd	220.0	17.8	17.800	2.308	13.0

Current Optimization File Data

Current Value	Description
0.80	Nebulizer Gas Flow
8.75	Lens Voltage
1450.00	ICP RF Power
-1800.00	Analog Stage Voltage
900.00	Pulse Stage Voltage
30.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	7.3	2985.0
Co	59	21	8.0	34103.7
In	115	21	9.0	77537.2

ICPMS #6 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	584	2080	0.655
Be	9.0	9.1	2055	2080	0.676
Mg	24.0	24.0	5674	2120	0.601
Mg	25.0	25.0	5930	2080	0.677
Mg	26.0	25.9	6152	2120	0.713
Co	58.9	58.9	14160	2170	0.657
Rh	102.9	102.9	24847	2230	0.706
In	114.9	115.0	27789	2260	0.699
Ce	139.9	139.9	33848	2280	0.755
Pb	206.0	206.0	49948	2420	0.746
Pb	207.0	207.0	50135	2385	0.711
Pb	208.0	208.0	50439	2430	0.727
U	238.1	238.1	57729	2470	0.712

ICPMS#6 - Summary Report

Sample ID: Blank
Sample Date/Time: Thursday, March 25, 2010 23:39:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\Blank.007

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		99203	
	U	238		ug/L		26	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Thursday, March 25, 2010 23:42:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\Standard 1.008

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		100494	100493.600
	U	238	10.000	ug/L	1.205	53935	0.536

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Thursday, March 25, 2010 23:45:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\Standard 2.009

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		99977	99976.627
	U	238	100.007	ug/L	0.802	540187	5.403

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Thursday, March 25, 2010 23:48:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\QC Std 1.010

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		98148	98147.755
	U	238	54.121	ug/L	0.090	287013	2.924

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		98.9			
	U	238	108.242				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Thursday, March 25, 2010 23:52:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\QC Std 2.011

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		96948	96947.556
	U	238	0.011	ug/L	17.119	84	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		97.7			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Thursday, March 25, 2010 23:55:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\QC Std 3.012

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		**ug/L**		99178	99177.738
[	U	238	**0.218**	**ug/L**	1.805	1193	0.012

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	Lu	175		100.0			
[	U	238	108.910				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Thursday, March 25, 2010 23:58:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\QC Std 4.013

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		98268	98267.831
	U	238	0.005	ug/L	36.082	54	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		99.1			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Friday, March 26, 2010 00:01:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\QC Std 5.014

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		**ug/L**		98559	98559.477
	U	238	**21.758**	**ug/L**	0.314	115886	1.176

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		99.4			
	U	238	108.792				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, March 26, 2010 00:04:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\QC Std 6.015

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		98667	98666.564
⌊	U	238	**53.804**	**ug/L**	0.812	286821	2.907

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		99.5			
⌊	U	238	107.608				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, March 26, 2010 00:07:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\QC Std 7.016

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		98475	98475.259
[	U	238	0.008	ug/L	17.468	69	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	Lu	175		99.3			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, March 26, 2010 00:32:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\QC Std 6.024

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		97410	97409.634
	U	238	54.025	ug/L	0.622	284341	2.919

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		98.2			
	U	238	108.049				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, March 26, 2010 00:35:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\QC Std 7.025

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		96914	96914.274
	U	238	0.012	ug/L	10.073	87	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		97.7			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202056883
Sample Date/Time: Friday, March 26, 2010 00:38:13
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\1202056883.026

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		97967	97967.083
	U	238	0.007	ug/L	16.969	61	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		98.8			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202056888
Sample Date/Time: Friday, March 26, 2010 00:41:16
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 959116|40|rmj
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\1202056888.027

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		100155	100155.215
⌊	U	238	**0.616**	ug/L	1.792	3357	0.033

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovi	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Lu	175		101.0			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 248110001
Sample Date/Time: Friday, March 26, 2010 00:44:19
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\248110001.028

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		105955	105954.533
	U	238	19.665	ug/L	0.692	112598	1.062

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		106.8			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202056884
Sample Date/Time: Friday, March 26, 2010 00:47:22
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\1202056884.029

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		105661	105660.701
	U	238	24.291	ug/L	1.113	138690	1.312

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		106.5			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202056886
Sample Date/Time: Friday, March 26, 2010 00:50:26
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\1202056886.030

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		106328	106328.324
[	U	238	45.722	ug/L	0.838	262671	2.470

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	Lu	175		107.2			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202056887
Sample Date/Time: Friday, March 26, 2010 00:53:30
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\1202056887.031

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		105688	105688.255
	U	238	43.816	ug/L	0.166	250218	2.367

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		106.5			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202056885
Sample Date/Time: Friday, March 26, 2010 00:56:35
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 959116|10|rmj
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\1202056885.032

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		101976	101975.710
	U	238	4.001	ug/L	0.368	22069	0.216

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		102.8			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 248110002
Sample Date/Time: Friday, March 26, 2010 00:59:39
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\248110002.033

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		104492	104491.550
	U	238	17.943	ug/L	1.239	101311	0.969

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		105.3			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, March 26, 2010 01:02:42
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\QC Std 6.034

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		**ug/L**		98702	98702.149
[	U	238	**53.844**	**ug/L**	1.297	287135	2.909

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	Lu	175		99.5			
[	U	238	107.688				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, March 26, 2010 01:05:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\QC Std 7.035

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		97284	97284.462
	U	238	0.009	ug/L	25.453	71	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		98.1			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 248110003
Sample Date/Time: Friday, March 26, 2010 01:08:53
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\248110003.036

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		105916	105915.960
[	U	238	3.458	ug/L	1.243	19813	0.187

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[>	Lu	175		106.8			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 248110004
Sample Date/Time: Friday, March 26, 2010 01:11:56
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959116|2|rm|
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\248110004.037

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		110078	110078.271
	U	238	**2.757**	ug/L	1.149	16424	0.149

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		111.0			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 248110005
Sample Date/Time: Friday, March 26, 2010 01:15:00
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\248110005.038

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		105470	105470.298
	U	238	18.350	ug/L	1.542	104592	0.991

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		106.3			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 248110006
Sample Date/Time: Friday, March 26, 2010 01:18:04
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\248110006.039

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		109140	109140.418
	U	238	5.196	ug/L	0.733	30667	0.281

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		110.0			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 248110007
Sample Date/Time: Friday, March 26, 2010 01:21:08
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\248110007.040

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		107476	107475.570
	U	238	7.980	ug/L	0.692	46366	0.431

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		108.3			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 248110008
Sample Date/Time: Friday, March 26, 2010 01:24:12
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 959116|2|rmj
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\248110008.041

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		**ug/L**		106851	106850.868
	U	238	**26.119**	**ug/L**	1.441	150812	1.411

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		107.7			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, March 26, 2010 01:36:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\QC Std 6.045

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		98026	98025.507
	U	238	53.622	ug/L	0.367	284017	2.897

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
>	Lu	175		98.8			
	U	238	107.245				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, March 26, 2010 01:39:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u.mth
Dataset File: C:\elandata\Dataset\100325\QC Std 7.046

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		98590	98590.024
	U	238	0.008	ug/L	18.318	69	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Lu	175		99.4			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Method Name: SOIL
Method Description: 7471A, ILM04 ANALYST JXL1
Element: Hg

Date: 03/10/2010
Technique:FI-MHS
Calibration Type:
Hg, Calc. Intercept : Linear
Wavelength: 253.7 nm
Sample Info Name: 031010S1.SIF Results Data Set Name: 031010S1

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 03/10/2010
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0034	0.0034	11:24:32	No
2			0.0034	0.0034	11:25:08	No
Mean:			0.0034			
SD :			0.0000			
%RSD:			1.3036			

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 03/10/2010
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0022	0.0057	11:26:31	No
2			0.0022	0.0056	11:27:05	No
Mean:			0.0022			
SD :			0.0001			
%RSD:			2.2945			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.01100
Intercept : 0.00000

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 03/10/2010
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0054	0.0089	11:28:28	No
2			0.0052	0.0086	11:29:02	No
Mean:			0.0053			
SD :			0.0002			
%RSD:			3.6849			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99986 Slope: 0.01060
Intercept : 0.00003

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 03/10/2010
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0218	0.0252	11:30:27	No
2			0.0211	0.0245	11:31:01	No
Mean:			0.0214			
SD :			0.0005			
%RSD:			2.3140			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99999 Slope: 0.01071
Intercept : 0.00001

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 03/10/2010
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0551	0.0585	11:32:26	No
2			0.0548	0.0582	11:33:01	No
Mean:			0.0550			
SD :			0.0002			
%RSD:			0.3529			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99995 Slope: 0.01099
Intercept : -0.00014

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 03/10/2010
Sample ID: S10

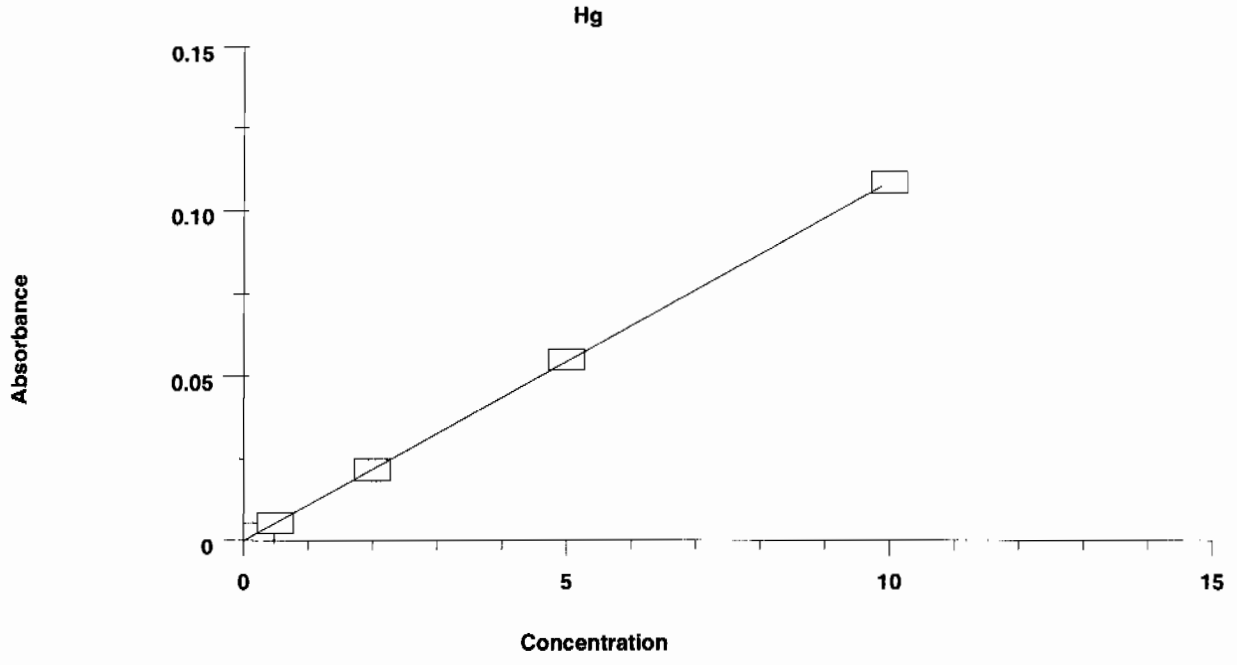
Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.1104	0.1138	11:34:28	No
2			0.1066	0.1101	11:35:03	No
Mean:			0.1085			
SD :			0.0026			
%RSD:			2.4402			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99997 Slope: 0.01088
Intercept : -0.00001

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0034	---	----	----	----
S0.2	0.0022	0.200	0.204	0.0001	2.3
S0.5	0.0053	0.500	0.489	0.0002	3.7
S2.0	0.0214	2.000	1.973	0.0005	2.3
S5.0	0.0550	5.000	5.054	0.0002	0.4
S10	0.1085	10.000	9.979	0.0026	2.4

Correlation Coefficient: 0.99997 Slope: 0.01088 Intercept: 0.0000



Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 03/10/2010
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.283	5.283	0.0574	0.0609	11:36:31	No
2	5.297	5.297	0.0576	0.0610	11:37:06	No
Mean:	5.290	5.290	0.0575			
SD :	0.0104	0.0104	0.0001			
%RSD:	0.2	0.2	0.1961			

QC value within specified limits.

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 03/10/2010
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.093	-0.093	-0.0010	0.0024	11:38:29	No
2	-0.096	-0.096	-0.0011	0.0024	11:39:03	No
Mean:	-0.095	-0.095	-0.0010			
SD :	0.0021	0.0021	0.0000			
%RSD:	2.2	2.2	2.1790			

QC value within specified limits.

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 03/10/2010
Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.219	0.219	0.0024	0.0058	11:40:27	No
2	0.202	0.202	0.0022	0.0056	11:41:02	No
Mean:	0.210	0.210	0.0023			
SD :	0.0120	0.0120	0.0001			
%RSD:	5.7	5.7	5.7195			

QC value within specified limits.

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 03/10/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.274	5.274	0.0574	0.0608	11:42:28	No
2	5.053	5.053	0.0549	0.0584	11:43:02	No
Mean:	5.164	5.164	0.0561			
SD :	0.1562	0.1562	0.0017			
%RSD:	3.0	3.0	3.0253			

QC value within specified limits.

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 03/10/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.002	-0.002	0.0000	0.0034	11:44:30	No
2	-0.001	-0.001	0.0000	0.0034	11:45:04	No
Mean:	-0.002	-0.002	0.0000			
SD :	0.0012	0.0012	0.0000			
%RSD:	78.7	78.7	43.6378			

QC value within specified limits.

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 03/10/2010
Sample ID: 1202056179|i||958757|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.056	-0.056	-0.0006	0.0028	11:46:31	No
2	-0.082	-0.082	-0.0009	0.0025	11:47:06	No
Mean:	-0.069	-0.069	-0.0008			
SD :	0.0181	0.0181	0.0002			
%RSD:	26.3	26.3	25.8466			

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 03/10/2010
Sample ID: 1202056180|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.686	3.686	0.0401	0.0435	11:48:31	No
2	3.631	3.631	0.0395	0.0429	11:49:06	No
Mean:	3.658	3.658	0.0398			
SD :	0.0388	0.0388	0.0004			
%RSD:	1.1	1.1	1.0601			

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 03/10/2010
Sample ID: 248068001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.013	0.013	0.0001	0.0035	11:50:32	No
2	0.022	0.022	0.0002	0.0036	11:51:07	No
Mean:	0.017	0.017	0.0002			
SD :	0.0062	0.0062	0.0001			
%RSD:	35.5	35.5	38.2585			

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 03/10/2010
Sample ID: 1202056181|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.035	-0.035	-0.0004	0.0030	11:52:33	No
2	-0.035	-0.035	-0.0004	0.0030	11:53:08	No
Mean:	-0.035	-0.035	-0.0004			
SD :	0.0000	0.0000	0.0000			
%RSD:						

Element: Hg Seq. No.: 16 AS Loc.: 16 Date: 03/10/2010
Sample ID: 1202056182|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.093	2.093	0.0228	0.0262	11:54:36	No
2	2.071	2.071	0.0225	0.0259	11:55:11	No
Mean:	2.082	2.082	0.0226			
SD :	0.0159	0.0159	0.0002			
%RSD:	0.8	0.8	0.7658			

Element: Hg Seq. No.: 17 AS Loc.: 17 Date: 03/10/2010
Sample ID: 1202056184|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.151	2.151	0.0234	0.0268	11:56:35	No
2	2.086	2.086	0.0227	0.0261	11:57:10	No
Mean:	2.119	2.119	0.0230			
SD :	0.0462	0.0462	0.0005			
%RSD:	2.2	2.2	2.1814			

Element: Hg Seq. No.: 18 AS Loc.: 18 Date: 03/10/2010
Sample ID: 1202056183|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.111	-0.111	-0.0012	0.0022	11:58:32	No
2	-0.114	-0.114	-0.0012	0.0022	11:59:06	No
Mean:	-0.112	-0.112	-0.0012			
SD :	0.0015	0.0015	0.0000			
%RSD:	1.4	1.4	1.3550			

Element: Hg Seq. No.: 19 AS Loc.: 19 Date: 03/10/2010
Sample ID: 248068002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.261	0.261	0.0028	0.0062	12:00:28	No
2	0.260	0.260	0.0028	0.0062	12:01:03	No
Mean:	0.261	0.261	0.0028			
SD :	0.0008	0.0008	0.0000			
%RSD:	0.3	0.3	0.2969			

Element: Hg Seq. No.: 20 AS Loc.: 20 Date: 03/10/2010
Sample ID: 248110001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.257	0.257	0.0028	0.0062	12:02:25	No
2	0.247	0.247	0.0027	0.0061	12:03:00	No
Mean:	0.252	0.252	0.0027			
SD :	0.0077	0.0077	0.0001			

%RSD: 3.1 3.1 3.0785

Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 03/10/2010
Sample ID: 248110002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.233	0.233	0.0025	0.0059	12:04:22	No
2	0.243	0.243	0.0026	0.0060	12:04:57	No
Mean:	0.238	0.238	0.0026			
SD :	0.0070	0.0070	0.0001			
%RSD:	2.9	2.9	2.9532			

Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 03/10/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.122	5.122	0.0557	0.0591	12:06:22	No
2	5.174	5.174	0.0563	0.0597	12:06:57	No
Mean:	5.148	5.148	0.0560			
SD :	0.0365	0.0365	0.0004			
%RSD:	0.7	0.7	0.7088			

QC value within specified limits.

Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 03/10/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.038	-0.038	-0.0004	0.0030	12:08:25	No
2	-0.032	-0.032	-0.0004	0.0030	12:09:00	No
Mean:	-0.035	-0.035	-0.0004			
SD :	0.0042	0.0042	0.0000			
%RSD:	11.9	11.9	11.5118			

QC value within specified limits.

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 03/10/2010
Sample ID: 248110003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.259	0.259	0.0028	0.0062	12:10:25	No
2	0.268	0.268	0.0029	0.0063	12:11:00	No
Mean:	0.264	0.264	0.0029			
SD :	0.0065	0.0065	0.0001			
%RSD:	2.5	2.5	2.4719			

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 03/10/2010
Sample ID: 248110004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.060	0.060	0.0006	0.0041	12:12:24	No
2	0.079	0.079	0.0008	0.0043	12:12:59	No
Mean:	0.069	0.069	0.0007			
SD :	0.0130	0.0130	0.0001			
%RSD:	18.7	18.7	18.9955			

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 03/10/2010
Sample ID: 248110005|i|||

%RSD: 60.8 60.8 59.9339

Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 03/10/2010
Sample ID: 248118003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.010	0.010	0.0001	0.0035	12:26:22	No
2	-0.047	-0.047	-0.0005	0.0029	12:26:57	No
Mean:	-0.018	-0.018	-0.0002			
SD :	0.0401	0.0401	0.0004			
%RSD:	218.6	218.6	204.8136			

Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 03/10/2010
Sample ID: 248118004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.477	0.477	0.0052	0.0086	12:28:24	No
2	0.695	0.695	0.0075	0.0110	12:28:59	No
Mean:	0.586	0.586	0.0064			
SD :	0.1541	0.1541	0.0017			
%RSD:	26.3	26.3	26.3746			

Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 03/10/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.238	3.238	0.0352	0.0386	12:30:26	No
2	3.176	3.176	0.0345	0.0379	12:31:01	No
Mean:	3.207	3.207	0.0349			
SD :	0.0433	0.0433	0.0005			
%RSD:	1.3	1.3	1.3501			

QC failed, value less than lower limit for Hg.
Current analysis method being continued.

Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 03/10/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.170	-0.170	-0.0019	0.0016	12:32:29	No
2	-0.111	-0.111	-0.0012	0.0022	12:33:03	No
Mean:	-0.140	-0.140	-0.0015			
SD :	0.0412	0.0412	0.0004			
%RSD:	29.4	29.4	29.1117			

QC value within specified limits.

Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 03/10/2010
Sample ID: 248118005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.170	-0.170	-0.0019	0.0016	12:34:27	No
2	-0.075	-0.075	-0.0008	0.0026	12:35:03	No
Mean:	-0.123	-0.123	-0.0013			
SD :	0.0669	0.0669	0.0007			
%RSD:	54.6	54.6	54.0576			

Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 03/10/2010

SD :	0.8334	0.8334	0.0091			
%RSD:	111.7	111.7	111.8433			

Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 03/10/2010
Sample ID: 1202056102|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.719	2.719	0.0296	0.0330	12:48:03	No
2	2.588	2.588	0.0281	0.0315	12:48:38	No
Mean:	2.653	2.653	0.0288			
SD :	0.0924	0.0924	0.0010			
%RSD:	3.5	3.5	3.4851			

Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 03/10/2010
Sample ID: 1202056104|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.725	2.725	0.0296	0.0330	12:50:02	No
2	2.603	2.603	0.0283	0.0317	12:50:37	No
Mean:	2.664	2.664	0.0290			
SD :	0.0861	0.0861	0.0009			
%RSD:	3.2	3.2	3.2322			

Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 03/10/2010
Sample ID: 1202056103|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.023	0.023	0.0002	0.0036	12:52:01	No
2	-0.006	-0.006	-0.0001	0.0033	12:52:36	No
Mean:	0.009	0.009	0.0001			
SD :	0.0199	0.0199	0.0002			
%RSD:	233.2	233.2	272.7061			

Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 03/10/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.971	3.971	0.0432	0.0466	12:54:02	No
2	3.875	3.875	0.0421	0.0456	12:54:37	No
Mean:	3.923	3.923	0.0427			
SD :	0.0678	0.0678	0.0007			
%RSD:	1.7	1.7	1.7290			

QC failed, value less than lower limit for Hg.
Current analysis method being continued.

Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 03/10/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.107	-0.107	-0.0012	0.0022	12:56:06	No
2	-0.111	-0.111	-0.0012	0.0022	12:56:41	No
Mean:	-0.109	-0.109	-0.0012			
SD :	0.0031	0.0031	0.0000			
%RSD:	2.8	2.8	2.8075			

QC value within specified limits.

Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 03/10/2010
Sample ID: 247806002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.020	-0.020	-0.0002	0.0032	12:58:06	No
2	-0.033	-0.033	-0.0004	0.0030	12:58:42	No
Mean:	-0.027	-0.027	-0.0003			
SD :	0.0090	0.0090	0.0001			
%RSD:	33.7	33.7	32.2087			

Element: Hg Seq. No.: 49 AS Loc.: 43 Date: 03/10/2010
Sample ID: 247806003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.181	0.181	0.0020	0.0054	13:00:06	No
2	0.151	0.151	0.0016	0.0050	13:00:41	No
Mean:	0.166	0.166	0.0018			
SD :	0.0214	0.0214	0.0002			
%RSD:	12.9	12.9	12.9601			

Element: Hg Seq. No.: 50 AS Loc.: 44 Date: 03/10/2010
Sample ID: 247806004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored

Element: Hg Seq. No.: 50 AS Loc.: 7 Date: 03/10/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.005	5.005	0.0544	0.0578	13:05:31	No
2	4.892	4.892	0.0532	0.0566	13:06:06	No
Mean:	4.949	4.949	0.0538			
SD :	0.0796	0.0796	0.0009			
%RSD:	1.6	1.6	1.6094			

QC value within specified limits.

Element: Hg Seq. No.: 51 AS Loc.: 8 Date: 03/10/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.089	-0.089	-0.0010	0.0024	13:07:34	No
2	-0.083	-0.083	-0.0009	0.0025	13:08:08	No
Mean:	-0.086	-0.086	-0.0010			
SD :	0.0043	0.0043	0.0000			
%RSD:	5.0	5.0	4.9353			

QC value within specified limits.

Element: Hg Seq. No.: 52 AS Loc.: 22 Date: 03/10/2010
Sample ID: 248110003|i||958757|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.205	0.205	0.0022	0.0056	13:09:34	No
2	0.196	0.196	0.0021	0.0055	13:10:09	No
Mean:	0.201	0.201	0.0022			
SD :	0.0063	0.0063	0.0001			
%RSD:	3.1	3.1	3.1572			

Element: Hg Seq. No.: 53 AS Loc.: 23 Date: 03/10/2010
Sample ID: 248110004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.016	0.016	0.0002	0.0036	13:11:33	No
2	0.024	0.024	0.0002	0.0037	13:12:08	No
Mean:	0.020	0.020	0.0002			
SD :	0.0058	0.0058	0.0001			
%RSD:	29.2	29.2	31.1504			

Element: Hg Seq. No.: 54 AS Loc.: 24 Date: 03/10/2010
Sample ID: 248110005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.134	0.134	0.0014	0.0049	13:13:32	No
2	0.131	0.131	0.0014	0.0048	13:14:07	No
Mean:	0.133	0.133	0.0014			
SD :	0.0017	0.0017	0.0000			
%RSD:	1.3	1.3	1.2712			

Element: Hg Seq. No.: 55 AS Loc.: 25 Date: 03/10/2010
Sample ID: 248110006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.220	0.220	0.0024	0.0058	13:15:31	No
2	0.228	0.228	0.0025	0.0059	13:16:06	No
Mean:	0.224	0.224	0.0024			
SD :	0.0056	0.0056	0.0001			
%RSD:	2.5	2.5	2.5247			

Element: Hg Seq. No.: 56 AS Loc.: 26 Date: 03/10/2010
Sample ID: 248110007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.205	0.205	0.0022	0.0056	13:17:31	No
2	0.212	0.212	0.0023	0.0057	13:18:06	No
Mean:	0.209	0.209	0.0023			
SD :	0.0050	0.0050	0.0001			
%RSD:	2.4	2.4	2.4058			

Element: Hg Seq. No.: 57 AS Loc.: 27 Date: 03/10/2010
Sample ID: 248110008|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.231	0.231	0.0025	0.0059	13:19:32	No
2	0.226	0.226	0.0024	0.0059	13:20:06	No
Mean:	0.229	0.229	0.0025			
SD :	0.0037	0.0037	0.0000			
%RSD:	1.6	1.6	1.6134			

Element: Hg Seq. No.: 58 AS Loc.: 28 Date: 03/10/2010
Sample ID: 248118001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.019	-0.019	-0.0002	0.0032	13:21:32	No
2	-0.023	-0.023	-0.0003	0.0032	13:22:07	No
Mean:	-0.021	-0.021	-0.0002			

SD :	0.0025	0.0025	0.0000			
%RSD:	12.0	12.0	11.2962			

Element: Hg Seq. No.: 59 AS Loc.: 29 Date: 03/10/2010
Sample ID: 248118002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.028	-0.028	-0.0003	0.0031	13:23:33	No
2	-0.033	-0.033	-0.0004	0.0030	13:24:08	No
Mean:	-0.030	-0.030	-0.0003			
SD :	0.0033	0.0033	0.0000			
%RSD:	10.7	10.7	10.2525			

Element: Hg Seq. No.: 60 AS Loc.: 30 Date: 03/10/2010
Sample ID: 248118003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.052	0.052	0.0006	0.0040	13:25:35	No
2	0.035	0.035	0.0004	0.0038	13:26:10	No
Mean:	0.044	0.044	0.0005			
SD :	0.0119	0.0119	0.0001			
%RSD:	27.2	27.2	27.9535			

Element: Hg Seq. No.: 61 AS Loc.: 31 Date: 03/10/2010
Sample ID: 248118004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.965	0.965	0.0105	0.0139	13:27:37	No
2	0.942	0.942	0.0102	0.0136	13:28:11	No
Mean:	0.953	0.953	0.0104			
SD :	0.0162	0.0162	0.0002			
%RSD:	1.7	1.7	1.6982			

Element: Hg Seq. No.: 62 AS Loc.: 7 Date: 03/10/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	4.923	4.923	0.0535	0.0569	13:29:38	No
2	4.958	4.958	0.0539	0.0573	13:30:13	No
Mean:	4.940	4.940	0.0537			
SD :	0.0249	0.0249	0.0003			
%RSD:	0.5	0.5	0.5048			

QC value within specified limits.

Element: Hg Seq. No.: 63 AS Loc.: 8 Date: 03/10/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.061	-0.061	-0.0007	0.0027	13:31:41	No
2	-0.068	-0.068	-0.0008	0.0027	13:32:17	No
Mean:	-0.065	-0.065	-0.0007			
SD :	0.0052	0.0052	0.0001			
%RSD:	8.0	8.0	7.8955			

QC value within specified limits.

Element: Hg Seq. No.: 64 AS Loc.: 32 Date: 03/10/2010

Miscellaneous

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

Batch ID: 959115.0 **Verified by:** _____
Analyst: Barry Audain
Method: SW846 3050B

Lab SOP: GL-MA-E-009 REV# 19
Instrument: Sartorius Balance B-001

Sample ID	Run Date	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202056883 MB	03-MAR-2010 18:14:00	0.521	50	95.96929	
1202056888 LCS	03-MAR-2010 18:14:00	0.578	50	86.50519	
248110001	03-MAR-2010 18:14:00	0.534	50	93.63296	
1202056884 DUP (248110001)	03-MAR-2010 18:14:00	0.556	50	89.92806	
1202056885 SDILT (248110001)	03-MAR-2010 18:14:00	0.534	50	93.63296	
1202056886 MS (248110001)	03-MAR-2010 18:14:00	0.526	50	95.05703	
1202056887 MSD (248110001)	03-MAR-2010 18:14:00	0.502	50	99.60159	
248110002	03-MAR-2010 18:14:00	0.503	50	99.40358	
248110003	03-MAR-2010 18:14:00	0.511	50	97.84736	
248110004	03-MAR-2010 18:14:00	0.569	50	87.87346	
248110005	03-MAR-2010 18:14:00	0.519	50	96.33911	
248110006	03-MAR-2010 18:14:00	0.518	50	96.5251	
248110007	03-MAR-2010 18:14:00	0.505	50	99.0099	
248110008	03-MAR-2010 18:14:00	0.527	50	94.87666	
248118001	03-MAR-2010 18:14:00	0.53	50	94.33962	
248118002	03-MAR-2010 18:14:00	0.585	50	85.47009	
248118003	03-MAR-2010 18:14:00	0.516	50	96.89922	
248118004	03-MAR-2010 18:14:00	0.574	50	87.10801	
248118005	03-MAR-2010 18:14:00	0.576	50	86.80556	
248118006	03-MAR-2010 18:14:00	0.512	50	97.65625	
248118007	03-MAR-2010 18:14:00	0.584	50	85.61644	

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1202056888	Metals Soil LCS SRM ICPMS	UI062540-MS	.578	g
MS	1202056886	ICP-MS Spike for soil products.	UI090827-A	.5	mL
MS	1202056886	ICP-MS Spike for Soil Products	UI090827-B	.5	mL
MSD	1202056887	ICP-MS Spike for soil products.	UI090827-A	.5	mL
MSD	1202056887	ICP-MS Spike for Soil Products	UI090827-B	.5	mL
REGNT	All	Hydrogen Peroxide 30%	1250038-02	1.5	mL
REGNT	All	Nitric Acid CONC.	1277919	5	mL

Comments:

sample#248110001 is a brown rocky soil.

Prep Logbook

Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Batch ID: **958755.0** Verified by: _____

Analyst: Lamanuel Hightower

Method: SW846 7471A Prep

Lab SOP: GL-MA-E-010 REV# 23

Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202056180	Metals LCS Soil SRM	UI031809A	.209	g
MS	1202056182	Mercury soil working intermediate standard for MS	WHG100310-14	.3	mL
MSD	1202056184	Mercury soil working intermediate standard for MS	WHG100310-14	.3	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202056179 MB	10-MAR-2010 09:00:00	Soil	0.547	30	54.84461	
1202056180 LCS	10-MAR-2010 09:00:00	Soil	0.209	30	143.54067	
248068001	10-MAR-2010 09:00:00	Soil	0.552	30	54.34783	
1202056181 DUP (248068001)	10-MAR-2010 09:00:00	Soil	0.585	30	51.28205	
1202056182 MS (248068001)	10-MAR-2010 09:00:00	Soil	0.505	30	59.40594	
1202056184 MSD (248068001)	10-MAR-2010 09:00:00	Soil	0.528	30	56.81818	
1202056183 SDILT (248068001)	10-MAR-2010 09:00:00	Soil	0.552	30	54.34783	
248068002	10-MAR-2010 09:00:00	Soil	0.525	30	57.14286	
248110001	10-MAR-2010 09:00:00	Soil	0.512	30	58.59375	
248110002	10-MAR-2010 09:00:00	Soil	0.593	30	50.59022	
248110003	10-MAR-2010 09:00:00	Soil	0.521	30	57.58157	
248110004	10-MAR-2010 09:00:00	Soil	0.527	30	56.926	
248110005	10-MAR-2010 09:00:00	Soil	0.557	30	53.85996	
248110006	10-MAR-2010 09:00:00	Soil	0.509	30	58.9391	
248110007	10-MAR-2010 09:00:00	Soil	0.558	30	53.76344	
248110008	10-MAR-2010 09:00:00	Soil	0.517	30	58.02708	
248118001	10-MAR-2010 09:00:00	Soil	0.558	30	53.76344	
248118002	10-MAR-2010 09:00:00	Soil	0.545	30	55.04587	
248118003	10-MAR-2010 09:00:00	Soil	0.588	30	51.02041	
248118004	10-MAR-2010 09:00:00	Soil	0.599	30	50.08347	
248118005	10-MAR-2010 09:00:00	Soil	0.535	30	56.07477	
248118006	10-MAR-2010 09:00:00	Soil	0.563	30	53.28597	
248118007	10-MAR-2010 09:00:00	Soil	0.554	30	54.15162	

Reagent/Solvent Lot ID	Description	Amount
1255532-C	Hg reducing agent	2 mL

Comments:

Sample 248068001 is a powder like brown soil.

Prep Logbook

Batch ID: **958755.0** Verified by: _____

Analyst: Lamanuel Hightower

Method: SW846 7471A Prep

Lab SOP: GL-MA-E-010 REV# 23

Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202056180	Metals LCS Soil SRM	UI031809A	.209	g
MS	1202056182	Mercury soil working intermediate standard for MS	WHG100310-14	.3	mL
MSD	1202056184	Mercury soil working intermediate standard for MS	WHG100310-14	.3	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1

I255532-C	Hg reducing agent	2 mL
1274391-1	NITRIC ACID	.375 mL
1277235-A	Hydrochloric Acid Conc.	1.125 mL
1277238-C	5% KMnO4 solution	7.5 mL
WHG100310-07	Mercury Working Standard 1st Source CAL S 0.2/CRA	30 uL
WHG100310-08	Mercury Working Standard 1st Source CAL S 0.5	75 uL
WHG100310-09	Mercury Working 1st Source CAL S 2.0	300 uL
WHG100310-10	Mercury Working 1st Source CAL S 5.0/CCV	750 uL
WHG100310-11	Mercury Working 1st Source CAL S 10.0	1.5 mL
WHG100310-12	Mercury Working 2nd Source S 5.0/ICV	750 uL

Digestion Start Date: 10-MAR-10 09:00:00

Digestion End Date: 10-MAR-10 09:30:00

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

Batch ID: **959113.0** Verified by: _____
Analyst: Anthony Green
Method: SW846 3050B
Lab SOP: GL-MA-E-009 REV# 19
Instrument: BAL-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202056882	Metals Soil LCS SRM ICP/Hg	UI062540-I	.548	g
MS	1202056880	Metals Spike Mix I	UI1268741-01	.25	mL
MS	1202056880	Metals Spike Mix II	UI1268744-06	.25	mL
MSD	1202056881	Metals Spike Mix I	UI1268741-01	.25	mL
MSD	1202056881	Metals Spike Mix II	UI1268744-06	.25	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202056877 MB	09-MAR-2010 10:00:00	Soil	0.549	50	91.07468	
1202056882 LCS	09-MAR-2010 10:00:00	Soil	0.548	50	91.24088	
248110001	09-MAR-2010 10:00:00	Soil	0.533	50	93.80863	
1202056878 DUP (248110001)	09-MAR-2010 10:00:00	Soil	0.527	50	94.87666	
1202056879 SDILT (248110001)	09-MAR-2010 10:00:00	Soil	0.533	50	93.80863	
1202056880 MS (248110001)	09-MAR-2010 10:00:00	Soil	0.513	50	97.46589	
1202056881 MSD (248110001)	09-MAR-2010 10:00:00	Soil	0.52	50	96.15385	
248110002	09-MAR-2010 10:00:00	Soil	0.533	50	93.80863	
248110003	09-MAR-2010 10:00:00	Soil	0.566	50	88.33922	
248110004	09-MAR-2010 10:00:00	Soil	0.527	50	94.87666	
248110005	09-MAR-2010 10:00:00	Soil	0.533	50	93.80863	
248110006	09-MAR-2010 10:00:00	Soil	0.511	50	97.84736	
248110007	09-MAR-2010 10:00:00	Soil	0.515	50	97.08738	
248110008	09-MAR-2010 10:00:00	Soil	0.536	50	93.28358	
248118001	09-MAR-2010 10:00:00	Soil	0.506	50	98.81423	
248118002	09-MAR-2010 10:00:00	Soil	0.521	50	95.96929	
248118003	09-MAR-2010 10:00:00	Soil	0.51	50	98.03922	
248118004	09-MAR-2010 10:00:00	Soil	0.551	50	90.7441	
248118005	09-MAR-2010 10:00:00	Soil	0.594	50	84.17508	
248118006	09-MAR-2010 10:00:00	Soil	0.524	50	95.41985	
248118007	09-MAR-2010 10:00:00	Soil	0.59	50	84.74576	

Reagent/Solvent Lot ID **Description** **Amount** **Comments:**

Prep Logbook

Batch ID: **959113.0** Verified by: _____

Analyst: Anthony Green

Method: SW846 3050B

Lab SOP: GL-MA-E-009 REV# 19

Instrument: BAL-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202056882	Metals Soil LCS SRM ICP/Hg	UI062540-I	.548	g
MS	1202056880	Metals Spike Mix I	UI1268741-01	.25	mL
MS	1202056880	Metals Spike Mix II	UI1268744-06	.25	mL
MSD	1202056881	Metals Spike Mix I	UI1268741-01	.25	mL
MSD	1202056881	Metals Spike Mix II	UI1268744-06	.25	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1277916	HYDROCHLORIC ACID	10 mL				
1277919	Nitric Acid CONC.	1.25 mL				

Sample 248110001 consist of brown, rocky soil.

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
26-MAR-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP/MS	SW846 3050B/6020	Solid	LANL
Batch ID:	**Sample Numbers:**		
959116	See Below		

Potentially affected work order(s)(SDG): 248110(10-2090-1),248118(10-2093-1)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:	DER Disposition:
1. Failed Recovery for MS/PS: QC 1202056886MS 2. Failed Recovery for MSD/PSD: QC 1202056887MSD	The matrix spike and matrix spike duplicate recovery failed outside of the control limits for Se due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Rose Jenkins 27-MAR-10

Data Validator/Group Leader:

Jamie Johnson 27-MAR-10

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
30-MAR-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
959114	See Below		

Potentially affected work order(s)(SDG): 248110(10-2090-1),248118(10-2093-1)

Application Issues:

Failed RPD for DUP

Failed Recovery for MSD/PSD

Failed Recovery for LCS/LCSD

Failed Recovery for MS/PS

Specification and Requirements Exception Description:

1. Failed Recovery for MS/PS:

   QC 1202056880MS

2. Failed RPD for DUP:

   QC 1202056878DUP

3. Failed Recovery for LCS/LCSD:

   QC 1202056882LCS

4. Failed Recovery for MSD/PSD:

   QC 1202056881MSD

DER Disposition:

1./4. The matrix spike and matrix spike duplicate recovery failed outside of the control limits for antimony and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

2. The sample and sample duplicate % RPD failed outside the control limits for manganese due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

3. 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.

Originator's Name:

Helen Camello 30-MAR-10

Data Validator/Group Leader:

Kristen Parson 31-MAR-10

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: 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

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI062540-MS **Opened:** 12-JUN-09 **Lot Number :** D062-540
Name: ICPMS SOIL SRM **Received:** 12-JUN-09
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICPMS
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	67.4 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.6 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Lithium	10.6 mg/kg
Magnesium	4000 mg/kg	Manganese	558 mg/kg
Mercury	8.46 mg/kg	Molybdenum	48.6 mg/kg
Nickel	134 mg/kg	Phosphorous	755 mg/kg
Potassium	4300 mg/kg	Selenium	286 mg/kg
Silver	30.1 mg/kg	Sodium	1020 mg/kg

Analyte	Concentration	Analyte	Concentration
Strontium	227 mg/kg	Thallium	121 mg/kg
Thorium	9.84 mg/kg	Tin	104 mg/kg
Titanium	462 mg/kg	Uranium	2.13 mg/kg
Uranium-235	.0153 mg/kg	Uranium-238	2.11 mg/kg
Vanadium	92.4 mg/kg	Zinc	594 mg/kg
Zirconium	10.6 mg/kg		

Serial ID: 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%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090612-02 **Opened:** 12-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **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

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 :** 1015749
Type: Source Material **Expires:** 27-AUG-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

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 :** 1015749
Type: Source Material **Expires:** 27-AUG-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

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 Carnello **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 Carnello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L

Analyte	Concentration	Analyte	Concentration
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091217-12 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 17-DEC-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018212
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI091217-13 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 17-DEC-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration

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: 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 Carnello **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: UI100310-49.11 **Opened:** 29-MAR-10 **Amount :** 100 ml
Name: Trace ICP ICSAB **Received:** 12-MAR-10 **Catalog Number :** 160066-04
Type: Source Material **Expires:** 30-MAR-10 **Lot Number :** 1019142
Employee: Helen Carnello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Inteferent Check Standard AB
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Antimony	500 ug/L
Arsenic	500 ug/L	Barium	500 ug/L
Beryllium	250 ug/L	Boron	500 ug/L
Cadmium	500 ug/L	Calcium	500000 ug/L
Chromium	500 ug/L	Cobalt	500 ug/L
Copper	500 ug/L	Iron	200000 ug/L
Lead	500 ug/L	Magnesium	500000 ug/L
Manganese	500 ug/L	Molybdenum	500 ug/L
Nickel	500 ug/L	Phosphorous	2500 ug/L
Potassium	5000 ug/L	Selenium	2500 ug/L
Silica	10696.5 ug/L	Silicon	5000 ug/L
Silver	250 ug/L	Sodium	5000 ug/L
Strontium	500 ug/L	Sulfur	2500 ug/L
Thallium	500 ug/L	Tin	500 ug/L
Titanium	500 ug/L	Uranium	500 ug/L
Vanadium	500 ug/L	Zinc	500 ug/L

Serial ID: 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		

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

Analyte	Concentration	Analyte	Concentration
Zirconium	20 mg/L		

Serial ID: UI100318-11 **Opened:** 18-MAR-10 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 18-MAR-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 18-MAR-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: UI100325-40 **Opened:** 25-MAR-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-MAR-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 25-MAR-11 **Lot Number :** 1019348
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Standard Logbook

Serial ID: UI100325-41 **Opened:** 25-MAR-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-MAR-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 25-MAR-11 **Lot Number :** 1019348
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: UI1268741-01 **Opened:** 11-FEB-10 **Lot Number :** 1018514
Name: METALSPIKE-1 **Received:** 11-FEB-10
Type: Source Material **Expires:** 11-FEB-11
Employee: Bryan Davis
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI1268744-06 **Opened:** 11-FEB-10 **Lot Number :** 1018515
Name: METALSPIKE-2 **Received:** 11-FEB-10
Type: Source Material **Expires:** 11-FEB-11
Employee: Bryan Davis
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL

Analyte	Concentration	Analyte	Concentration
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: UMS100226-01 **Opened:** 26-FEB-10 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 26-FEB-10 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 26-FEB-11 **Lot Number :** 21-104JB
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: UMS100226-02 **Opened:** 26-FEB-10 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 26-FEB-10 **Lot Number :** 21-103JB
Type: Source Material **Expires:** 26-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
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS100226-03 **Opened:** 26-FEB-10 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 26-FEB-10 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 26-FEB-11 **Lot Number :** 21-102JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C

Standard Logbook

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: IHG100309-01 **Opened:** 09-MAR-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 09-MAR-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 10-MAR-10 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG100309-02 **Opened:** 09-MAR-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 09-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Intermediate **Expires:** 10-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: IHG100310-01 **Opened:** 10-MAR-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 10-MAR-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 11-MAR-10 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG100310-02 **Opened:** 10-MAR-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 10-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Intermediate **Expires:** 11-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: WHG100309-07 **Opened:** 09-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 09-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 16-MAR-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100309-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG100309-08 **Opened:** 09-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 09-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 16-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.
IHG100309-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100309-09 **Opened:** 09-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 09-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 16-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.
IHG100309-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG100309-10 **Opened:** 09-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 09-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 16-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.
IHG100309-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100309-11 **Opened:** 09-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 09-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 16-MAR-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100309-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Serial ID: WHG100309-12 **Opened:** 09-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 09-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 16-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.	Aliquot	Final Vol.	Final Conc.
IHG100309-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100310-07 **Opened:** 10-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 10-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 17-MAR-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100310-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG100310-08 **Opened:** 10-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 10-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 17-MAR-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100310-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100310-09 **Opened:** 10-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 10-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 17-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.
IHG100310-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG100310-10 **Opened:** 10-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 10-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 17-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.
IHG100310-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100310-11 **Opened:** 10-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 10-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 17-MAR-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100310-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Serial ID: WHG100310-12 **Opened:** 10-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 10-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 17-MAR-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100310-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100310-14 **Opened:** 10-MAR-10 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 10-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 17-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.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI100329-42 **Opened:** 29-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 30-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1293083
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.
WI100329-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100329-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100329-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100329-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100329-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100329-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100329-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100329-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100329-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100329-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100329-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100329-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100329-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100329-43 **Opened:** 29-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 30-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1293083
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
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI100329-44 **Opened:** 29-MAR-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 30-MAR-10 **Solvent :** 3%HCL and 1 %HNO3-1293083
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI100329-45 **Opened:** 29-MAR-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 30-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1293083
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: WI100329-46 **Opened:** 29-MAR-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 30-MAR-10 **Solvent :** 3%HCL AND 1%HNO3-1293083
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100329-47 **Opened:** 29-MAR-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 30-MAR-10 **Solvent :** 3%HCL &1%HNO3-1293083
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100323-04AB **Opened:** 23-MAR-10 **Balance Id :** 40245216
Name: ICPMS Cal Standard 10 **Received:** 23-MAR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 24-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1289731
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100323-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100323-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100323-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100323-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100323-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100323-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100323-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100323-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100323-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100323-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100323-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100323-04B **Opened:** 23-MAR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 23-MAR-10 **Balance Id :** 40245216
Type: Working **Expires:** 24-MAR-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1289731
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
UMS100226-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS100323-05B **Opened:** 23-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 23-MAR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 24-MAR-10 **Solvent :** 2%HNO3/1%HCl- 1289731
Employee: Rose Jenkins
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
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100323-06B **Opened:** 23-MAR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 23-MAR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 24-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1289731
Employee: Rose Jenkins **Verified:** 06-MAR-10
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
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

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100323-07B **Opened:** 23-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 23-MAR-10 **Lot Number :** 1010773
Type: Working **Expires:** 24-MAR-10 **Pipet Id :** 3541598
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl - 1289731
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100323-08B **Opened:** 23-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 23-MAR-10 **Pipet Id :** 3541598/1758088
Type: Working **Expires:** 24-MAR-10 **Solvent :** 2%HNO3/1%HCl- 1289731
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100325-04AB **Opened:** 25-MAR-10 **Balance Id :** 40245216
Name: ICPMS Cal Standard 10 **Received:** 25-MAR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 26-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1289731
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100325-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100325-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100325-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100325-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100325-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100325-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100325-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100325-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100325-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100325-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100325-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100325-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100325-04B **Opened:** 25-MAR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 25-MAR-10 **Balance Id :** 40245216
Type: Working **Expires:** 26-MAR-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1289731
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
UMS100226-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS100325-05B **Opened:** 25-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 25-MAR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 26-MAR-10 **Solvent :** 2%HNO3/1%HCl- 1289731
Employee: Rose Jenkins
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: WMS100325-06B **Opened:** 25-MAR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 25-MAR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 26-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1289731
Employee: Rose Jenkins **Verified:** 06-MAR-10
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L

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: WMS100325-07B
Name: ICPMS ICSA
Type: Working
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Opened: 25-MAR-10
Received: 25-MAR-10
Expires: 26-MAR-10

Balance Id : 40245216
Lot Number : 1010773
Pipet Id : 3541598
Solvent : 2%HNO3/1%HCl - 1289731

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100325-08B
Name: ICPMS ICSAB
Type: Working
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSAB

Opened: 25-MAR-10
Received: 25-MAR-10
Expires: 26-MAR-10

Balance Id : 40245216
Pipet Id : 3541598/1758088
Solvent : 2%HNO3/1%HCl- 1289731

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 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: Hydroxlyamine 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: 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

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.	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
Comments: None

Serial ID: 1277919 **Opened:** 02-MAR-10 **Lot Number :** J 04043 L
Name: I-HNO3 **Received:** 02-MAR-10
Type: Reagent/Solvent **Expires:** 02-MAR-11
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1289731 **Opened:** 22-MAR-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 22-MAR-10
Type: Reagent/Solvent **Expires:** 29-MAR-10
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1277916	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1293083 **Opened:** 29-MAR-10 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 29-MAR-10 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 04-APR-10 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2090

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	959217	**Method:**	SW9012A Cyanide and Total
Prep Batch :	959216	**Method:**	SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
248108001	RE15-10-8407
1202057161	Method Blank (MB)
1202057162	248188001(RE11-10-1654) Sample Duplicate (DUP)
1202057163	248044005(CAPA-10-13085) Sample Duplicate (DUP)
1202057164	248188001(RE11-10-1654) Matrix Spike (MS)
1202057165	248044005(CAPA-10-13085) Matrix Spike (MS)
1202057166	248188001(RE11-10-1654) Matrix Spike Duplicate (MSD)
1202057167	248044005(CAPA-10-13085) Matrix Spike Duplicate (MSD)
1202057168	Laboratory Control Sample (LCS)

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

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

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

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

Quality Control (QC) Designation
The following samples were selected for QC analysis: 248044005 (CAPA-10-13085) and 248188001 (RE11-10-1654).

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. 1202057163 (CAPA-10-13085).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

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

Sample Re-analysis
The following sample was re-analyzed due to instrument failure: 1202057164 (RE11-10-1654).

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:	959199	**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
248108001	RE15-10-8407
1202057088	Method Blank (MB)
1202057090	248108001(RE15-10-8407) Sample Duplicate (DUP)
1202057093	248108001(RE15-10-8407) Post Spike (PS)
1202057095	Laboratory Control Sample (LCS)
1202059915	248044005(CAPA-10-13085) Sample Duplicate (DUP)
1202059916	248044005(CAPA-10-13085) Post Spike (PS)

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: 248044005 (CAPA-10-13085) and 248108001 (RE15-10-8407).

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. 1202057090 (RE15-10-8407).

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 matrix interference: 1202057090 (RE15-10-8407), 1202057093 (RE15-10-8407), 1202059915 (CAPA-10-13085), 1202059916 (CAPA-10-13085) and 248108001 (RE15-10-8407).

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:** 3-23-10

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: 10-2090 GEL Work Order: 248108

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 _____ 3-23-10

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: 10-2090

Client Sample ID: RE15-10-8407
Sample ID: 248108001
Matrix: W
Collect Date: 22-FEB-10 12:00
Receive Date: 26-FEB-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 03/08/10	1511	959217	1
Nutrient Analysis										
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"										
Nitrogen, Nitrate/Nitrite	U	ND	0.100	0.500	mg/L	10	AXH3 03/03/10	1239	959199	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/08/10	1241	959216

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	
2	EPA 353.2	

Quality Control Summary

QC Summary

Report Date: March 17, 2010
Page 1 of 2

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

Contact: Ms. Joylene Valdez

Workorder: 248108

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis										
Batch 959217										
QC1202057162 248188001 DUP										
Cyanide, Total		U	ND	U	ND	ug/L	N/A		AXC2	03/08/10 15:24
QC1202057163 248044005 DUP										
Cyanide, Total		U	ND	U	ND	ug/L	N/A			03/08/10 15:07
QC1202057168 LCS										
Cyanide, Total	50.0				49.3	ug/L		98.6	(90%-110%)	03/08/10 15:05
QC1202057161 MB										
Cyanide, Total				U	5.00	ug/L				03/08/10 15:05
QC1202057164 248188001 MS										
Cyanide, Total	100	U	ND		106	ug/L		106	(60%-144%)	03/08/10 15:37
QC1202057165 248044005 MS										
Cyanide, Total	100	U	ND		101	ug/L		101	(60%-144%)	03/08/10 15:08
QC1202057166 248188001 MSD										
Cyanide, Total	100	U	ND		110	ug/L	3.70	110	(0%-20%)	03/08/10 15:30
QC1202057167 248044005 MSD										
Cyanide, Total	100	U	ND		105	ug/L	3.88	105	(0%-20%)	03/08/10 15:09
Nutrient Analysis										
Batch 959199										
QC1202057090 248108001 DUP										
Nitrogen, Nitrate/Nitrite		U	ND	J	0.123	mg/L	200		(+/-0.500) AXH3	03/03/10 12:45
QC1202059915 248044005 DUP										
Nitrogen, Nitrate/Nitrite		U	ND	U	ND	mg/L	N/A			03/03/10 12:06
QC1202057095 LCS										
Nitrogen, Nitrate/Nitrite	1.00				1.00	mg/L		100	(90%-110%)	03/03/10 11:44
QC1202057088 MB										
Nitrogen, Nitrate/Nitrite				J	0.0116	mg/L				03/03/10 11:43
QC1202057093 248108001 PS										
Nitrogen, Nitrate/Nitrite	1.00	U	ND		1.10	mg/L		109	(90%-110%)	03/03/10 12:47
QC1202059916 248044005 PS										
Nitrogen, Nitrate/Nitrite	1.00	U	ND		1.04	mg/L		103	(90%-110%)	03/03/10 12:12

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample

QC Summary

Workorder: 248108

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

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: 17-MAR-2010 14:12

GEL Laboratories LLC
Contract: LANL01004
SDG #: 10-2090

Flow Injection Analysis
Method: SW846 9012A Concentration Units:ug/L
Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**08-MAR-2010 10:32:54**	**OM_3-8-2010_10-24-48**	**147**	**150**	**98**	**(90%-110%)**	**Yes**
CCV	08-MAR-2010 15:01:26	OM_3-8-2010_14-58-05	103	100	103	(90%-110%)	Yes
CCV	08-MAR-2010 15:13:54	OM_3-8-2010_14-58-05	106	100	106	(90%-110%)	Yes
CCV	08-MAR-2010 15:26:19	OM_3-8-2010_14-58-05	109	100	109	(90%-110%)	Yes
CCV	08-MAR-2010 15:38:47	OM_3-8-2010_14-58-05	104	100	104	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**08-MAR-2010 10:34:44**	**OM_3-8-2010_10-24-48**	**-1.65**	**10**	**Yes**
CCB	08-MAR-2010 15:03:15	OM_3-8-2010_14-58-05	-1.49	10	Yes
CCB	08-MAR-2010 15:15:44	OM_3-8-2010_14-58-05	-1.84	10	Yes
CCB	08-MAR-2010 15:28:11	OM_3-8-2010_14-58-05	-1.78	10	Yes
CCB	08-MAR-2010 15:40:39	OM_3-8-2010_14-58-05	-0.768	10	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 17-MAR-2010 14:12

GEL Laboratories LLC
Contract: LANL01004
SDG #: 10-2090

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 11:34:09	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
CCV	03-MAR-2010 12:07:39	OM_3-3-2010_10-30-06	0.981	1	98.1	(90%-110%)	Yes
CCV	03-MAR-2010 12:24:25	OM_3-3-2010_10-30-06	1.01	1	101	(90%-110%)	Yes
CCV	03-MAR-2010 12:41:09	OM_3-3-2010_10-30-06	1.02	1	102	(90%-110%)	Yes
CCV	03-MAR-2010 12:57:55	OM_3-3-2010_10-30-06	1.01	1	101	(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 11:36:31	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
CCB	03-MAR-2010 12:10:01	OM_3-3-2010_10-30-06	0.00404	0.05	Yes
CCB	03-MAR-2010 12:26:48	OM_3-3-2010_10-30-06	0.00458	0.05	Yes
CCB	03-MAR-2010 12:43:31	OM_3-3-2010_10-30-06	0.00556	0.05	Yes
CCB	03-MAR-2010 13:00:17	OM_3-3-2010_10-30-06	0.00422	0.05	Yes

Cyanide, Total

Prep Logbook

Cyanide Sample Distillation

Batch ID: **959216.0** Verified by: _____

Analyst: Alan Stanley

Method: SW846 9010B Prep EPA 335.4

Lab SOP: GL-GC-E-067 REV# 13

Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202057168	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.0125	mL
MS	1202057164	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202057165	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202057166	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202057167	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
1202057161 MB	08-MAR-2010 12:41:00	Water	25	25	1	>12
1202057168 LCS	08-MAR-2010 12:41:00	Water	25	25	1	>12
248044005	08-MAR-2010 12:41:00	Ground Water	25	25	1	>12
1202057163 DUP (248044005)	08-MAR-2010 12:41:00	Ground Water	25	25	1	>12
1202057165 MS (248044005)	08-MAR-2010 12:41:00	Ground Water	25	25	1	>12
1202057167 MSD (248044005)	08-MAR-2010 12:41:00	Ground Water	25	25	1	>12
248044006	08-MAR-2010 12:41:00	Ground Water	25	25	1	>12
248108001	08-MAR-2010 12:41:00	Water	25	25	1	>12
248117001	08-MAR-2010 12:41:00	Water	25	25	1	>12
248127002	08-MAR-2010 12:41:00	Water	25	25	1	>12
248162001	08-MAR-2010 12:41:00	Water	25	25	1	>12
248162002	08-MAR-2010 12:41:00	Water	25	25	1	>12
248162003	08-MAR-2010 12:41:00	Water	25	25	1	>12
248162004	08-MAR-2010 12:41:00	Water	25	25	1	>12
248164002	08-MAR-2010 12:41:00	Ground Water	25	25	1	>12
248168006	08-MAR-2010 12:41:00	Water	25	25	1	>12
248169004	08-MAR-2010 12:41:00	Water	25	25	1	>12
248188001	08-MAR-2010 12:41:00	Water	25	25	1	>12
1202057162 DUP (248188001)	08-MAR-2010 12:41:00	Water	25	25	1	>12
1202057164 MS (248188001)	08-MAR-2010 12:41:00	Water	25	25	1	>12

Prep Logbook

Batch ID: **959216.0** Verified by: _____
Analyst: Alan Stanley
Method: SW846 9010B Prep EPA 335.4
Lab SOP: GL-GC-E-067 REV# 13
Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202057168	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.0125	mL
MS	1202057164	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202057165	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202057166	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202057167	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
1202057166 MSD (248188001)	08-MAR-2010 12:41:00	Water	25	25	1	>12
248199001	08-MAR-2010 12:41:00	Water	25	25	1	>12
248238001	08-MAR-2010 12:41:00	Water	25	25	1	>12
248238002	08-MAR-2010 12:41:00	Water	25	25	1	>12
248242001	08-MAR-2010 12:41:00	Water	25	25	1	>12
248245001	08-MAR-2010 12:41:00	Water	25	25	1	>12
248257001	08-MAR-2010 12:41:00	Water	25	25	1	>12
248257002	08-MAR-2010 12:41:00	Water	25	25	1	>12

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
WCN100308-07	150 ppb CN Distilled ICV Standard	.0375 mL

Comments:

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	3/8/2010 10:25:45	OM_3-8-2010_10-24-48
150 ppb		1	axc2	3/8/2010 10:26:37	OM_3-8-2010_10-24-48
100 ppb		1	axc2	3/8/2010 10:27:29	OM_3-8-2010_10-24-48
50 ppb		1	axc2	3/8/2010 10:28:22	OM_3-8-2010_10-24-48
10 ppb		1	axc2	3/8/2010 10:29:15	OM_3-8-2010_10-24-48
CRDL 5.0 ppb		1	axc2	3/8/2010 10:30:09	OM_3-8-2010_10-24-48
ICAL-00		1	axc2	3/8/2010 10:31:03	OM_3-8-2010_10-24-48
ICV		1	axc2	3/8/2010 10:32:54	OM_3-8-2010_10-24-48
ICB		1	axc2	3/8/2010 10:34:44	OM_3-8-2010_10-24-48
CRDL		1	axc2	3/8/2010 10:36:34	OM_3-8-2010_10-24-48
1202054789	958168	1	axc2	3/8/2010 10:38:23	OM_3-8-2010_10-24-48
1202054796	958168	1	axc2	3/8/2010 10:39:17	OM_3-8-2010_10-24-48
248010001	958168	1	axc2	3/8/2010 10:40:10	OM_3-8-2010_10-24-48
1202054790	958168	1	axc2	3/8/2010 10:41:03	OM_3-8-2010_10-24-48
1202054792	958168	1	axc2	3/8/2010 10:41:56	OM_3-8-2010_10-24-48
1202054794	958168	1	axc2	3/8/2010 10:42:48	OM_3-8-2010_10-24-48
248010002	958168	1	axc2	3/8/2010 10:43:42	OM_3-8-2010_10-24-48
248019001	958168	1	axc2	3/8/2010 10:44:34	OM_3-8-2010_10-24-48
248019002	958168	1	axc2	3/8/2010 10:45:26	OM_3-8-2010_10-24-48
248023002	958168	1	axc2	3/8/2010 10:46:19	OM_3-8-2010_10-24-48
CCV		1	axc2	3/8/2010 10:47:11	OM_3-8-2010_10-24-48
CCB		1	axc2	3/8/2010 10:49:01	OM_3-8-2010_10-24-48
248024001	958168	1	axc2	3/8/2010 10:50:50	OM_3-8-2010_10-24-48
248024003	958168	1	axc2	3/8/2010 10:51:41	OM_3-8-2010_10-24-48
248044002	958168	1	axc2	3/8/2010 10:52:34	OM_3-8-2010_10-24-48
1202054791	958168	1	axc2	3/8/2010 10:53:25	OM_3-8-2010_10-24-48
1202054793	958168	1	axc2	3/8/2010 10:54:17	OM_3-8-2010_10-24-48
1202054795	958168	1	axc2	3/8/2010 10:55:10	OM_3-8-2010_10-24-48
248401005	958168	1	axc2	3/8/2010 10:56:04	OM_3-8-2010_10-24-48
248516001	958168	1	axc2	3/8/2010 10:56:58	OM_3-8-2010_10-24-48
248516002	958168	1	axc2	3/8/2010 10:57:51	OM_3-8-2010_10-24-48
248518001	958168	1	axc2	3/8/2010 10:58:44	OM_3-8-2010_10-24-48
CCV		1	axc2	3/8/2010 10:59:36	OM_3-8-2010_10-24-48
CCB		1	axc2	3/8/2010 11:01:27	OM_3-8-2010_10-24-48
248533001	958168	1	axc2	3/8/2010 11:03:16	OM_3-8-2010_10-24-48
248548001	958168	1	axc2	3/8/2010 11:04:09	OM_3-8-2010_10-24-48
248548003	958168	1	axc2	3/8/2010 11:05:01	OM_3-8-2010_10-24-48
248551001	958168	1	axc2	3/8/2010 11:05:54	OM_3-8-2010_10-24-48
248551002	958168	1	axc2	3/8/2010 11:06:46	OM_3-8-2010_10-24-48
248555002	958168	1	axc2	3/8/2010 11:07:39	OM_3-8-2010_10-24-48
1202059721	960271	1	axc2	3/8/2010 11:08:31	OM_3-8-2010_10-24-48
1202059731	960271	1	axc2	3/8/2010 11:09:23	OM_3-8-2010_10-24-48
248072001	960271	1	axc2	3/8/2010 11:10:15	OM_3-8-2010_10-24-48
1202059722	960271	1	axc2	3/8/2010 11:11:06	OM_3-8-2010_10-24-48
CCV		1	axc2	3/8/2010 11:11:59	OM_3-8-2010_10-24-48
CCB		1	axc2	3/8/2010 11:13:49	OM_3-8-2010_10-24-48
1202059725	960271	1	axc2	3/8/2010 11:15:40	OM_3-8-2010_10-24-48
1202059728	960271	1	axc2	3/8/2010 11:16:33	OM_3-8-2010_10-24-48
248072002	960271	1	axc2	3/8/2010 11:17:27	OM_3-8-2010_10-24-48
248072003	960271	1	axc2	3/8/2010 11:18:21	OM_3-8-2010_10-24-48
248097001	960271	1	axc2	3/8/2010 11:19:14	OM_3-8-2010_10-24-48
1202059724	960271	1	axc2	3/8/2010 11:20:07	OM_3-8-2010_10-24-48
1202059727	960271	1	axc2	3/8/2010 11:21:00	OM_3-8-2010_10-24-48
1202059730	960271	1	axc2	3/8/2010 11:21:53	OM_3-8-2010_10-24-48
248097002	960271	1	axc2	3/8/2010 11:22:47	OM_3-8-2010_10-24-48
248097003	960271	1	axc2	3/8/2010 11:23:38	OM_3-8-2010_10-24-48
CCV		1	axc2	3/8/2010 11:24:31	OM_3-8-2010_10-24-48
CCB		1	axc2	3/8/2010 11:26:21	OM_3-8-2010_10-24-48

248097004	960271	1	axc2	3/8/2010 11:28:09	OM_3-8-2010_10-24-48
248298001	960271	1	axc2	3/8/2010 11:29:02	OM_3-8-2010_10-24-48
248298002	960271	1	axc2	3/8/2010 11:29:53	OM_3-8-2010_10-24-48
248298003	960271	1	axc2	3/8/2010 11:30:46	OM_3-8-2010_10-24-48
248303001	960271	1	axc2	3/8/2010 11:31:38	OM_3-8-2010_10-24-48
248337001	960271	1	axc2	3/8/2010 11:32:32	OM_3-8-2010_10-24-48
248375001	960271	1	axc2	3/8/2010 11:33:26	OM_3-8-2010_10-24-48
248375002	960271	1	axc2	3/8/2010 11:34:19	OM_3-8-2010_10-24-48
248397001	960271	1	axc2	3/8/2010 11:35:14	OM_3-8-2010_10-24-48
248397002	960271	1	axc2	3/8/2010 11:36:06	OM_3-8-2010_10-24-48
CCV		1	axc2	3/8/2010 11:37:00	OM_3-8-2010_10-24-48
CCB		1	axc2	3/8/2010 11:38:51	OM_3-8-2010_10-24-48
248407001	960271	1	axc2	3/8/2010 11:40:39	OM_3-8-2010_10-24-48
1202059723	960271	1	axc2	3/8/2010 11:41:33	OM_3-8-2010_10-24-48
1202059726	960271	1	axc2	3/8/2010 11:42:26	OM_3-8-2010_10-24-48
1202059729	960271	1	axc2	3/8/2010 11:43:19	OM_3-8-2010_10-24-48
248419001	960271	1	axc2	3/8/2010 11:44:11	OM_3-8-2010_10-24-48
248419002	960271	1	axc2	3/8/2010 11:45:04	OM_3-8-2010_10-24-48
1202053300	957584	1	axc2	3/8/2010 11:45:57	OM_3-8-2010_10-24-48
1202053310	957584	1	axc2	3/8/2010 11:46:49	OM_3-8-2010_10-24-48
247829002	957584	1	axc2	3/8/2010 11:47:41	OM_3-8-2010_10-24-48
1202053302	957584	1	axc2	3/8/2010 11:48:33	OM_3-8-2010_10-24-48
CCV		1	axc2	3/8/2010 11:49:26	OM_3-8-2010_10-24-48
CCB		1	axc2	3/8/2010 11:51:15	OM_3-8-2010_10-24-48
1202053305	957584	1	axc2	3/8/2010 11:53:05	OM_3-8-2010_10-24-48
1202053308	957584	1	axc2	3/8/2010 11:54:00	OM_3-8-2010_10-24-48
247865010	957584	1	axc2	3/8/2010 11:54:55	OM_3-8-2010_10-24-48
247865012	957584	1	axc2	3/8/2010 11:55:48	OM_3-8-2010_10-24-48
1202053303	957584	1	axc2	3/8/2010 11:56:41	OM_3-8-2010_10-24-48
1202053306	957584	1	axc2	3/8/2010 11:57:35	OM_3-8-2010_10-24-48
1202053309	957584	1	axc2	3/8/2010 11:58:28	OM_3-8-2010_10-24-48
247865013	957584	1	axc2	3/8/2010 11:59:21	OM_3-8-2010_10-24-48
247865014	957584	1	axc2	3/8/2010 12:00:15	OM_3-8-2010_10-24-48
247865015	957584	1	axc2	3/8/2010 12:01:07	OM_3-8-2010_10-24-48
CCV		1	axc2	3/8/2010 12:02:00	OM_3-8-2010_10-24-48
CCB		1	axc2	3/8/2010 12:03:51	OM_3-8-2010_10-24-48
247865016	957584	1	axc2	3/8/2010 12:05:41	OM_3-8-2010_10-24-48
247865017	957584	1	axc2	3/8/2010 12:06:33	OM_3-8-2010_10-24-48
247865018	957584	1	axc2	3/8/2010 12:07:25	OM_3-8-2010_10-24-48
247865019	957584	1	axc2	3/8/2010 12:08:18	OM_3-8-2010_10-24-48
247865020	957584	1	axc2	3/8/2010 12:09:10	OM_3-8-2010_10-24-48
247866001	957584	1	axc2	3/8/2010 12:10:05	OM_3-8-2010_10-24-48
247919001	957584	1	axc2	3/8/2010 12:10:59	OM_3-8-2010_10-24-48
247919002	957584	1	axc2	3/8/2010 12:11:53	OM_3-8-2010_10-24-48
247922004	957584	1	axc2	3/8/2010 12:12:48	OM_3-8-2010_10-24-48
1202053301	957584	1	axc2	3/8/2010 12:13:41	OM_3-8-2010_10-24-48
CCV		1	axc2	3/8/2010 12:14:34	OM_3-8-2010_10-24-48
CCB		1	axc2	3/8/2010 12:16:24	OM_3-8-2010_10-24-48
1202053304	957584	1	axc2	3/8/2010 12:18:14	OM_3-8-2010_10-24-48
1202053307	957584	1	axc2	3/8/2010 12:19:07	OM_3-8-2010_10-24-48
248164004	957584	1	axc2	3/8/2010 12:20:01	OM_3-8-2010_10-24-48
248382002	957584	1	axc2	3/8/2010 12:20:54	OM_3-8-2010_10-24-48
248382003	957584	1	axc2	3/8/2010 12:21:47	OM_3-8-2010_10-24-48
248401002	957584	1	axc2	3/8/2010 12:22:40	OM_3-8-2010_10-24-48
248401004	957584	1	axc2	3/8/2010 12:23:33	OM_3-8-2010_10-24-48
CCV		1	axc2	3/8/2010 12:24:25	OM_3-8-2010_10-24-48
CCB		1	axc2	3/8/2010 12:26:15	OM_3-8-2010_10-24-48

Author: axc2 Date : 3/8/2010

Original Run Filename: OM_3-8-2010_10-24-48.OMN created 3/8/2010 10:24:48
Original Run Author's Signature: [axc2]
Current Run Filename: OM_3-8-2010_10-24-48.OMN last modified 3/8/2010 12:27:20
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN100308-01	1	S1	200	10.4	3/8/2010@10:25:45			200 ppb
WCN100308-02	1	S2	150	7.82	3/8/2010@10:26:37			150 ppb
WCN100308-03	1	S3	100	5.36	3/8/2010@10:27:29			100 ppb
WCN100308-04	1	S4	50.0	2.85	3/8/2010@10:28:22			50 ppb
WCN100308-05	1	S5	10.0	0.644	3/8/2010@10:29:15			10 ppb
WCN100308-06	1	S6	5.00	0.400	3/8/2010@10:30:09			CRDL 5.0 ppb
WCN100308-08	1	S7	0.00	-0.0189	3/8/2010@10:31:03			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99976 > 0.99500					
Message			Pass					
Action			Continue					
WCN100308-07	1	S8	147	7.72	3/8/2010@10:32:54			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-2.1 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-2.1 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100308-08	1	S7	-1.65	0.0363	3/8/2010@10:34:44			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.65 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.65 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100308-06	1	S6	5.25	0.393	3/8/2010@10:36:34			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.25 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.25 > 2.50					
Message			Pass					
Action			None					
1202054789|958168|MB	1	1	-1.83	0.0269	3/8/2010@10:38:23			
1202054796||LCS	1	2	50.4	2.73	3/8/2010@10:39:17			
248010001	1	3	-1.53	0.0427	3/8/2010@10:40:10			
1202054790||DUP	1	4	-1.69	0.0344	3/8/2010@10:41:03			
1202054792||MS	1	5	114	6.01	3/8/2010@10:41:56			
1202054794||MSD	1	6	111	5.86	3/8/2010@10:42:48			
248010002	1	7	-1.44	0.0471	3/8/2010@10:43:42			
248019001	1	8	-1.39	0.0498	3/8/2010@10:44:34			
248019002	1	9	-1.40	0.0491	3/8/2010@10:45:26			
248023002	1	10	-1.75	0.0312	3/8/2010@10:46:19			
WCN100308-03	1	S3	105	5.54	3/8/2010@10:47:11			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			4.8 < 10.0					

		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	4.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100308-08	1	S7	-1.67	0.0352	3/8/2010@10:49:01			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	-1.67 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	-1.67 > -5.00					
		Message	CCB Passed					
		Action	Continue					
248024001	1	11	-2.29	0.00319	3/8/2010@10:50:50			
248024003	1	12	-0.940	0.0730	3/8/2010@10:51:41			
248044002	1	13	-1.78	0.0297	3/8/2010@10:52:34			
1202054791||DUP	1	14	-1.89	0.0237	3/8/2010@10:53:25			
1202054793||MS	1	15	113	5.97	3/8/2010@10:54:17			
1202054795||MSD	1	16	94.5	5.01	3/8/2010@10:55:10			
248401005	1	17	-2.36	-4.50e-4	3/8/2010@10:56:04			
248516001	1	18	-1.70	0.0336	3/8/2010@10:56:58			
248516002	1	19	-2.03	0.0168	3/8/2010@10:57:51			
248518001	1	20	-2.35	3.13e-4	3/8/2010@10:58:44			
WCN100308-03	1	S3	107	5.64	3/8/2010@10:59:36			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					
WCN100308-08	1	S7	-1.82	0.0275	3/8/2010@11:01:27			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	-1.82 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	-1.82 > -5.00					
		Message	CCB Passed					
		Action	Continue					
248533001	1	21	-1.85	0.0260	3/8/2010@11:03:16			
248548001	1	22	-2.24	0.00579	3/8/2010@11:04:09			
248548003	1	23	-1.45	0.0465	3/8/2010@11:05:01			
248551001	1	24	-0.552	0.0931	3/8/2010@11:05:54			
248551002	1	25	-1.81	0.0281	3/8/2010@11:06:46			
248555002	1	26	-1.99	0.0185	3/8/2010@11:07:39			
1202059721|960271|MB	1	27	-1.70	0.0339	3/8/2010@11:08:31			
1202059731||LCS	1	28	49.0	2.66	3/8/2010@11:09:23			
248072001	1	29	-2.36	-5.25e-4	3/8/2010@11:10:15			
1202059722||DUP	1	30	-1.95	0.0206	3/8/2010@11:11:06			
WCN100308-03	1	S3	105	5.54	3/8/2010@11:11:59			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	4.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	4.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100308-08	1	S7	-1.72	0.0325	3/8/2010@11:13:49			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
Result:	-1.72 < 5.00							
Message	CCB Passed							
Action	Continue							
DQM Test: < - Concentration Limit								
Result:	-1.72 > -5.00							
Message	CCB Passed							
Action	Continue							
1202059725||MS	1	31	102	5.41	3/8/2010@11:15:40			
1202059728||MSD	1	32	101	5.33	3/8/2010@11:16:33			
248072002	1	33	-1.30	0.0543	3/8/2010@11:17:27			
248072003	1	34	-2.90	-0.0286	3/8/2010@11:18:21			
248097001	1	35	-1.88	0.0245	3/8/2010@11:19:14			
1202059724||DUP	1	36	-1.58	0.0398	3/8/2010@11:20:07			
1202059727||MS	1	37	100	5.32	3/8/2010@11:21:00			
1202059730||MSD	1	38	102	5.39	3/8/2010@11:21:53			
248097002	1	39	12.3	0.757	3/8/2010@11:22:47			
248097003	1	40	-1.04	0.0680	3/8/2010@11:23:38			
WCN100308-03	1	S3	106	5.63	3/8/2010@11:24:31			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:	6.4 < 10.0							
Message	CCV Passed							
Action	Continue							
DQM Test: < - Percent Relative Difference								
Result:	6.4 < 10.0							
Message	CCV Passed							
Action	Continue							
WCN100308-08	1	S7	-1.68	0.0346	3/8/2010@11:26:21			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:	-1.68 < 5.00							
Message	CCB Passed							
Action	Continue							
DQM Test: < - Concentration Limit								
Result:	-1.68 > -5.00							
Message	CCB Passed							
Action	Continue							
248097004	1	41	-0.871	0.0766	3/8/2010@11:28:09			
248298001	1	42	-1.67	0.0350	3/8/2010@11:29:02			
248298002	1	43	-1.93	0.0216	3/8/2010@11:29:53			
248298003	1	44	-0.109	0.116	3/8/2010@11:30:46			
248303001	1	45	2.92	0.273	3/8/2010@11:31:38			
248337001	1	46	-2.49	-0.00692	3/8/2010@11:32:32			
248375001	1	47	-2.35	1.70e-4	3/8/2010@11:33:26			
248375002	1	48	-2.05	0.0157	3/8/2010@11:34:19			
248397001	1	49	-1.87	0.0247	3/8/2010@11:35:14			
248397002	1	50	-2.17	0.00925	3/8/2010@11:36:06			
WCN100308-03	1	S3	106	5.62	3/8/2010@11:37:00			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:	6.2 < 10.0							
Message	CCV Passed							
Action	Continue							
DQM Test: < - Percent Relative Difference								
Result:	6.2 < 10.0							
Message	CCV Passed							
Action	Continue							
WCN100308-08	1	S7	-2.34	8.36e-4	3/8/2010@11:38:51			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:	-2.34 < 5.00							
Message	CCB Passed							
Action	Continue							
DQM Test: < - Concentration Limit								
Result:	-2.34 > -5.00							
Message	CCB Passed							
Action	Continue							

248407001	1	51	-1.69	0.0345	3/8/2010@11:40:39			
1202059723||DUP	1	52	-2.37	-0.00102	3/8/2010@11:41:33			
1202059726||MS	1	53	104	5.51	3/8/2010@11:42:26			
1202059729||MSD	1	54	82.4	4.39	3/8/2010@11:43:19			
248419001	1	55	-1.45	0.0465	3/8/2010@11:44:11			
248419002	1	56	-1.82	0.0276	3/8/2010@11:45:04			
1202053300|957584|MB	1	57	-1.77	0.0301	3/8/2010@11:45:57			
1202053310||LCS	1	58	52.0	2.81	3/8/2010@11:46:49			
247829002	1	59	-1.36	0.0515	3/8/2010@11:47:41			
1202053302||DUP	1	60	-1.35	0.0518	3/8/2010@11:48:33			
WCN100308-03	1	S3	107	5.65	3/8/2010@11:49:26			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					
WCN100308-08	1	S7	-1.71	0.0332	3/8/2010@11:51:15			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.71 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.71 > -5.00					
Message			CCB Passed					
Action			Continue					
1202053305||MS	1	61	108	5.71	3/8/2010@11:53:05			
1202053308||MSD	1	62	108	5.72	3/8/2010@11:54:00			
247865010	1	63	-1.12	0.0636	3/8/2010@11:54:55			
247865012	1	64	-1.20	0.0593	3/8/2010@11:55:48			
1202053303||DUP	1	65	-1.53	0.0427	3/8/2010@11:56:41			
1202053306||MS	1	66	86.3	4.59	3/8/2010@11:57:35			
1202053309||MSD	1	67	102	5.39	3/8/2010@11:58:28			
247865013	1	68	-1.42	0.0483	3/8/2010@11:59:21			
247865014	1	69	-1.44	0.0472	3/8/2010@12:00:15			
247865015	1	70	-1.50	0.0439	3/8/2010@12:01:07			
WCN100308-03	1	S3	106	5.63	3/8/2010@12:02:00			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.4 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.4 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100308-08	1	S7	-1.63	0.0372	3/8/2010@12:03:51			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					
247865016	1	71	-1.63	0.0374	3/8/2010@12:05:41			
247865017	1	72	-1.38	0.0501	3/8/2010@12:06:33			
247865018	1	73	-2.31	0.00203	3/8/2010@12:07:25			
247865019	1	74	-1.70	0.0337	3/8/2010@12:08:18			
247865020	1	75	-1.21	0.0589	3/8/2010@12:09:10			
247866001	1	76	-1.82	0.0273	3/8/2010@12:10:05			
247919001	1	77	-1.59	0.0392	3/8/2010@12:10:59			
247919002	1	78	-1.41	0.0486	3/8/2010@12:11:53			

247922004	1	79	0.739	0.160	3/8/2010@12:12:48			
1202053301||DUP	1	80	0.641	0.155	3/8/2010@12:13:41			
WCN100308-03	1	S3	107	5.65	3/8/2010@12:14:34			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.8 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.8 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100308-08	1	S7	-1.86	0.0256	3/8/2010@12:16:24			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.86 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.86 > -5.00					
Message			CCB Passed					
Action			Continue					
1202053304||MS	1	81	98.2	5.21	3/8/2010@12:18:14			
1202053307||MSD	1	82	98.4	5.21	3/8/2010@12:19:07			
248164004	1	83	-1.49	0.0445	3/8/2010@12:20:01			
248382002	1	84	-1.58	0.0400	3/8/2010@12:20:54			
248382003	1	85	-1.82	0.0273	3/8/2010@12:21:47			
248401002	1	86	-1.52	0.0428	3/8/2010@12:22:40			
248401004	1	87	-1.38	0.0501	3/8/2010@12:23:33			
WCN100308-03	1	S3	106	5.59	3/8/2010@12:24:25			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					
WCN100308-08	1	S7	-1.71	0.0334	3/8/2010@12:26:15			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.71 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.71 > -5.00					
Message			CCB Passed					
Action			Continue					

Analyte Properties Table for OM_3-8-2010_10-24-48.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Author: axc2 Date : 3/8/2010

Channel 1: Current View

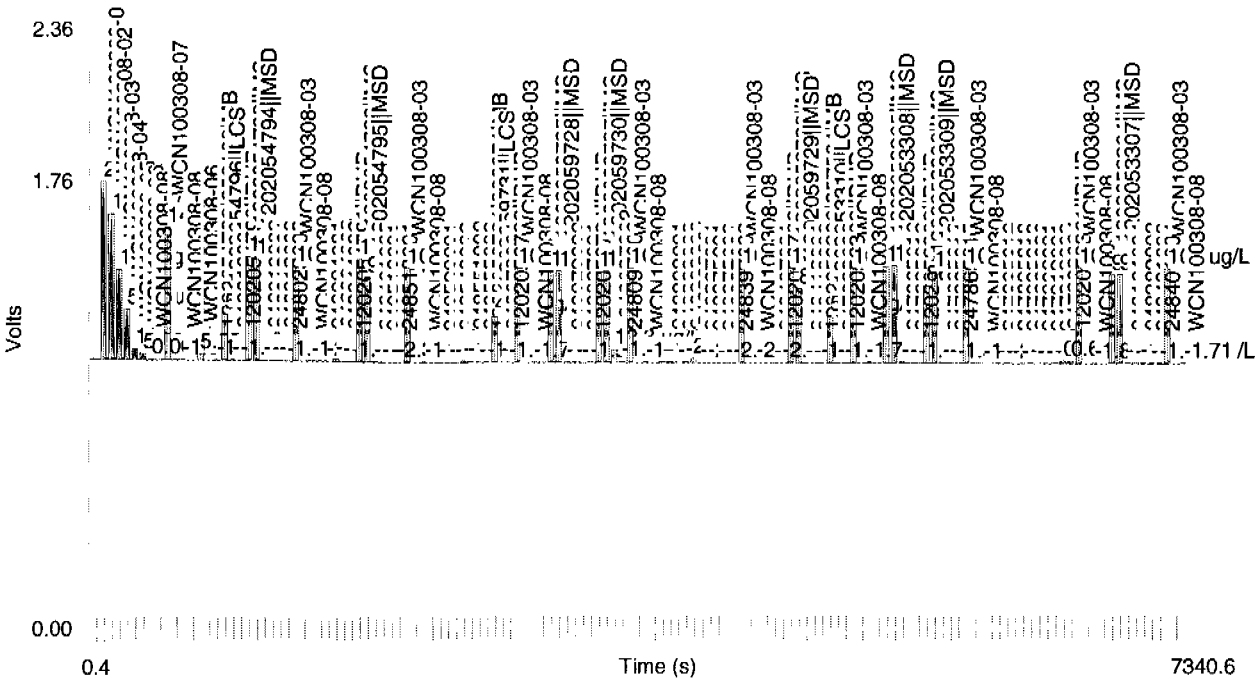
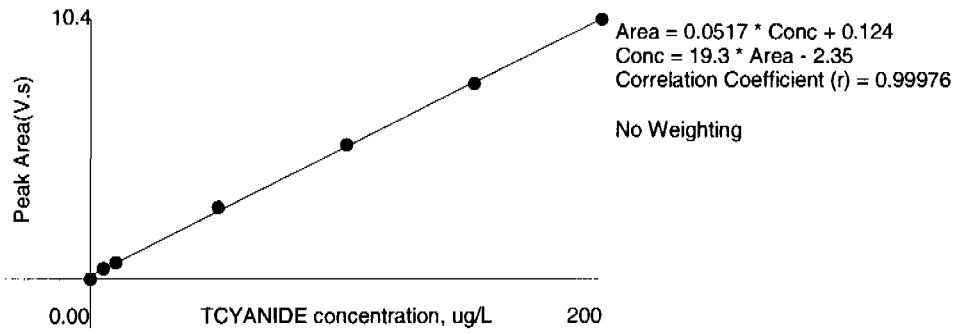


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	10.4	0.692	0.2	3/8/2010	10:26:48
2	150	1	7.82	0.567	0.7	3/8/2010	10:27:40
3	100	1	5.36	0.353	-1.3	3/8/2010	10:28:32
4	50.0	1	2.85	0.199	-5.1	3/8/2010	10:29:25
5	10.0	1	0.644	0.0420	-0.6	3/8/2010	10:30:18
6	5.00	1	0.400	0.0240	-4.6	3/8/2010	10:31:12
7	0.00	1	-0.0189	-0.00306		3/8/2010	10:32:06

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	3/8/2010 15:01:26	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 15:03:15	OM_3-8-2010_14-58-05
1202057161	959217	1	axc2	3/8/2010 15:05:05	OM_3-8-2010_14-58-05
1202057168	959217	1	axc2	3/8/2010 15:05:58	OM_3-8-2010_14-58-05
248044005	959217	1	axc2	3/8/2010 15:06:52	OM_3-8-2010_14-58-05
1202057163	959217	1	axc2	3/8/2010 15:07:45	OM_3-8-2010_14-58-05
1202057165	959217	1	axc2	3/8/2010 15:08:38	OM_3-8-2010_14-58-05
1202057167	959217	1	axc2	3/8/2010 15:09:31	OM_3-8-2010_14-58-05
248044006	959217	1	axc2	3/8/2010 15:10:24	OM_3-8-2010_14-58-05
248108001	959217	1	axc2	3/8/2010 15:11:16	OM_3-8-2010_14-58-05
248117001	959217	1	axc2	3/8/2010 15:12:08	OM_3-8-2010_14-58-05
248127002	959217	1	axc2	3/8/2010 15:13:02	OM_3-8-2010_14-58-05
CCV		1	axc2	3/8/2010 15:13:54	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 15:15:44	OM_3-8-2010_14-58-05
248162001	959217	1	axc2	3/8/2010 15:17:33	OM_3-8-2010_14-58-05
248162002	959217	1	axc2	3/8/2010 15:18:25	OM_3-8-2010_14-58-05
248162003	959217	1	axc2	3/8/2010 15:19:17	OM_3-8-2010_14-58-05
248162004	959217	1	axc2	3/8/2010 15:20:09	OM_3-8-2010_14-58-05
248164002	959217	1	axc2	3/8/2010 15:21:00	OM_3-8-2010_14-58-05
248168006	959217	1	axc2	3/8/2010 15:21:55	OM_3-8-2010_14-58-05
248169004	959217	1	axc2	3/8/2010 15:22:48	OM_3-8-2010_14-58-05
248188001	959217	1	axc2	3/8/2010 15:23:41	OM_3-8-2010_14-58-05
1202057162	959217	1	axc2	3/8/2010 15:24:34	OM_3-8-2010_14-58-05
1202057164*	959217	1	axc2	3/8/2010 15:25:27	OM_3-8-2010_14-58-05
CCV		1	axc2	3/8/2010 15:26:19	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 15:28:11	OM_3-8-2010_14-58-05
1202057166	959217	1	axc2	3/8/2010 15:30:01	OM_3-8-2010_14-58-05
248199001	959217	1	axc2	3/8/2010 15:30:54	OM_3-8-2010_14-58-05
248238001	959217	1	axc2	3/8/2010 15:31:46	OM_3-8-2010_14-58-05
248238002	959217	1	axc2	3/8/2010 15:32:39	OM_3-8-2010_14-58-05
1202057164*	959217	1	axc2	3/8/2010 15:33:32	OM_3-8-2010_14-58-05
248242001	959217	1	axc2	3/8/2010 15:34:25	OM_3-8-2010_14-58-05
248245001	959217	1	axc2	3/8/2010 15:35:17	OM_3-8-2010_14-58-05
248257001	959217	1	axc2	3/8/2010 15:36:09	OM_3-8-2010_14-58-05
248257002	959217	1	axc2	3/8/2010 15:37:01	OM_3-8-2010_14-58-05
1202057164	959217	1	axc2	3/8/2010 15:37:54	OM_3-8-2010_14-58-05
CCV		1	axc2	3/8/2010 15:38:47	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 15:40:39	OM_3-8-2010_14-58-05
1202057112	959204	1	axc2	3/8/2010 15:42:28	OM_3-8-2010_14-58-05
1202057119	959204	25	axc2	3/8/2010 15:43:18	OM_3-8-2010_14-58-05
248110001	959204	1	axc2	3/8/2010 15:44:13	OM_3-8-2010_14-58-05
248110002	959204	1	axc2	3/8/2010 15:45:07	OM_3-8-2010_14-58-05
248110003	959204	1	axc2	3/8/2010 15:46:00	OM_3-8-2010_14-58-05
248110004	959204	1	axc2	3/8/2010 15:46:54	OM_3-8-2010_14-58-05
248110005	959204	1	axc2	3/8/2010 15:47:47	OM_3-8-2010_14-58-05
248110006	959204	1	axc2	3/8/2010 15:48:41	OM_3-8-2010_14-58-05
248110007	959204	1	axc2	3/8/2010 15:49:33	OM_3-8-2010_14-58-05
248110008	959204	1	axc2	3/8/2010 15:50:26	OM_3-8-2010_14-58-05
CCV		1	axc2	3/8/2010 15:51:19	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 15:53:09	OM_3-8-2010_14-58-05
248118001	959204	1	axc2	3/8/2010 15:54:59	OM_3-8-2010_14-58-05
248118002	959204	1	axc2	3/8/2010 15:55:52	OM_3-8-2010_14-58-05
248118003	959204	1	axc2	3/8/2010 15:56:45	OM_3-8-2010_14-58-05
248118004	959204	1	axc2	3/8/2010 15:57:37	OM_3-8-2010_14-58-05
248118005	959204	1	axc2	3/8/2010 15:58:28	OM_3-8-2010_14-58-05
248118006	959204	1	axc2	3/8/2010 15:59:22	OM_3-8-2010_14-58-05
248118007	959204	1	axc2	3/8/2010 16:00:13	OM_3-8-2010_14-58-05
248189001	959204	1	axc2	3/8/2010 16:01:07	OM_3-8-2010_14-58-05

1202057113	959204	1	axc2	3/8/2010 16:02:01	OM_3-8-2010_14-58-05
1202057115	959204	1	axc2	3/8/2010 16:02:55	OM_3-8-2010_14-58-05
CCV		1	axc2	3/8/2010 16:03:48	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 16:05:39	OM_3-8-2010_14-58-05
1202057117	959204	1	axc2	3/8/2010 16:07:29	OM_3-8-2010_14-58-05
248189002	959204	1	axc2	3/8/2010 16:08:23	OM_3-8-2010_14-58-05
1202057114	959204	1	axc2	3/8/2010 16:09:16	OM_3-8-2010_14-58-05
1202057116	959204	1	axc2	3/8/2010 16:10:09	OM_3-8-2010_14-58-05
1202057118	959204	1	axc2	3/8/2010 16:11:02	OM_3-8-2010_14-58-05
1202054781	958165	1	axc2	3/8/2010 16:11:55	OM_3-8-2010_14-58-05
1202054788	958165	25	axc2	3/8/2010 16:12:47	OM_3-8-2010_14-58-05
247918001	958165	1	axc2	3/8/2010 16:13:39	OM_3-8-2010_14-58-05
247918002	958165	1	axc2	3/8/2010 16:14:33	OM_3-8-2010_14-58-05
247918003	958165	1	axc2	3/8/2010 16:15:25	OM_3-8-2010_14-58-05
CCV		1	axc2	3/8/2010 16:16:17	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 16:18:09	OM_3-8-2010_14-58-05
247918004	958165	1	axc2	3/8/2010 16:19:58	OM_3-8-2010_14-58-05
1202054782	958165	1	axc2	3/8/2010 16:20:49	OM_3-8-2010_14-58-05
1202054784	958165	1	axc2	3/8/2010 16:21:44	OM_3-8-2010_14-58-05
1202054786	958165	1	axc2	3/8/2010 16:22:39	OM_3-8-2010_14-58-05
247918005	958165	1	axc2	3/8/2010 16:23:32	OM_3-8-2010_14-58-05
1202054783	958165	1	axc2	3/8/2010 16:24:26	OM_3-8-2010_14-58-05
1202054785	958165	1	axc2	3/8/2010 16:25:20	OM_3-8-2010_14-58-05
1202054787	958165	1	axc2	3/8/2010 16:26:12	OM_3-8-2010_14-58-05
247918006	958165	1	axc2	3/8/2010 16:27:06	OM_3-8-2010_14-58-05
247918007	958165	1	axc2	3/8/2010 16:28:00	OM_3-8-2010_14-58-05
CCV		1	axc2	3/8/2010 16:28:51	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 16:30:42	OM_3-8-2010_14-58-05
248009001	958165	1	axc2	3/8/2010 16:32:32	OM_3-8-2010_14-58-05
248009002	958165	1	axc2	3/8/2010 16:33:25	OM_3-8-2010_14-58-05
248009003	958165	1	axc2	3/8/2010 16:34:17	OM_3-8-2010_14-58-05
248009004	958165	1	axc2	3/8/2010 16:35:10	OM_3-8-2010_14-58-05
248009005	958165	1	axc2	3/8/2010 16:36:03	OM_3-8-2010_14-58-05
248025001	958165	1	axc2	3/8/2010 16:36:55	OM_3-8-2010_14-58-05
248025002	958165	1	axc2	3/8/2010 16:37:48	OM_3-8-2010_14-58-05
248025004	958165	1	axc2	3/8/2010 16:38:42	OM_3-8-2010_14-58-05
248025006	958165	1	axc2	3/8/2010 16:39:36	OM_3-8-2010_14-58-05
248422001	958165	1	axc2	3/8/2010 16:40:31	OM_3-8-2010_14-58-05
CCV		1	axc2	3/8/2010 16:41:23	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 16:43:15	OM_3-8-2010_14-58-05
248422002	958165	1	axc2	3/8/2010 16:45:06	OM_3-8-2010_14-58-05
1202061930	961278	1	axc2	3/8/2010 16:46:01	OM_3-8-2010_14-58-05
1202061932	961278	1	axc2	3/8/2010 16:46:53	OM_3-8-2010_14-58-05
247819001	961278	1	axc2	3/8/2010 16:47:47	OM_3-8-2010_14-58-05
1202061931	961278	1	axc2	3/8/2010 16:48:41	OM_3-8-2010_14-58-05
CCV		1	axc2	3/8/2010 16:49:33	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 16:51:24	OM_3-8-2010_14-58-05

Author: axc2 Date : 3/8/2010

Original Run Filename: OM_3-8-2010_14-58-05.OMN created 3/8/2010 14:58:05
Original Run Author's Signature: [axc2]
Current Run Filename: OM_3-8-2010_14-58-05.OMN last modified 3/8/2010 16:52:28
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN100308-03	1	S3	103	5.47	3/8/2010@15:01:26			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			3.3 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			3.3 < 10.0					
Message			CCV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100308-08	1	S7	-1.49	0.0446	3/8/2010@15:03:15			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.49 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.49 > -5.00					
Message			CCB Passed					
Action			Continue					
1202057161|959217|MB	1	1	-2.52	-0.00888	3/8/2010@15:05:05			
1202057168||LCS	1	2	49.3	2.67	3/8/2010@15:05:58			
248044005	1	3	-2.52	-0.00856	3/8/2010@15:06:52			
1202057163||DUP	1	4	-2.04	0.0161	3/8/2010@15:07:45			
1202057165||MS	1	5	101	5.35	3/8/2010@15:08:38			
1202057167||MSD	1	6	105	5.56	3/8/2010@15:09:31			
248044006	1	7	-1.95	0.0206	3/8/2010@15:10:24			
248108001	1	8	-2.52	-0.00848	3/8/2010@15:11:16			
248117001	1	9	-2.48	-0.00645	3/8/2010@15:12:08			
248127002	1	10	-0.731	0.0839	3/8/2010@15:13:02			
WCN100308-03	1	S3	106	5.63	3/8/2010@15:13:54			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.4 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.4 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100308-08	1	S7	-1.84	0.0265	3/8/2010@15:15:44			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.84 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.84 > -5.00					
Message			CCB Passed					
Action			Continue					
248162001	1	11	-2.35	1.80e-4	3/8/2010@15:17:33			
248162002	1	12	-2.05	0.0154	3/8/2010@15:18:25			
248162003	1	13	-2.14	0.0108	3/8/2010@15:19:17			
248162004	1	14	-2.03	0.0167	3/8/2010@15:20:09			
248164002	1	15	-1.57	0.0404	3/8/2010@15:21:00			

248168006	1	16	-1.99	0.0187	3/8/2010@15:21:55			
248169004	1	17	-1.56	0.0412	3/8/2010@15:22:48			
248188001	1	18	-2.03	0.0168	3/8/2010@15:23:41			
1202057162||DUP	1	19	-2.31	0.00215	3/8/2010@15:24:34			
1202057164||MS	1	20	70.7	3.78	3/8/2010@15:25:27			
WCN100308-03	1	S3	109	5.76	3/8/2010@15:26:19			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		9.0 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		9.0 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN100308-08	1	S7	-1.78	0.0295	3/8/2010@15:28:11			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-1.78 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-1.78 > -5.00					
	Message		CCB Passed					
	Action		Continue					
1202057166||MSD	1	21	110	5.81	3/8/2010@15:30:01			
248199001	1	22	-1.68	0.0348	3/8/2010@15:30:54			
248238001	1	23	-1.98	0.0191	3/8/2010@15:31:46			
248238002	1	24	-1.94	0.0214	3/8/2010@15:32:39			
1202057164||MS	1	20	71.8	3.84	3/8/2010@15:33:32			
248242001	1	25	-1.93	0.0217	3/8/2010@15:34:25			
248245001	1	26	-2.35	1.99e-4	3/8/2010@15:35:17			
248257001	1	27	-2.49	-0.00739	3/8/2010@15:36:09			
248257002	1	28	-1.86	0.0256	3/8/2010@15:37:01			
1202057164||MS	1	20	106	5.61	3/8/2010@15:37:54			
WCN100308-03	1	S3	104	5.52	3/8/2010@15:38:47			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		4.3 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		4.3 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN100308-08	1	S7	-0.768	0.0819	3/8/2010@15:40:39			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-0.768 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-0.768 > -5.00					
	Message		CCB Passed					
	Action		Continue					
1202057112|959204|MB	1	29	-2.19	0.00819	3/8/2010@15:42:28			
1202057119||LCS	1	30	31.1	1.73	3/8/2010@15:43:18		25.00	
248110001	1	31	-0.304	0.106	3/8/2010@15:44:13			
248110002	1	32	-1.46	0.0463	3/8/2010@15:45:07			
248110003	1	33	-2.31	0.00237	3/8/2010@15:46:00			
248110004	1	34	-2.16	0.00990	3/8/2010@15:46:54			
248110005	1	35	-0.698	0.0856	3/8/2010@15:47:47			
248110006	1	36	-1.47	0.0458	3/8/2010@15:48:41			
248110007	1	37	-1.24	0.0576	3/8/2010@15:49:33			
248110008	1	38	-0.761	0.0823	3/8/2010@15:50:26			
WCN100308-03	1	S3	106	5.60	3/8/2010@15:51:19			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					
WCN100308-08	1	S7	-1.95	0.0205	3/8/2010@15:53:09			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					
248118001	1	39	0.0365	0.124	3/8/2010@15:54:59			
248118002	1	40	-2.19	0.00813	3/8/2010@15:55:52			
248118003	1	41	-0.754	0.0827	3/8/2010@15:56:45			
248118004	1	42	-1.55	0.0414	3/8/2010@15:57:37			
248118005	1	43	-1.86	0.0257	3/8/2010@15:58:28			
248118006	1	44	-0.195	0.112	3/8/2010@15:59:22			
248118007	1	45	-2.48	-0.00657	3/8/2010@16:00:13			
248189001	1	46	1.50	0.200	3/8/2010@16:01:07			
1202057113||DUP	1	47	1.10	0.179	3/8/2010@16:02:01			
1202057115||MS	1	48	98.4	5.21	3/8/2010@16:02:55			
WCN100308-03	1	S3	106	5.63	3/8/2010@16:03:48			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100308-08	1	S7	-2.33	0.00121	3/8/2010@16:05:39			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.33 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.33 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202057117||MSD	1	49	97.7	5.18	3/8/2010@16:07:29			
248189002	1	50	0.509	0.148	3/8/2010@16:08:23			
1202057114||DUP	1	51	0.322	0.138	3/8/2010@16:09:16			
1202057116||MS	1	52	93.9	4.98	3/8/2010@16:10:09			
1202057118||MSD	1	53	93.9	4.98	3/8/2010@16:11:02			
1202054781|958165|MB	1	54	-2.89	-0.0281	3/8/2010@16:11:55			
1202054788||LCS	1	55	20.3	1.17	3/8/2010@16:12:47		25.00	
247918001	1	56	-1.17	0.0613	3/8/2010@16:13:39			
247918002	1	57	-1.63	0.0371	3/8/2010@16:14:33			
247918003	1	58	-2.35	2.32e-4	3/8/2010@16:15:25			
WCN100308-03	1	S3	106	5.59	3/8/2010@16:16:17			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					
WCN100308-08	1	S7	-2.61	-0.0134	3/8/2010@16:18:09			CCB

		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-2.61 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-2.61 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247918004	1	59	-1.83	0.0268	3/8/2010@16:19:58			
1202054782||DUP	1	60	-1.86	0.0252	3/8/2010@16:20:49			
1202054784||MS	1	61	88.6	4.71	3/8/2010@16:21:44			
1202054786||MSD	1	62	102	5.39	3/8/2010@16:22:39			
247918005	1	63	-1.63	0.0372	3/8/2010@16:23:32			
1202054783||DUP	1	64	-2.35	2.22e-4	3/8/2010@16:24:26			
1202054785||MS	1	65	103	5.44	3/8/2010@16:25:20			
1202054787||MSD	1	66	99.0	5.24	3/8/2010@16:26:12			
247918006	1	67	-0.953	0.0724	3/8/2010@16:27:06			
247918007	1	68	0.145	0.129	3/8/2010@16:28:00			
WCN100308-03	1	S3	105	5.54	3/8/2010@16:28:51			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	4.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	4.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100308-08	1	S7	-2.34	4.90e-4	3/8/2010@16:30:42			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-2.34 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-2.34 > -5.00					
		Message	CCB Passed					
		Action	Continue					
248009001	1	69	-2.44	-0.00446	3/8/2010@16:32:32			
248009002	1	70	-1.42	0.0484	3/8/2010@16:33:25			
248009003	1	71	2.15	0.233	3/8/2010@16:34:17			
248009004	1	72	-1.18	0.0606	3/8/2010@16:35:10			
248009005	1	73	-2.05	0.0157	3/8/2010@16:36:03			
248025001	1	74	-2.44	-0.00448	3/8/2010@16:36:55			
248025002	1	75	-1.60	0.0388	3/8/2010@16:37:48			
248025004	1	76	-0.787	0.0809	3/8/2010@16:38:42			
248025006	1	77	-0.371	0.102	3/8/2010@16:39:36			
248422001	1	78	-2.28	0.00369	3/8/2010@16:40:31			
WCN100308-03	1	S3	102	5.40	3/8/2010@16:41:23			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	2.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	2.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100308-08	1	S7	-2.30	0.00277	3/8/2010@16:43:15			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-2.30 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-2.30 > -5.00					
		Message	CCB Passed					

		Action	Continue					
248422002	1	79	-1.20	0.0595	3/8/2010@16:45:06			
1202061930|961278|MB	1	80	-1.83	0.0272	3/8/2010@16:46:01			
1202061932||LCS	1	81	-1.96	0.0203	3/8/2010@16:46:53			
247819001	1	82	110	5.83	3/8/2010@16:47:47			
1202061931||DUP	1	83	184	9.64	3/8/2010@16:48:41			
WCN100308-03	1	S3	106	5.59	3/8/2010@16:49:33			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					
WCN100308-08	1	S7	-2.34	3.67e-4	3/8/2010@16:51:24			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.34 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.34 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_3-8-2010_14-58-05.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Author: axc2

Date : 3/8/2010

Channel 1: Current View

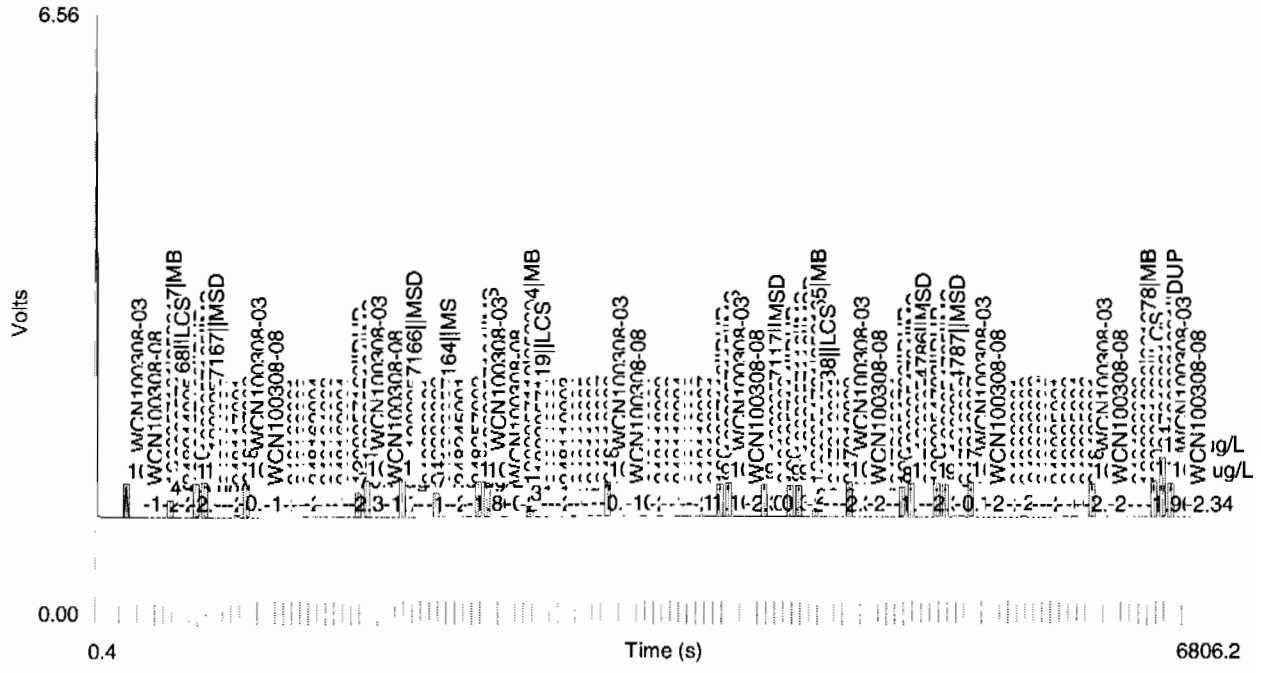
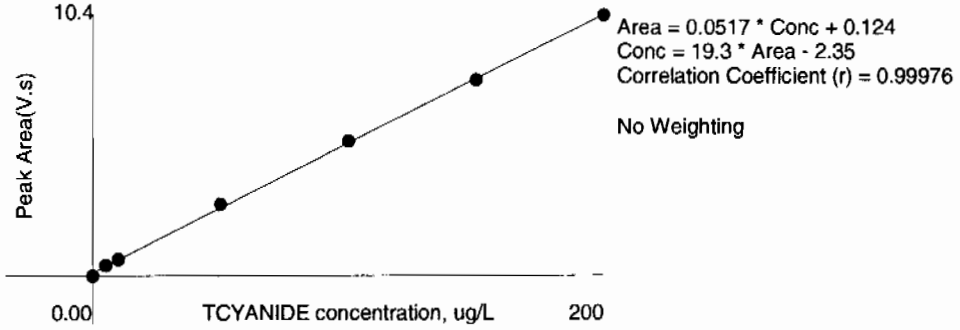


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	10.4	0.692	0.2	3/8/2010	10:26:48
2	150	1	7.82	0.567	0.7	3/8/2010	10:27:40
3	100	1	5.36	0.353	-1.3	3/8/2010	10:28:32
4	50.0	1	2.85	0.199	-5.1	3/8/2010	10:29:25
5	10.0	1	0.644	0.0420	-0.6	3/8/2010	10:30:18
6	5.00	1	0.400	0.0240	-4.6	3/8/2010	10:31:12
7	0.00	1	-0.0189	-0.00306		3/8/2010	10:32:06

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

Author: lachat

Date : 3/3/2010

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 Colum 9056CAJ
LCS nominal 1.0 mg/L

Sample	Rep.	Cup No.	Channel 1 NO3 + NO2 Conc. (mg/L)	Area (Vs)	Detection Time	ADF	MDF	Description
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|MB	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					

Author: lachat

Date : 3/3/2010

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

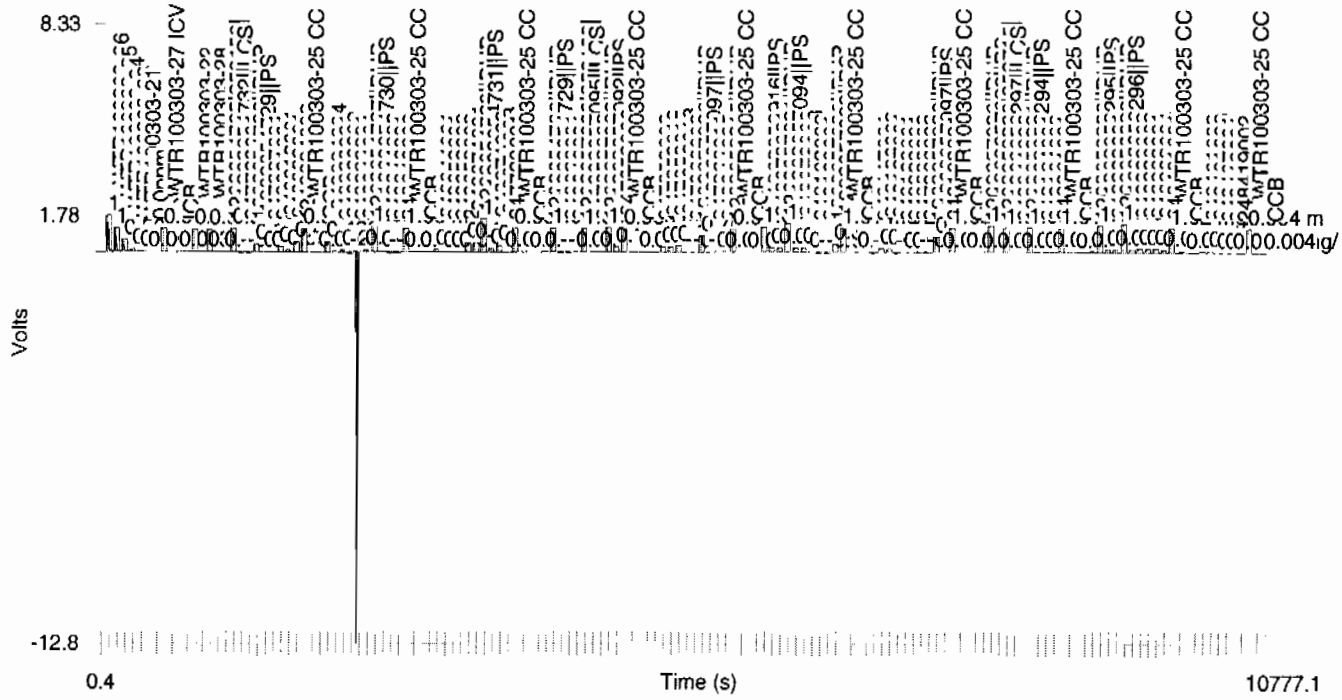


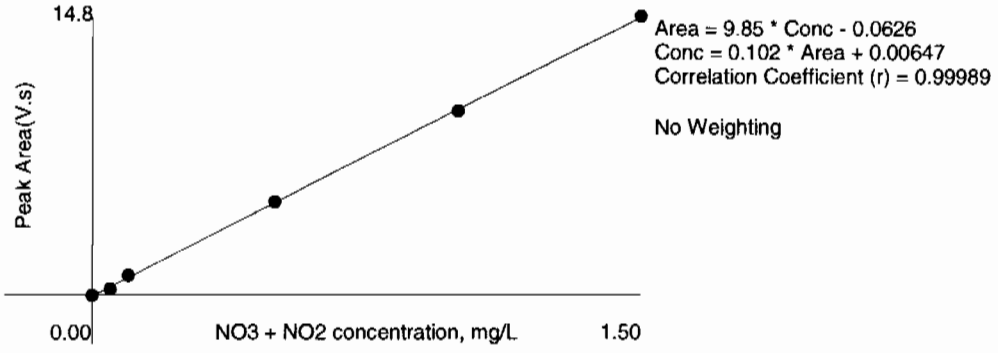
Table 1: NO3 + NO2

	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

Author: lachat

Date : 3/3/2010

Figure 1: NO3 + NO2



General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2090-1

Method/Analysis Information

Product: **pH**

Analytical Batch: 959805 **Method:** SW9045C pH

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9045C/9045D:

Sample ID	Client ID
248110001	RE15-10-8404
248110002	RE15-10-8396
248110003	RE15-10-8393
248110004	RE15-10-8395
248110005	RE15-10-8398
248110006	RE15-10-8394
248110007	RE15-10-8399
248110008	RE15-10-8397
1202058593	248025004(CAPU-10-12541) Sample Duplicate (DUP)
1202058594	248110008(RE15-10-8397) Sample Duplicate (DUP)
1202058595	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: 248025004 (CAPU-10-12541) and 248110008 (RE15-10-8397).

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: 248110001 (RE15-10-8404), 248110002 (RE15-10-8396), 248110003 (RE15-10-8393), 248110004 (RE15-10-8395), 248110005 (RE15-10-8398), 248110006 (RE15-10-8394), 248110007 (RE15-10-8399) and 248110008 (RE15-10-8397).

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:	959204	**Method:**	SW9012A Cyanide and Total
Prep Batch :	959203	**Method:**	SSW846 9010B Prep

Sample Analysis
The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
248110001	RE15-10-8404
248110002	RE15-10-8396
248110003	RE15-10-8393
248110004	RE15-10-8395
248110005	RE15-10-8398
248110006	RE15-10-8394
248110007	RE15-10-8399
248110008	RE15-10-8397
1202057112	Method Blank (MB)
1202057113	248189001(RE11-10-1651) Sample Duplicate (DUP)
1202057114	248189002(RE11-10-1652) Sample Duplicate (DUP)
1202057115	248189001(RE11-10-1651) Matrix Spike (MS)
1202057116	248189002(RE11-10-1652) Matrix Spike (MS)
1202057117	248189001(RE11-10-1651) Matrix Spike Duplicate (MSD)
1202057118	248189002(RE11-10-1652) Matrix Spike Duplicate (MSD)
1202057119	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: 248189001 (RE11-10-1651) and 248189002 (RE11-10-1652).

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. 1202057114 (RE11-10-1652).

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: 1202057119 (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:	962078	**Method:**	EPA 300.0 Nitrate in Soil
Prep Batch :	962077	**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
248110001	RE15-10-8404
248110002	RE15-10-8396
248110003	RE15-10-8393
248110004	RE15-10-8395
248110005	RE15-10-8398
248110006	RE15-10-8394
248110007	RE15-10-8399
248110008	RE15-10-8397
1202063606	Method Blank (MB)
1202063607	248110001(RE15-10-8404) Sample Duplicate (DUP)
1202063608	248118007(RE36-10-8452) Sample Duplicate (DUP)
1202063609	248110001(RE15-10-8404) Matrix Spike (MS)
1202063610	248118007(RE36-10-8452) Matrix Spike (MS)
1202063611	248110001(RE15-10-8404) Matrix Spike Duplicate (MSD)
1202063612	248118007(RE36-10-8452) Matrix Spike Duplicate (MSD)
1202063613	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: 248110001 (RE15-10-8404) and 248118007 (RE36-10-8452).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The spike recovery falls outside of the GEL acceptance limits but within the client specified limits. 1202063609 (RE15-10-8404).

Matrix Spike Duplicate (MSD) Recovery Statement
The spike duplicate recovery falls outside of the GEL acceptance limits but within the client specified limits. 1202063611 (RE15-10-8404).

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
The following DER was generated for this SDG: 808585 1202063609 (RE15-10-8404), 1202063611 (RE15-10-8404), 248110001 (RE15-10-8404), 248110002 (RE15-10-8396), 248110003 (RE15-10-8393), 248110004 (RE15-10-8395), 248110005 (RE15-10-8398), 248110006 (RE15-10-8394), 248110007 (RE15-10-8399) and 248110008 (RE15-10-8397).

Manual Integrations
Manual integrations were not required for the samples in 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: Nik-Cole A. Elmore **Date:** 3.24.10

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: 10-2090-1 GEL Work Order: 248110

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 Nik-Cole A. Elmore 3.24.10

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 24, 2010
Client SDG: 10-2090-1

Client Sample ID: RE15-10-8404
Sample ID: 248110001
Matrix: R
Collect Date: 22-FEB-10 12:00
Receive Date: 26-FEB-10
Collector: Client
Moisture: 9.44%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis										
SW9045C pH "As Received"										
pH at Temp 19.3C	H	8.61	0.010	0.100	SU	1	LXA1 03/02/10	1250	959805	1
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	72.2	265	ug/kg	1	AXC2 03/08/10	1544	959204	2
Ion Chromatography										
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"										
Nitrate-N		1.62	0.331	1.10	mg/kg	1	MAR1 03/20/10	1110	962078	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	03/19/10	1315	962077
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/08/10	1243	959203

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

Report Date: March 24, 2010
Client SDG: 10-2090-1

Client Sample ID: RE15-10-8396
Sample ID: 248110002
Matrix: R
Collect Date: 22-FEB-10 12:00
Receive Date: 26-FEB-10
Collector: Client
Moisture: 8.69%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis										
SW9045C pH "As Received"										
pH at Temp 19.4C	H	8.41	0.010	0.100	SU	1	LXA1 03/02/10	1250	959805	1
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	74.5	274	ug/kg	1	AXC2 03/08/10	1545	959204	2
Ion Chromatography										
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"										
Nitrate-N		1.57	0.329	1.10	mg/kg	1	MAR1 03/20/10	1258	962078	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	03/19/10	1315	962077
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/08/10	1243	959203

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

Report Date: March 24, 2010
Client SDG: 10-2090-1

Client Sample ID: RE15-10-8393
Sample ID: 248110003
Matrix: R
Collect Date: 22-FEB-10 12:00
Receive Date: 26-FEB-10
Collector: Client
Moisture: 20.1%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis										
SW9045C pH "As Received"										
pH at Temp 19.3C	H	8.80	0.010	0.100	SU	1	LXA1 03/02/10	1250	959805	1
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	83.5	307	ug/kg	1	AXC2 03/08/10	1546	959204	2
Ion Chromatography										
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"										
Nitrate-N	U	ND	0.376	1.25	mg/kg	1	MAR1 03/20/10	1325	962078	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	03/19/10	1315	962077
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/08/10	1243	959203

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

Report Date: March 24, 2010
Client SDG: 10-2090-1

Client Sample ID: RE15-10-8395
Sample ID: 248110004
Matrix: R
Collect Date: 22-FEB-10 12:00
Receive Date: 26-FEB-10
Collector: Client
Moisture: 4.41%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 19.4C	H	9.09	0.010	0.100	SU	1	LXA1	03/02/10	1250	959805	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	U	ND	69.7	256	ug/kg	1	AXC2	03/08/10	1546	959204	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	0.314	1.05	mg/kg	1	MAR1	03/20/10	1352	962078	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	03/19/10	1315	962077
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/08/10	1243	959203

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

Report Date: March 24, 2010
Client SDG: 10-2090-1

Client Sample ID: RE15-10-8398
Sample ID: 248110005
Matrix: R
Collect Date: 22-FEB-10 12:00
Receive Date: 26-FEB-10
Collector: Client
Moisture: 12.8%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 19.3C	H	8.32	0.010	0.100	SU	1	LXA1	03/02/10	1250	959805	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	U	ND	73.6	271	ug/kg	1	AXC2	03/08/10	1547	959204	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	0.344	1.15	mg/kg	1	MAR1	03/20/10	1419	962078	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	03/19/10	1315	962077
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/08/10	1243	959203

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

Report Date: March 24, 2010
Client SDG: 10-2090-1

Client Sample ID: RE15-10-8394
Sample ID: 248110006
Matrix: R
Collect Date: 22-FEB-10 12:00
Receive Date: 26-FEB-10
Collector: Client
Moisture: 10.3%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 19.2C	H	8.91	0.010	0.100	SU	1	LXA1	03/02/10	1250	959805	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	U	ND	74.4	273	ug/kg	1	AXC2	03/08/10	1548	959204	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	0.335	1.12	mg/kg	1	MAR1	03/21/10	1319	962078	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	03/19/10	1315	962077
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/08/10	1243	959203

The following Analytical Methods were performed

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

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 24, 2010
Client SDG: 10-2090-1

Client Sample ID: RE15-10-8399
Sample ID: 248110007
Matrix: R
Collect Date: 22-FEB-10 12:00
Receive Date: 26-FEB-10
Collector: Client
Moisture: 11.7%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis										
SW9045C pH "As Received"										
pH at Temp 19.2C	H	8.59	0.010	0.100	SU	1	LXA1 03/02/10	1250	959805	1
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.7	253	ug/kg	1	AXC2 03/08/10	1549	959204	2
Ion Chromatography										
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"										
Nitrate-N	U	ND	0.340	1.13	mg/kg	1	MAR1 03/21/10	1346	962078	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	03/19/10	1315	962077
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/08/10	1243	959203

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

Report Date: March 24, 2010
Client SDG: 10-2090-1

Client Sample ID: RE15-10-8397
Sample ID: 248110008
Matrix: R
Collect Date: 22-FEB-10 12:00
Receive Date: 26-FEB-10
Collector: Client
Moisture: 6.13%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis										
SW9045C pH "As Received"										
pH at Temp 19.1C	H	8.67	0.010	0.100	SU	1	LXA1 03/02/10	1250	959805	1
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	71.0	261	ug/kg	1	AXC2 03/08/10	1550	959204	2
Ion Chromatography										
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"										
Nitrate-N		1.93	0.320	1.07	mg/kg	1	MAR1 03/21/10	1413	962078	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	03/19/10	1315	962077
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/08/10	1243	959203

The following Analytical Methods were performed

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

Quality Control Summary

QC Summary

Report Date: March 24, 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: 248110

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Electrode Analysis										
Batch 959805										
QC1202058593 248025004 DUP										
pH	H	9.76	H	9.73	SU	0.308		(0%-10%)	LXA1	03/02/10 12:50
QC1202058594 248110008 DUP										
pH	H	8.67	H	8.57	SU	1.16		(0%-10%)		03/02/10 12:50
QC1202058595 LCS										
pH	7.00			6.99	SU		99.9	(95%-105%)		03/02/10 12:50
Flow Injection Analysis										
Batch 959204										
QC1202057113 248189001 DUP										
Cyanide, Total	J	86.4	U	ND	ug/kg	200 ^			AXC2	03/08/10 16:02
QC1202057114 248189002 DUP										
Cyanide, Total	U	ND	U	ND	ug/kg	N/A				03/08/10 16:09
QC1202057119 LCS										
Cyanide, Total	67900			77800	ug/kg		115	(32%-157%)		03/08/10 15:43
QC1202057112 MB										
Cyanide, Total			U	250	ug/kg					03/08/10 15:42
QC1202057115 248189001 MS										
Cyanide, Total	5560 J	86.4		5470	ug/kg		96.8	(26%-158%)		03/08/10 16:02
QC1202057116 248189002 MS										
Cyanide, Total	6600 U	ND		6200	ug/kg		93.4	(26%-158%)		03/08/10 16:10
QC1202057117 248189001 MSD										
Cyanide, Total	5870 J	86.4		5730	ug/kg	4.60	96.2	(0%-30%)		03/08/10 16:07
QC1202057118 248189002 MSD										
Cyanide, Total	6150 U	ND		5770	ug/kg	7.14	93.3	(0%-30%)		03/08/10 16:11
Ion Chromatography										
Batch 962078										
QC1202063607 248110001 DUP										
Nitrate-N		1.62		1.60	mg/kg	1.10 ^		(+/-1.10)	MAR1	03/20/10 11:37
QC1202063608 248118007 DUP										
Nitrate-N	U	ND	U	ND	mg/kg	N/A				03/21/10 18:42
QC1202063613 LCS										
Nitrate-N	50.0			46.9	mg/kg		93.9	(90%-110%)		03/20/10 10:43
QC1202063606 MB										
Nitrate-N			U	1.00	mg/kg					03/20/10 10:16
QC1202063609 248110001 MS										
Nitrate-N	55.2	1.62		50.5	mg/kg		88.5*	(90%-110%)		03/20/10 12:04
QC1202063610 248118007 MS										
Nitrate-N	53.8 U	ND		49.2	mg/kg		91.3	(90%-110%)		03/21/10 19:09
QC1202063611 248110001 MSD										
Nitrate-N	55.2	1.62		50.4	mg/kg	0.287	88.3*	(0%-20%)		03/20/10 12:31
QC1202063612 248118007 MSD										
Nitrate-N	53.8 U	ND		49.3	mg/kg	0.262	91.6	(0%-20%)		03/21/10 19:36

QC Summary

Workorder: 248110

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

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

QC Summary

Workorder: 248110

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

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: 24-MAR-2010 12:19

GEL Laboratories LLC
Contract: LANL01004
SDG #: 10-2090-1

Flow Injection Analysis
Method: SW846 9012A Concentration Units:ug/L
Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**08-MAR-2010 10:32:54**	**OM_3-8-2010_10-24-48**	**147**	**150**	**98**	**(90%-110%)**	**Yes**
CCV	08-MAR-2010 15:38:47	OM_3-8-2010_14-58-05	104	100	104	(90%-110%)	Yes
CCV	08-MAR-2010 15:51:19	OM_3-8-2010_14-58-05	106	100	106	(90%-110%)	Yes
CCV	08-MAR-2010 16:03:48	OM_3-8-2010_14-58-05	106	100	106	(90%-110%)	Yes
CCV	08-MAR-2010 16:16:17	OM_3-8-2010_14-58-05	106	100	106	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**08-MAR-2010 10:34:44**	**OM_3-8-2010_10-24-48**	**-1.65**	**10**	**Yes**
CCB	08-MAR-2010 15:40:39	OM_3-8-2010_14-58-05	-0.768	10	Yes
CCB	08-MAR-2010 15:53:09	OM_3-8-2010_14-58-05	-1.95	10	Yes
CCB	08-MAR-2010 16:05:39	OM_3-8-2010_14-58-05	-2.33	10	Yes
CCB	08-MAR-2010 16:18:09	OM_3-8-2010_14-58-05	-2.61	10	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 24-MAR-2010 12:19

GEL Laboratories LLC
Contract: LANL01004
SDG #: 10-2090-1

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	**19-MAR-2010 10:31:00**	**100319**	**4.6689**	**5**	**93.4**	**(90%-110%)**	**Yes**
CCV	20-MAR-2010 09:23:00	100319	7.2587	7.5	96.8	(90%-110%)	Yes
CCV	20-MAR-2010 14:45:00	100319	4.674	5	93.5	(90%-110%)	Yes
ICV	**21-MAR-2010 11:32:00**	**100321**	**4.6626**	**5**	**93.3**	**(90%-110%)**	**Yes**
CCV	21-MAR-2010 16:54:00	100321	7.264	7.5	96.9	(90%-110%)	Yes
CCV	21-MAR-2010 20:03:00	100321	4.7008	5	94	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**19-MAR-2010 10:58:00**	**100319**	**0**	**0.1**	**Yes**
CCB	20-MAR-2010 09:49:00	100319	0	0.1	Yes
CCB	20-MAR-2010 15:12:00	100319	0	0.1	Yes
ICB	**21-MAR-2010 12:53:00**	**100321**	**0**	**0.1**	**Yes**
CCB	21-MAR-2010 17:21:00	100321	0	0.1	Yes
CCB	21-MAR-2010 20:30:00	100321	0	0.1	Yes

Cyanide, Total

Prep Logbook

Cyanide Sample Distillation

Batch ID: **959203.0** Verified by: _____

Analyst: Alan Stanley

Method: SW846 9010B Prep

Lab SOP: GL-GC-E-067 REV# 13

Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202057119	Total Cyanide Solid LCS	URF1200957-01	.25	g
MS	1202057115	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202057116	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202057117	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202057118	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
1202057112 MB	08-MAR-2010 12:43:00	Soil	0.5	25	50	>12
1202057119 LCS	08-MAR-2010 12:43:00	Soil	0.25	25	100	>12
248110001	08-MAR-2010 12:43:00	Soil	0.52	25	48.07692	>12
248110002	08-MAR-2010 12:43:00	Soil	0.5	25	50	>12
248110003	08-MAR-2010 12:43:00	Soil	0.51	25	49.01961	>12
248110004	08-MAR-2010 12:43:00	Soil	0.51	25	49.01961	>12
248110005	08-MAR-2010 12:43:00	Soil	0.53	25	47.16981	>12
248110006	08-MAR-2010 12:43:00	Soil	0.51	25	49.01961	>12
248110007	08-MAR-2010 12:43:00	Soil	0.56	25	44.64286	>12
248110008	08-MAR-2010 12:43:00	Soil	0.51	25	49.01961	>12
248118001	08-MAR-2010 12:43:00	Soil	0.54	25	46.2963	>12
248118002	08-MAR-2010 12:43:00	Soil	0.53	25	47.16981	>12
248118003	08-MAR-2010 12:43:00	Soil	0.51	25	49.01961	>12
248118004	08-MAR-2010 12:43:00	Soil	0.5	25	50	>12
248118005	08-MAR-2010 12:43:00	Soil	0.52	25	48.07692	>12
248118006	08-MAR-2010 12:43:00	Soil	0.58	25	43.10345	>12
248118007	08-MAR-2010 12:43:00	Soil	0.58	25	43.10345	>12
248189001	08-MAR-2010 12:43:00	Soil	0.56	25	44.64286	>12
1202057113 DUP (248189001)	08-MAR-2010 12:43:00	Soil	0.55	25	45.45455	>12
1202057115 MS (248189001)	08-MAR-2010 12:43:00	Soil	0.58	25	43.10345	>12
1202057117 MSD (248189001)	08-MAR-2010 12:43:00	Soil	0.55	25	45.45455	>12

Prep Logbook

Batch ID: **959203.0** Verified by: _____
Analyst: Alan Stanley
Method: SW846 9010B Prep
Lab SOP: GL-GC-E-067 REV# 13
Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202057119	Total Cyanide Solid LCS	URF1200957-01	.25	g
MS	1202057115	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202057116	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202057117	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202057118	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
248189002	08-MAR-2010 12:43:00	Soil	0.53	25	47.16981	>12
1202057114 DUP (248189002)	08-MAR-2010 12:43:00	Soil	0.58	25	43.10345	>12
1202057116 MS (248189002)	08-MAR-2010 12:43:00	Soil	0.54	25	46.2963	>12
1202057118 MSD (248189002)	08-MAR-2010 12:43:00	Soil	0.58	25	43.10345	>12

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
WCN100308-07	150 ppb CN Distilled ICV Standard	.0375 mL

Comments:

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	3/8/2010 10:25:45	OM_3-8-2010_10-24-48
150 ppb		1	axc2	3/8/2010 10:26:37	OM_3-8-2010_10-24-48
100 ppb		1	axc2	3/8/2010 10:27:29	OM_3-8-2010_10-24-48
50 ppb		1	axc2	3/8/2010 10:28:22	OM_3-8-2010_10-24-48
10 ppb		1	axc2	3/8/2010 10:29:15	OM_3-8-2010_10-24-48
CRDL 5.0 ppb		1	axc2	3/8/2010 10:30:09	OM_3-8-2010_10-24-48
ICAL-00		1	axc2	3/8/2010 10:31:03	OM_3-8-2010_10-24-48
ICV		1	axc2	3/8/2010 10:32:54	OM_3-8-2010_10-24-48
ICB		1	axc2	3/8/2010 10:34:44	OM_3-8-2010_10-24-48
CRDL		1	axc2	3/8/2010 10:36:34	OM_3-8-2010_10-24-48
1202054789	958168	1	axc2	3/8/2010 10:38:23	OM_3-8-2010_10-24-48
1202054796	958168	1	axc2	3/8/2010 10:39:17	OM_3-8-2010_10-24-48
248010001	958168	1	axc2	3/8/2010 10:40:10	OM_3-8-2010_10-24-48
1202054790	958168	1	axc2	3/8/2010 10:41:03	OM_3-8-2010_10-24-48
1202054792	958168	1	axc2	3/8/2010 10:41:56	OM_3-8-2010_10-24-48
1202054794	958168	1	axc2	3/8/2010 10:42:48	OM_3-8-2010_10-24-48
248010002	958168	1	axc2	3/8/2010 10:43:42	OM_3-8-2010_10-24-48
248019001	958168	1	axc2	3/8/2010 10:44:34	OM_3-8-2010_10-24-48
248019002	958168	1	axc2	3/8/2010 10:45:26	OM_3-8-2010_10-24-48
248023002	958168	1	axc2	3/8/2010 10:46:19	OM_3-8-2010_10-24-48
CCV		1	axc2	3/8/2010 10:47:11	OM_3-8-2010_10-24-48
CCB		1	axc2	3/8/2010 10:49:01	OM_3-8-2010_10-24-48
248024001	958168	1	axc2	3/8/2010 10:50:50	OM_3-8-2010_10-24-48
248024003	958168	1	axc2	3/8/2010 10:51:41	OM_3-8-2010_10-24-48
248044002	958168	1	axc2	3/8/2010 10:52:34	OM_3-8-2010_10-24-48
1202054791	958168	1	axc2	3/8/2010 10:53:25	OM_3-8-2010_10-24-48
1202054793	958168	1	axc2	3/8/2010 10:54:17	OM_3-8-2010_10-24-48
1202054795	958168	1	axc2	3/8/2010 10:55:10	OM_3-8-2010_10-24-48
248401005	958168	1	axc2	3/8/2010 10:56:04	OM_3-8-2010_10-24-48
248516001	958168	1	axc2	3/8/2010 10:56:58	OM_3-8-2010_10-24-48
248516002	958168	1	axc2	3/8/2010 10:57:51	OM_3-8-2010_10-24-48
248518001	958168	1	axc2	3/8/2010 10:58:44	OM_3-8-2010_10-24-48
CCV		1	axc2	3/8/2010 10:59:36	OM_3-8-2010_10-24-48
CCB		1	axc2	3/8/2010 11:01:27	OM_3-8-2010_10-24-48
248533001	958168	1	axc2	3/8/2010 11:03:16	OM_3-8-2010_10-24-48
248548001	958168	1	axc2	3/8/2010 11:04:09	OM_3-8-2010_10-24-48
248548003	958168	1	axc2	3/8/2010 11:05:01	OM_3-8-2010_10-24-48
248551001	958168	1	axc2	3/8/2010 11:05:54	OM_3-8-2010_10-24-48
248551002	958168	1	axc2	3/8/2010 11:06:46	OM_3-8-2010_10-24-48
248555002	958168	1	axc2	3/8/2010 11:07:39	OM_3-8-2010_10-24-48
1202059721	960271	1	axc2	3/8/2010 11:08:31	OM_3-8-2010_10-24-48
1202059731	960271	1	axc2	3/8/2010 11:09:23	OM_3-8-2010_10-24-48
248072001	960271	1	axc2	3/8/2010 11:10:15	OM_3-8-2010_10-24-48
1202059722	960271	1	axc2	3/8/2010 11:11:06	OM_3-8-2010_10-24-48
CCV		1	axc2	3/8/2010 11:11:59	OM_3-8-2010_10-24-48
CCB		1	axc2	3/8/2010 11:13:49	OM_3-8-2010_10-24-48
1202059725	960271	1	axc2	3/8/2010 11:15:40	OM_3-8-2010_10-24-48
1202059728	960271	1	axc2	3/8/2010 11:16:33	OM_3-8-2010_10-24-48
248072002	960271	1	axc2	3/8/2010 11:17:27	OM_3-8-2010_10-24-48
248072003	960271	1	axc2	3/8/2010 11:18:21	OM_3-8-2010_10-24-48
248097001	960271	1	axc2	3/8/2010 11:19:14	OM_3-8-2010_10-24-48
1202059724	960271	1	axc2	3/8/2010 11:20:07	OM_3-8-2010_10-24-48
1202059727	960271	1	axc2	3/8/2010 11:21:00	OM_3-8-2010_10-24-48
1202059730	960271	1	axc2	3/8/2010 11:21:53	OM_3-8-2010_10-24-48
248097002	960271	1	axc2	3/8/2010 11:22:47	OM_3-8-2010_10-24-48
248097003	960271	1	axc2	3/8/2010 11:23:38	OM_3-8-2010_10-24-48
CCV		1	axc2	3/8/2010 11:24:31	OM_3-8-2010_10-24-48
CCB		1	axc2	3/8/2010 11:26:21	OM_3-8-2010_10-24-48

248097004	960271	1	axc2	3/8/2010 11:28:09	OM_3-8-2010_10-24-48
248298001	960271	1	axc2	3/8/2010 11:29:02	OM_3-8-2010_10-24-48
248298002	960271	1	axc2	3/8/2010 11:29:53	OM_3-8-2010_10-24-48
248298003	960271	1	axc2	3/8/2010 11:30:46	OM_3-8-2010_10-24-48
248303001	960271	1	axc2	3/8/2010 11:31:38	OM_3-8-2010_10-24-48
248337001	960271	1	axc2	3/8/2010 11:32:32	OM_3-8-2010_10-24-48
248375001	960271	1	axc2	3/8/2010 11:33:26	OM_3-8-2010_10-24-48
248375002	960271	1	axc2	3/8/2010 11:34:19	OM_3-8-2010_10-24-48
248397001	960271	1	axc2	3/8/2010 11:35:14	OM_3-8-2010_10-24-48
248397002	960271	1	axc2	3/8/2010 11:36:06	OM_3-8-2010_10-24-48
CCV		1	axc2	3/8/2010 11:37:00	OM_3-8-2010_10-24-48
CCB		1	axc2	3/8/2010 11:38:51	OM_3-8-2010_10-24-48
248407001	960271	1	axc2	3/8/2010 11:40:39	OM_3-8-2010_10-24-48
1202059723	960271	1	axc2	3/8/2010 11:41:33	OM_3-8-2010_10-24-48
1202059726	960271	1	axc2	3/8/2010 11:42:26	OM_3-8-2010_10-24-48
1202059729	960271	1	axc2	3/8/2010 11:43:19	OM_3-8-2010_10-24-48
248419001	960271	1	axc2	3/8/2010 11:44:11	OM_3-8-2010_10-24-48
248419002	960271	1	axc2	3/8/2010 11:45:04	OM_3-8-2010_10-24-48
1202053300	957584	1	axc2	3/8/2010 11:45:57	OM_3-8-2010_10-24-48
1202053310	957584	1	axc2	3/8/2010 11:46:49	OM_3-8-2010_10-24-48
247829002	957584	1	axc2	3/8/2010 11:47:41	OM_3-8-2010_10-24-48
1202053302	957584	1	axc2	3/8/2010 11:48:33	OM_3-8-2010_10-24-48
CCV		1	axc2	3/8/2010 11:49:26	OM_3-8-2010_10-24-48
CCB		1	axc2	3/8/2010 11:51:15	OM_3-8-2010_10-24-48
1202053305	957584	1	axc2	3/8/2010 11:53:05	OM_3-8-2010_10-24-48
1202053308	957584	1	axc2	3/8/2010 11:54:00	OM_3-8-2010_10-24-48
247865010	957584	1	axc2	3/8/2010 11:54:55	OM_3-8-2010_10-24-48
247865012	957584	1	axc2	3/8/2010 11:55:48	OM_3-8-2010_10-24-48
1202053303	957584	1	axc2	3/8/2010 11:56:41	OM_3-8-2010_10-24-48
1202053306	957584	1	axc2	3/8/2010 11:57:35	OM_3-8-2010_10-24-48
1202053309	957584	1	axc2	3/8/2010 11:58:28	OM_3-8-2010_10-24-48
247865013	957584	1	axc2	3/8/2010 11:59:21	OM_3-8-2010_10-24-48
247865014	957584	1	axc2	3/8/2010 12:00:15	OM_3-8-2010_10-24-48
247865015	957584	1	axc2	3/8/2010 12:01:07	OM_3-8-2010_10-24-48
CCV		1	axc2	3/8/2010 12:02:00	OM_3-8-2010_10-24-48
CCB		1	axc2	3/8/2010 12:03:51	OM_3-8-2010_10-24-48
247865016	957584	1	axc2	3/8/2010 12:05:41	OM_3-8-2010_10-24-48
247865017	957584	1	axc2	3/8/2010 12:06:33	OM_3-8-2010_10-24-48
247865018	957584	1	axc2	3/8/2010 12:07:25	OM_3-8-2010_10-24-48
247865019	957584	1	axc2	3/8/2010 12:08:18	OM_3-8-2010_10-24-48
247865020	957584	1	axc2	3/8/2010 12:09:10	OM_3-8-2010_10-24-48
247866001	957584	1	axc2	3/8/2010 12:10:05	OM_3-8-2010_10-24-48
247919001	957584	1	axc2	3/8/2010 12:10:59	OM_3-8-2010_10-24-48
247919002	957584	1	axc2	3/8/2010 12:11:53	OM_3-8-2010_10-24-48
247922004	957584	1	axc2	3/8/2010 12:12:48	OM_3-8-2010_10-24-48
1202053301	957584	1	axc2	3/8/2010 12:13:41	OM_3-8-2010_10-24-48
CCV		1	axc2	3/8/2010 12:14:34	OM_3-8-2010_10-24-48
CCB		1	axc2	3/8/2010 12:16:24	OM_3-8-2010_10-24-48
1202053304	957584	1	axc2	3/8/2010 12:18:14	OM_3-8-2010_10-24-48
1202053307	957584	1	axc2	3/8/2010 12:19:07	OM_3-8-2010_10-24-48
248164004	957584	1	axc2	3/8/2010 12:20:01	OM_3-8-2010_10-24-48
248382002	957584	1	axc2	3/8/2010 12:20:54	OM_3-8-2010_10-24-48
248382003	957584	1	axc2	3/8/2010 12:21:47	OM_3-8-2010_10-24-48
248401002	957584	1	axc2	3/8/2010 12:22:40	OM_3-8-2010_10-24-48
248401004	957584	1	axc2	3/8/2010 12:23:33	OM_3-8-2010_10-24-48
CCV		1	axc2	3/8/2010 12:24:25	OM_3-8-2010_10-24-48
CCB		1	axc2	3/8/2010 12:26:15	OM_3-8-2010_10-24-48

Author: axc2 Date : 3/8/2010

Original Run Filename: OM_3-8-2010_10-24-48.OMN created 3/8/2010 10:24:48
Original Run Author's Signature: [axc2]
Current Run Filename: OM_3-8-2010_10-24-48.OMN last modified 3/8/2010 12:27:20
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN100308-01	1	S1	200	10.4	3/8/2010@10:25:45			200 ppb
WCN100308-02	1	S2	150	7.82	3/8/2010@10:26:37			150 ppb
WCN100308-03	1	S3	100	5.36	3/8/2010@10:27:29			100 ppb
WCN100308-04	1	S4	50.0	2.85	3/8/2010@10:28:22			50 ppb
WCN100308-05	1	S5	10.0	0.644	3/8/2010@10:29:15			10 ppb
WCN100308-06	1	S6	5.00	0.400	3/8/2010@10:30:09			CRDL 5.0 ppb
WCN100308-08	1	S7	0.00	-0.0189	3/8/2010@10:31:03			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99976 > 0.99500					
Message			Pass					
Action			Continue					
WCN100308-07	1	S8	147	7.72	3/8/2010@10:32:54			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-2.1 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-2.1 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100308-08	1	S7	-1.65	0.0363	3/8/2010@10:34:44			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.65 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.65 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100308-06	1	S6	5.25	0.393	3/8/2010@10:36:34			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.25 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.25 > 2.50					
Message			Pass					
Action			None					
1202054789|958168|MB	1	1	-1.83	0.0269	3/8/2010@10:38:23			
1202054796||LCS	1	2	50.4	2.73	3/8/2010@10:39:17			
248010001	1	3	-1.53	0.0427	3/8/2010@10:40:10			
1202054790||DUP	1	4	-1.69	0.0344	3/8/2010@10:41:03			
1202054792||MS	1	5	114	6.01	3/8/2010@10:41:56			
1202054794||MSD	1	6	111	5.86	3/8/2010@10:42:48			
248010002	1	7	-1.44	0.0471	3/8/2010@10:43:42			
248019001	1	8	-1.39	0.0498	3/8/2010@10:44:34			
248019002	1	9	-1.40	0.0491	3/8/2010@10:45:26			
248023002	1	10	-1.75	0.0312	3/8/2010@10:46:19			
WCN100308-03	1	S3	105	5.54	3/8/2010@10:47:11			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			4.8 < 10.0					

		Message	CCV Passed						
		Action	Continue						
DQM Test: < - Percent Relative Difference									
		Result:	4.8 < 10.0						
		Message	CCV Passed						
		Action	Continue						
WCN100308-08	1	S7	-1.67	0.0352	3/8/2010@10:49:01			CCB	
		Known Conc:	0.00						
DQM Test: > + Concentration Limit									
		Result:	-1.67 < 5.00						
		Message	CCB Passed						
		Action	Continue						
DQM Test: < - Concentration Limit									
		Result:	-1.67 > -5.00						
		Message	CCB Passed						
		Action	Continue						
248024001	1	11	-2.29	0.00319	3/8/2010@10:50:50				
248024003	1	12	-0.940	0.0730	3/8/2010@10:51:41				
248044002	1	13	-1.78	0.0297	3/8/2010@10:52:34				
1202054791||DUP	1	14	-1.89	0.0237	3/8/2010@10:53:25				
1202054793||MS	1	15	113	5.97	3/8/2010@10:54:17				
1202054795||MSD	1	16	94.5	5.01	3/8/2010@10:55:10				
248401005	1	17	-2.36	-4.50e-4	3/8/2010@10:56:04				
248516001	1	18	-1.70	0.0336	3/8/2010@10:56:58				
248516002	1	19	-2.03	0.0168	3/8/2010@10:57:51				
248518001	1	20	-2.35	3.13e-4	3/8/2010@10:58:44				
WCN100308-03	1	S3	107	5.64	3/8/2010@10:59:36			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						
WCN100308-08	1	S7	-1.82	0.0275	3/8/2010@11:01:27			CCB	
		Known Conc:	0.00						
DQM Test: > + Concentration Limit									
		Result:	-1.82 < 5.00						
		Message	CCB Passed						
		Action	Continue						
DQM Test: < - Concentration Limit									
		Result:	-1.82 > -5.00						
		Message	CCB Passed						
		Action	Continue						
248533001	1	21	-1.85	0.0260	3/8/2010@11:03:16				
248548001	1	22	-2.24	0.00579	3/8/2010@11:04:09				
248548003	1	23	-1.45	0.0465	3/8/2010@11:05:01				
248551001	1	24	-0.552	0.0931	3/8/2010@11:05:54				
248551002	1	25	-1.81	0.0281	3/8/2010@11:06:46				
248555002	1	26	-1.99	0.0185	3/8/2010@11:07:39				
1202059721|960271|MB	1	27	-1.70	0.0339	3/8/2010@11:08:31				
1202059731||LCS	1	28	49.0	2.66	3/8/2010@11:09:23				
248072001	1	29	-2.36	-5.25e-4	3/8/2010@11:10:15				
1202059722||DUP	1	30	-1.95	0.0206	3/8/2010@11:11:06				
WCN100308-03	1	S3	105	5.54	3/8/2010@11:11:59			CCV	
		Known Conc:	100						
DQM Test: > + Percent Relative Difference									
		Result:	4.7 < 10.0						
		Message	CCV Passed						
		Action	Continue						
DQM Test: < - Percent Relative Difference									
		Result:	4.7 < 10.0						
		Message	CCV Passed						
		Action	Continue						
WCN100308-08	1	S7	-1.72	0.0325	3/8/2010@11:13:49			CCB	
		Known Conc:	0.00						

DQM Test: > + Concentration Limit								
Result:	-1.72 < 5.00							
Message	CCB Passed							
Action	Continue							
DQM Test: < - Concentration Limit								
Result:	-1.72 > -5.00							
Message	CCB Passed							
Action	Continue							
1202059725||MS	1	31	102	5.41	3/8/2010@11:15:40			
1202059728||MSD	1	32	101	5.33	3/8/2010@11:16:33			
248072002	1	33	-1.30	0.0543	3/8/2010@11:17:27			
248072003	1	34	-2.90	-0.0286	3/8/2010@11:18:21			
248097001	1	35	-1.88	0.0245	3/8/2010@11:19:14			
1202059724||DUP	1	36	-1.58	0.0398	3/8/2010@11:20:07			
1202059727||MS	1	37	100	5.32	3/8/2010@11:21:00			
1202059730||MSD	1	38	102	5.39	3/8/2010@11:21:53			
248097002	1	39	12.3	0.757	3/8/2010@11:22:47			
248097003	1	40	-1.04	0.0680	3/8/2010@11:23:38			
WCN100308-03	1	S3	106	5.63	3/8/2010@11:24:31			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:	6.4 < 10.0							
Message	CCV Passed							
Action	Continue							
DQM Test: < - Percent Relative Difference								
Result:	6.4 < 10.0							
Message	CCV Passed							
Action	Continue							
WCN100308-08	1	S7	-1.68	0.0346	3/8/2010@11:26:21			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:	-1.68 < 5.00							
Message	CCB Passed							
Action	Continue							
DQM Test: < - Concentration Limit								
Result:	-1.68 > -5.00							
Message	CCB Passed							
Action	Continue							
248097004	1	41	-0.871	0.0766	3/8/2010@11:28:09			
248298001	1	42	-1.67	0.0350	3/8/2010@11:29:02			
248298002	1	43	-1.93	0.0216	3/8/2010@11:29:53			
248298003	1	44	-0.109	0.116	3/8/2010@11:30:46			
248303001	1	45	2.92	0.273	3/8/2010@11:31:38			
248337001	1	46	-2.49	-0.00692	3/8/2010@11:32:32			
248375001	1	47	-2.35	1.70e-4	3/8/2010@11:33:26			
248375002	1	48	-2.05	0.0157	3/8/2010@11:34:19			
248397001	1	49	-1.87	0.0247	3/8/2010@11:35:14			
248397002	1	50	-2.17	0.00925	3/8/2010@11:36:06			
WCN100308-03	1	S3	106	5.62	3/8/2010@11:37:00			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:	6.2 < 10.0							
Message	CCV Passed							
Action	Continue							
DQM Test: < - Percent Relative Difference								
Result:	6.2 < 10.0							
Message	CCV Passed							
Action	Continue							
WCN100308-08	1	S7	-2.34	8.36e-4	3/8/2010@11:38:51			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:	-2.34 < 5.00							
Message	CCB Passed							
Action	Continue							
DQM Test: < - Concentration Limit								
Result:	-2.34 > -5.00							
Message	CCB Passed							
Action	Continue							

248407001	1	51	-1.69	0.0345	3/8/2010@11:40:39			
1202059723||DUP	1	52	-2.37	-0.00102	3/8/2010@11:41:33			
1202059726||MS	1	53	104	5.51	3/8/2010@11:42:26			
1202059729||MSD	1	54	82.4	4.39	3/8/2010@11:43:19			
248419001	1	55	-1.45	0.0465	3/8/2010@11:44:11			
248419002	1	56	-1.82	0.0276	3/8/2010@11:45:04			
1202053300|957584|MB	1	57	-1.77	0.0301	3/8/2010@11:45:57			
1202053310||LCS	1	58	52.0	2.81	3/8/2010@11:46:49			
247829002	1	59	-1.36	0.0515	3/8/2010@11:47:41			
1202053302||DUP	1	60	-1.35	0.0518	3/8/2010@11:48:33			
WCN100308-03	1	S3	107	5.65	3/8/2010@11:49:26			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					
WCN100308-08	1	S7	-1.71	0.0332	3/8/2010@11:51:15			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-1.71 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-1.71 > -5.00					
	Message		CCB Passed					
	Action		Continue					
1202053305||MS	1	61	108	5.71	3/8/2010@11:53:05			
1202053308||MSD	1	62	108	5.72	3/8/2010@11:54:00			
247865010	1	63	-1.12	0.0636	3/8/2010@11:54:55			
247865012	1	64	-1.20	0.0593	3/8/2010@11:55:48			
1202053303||DUP	1	65	-1.53	0.0427	3/8/2010@11:56:41			
1202053306||MS	1	66	86.3	4.59	3/8/2010@11:57:35			
1202053309||MSD	1	67	102	5.39	3/8/2010@11:58:28			
247865013	1	68	-1.42	0.0483	3/8/2010@11:59:21			
247865014	1	69	-1.44	0.0472	3/8/2010@12:00:15			
247865015	1	70	-1.50	0.0439	3/8/2010@12:01:07			
WCN100308-03	1	S3	106	5.63	3/8/2010@12:02:00			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		6.4 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		6.4 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN100308-08	1	S7	-1.63	0.0372	3/8/2010@12:03:51			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					
247865016	1	71	-1.63	0.0374	3/8/2010@12:05:41			
247865017	1	72	-1.38	0.0501	3/8/2010@12:06:33			
247865018	1	73	-2.31	0.00203	3/8/2010@12:07:25			
247865019	1	74	-1.70	0.0337	3/8/2010@12:08:18			
247865020	1	75	-1.21	0.0589	3/8/2010@12:09:10			
247866001	1	76	-1.82	0.0273	3/8/2010@12:10:05			
247919001	1	77	-1.59	0.0392	3/8/2010@12:10:59			
247919002	1	78	-1.41	0.0486	3/8/2010@12:11:53			

247922004	1	79	0.739	0.160	3/8/2010@12:12:48			
1202053301||DUP	1	80	0.641	0.155	3/8/2010@12:13:41			
WCN100308-03	1	S3	107	5.65	3/8/2010@12:14:34			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.8 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.8 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100308-08	1	S7	-1.86	0.0256	3/8/2010@12:16:24			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.86 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.86 > -5.00					
Message			CCB Passed					
Action			Continue					
1202053304||MS	1	81	98.2	5.21	3/8/2010@12:18:14			
1202053307||MSD	1	82	98.4	5.21	3/8/2010@12:19:07			
248164004	1	83	-1.49	0.0445	3/8/2010@12:20:01			
248382002	1	84	-1.58	0.0400	3/8/2010@12:20:54			
248382003	1	85	-1.82	0.0273	3/8/2010@12:21:47			
248401002	1	86	-1.52	0.0428	3/8/2010@12:22:40			
248401004	1	87	-1.38	0.0501	3/8/2010@12:23:33			
WCN100308-03	1	S3	106	5.59	3/8/2010@12:24:25			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					
WCN100308-08	1	S7	-1.71	0.0334	3/8/2010@12:26:15			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.71 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.71 > -5.00					
Message			CCB Passed					
Action			Continue					

Analyte Properties Table for OM_3-8-2010_10-24-48.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Author: axc2 Date : 3/8/2010

Channel 1: Current View

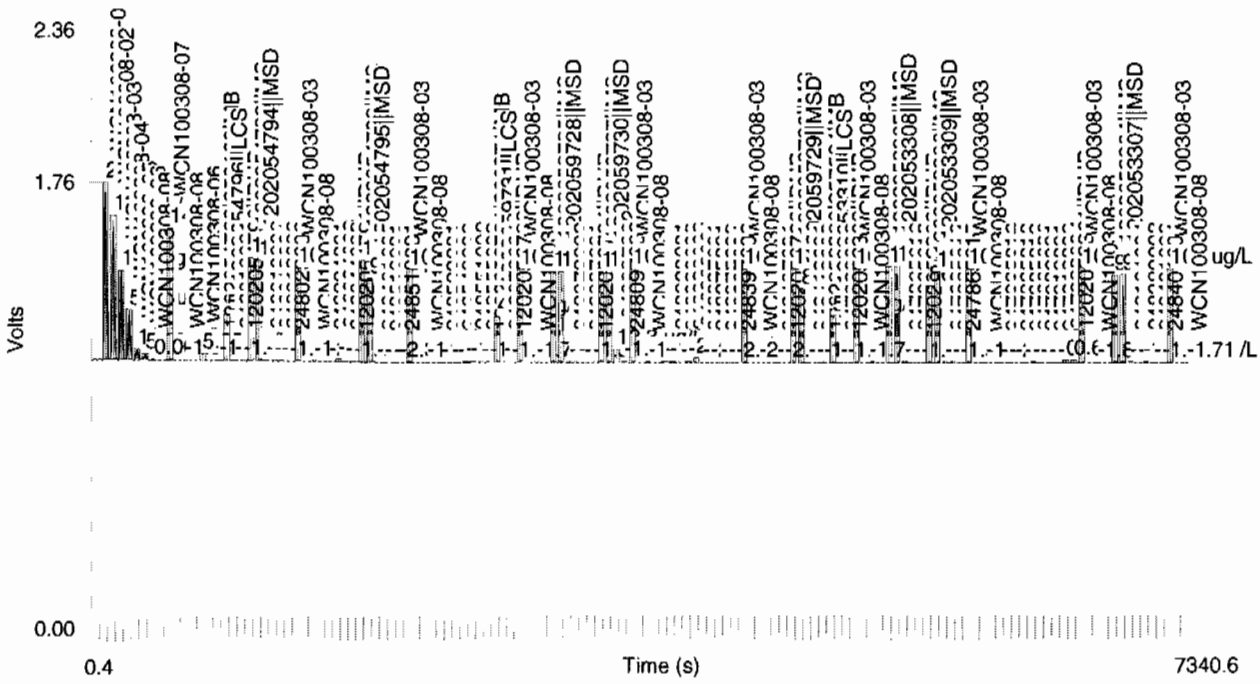
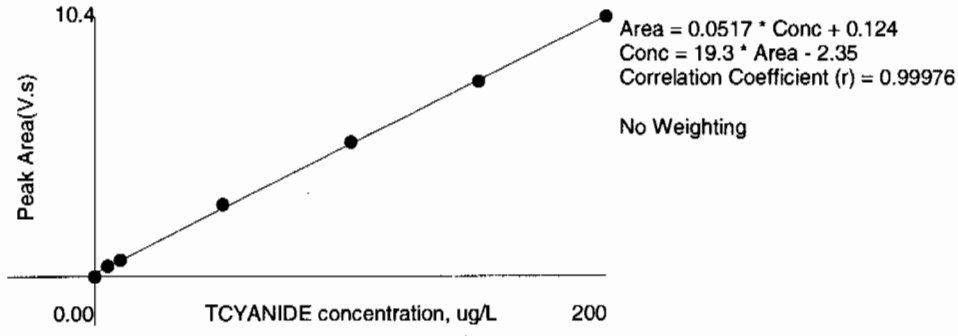


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	10.4	0.692	0.2	3/8/2010	10:26:48
2	150	1	7.82	0.567	0.7	3/8/2010	10:27:40
3	100	1	5.36	0.353	-1.3	3/8/2010	10:28:32
4	50.0	1	2.85	0.199	-5.1	3/8/2010	10:29:25
5	10.0	1	0.644	0.0420	-0.6	3/8/2010	10:30:18
6	5.00	1	0.400	0.0240	-4.6	3/8/2010	10:31:12
7	0.00	1	-0.0189	-0.00306		3/8/2010	10:32:06

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	3/8/2010 15:01:26	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 15:03:15	OM_3-8-2010_14-58-05
1202057161	959217	1	axc2	3/8/2010 15:05:05	OM_3-8-2010_14-58-05
1202057168	959217	1	axc2	3/8/2010 15:05:58	OM_3-8-2010_14-58-05
248044005	959217	1	axc2	3/8/2010 15:06:52	OM_3-8-2010_14-58-05
1202057163	959217	1	axc2	3/8/2010 15:07:45	OM_3-8-2010_14-58-05
1202057165	959217	1	axc2	3/8/2010 15:08:38	OM_3-8-2010_14-58-05
1202057167	959217	1	axc2	3/8/2010 15:09:31	OM_3-8-2010_14-58-05
248044006	959217	1	axc2	3/8/2010 15:10:24	OM_3-8-2010_14-58-05
248108001	959217	1	axc2	3/8/2010 15:11:16	OM_3-8-2010_14-58-05
248117001	959217	1	axc2	3/8/2010 15:12:08	OM_3-8-2010_14-58-05
248127002	959217	1	axc2	3/8/2010 15:13:02	OM_3-8-2010_14-58-05
CCV		1	axc2	3/8/2010 15:13:54	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 15:15:44	OM_3-8-2010_14-58-05
248162001	959217	1	axc2	3/8/2010 15:17:33	OM_3-8-2010_14-58-05
248162002	959217	1	axc2	3/8/2010 15:18:25	OM_3-8-2010_14-58-05
248162003	959217	1	axc2	3/8/2010 15:19:17	OM_3-8-2010_14-58-05
248162004	959217	1	axc2	3/8/2010 15:20:09	OM_3-8-2010_14-58-05
248164002	959217	1	axc2	3/8/2010 15:21:00	OM_3-8-2010_14-58-05
248168006	959217	1	axc2	3/8/2010 15:21:55	OM_3-8-2010_14-58-05
248169004	959217	1	axc2	3/8/2010 15:22:48	OM_3-8-2010_14-58-05
248188001	959217	1	axc2	3/8/2010 15:23:41	OM_3-8-2010_14-58-05
1202057162	959217	1	axc2	3/8/2010 15:24:34	OM_3-8-2010_14-58-05
1202057164*	959217	1	axc2	3/8/2010 15:25:27	OM_3-8-2010_14-58-05
CCV		1	axc2	3/8/2010 15:26:19	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 15:28:11	OM_3-8-2010_14-58-05
1202057166	959217	1	axc2	3/8/2010 15:30:01	OM_3-8-2010_14-58-05
248199001	959217	1	axc2	3/8/2010 15:30:54	OM_3-8-2010_14-58-05
248238001	959217	1	axc2	3/8/2010 15:31:46	OM_3-8-2010_14-58-05
248238002	959217	1	axc2	3/8/2010 15:32:39	OM_3-8-2010_14-58-05
1202057164*	959217	1	axc2	3/8/2010 15:33:32	OM_3-8-2010_14-58-05
248242001	959217	1	axc2	3/8/2010 15:34:25	OM_3-8-2010_14-58-05
248245001	959217	1	axc2	3/8/2010 15:35:17	OM_3-8-2010_14-58-05
248257001	959217	1	axc2	3/8/2010 15:36:09	OM_3-8-2010_14-58-05
248257002	959217	1	axc2	3/8/2010 15:37:01	OM_3-8-2010_14-58-05
1202057164	959217	1	axc2	3/8/2010 15:37:54	OM_3-8-2010_14-58-05
CCV		1	axc2	3/8/2010 15:38:47	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 15:40:39	OM_3-8-2010_14-58-05
1202057112	959204	1	axc2	3/8/2010 15:42:28	OM_3-8-2010_14-58-05
1202057119	959204	25	axc2	3/8/2010 15:43:18	OM_3-8-2010_14-58-05
248110001	959204	1	axc2	3/8/2010 15:44:13	OM_3-8-2010_14-58-05
248110002	959204	1	axc2	3/8/2010 15:45:07	OM_3-8-2010_14-58-05
248110003	959204	1	axc2	3/8/2010 15:46:00	OM_3-8-2010_14-58-05
248110004	959204	1	axc2	3/8/2010 15:46:54	OM_3-8-2010_14-58-05
248110005	959204	1	axc2	3/8/2010 15:47:47	OM_3-8-2010_14-58-05
248110006	959204	1	axc2	3/8/2010 15:48:41	OM_3-8-2010_14-58-05
248110007	959204	1	axc2	3/8/2010 15:49:33	OM_3-8-2010_14-58-05
248110008	959204	1	axc2	3/8/2010 15:50:26	OM_3-8-2010_14-58-05
CCV		1	axc2	3/8/2010 15:51:19	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 15:53:09	OM_3-8-2010_14-58-05
248118001	959204	1	axc2	3/8/2010 15:54:59	OM_3-8-2010_14-58-05
248118002	959204	1	axc2	3/8/2010 15:55:52	OM_3-8-2010_14-58-05
248118003	959204	1	axc2	3/8/2010 15:56:45	OM_3-8-2010_14-58-05
248118004	959204	1	axc2	3/8/2010 15:57:37	OM_3-8-2010_14-58-05
248118005	959204	1	axc2	3/8/2010 15:58:28	OM_3-8-2010_14-58-05
248118006	959204	1	axc2	3/8/2010 15:59:22	OM_3-8-2010_14-58-05
248118007	959204	1	axc2	3/8/2010 16:00:13	OM_3-8-2010_14-58-05
248189001	959204	1	axc2	3/8/2010 16:01:07	OM_3-8-2010_14-58-05

1202057113	959204	1	axc2	3/8/2010 16:02:01	OM_3-8-2010_14-58-05
1202057115	959204	1	axc2	3/8/2010 16:02:55	OM_3-8-2010_14-58-05
CCV		1	axc2	3/8/2010 16:03:48	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 16:05:39	OM_3-8-2010_14-58-05
1202057117	959204	1	axc2	3/8/2010 16:07:29	OM_3-8-2010_14-58-05
248189002	959204	1	axc2	3/8/2010 16:08:23	OM_3-8-2010_14-58-05
1202057114	959204	1	axc2	3/8/2010 16:09:16	OM_3-8-2010_14-58-05
1202057116	959204	1	axc2	3/8/2010 16:10:09	OM_3-8-2010_14-58-05
1202057118	959204	1	axc2	3/8/2010 16:11:02	OM_3-8-2010_14-58-05
1202054781	958165	1	axc2	3/8/2010 16:11:55	OM_3-8-2010_14-58-05
1202054788	958165	25	axc2	3/8/2010 16:12:47	OM_3-8-2010_14-58-05
247918001	958165	1	axc2	3/8/2010 16:13:39	OM_3-8-2010_14-58-05
247918002	958165	1	axc2	3/8/2010 16:14:33	OM_3-8-2010_14-58-05
247918003	958165	1	axc2	3/8/2010 16:15:25	OM_3-8-2010_14-58-05
CCV		1	axc2	3/8/2010 16:16:17	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 16:18:09	OM_3-8-2010_14-58-05
247918004	958165	1	axc2	3/8/2010 16:19:58	OM_3-8-2010_14-58-05
1202054782	958165	1	axc2	3/8/2010 16:20:49	OM_3-8-2010_14-58-05
1202054784	958165	1	axc2	3/8/2010 16:21:44	OM_3-8-2010_14-58-05
1202054786	958165	1	axc2	3/8/2010 16:22:39	OM_3-8-2010_14-58-05
247918005	958165	1	axc2	3/8/2010 16:23:32	OM_3-8-2010_14-58-05
1202054783	958165	1	axc2	3/8/2010 16:24:26	OM_3-8-2010_14-58-05
1202054785	958165	1	axc2	3/8/2010 16:25:20	OM_3-8-2010_14-58-05
1202054787	958165	1	axc2	3/8/2010 16:26:12	OM_3-8-2010_14-58-05
247918006	958165	1	axc2	3/8/2010 16:27:06	OM_3-8-2010_14-58-05
247918007	958165	1	axc2	3/8/2010 16:28:00	OM_3-8-2010_14-58-05
CCV		1	axc2	3/8/2010 16:28:51	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 16:30:42	OM_3-8-2010_14-58-05
248009001	958165	1	axc2	3/8/2010 16:32:32	OM_3-8-2010_14-58-05
248009002	958165	1	axc2	3/8/2010 16:33:25	OM_3-8-2010_14-58-05
248009003	958165	1	axc2	3/8/2010 16:34:17	OM_3-8-2010_14-58-05
248009004	958165	1	axc2	3/8/2010 16:35:10	OM_3-8-2010_14-58-05
248009005	958165	1	axc2	3/8/2010 16:36:03	OM_3-8-2010_14-58-05
248025001	958165	1	axc2	3/8/2010 16:36:55	OM_3-8-2010_14-58-05
248025002	958165	1	axc2	3/8/2010 16:37:48	OM_3-8-2010_14-58-05
248025004	958165	1	axc2	3/8/2010 16:38:42	OM_3-8-2010_14-58-05
248025006	958165	1	axc2	3/8/2010 16:39:36	OM_3-8-2010_14-58-05
248422001	958165	1	axc2	3/8/2010 16:40:31	OM_3-8-2010_14-58-05
CCV		1	axc2	3/8/2010 16:41:23	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 16:43:15	OM_3-8-2010_14-58-05
248422002	958165	1	axc2	3/8/2010 16:45:06	OM_3-8-2010_14-58-05
1202061930	961278	1	axc2	3/8/2010 16:46:01	OM_3-8-2010_14-58-05
1202061932	961278	1	axc2	3/8/2010 16:46:53	OM_3-8-2010_14-58-05
247819001	961278	1	axc2	3/8/2010 16:47:47	OM_3-8-2010_14-58-05
1202061931	961278	1	axc2	3/8/2010 16:48:41	OM_3-8-2010_14-58-05
CCV		1	axc2	3/8/2010 16:49:33	OM_3-8-2010_14-58-05
CCB		1	axc2	3/8/2010 16:51:24	OM_3-8-2010_14-58-05

Author: axc2

Date : 3/8/2010

Original Run Filename: OM_3-8-2010_14-58-05.OMN created 3/8/2010 14:58:05
Original Run Author's Signature: [axc2]
Current Run Filename: OM_3-8-2010_14-58-05.OMN last modified 3/8/2010 16:52:28
Current Run Author's Signature: [axc2]
Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Channel 1 TCYANIDE Area (Vs)	Detection Time	ADF	MDF	Description
WCN100308-03	1	S3	103	5.47	3/8/2010@15:01:26			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		3.3 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		3.3 < 10.0					
	Message		CCV Passed					
	Action		Continue					
	Calibration:		Table/Fig. 1					
WCN100308-08	1	S7	-1.49	0.0446	3/8/2010@15:03:15			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-1.49 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-1.49 > -5.00					
	Message		CCB Passed					
	Action		Continue					
1202057161|959217|MB	1	1	-2.52	-0.00888	3/8/2010@15:05:05			
1202057168||LCS	1	2	49.3	2.67	3/8/2010@15:05:58			
248044005	1	3	-2.52	-0.00856	3/8/2010@15:06:52			
1202057163||DUP	1	4	-2.04	0.0161	3/8/2010@15:07:45			
1202057165||MS	1	5	101	5.35	3/8/2010@15:08:38			
1202057167||MSD	1	6	105	5.56	3/8/2010@15:09:31			
248044006	1	7	-1.95	0.0206	3/8/2010@15:10:24			
248108001	1	8	-2.52	-0.00848	3/8/2010@15:11:16			
248117001	1	9	-2.48	-0.00645	3/8/2010@15:12:08			
248127002	1	10	-0.731	0.0839	3/8/2010@15:13:02			
WCN100308-03	1	S3	106	5.63	3/8/2010@15:13:54			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		6.4 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		6.4 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN100308-08	1	S7	-1.84	0.0265	3/8/2010@15:15:44			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-1.84 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-1.84 > -5.00					
	Message		CCB Passed					
	Action		Continue					
248162001	1	11	-2.35	1.80e-4	3/8/2010@15:17:33			
248162002	1	12	-2.05	0.0154	3/8/2010@15:18:25			
248162003	1	13	-2.14	0.0108	3/8/2010@15:19:17			
248162004	1	14	-2.03	0.0167	3/8/2010@15:20:09			
248164002	1	15	-1.57	0.0404	3/8/2010@15:21:00			

248168006	1	16	-1.99	0.0187	3/8/2010@15:21:55			
248169004	1	17	-1.56	0.0412	3/8/2010@15:22:48			
248188001	1	18	-2.03	0.0168	3/8/2010@15:23:41			
1202057162||DUP	1	19	-2.31	0.00215	3/8/2010@15:24:34			
1202057164||MS	1	20	70.7	3.78	3/8/2010@15:25:27			
WCN100308-03	1	S3	109	5.76	3/8/2010@15:26:19			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		9.0 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		9.0 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN100308-08	1	S7	-1.78	0.0295	3/8/2010@15:28:11			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-1.78 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-1.78 > -5.00					
	Message		CCB Passed					
	Action		Continue					
1202057166||MSD	1	21	110	5.81	3/8/2010@15:30:01			
248199001	1	22	-1.68	0.0348	3/8/2010@15:30:54			
248238001	1	23	-1.98	0.0191	3/8/2010@15:31:46			
248238002	1	24	-1.94	0.0214	3/8/2010@15:32:39			
1202057164||MS	1	20	71.8	3.84	3/8/2010@15:33:32			
248242001	1	25	-1.93	0.0217	3/8/2010@15:34:25			
248245001	1	26	-2.35	1.99e-4	3/8/2010@15:35:17			
248257001	1	27	-2.49	-0.00739	3/8/2010@15:36:09			
248257002	1	28	-1.86	0.0256	3/8/2010@15:37:01			
1202057164||MS	1	20	106	5.61	3/8/2010@15:37:54			
WCN100308-03	1	S3	104	5.52	3/8/2010@15:38:47			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		4.3 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		4.3 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN100308-08	1	S7	-0.768	0.0819	3/8/2010@15:40:39			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-0.768 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-0.768 > -5.00					
	Message		CCB Passed					
	Action		Continue					
1202057112|959204|MB	1	29	-2.19	0.00819	3/8/2010@15:42:28			
1202057119||LCS	1	30	31.1	1.73	3/8/2010@15:43:18		25.00	
248110001	1	31	-0.304	0.106	3/8/2010@15:44:13			
248110002	1	32	-1.46	0.0463	3/8/2010@15:45:07			
248110003	1	33	-2.31	0.00237	3/8/2010@15:46:00			
248110004	1	34	-2.16	0.00990	3/8/2010@15:46:54			
248110005	1	35	-0.698	0.0856	3/8/2010@15:47:47			
248110006	1	36	-1.47	0.0458	3/8/2010@15:48:41			
248110007	1	37	-1.24	0.0576	3/8/2010@15:49:33			
248110008	1	38	-0.761	0.0823	3/8/2010@15:50:26			
WCN100308-03	1	S3	106	5.60	3/8/2010@15:51:19			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					
WCN100308-08	1	S7	-1.95	0.0205	3/8/2010@15:53:09			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					
248118001	1	39	0.0365	0.124	3/8/2010@15:54:59			
248118002	1	40	-2.19	0.00813	3/8/2010@15:55:52			
248118003	1	41	-0.754	0.0827	3/8/2010@15:56:45			
248118004	1	42	-1.55	0.0414	3/8/2010@15:57:37			
248118005	1	43	-1.86	0.0257	3/8/2010@15:58:28			
248118006	1	44	-0.195	0.112	3/8/2010@15:59:22			
248118007	1	45	-2.48	-0.00657	3/8/2010@16:00:13			
248189001	1	46	1.50	0.200	3/8/2010@16:01:07			
1202057113||DUP	1	47	1.10	0.179	3/8/2010@16:02:01			
1202057115||MS	1	48	98.4	5.21	3/8/2010@16:02:55			
WCN100308-03	1	S3	106	5.63	3/8/2010@16:03:48			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100308-08	1	S7	-2.33	0.00121	3/8/2010@16:05:39			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.33 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.33 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202057117||MSD	1	49	97.7	5.18	3/8/2010@16:07:29			
248189002	1	50	0.509	0.148	3/8/2010@16:08:23			
1202057114||DUP	1	51	0.322	0.138	3/8/2010@16:09:16			
1202057116||MS	1	52	93.9	4.98	3/8/2010@16:10:09			
1202057118||MSD	1	53	93.9	4.98	3/8/2010@16:11:02			
1202054781|958165|MB	1	54	-2.89	-0.0281	3/8/2010@16:11:55			
1202054788||LCS	1	55	20.3	1.17	3/8/2010@16:12:47		25.00	
247918001	1	56	-1.17	0.0613	3/8/2010@16:13:39			
247918002	1	57	-1.63	0.0371	3/8/2010@16:14:33			
247918003	1	58	-2.35	2.32e-4	3/8/2010@16:15:25			
WCN100308-03	1	S3	106	5.59	3/8/2010@16:16:17			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					
WCN100308-08	1	S7	-2.61	-0.0134	3/8/2010@16:18:09			CCB

		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.61 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.61 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247918004	1	59	-1.83	0.0268	3/8/2010@16:19:58			
1202054782||DUP	1	60	-1.86	0.0252	3/8/2010@16:20:49			
1202054784||MS	1	61	88.6	4.71	3/8/2010@16:21:44			
1202054786||MSD	1	62	102	5.39	3/8/2010@16:22:39			
247918005	1	63	-1.63	0.0372	3/8/2010@16:23:32			
1202054783||DUP	1	64	-2.35	2.22e-4	3/8/2010@16:24:26			
1202054785||MS	1	65	103	5.44	3/8/2010@16:25:20			
1202054787||MSD	1	66	99.0	5.24	3/8/2010@16:26:12			
247918006	1	67	-0.953	0.0724	3/8/2010@16:27:06			
247918007	1	68	0.145	0.129	3/8/2010@16:28:00			
WCN100308-03	1	S3	105	5.54	3/8/2010@16:28:51			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	4.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	4.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100308-08	1	S7	-2.34	4.90e-4	3/8/2010@16:30:42			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.34 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.34 > -5.00					
		Message	CCB Passed					
		Action	Continue					
248009001	1	69	-2.44	-0.00446	3/8/2010@16:32:32			
248009002	1	70	-1.42	0.0484	3/8/2010@16:33:25			
248009003	1	71	2.15	0.233	3/8/2010@16:34:17			
248009004	1	72	-1.18	0.0606	3/8/2010@16:35:10			
248009005	1	73	-2.05	0.0157	3/8/2010@16:36:03			
248025001	1	74	-2.44	-0.00448	3/8/2010@16:36:55			
248025002	1	75	-1.60	0.0388	3/8/2010@16:37:48			
248025004	1	76	-0.787	0.0809	3/8/2010@16:38:42			
248025006	1	77	-0.371	0.102	3/8/2010@16:39:36			
248422001	1	78	-2.28	0.00369	3/8/2010@16:40:31			
WCN100308-03	1	S3	102	5.40	3/8/2010@16:41:23			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100308-08	1	S7	-2.30	0.00277	3/8/2010@16:43:15			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.30 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.30 > -5.00					
		Message	CCB Passed					

		Action	Continue					
248422002	1	79	-1.20	0.0595	3/8/2010@16:45:06			
1202061930|961278|MB	1	80	-1.83	0.0272	3/8/2010@16:46:01			
1202061932||LCS	1	81	-1.96	0.0203	3/8/2010@16:46:53			
247819001	1	82	110	5.83	3/8/2010@16:47:47			
1202061931||DUP	1	83	184	9.64	3/8/2010@16:48:41			
WCN100308-03	1	S3	106	5.59	3/8/2010@16:49:33			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					
WCN100308-08	1	S7	-2.34	3.67e-4	3/8/2010@16:51:24			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-2.34 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-2.34 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_3-8-2010_14-58-05.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Author: axc2 Date : 3/8/2010

Channel 1: Current View

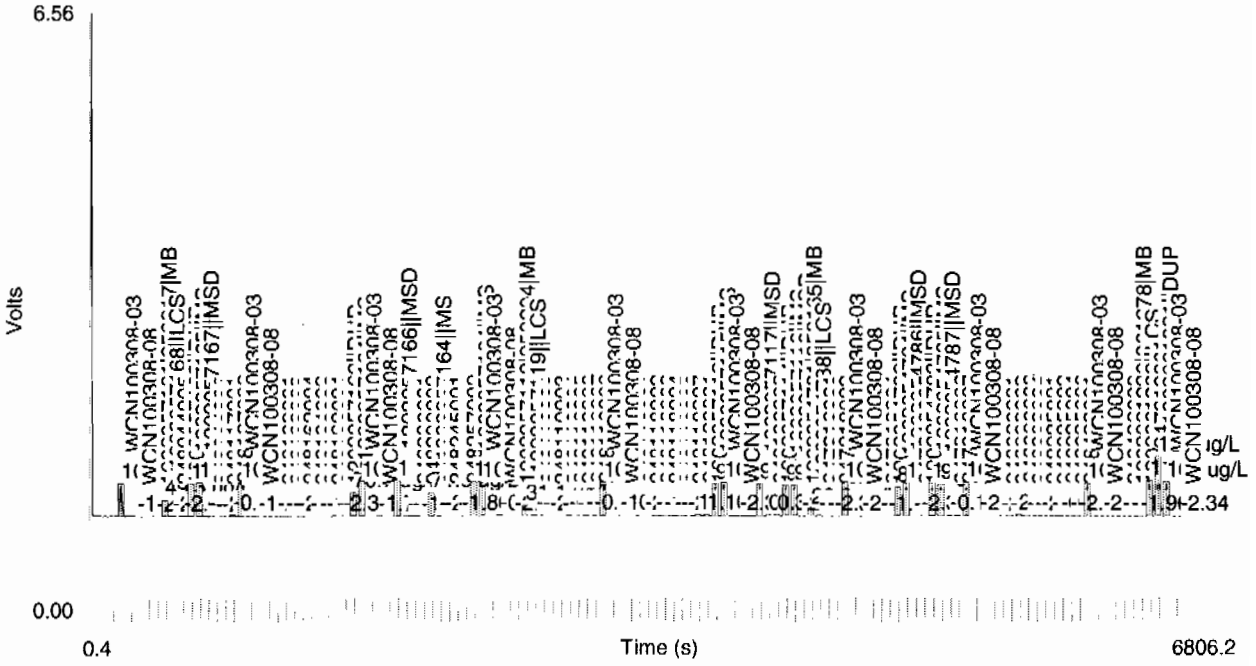
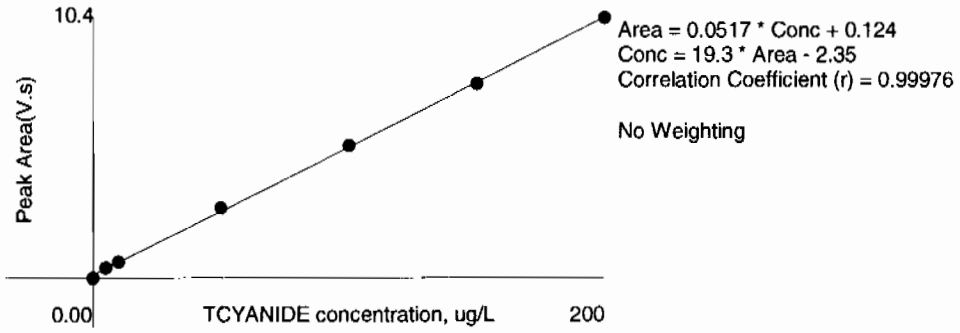


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	10.4	0.692	0.2	3/8/2010	10:26:48
2	150	1	7.82	0.567	0.7	3/8/2010	10:27:40
3	100	1	5.36	0.353	-1.3	3/8/2010	10:28:32
4	50.0	1	2.85	0.199	-5.1	3/8/2010	10:29:25
5	10.0	1	0.644	0.0420	-0.6	3/8/2010	10:30:18
6	5.00	1	0.400	0.0240	-4.6	3/8/2010	10:31:12
7	0.00	1	-0.0189	-0.00306		3/8/2010	10:32:06

Figure 1: TCYANIDE



Ion Chromatography

Prep Logbook

Ion Chromatography (IC)

Batch ID: **962077.0** Verified by: _____

Analyst: Mary Sherwood

Method: EPA 300.0 PREP

Lab SOP: GL-GC-E-086 REV# 17

Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202063613	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MS	1202063609	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MS	1202063610	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MSD	1202063611	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MSD	1202063612	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
1202063606 MB	19-MAR-2010 13:15:00	Soil	4	40	10	
1202063613 LCS	19-MAR-2010 13:15:00	Soil	4	40	10	
248110001	19-MAR-2010 13:15:00	Soil	4	40	10	
1202063607 DUP (248110001)	19-MAR-2010 13:15:00	Soil	4	40	10	
1202063609 MS (248110001)	19-MAR-2010 13:15:00	Soil	4	40	10	
1202063611 MSD (248110001)	19-MAR-2010 13:15:00	Soil	4	40	10	
248110002	19-MAR-2010 13:15:00	Soil	4	40	10	
248110003	19-MAR-2010 13:15:00	Soil	4	40	10	
248110004	19-MAR-2010 13:15:00	Soil	4	40	10	
248110005	19-MAR-2010 13:15:00	Soil	4	40	10	
248110006	19-MAR-2010 13:15:00	Soil	4	40	10	
248110007	19-MAR-2010 13:15:00	Soil	4	40	10	
248110008	19-MAR-2010 13:15:00	Soil	4	40	10	
248118001	19-MAR-2010 13:15:00	Soil	4	40	10	
248118002	19-MAR-2010 13:15:00	Soil	4	40	10	
248118003	19-MAR-2010 13:15:00	Soil	4	40	10	
248118004	19-MAR-2010 13:15:00	Soil	4	40	10	
248118005	19-MAR-2010 13:15:00	Soil	4	40	10	
248118006	19-MAR-2010 13:15:00	Soil	4	40	10	
248118007	19-MAR-2010 13:15:00	Soil	4	40	10	
1202063608 DUP (248118007)	19-MAR-2010 13:15:00	Soil	4	40	10	
1202063610 MS (248118007)	19-MAR-2010 13:15:00	Soil	4	40	10	
1202063612 MSD (248118007)	19-MAR-2010 13:15:00	Soil	4	40	10	

Prep Logbook

Batch ID: **962077.0** Verified by: _____

Analyst: Mary Sherwood

Method: EPA 300.0 PREP

Lab SOP: GL-GC-E-086 REV# 17

Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202063613	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MS	1202063609	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MS	1202063610	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MSD	1202063611	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MSD	1202063612	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

Reagent/Solvent Lot ID	Description	Amount

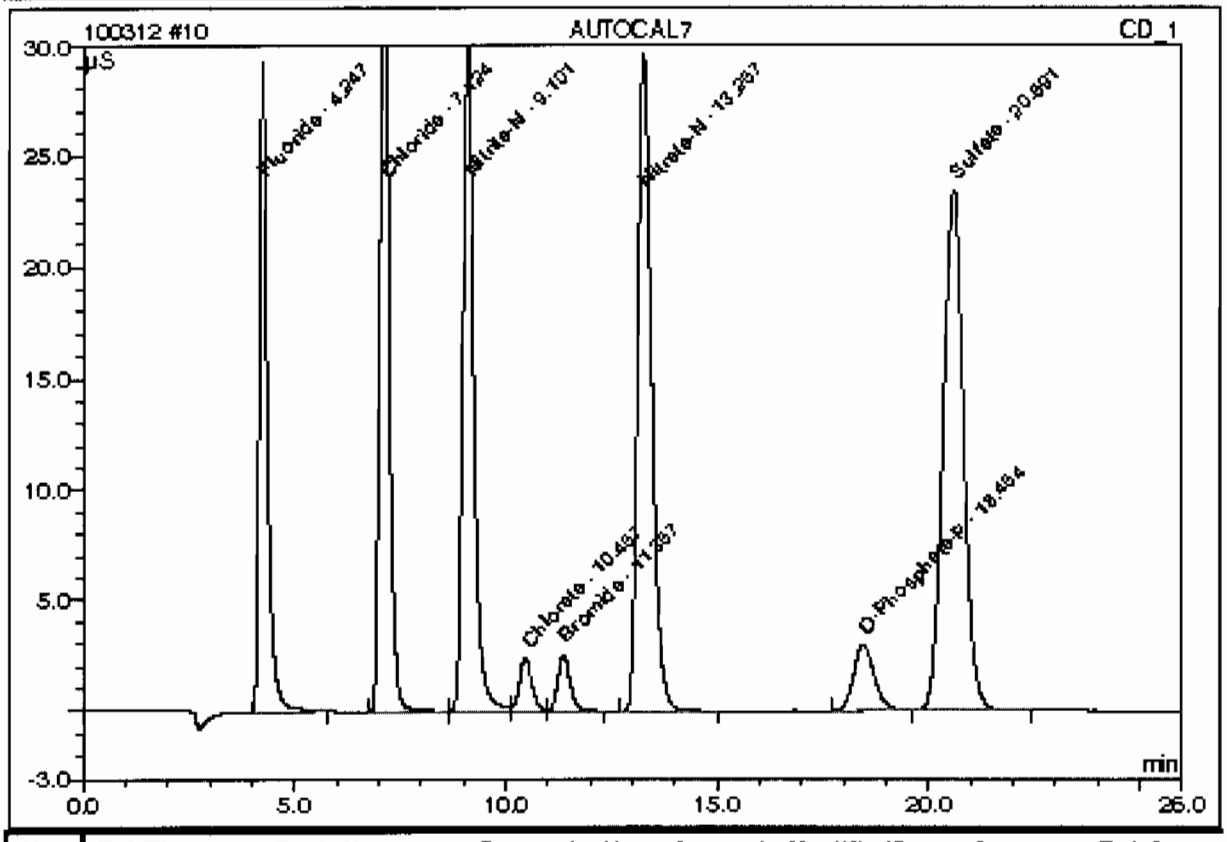
Comments:

This is runlog for Sequence 100312.seq for IC6

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	03/12/10 11:16		1	100312	MAR1
BLK	03/12/10 11:44		1	100312	MAR1
ICAL-07	03/12/10 12:13		1	100312	MAR1
ICAL-06	03/12/10 12:42		1	100312	MAR1
ICAL-05	03/12/10 13:11		1	100312	MAR1
ICAL-04	03/12/10 13:40		1	100312	MAR1
ICAL-03	03/12/10 14:08		1	100312	MAR1
ICAL-02	03/12/10 14:37		1	100312	MAR1
ICAL-01	03/12/10 15:06		1	100312	MAR1
ICV	03/12/10 15:35		1	100312	MAR1
ICB	03/12/10 16:04		1	100312	MAR1
1202063659	03/12/10 16:33	962090	1	100312	MAR1
1202063663	03/12/10 17:02	962090	1	100312	MAR1
248065001	03/12/10 17:31	962090	1	100312	MAR1
1202063660	03/12/10 18:00	962090	1	100312	MAR1
1202063661	03/12/10 18:29	962090	1	100312	MAR1
1202063662	03/12/10 18:58	962090	1	100312	MAR1
248065002	03/12/10 19:27	962090	1	100312	MAR1
248065003	03/12/10 19:55	962090	1	100312	MAR1
248065004	03/12/10 20:24	962090	1	100312	MAR1
248065005	03/12/10 20:53	962090	1	100312	MAR1
CVH	03/12/10 21:22		1	100312	MAR1
CCB	03/12/10 21:51		1	100312	MAR1
248065006	03/12/10 22:20	962090	1	100312	MAR1
248065007	03/12/10 22:49	962090	1	100312	MAR1
248065008	03/12/10 23:18	962090	1	100312	MAR1
248068001	03/12/10 23:47	962090	1	100312	MAR1

10 AUTOCAL7

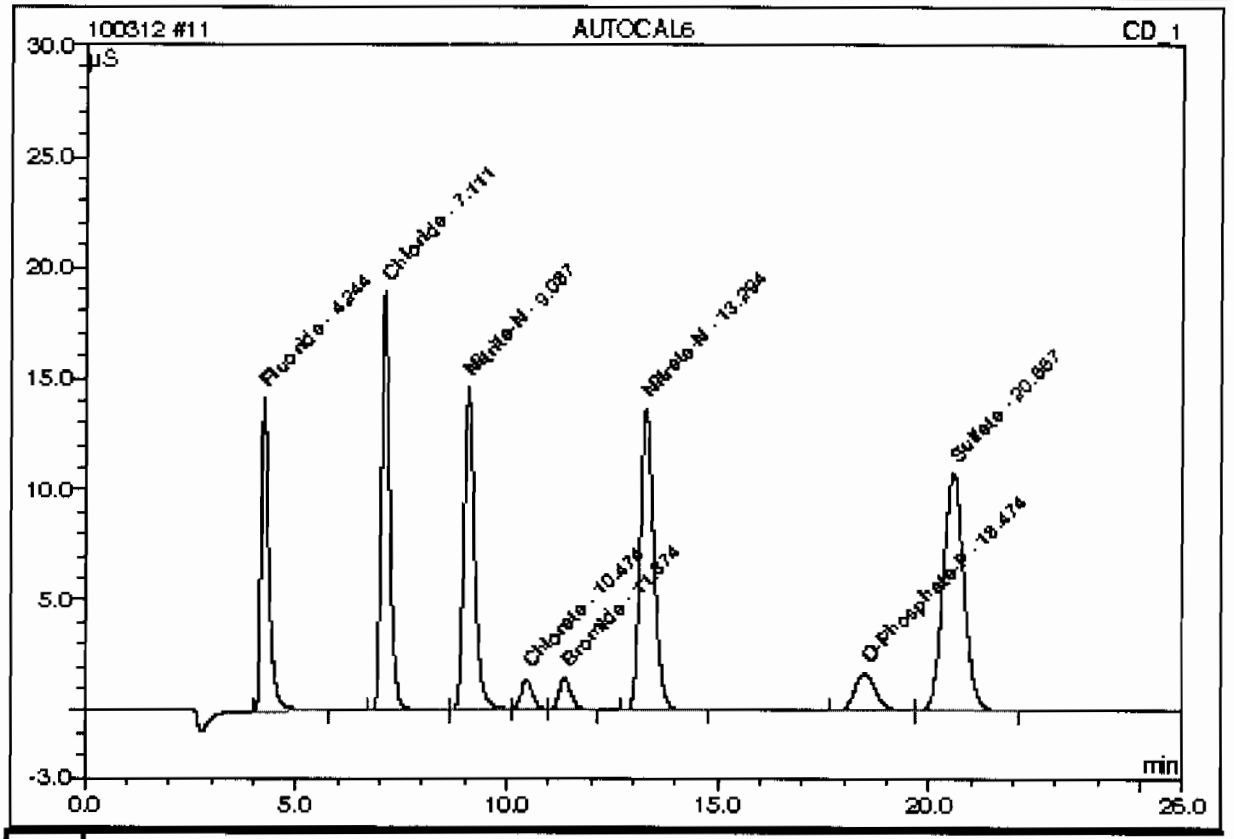
Sample Name:	AUTOCAL7	*Injection Volume:*	1.0
Vial Number:	3	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100312an	*Sample Amount:*	1.0000
Recording Time:	3/12/2010 12:13	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GLGCE086;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	10.0082		6.22157	11.84
2	7.12	Chloride	20.0000	20.0326		9.47163	18.02
3	9.10	Nitrite-N	10.0000	10.0084		9.13994	17.39
4	10.47	Chlorate	5.0000	5.0492		0.79245	1.51
5	11.37	Bromide	5.0000	5.0195		0.84636	1.61
6	13.26	Nitrate-N	10.0000	10.0123		11.22910	21.36
7	18.45	O-Phosphate-P	5.0000	5.0489		1.66651	3.17
8	20.59	Sulfate	40.0000	40.0441		13.19754	25.11
Total:				105.2231	0.000	52.565	100.00

11 AUTOCAL6

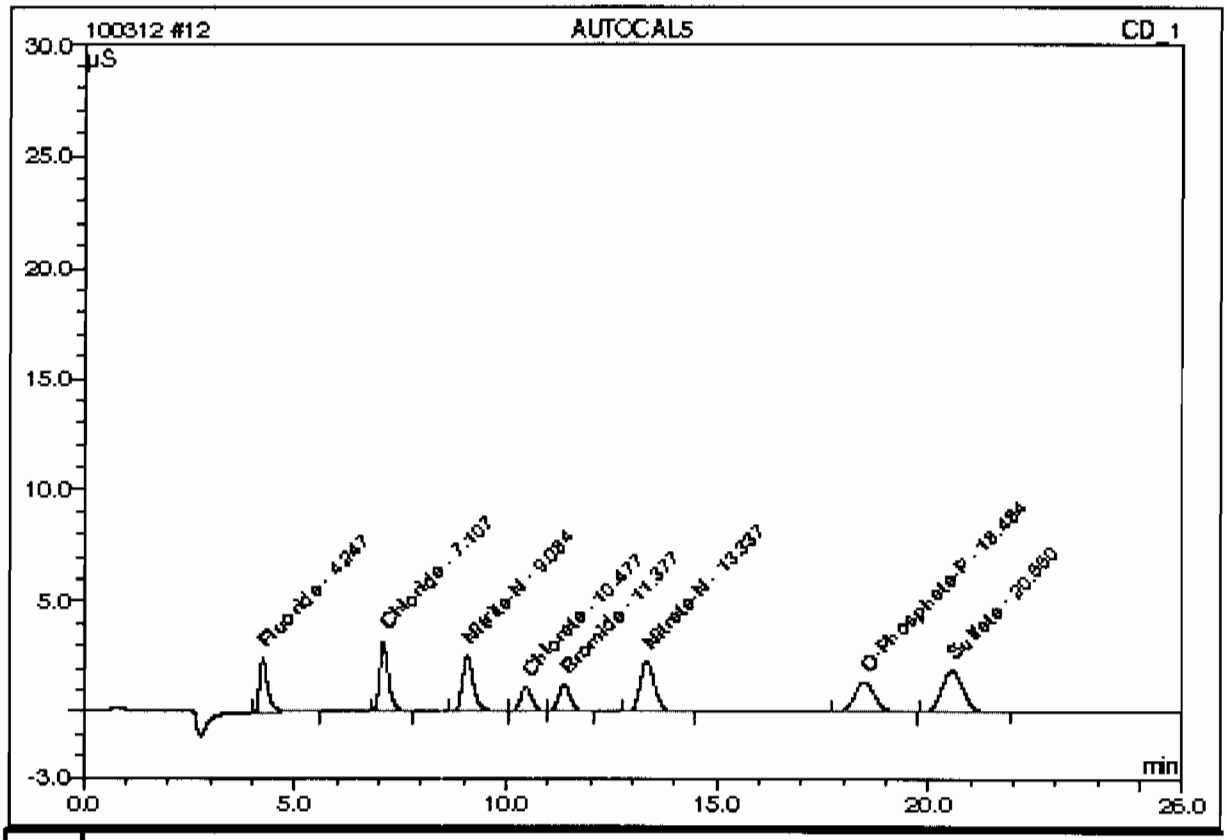
Sample Name:	AUTOCAL6	*Injection Volume:*	1.0
Vial Number:	4	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100312an	*Sample Amount:*	1.0000
Recording Time:	3/12/2010 12:42	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GLGCE086;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	4.8561		2.99032	12.03
2	7.11	Chloride	10.0000	9.3413		4.33873	17.46
3	9.09	Nitrite-N	5.0000	4.8263		4.34814	17.50
4	10.47	Chlorate	3.0000	2.9358		0.46050	1.85
5	11.37	Bromide	3.0000	2.9362		0.49122	1.98
6	13.29	Nitrate-N	5.0000	4.6985		5.14610	20.71
7	18.47	O-Phosphate-P	3.0000	2.9248		0.95491	3.84
8	20.57	Sulfate	20.0000	18.9050		6.12051	24.63
Total:				51.4240	0.000	24.850	100.00

12 AUTOCAL5

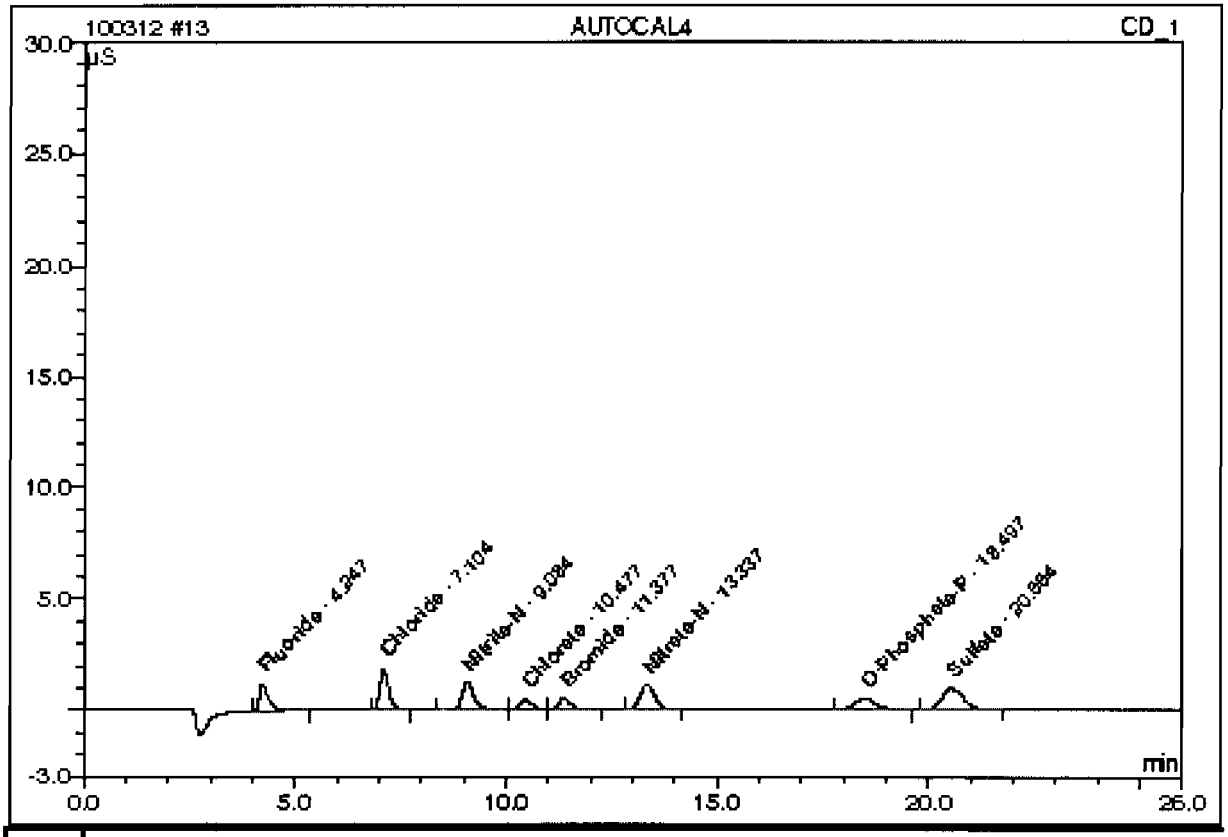
Sample Name:	AUTOCAL5	*Injection Volume:*	1.0
Vial Number:	5	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100312an	*Sample Amount:*	1.0000
Recording Time:	3/12/2010 13:11	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	1.0000	0.9247		0.54471	9.60
2	7.11	Chloride	2.0000	1.7462		0.75932	13.38
3	9.08	Nitrite-N	1.0000	0.9359		0.79384	13.99
4	10.48	Chlorate	2.5000	2.3846		0.36888	6.50
5	11.38	Bromide	2.5000	2.4488		0.40750	7.18
6	13.34	Nitrate-N	1.0000	0.9150		0.90731	15.99
7	18.48	O-Phosphate-P	2.5000	2.4403		0.78917	13.90
8	20.55	Sulfate	4.0000	3.6492		1.10495	19.47
Total:				15.4446	0.000	5.676	100.00

13 AUTOCAL4

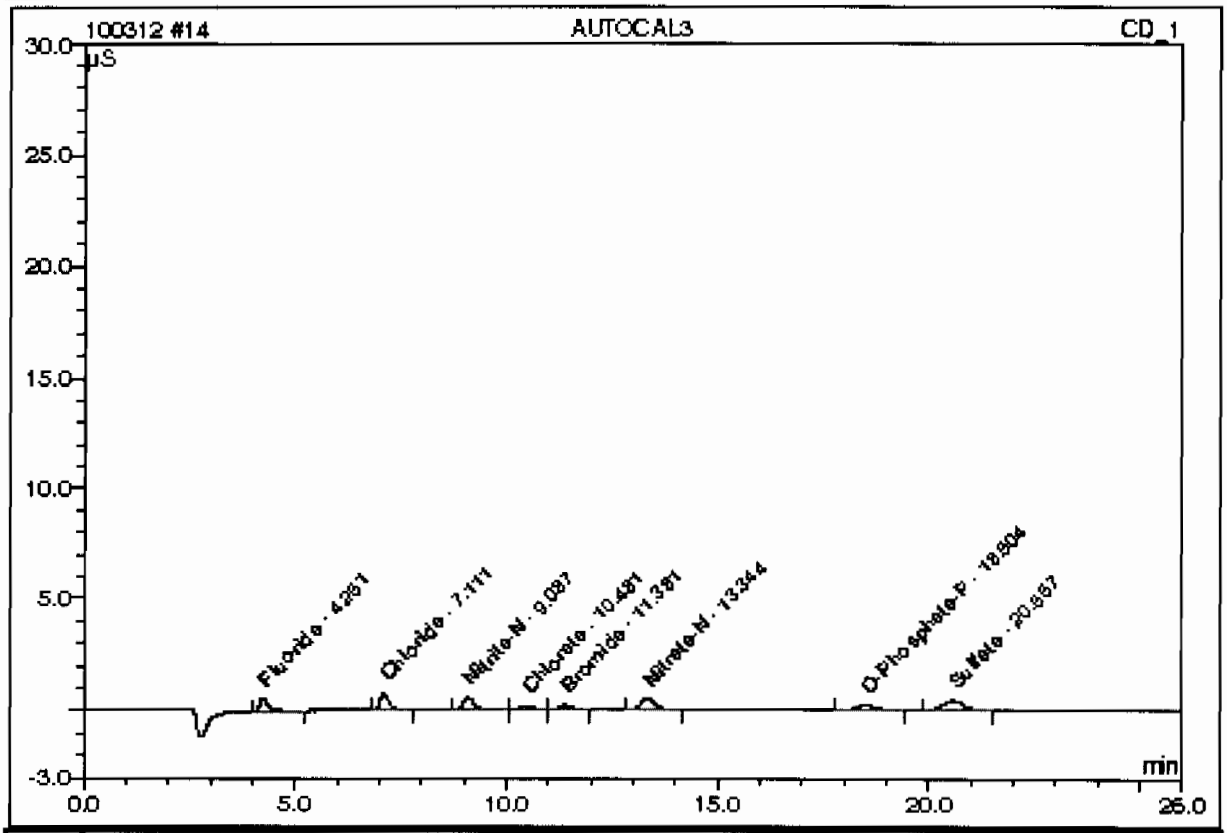
Sample Name:	AUTOCAL4	*Injection Volume:*	1.0
Vial Number:	6	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100312an	*Sample Amount:*	1.0000
Recording Time:	3/12/2010 13:40	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GLGCB086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	0.5000	0.5181		0.29079	10.43
2	7.10	Chloride	1.0000	1.0724		0.44928	16.11
3	9.08	Nitrite-N	0.5000	0.5242		0.41773	14.98
4	10.48	Chlorate	1.0000	1.0431		0.15901	5.70
5	11.38	Bromide	1.0000	1.0406		0.17190	6.16
6	13.34	Nitrate-N	0.5000	0.5021		0.43247	15.51
7	18.50	O-Phosphate-P	1.0000	0.9735		0.29999	10.76
8	20.55	Sulfate	2.0000	2.0444		0.56783	20.36
Total:				7.7184	0.000	2.789	100.00

14 AUTOCAL3

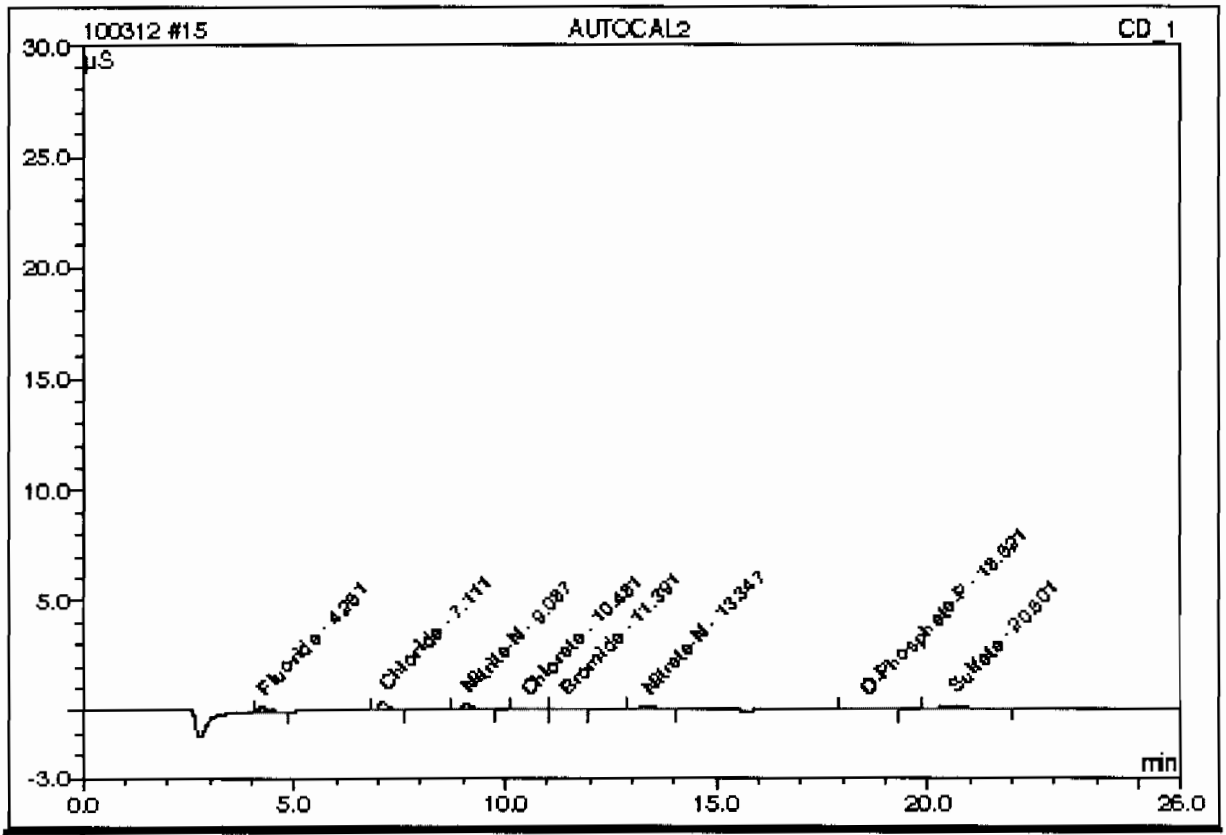
Sample Name:	AUTOCAL3	*Injection Volume:*	1.0
Vial Number:	7	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100312an	*Sample Amount:*	1.0000
Recording Time:	3/12/2010 14:08	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GLGCE086;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	0.2767		0.13273	10.36
2	7.11	Chloride	0.5000	0.6177		0.19612	15.31
3	9.09	Nitrite-N	0.2500	0.2802		0.18850	14.72
4	10.48	Chlorate	0.5000	0.4873		0.07006	5.47
5	11.38	Bromide	0.5000	0.4930		0.07924	6.19
6	13.34	Nitrate-N	0.2500	0.3124		0.20857	16.29
7	18.50	O-Phosphate-P	0.5000	0.4938		0.13887	10.84
8	20.57	Sulfate	1.0000	1.2082		0.26661	20.82
Total:				4.1694	0.000	1.281	100.00

15 AUTOCAL2

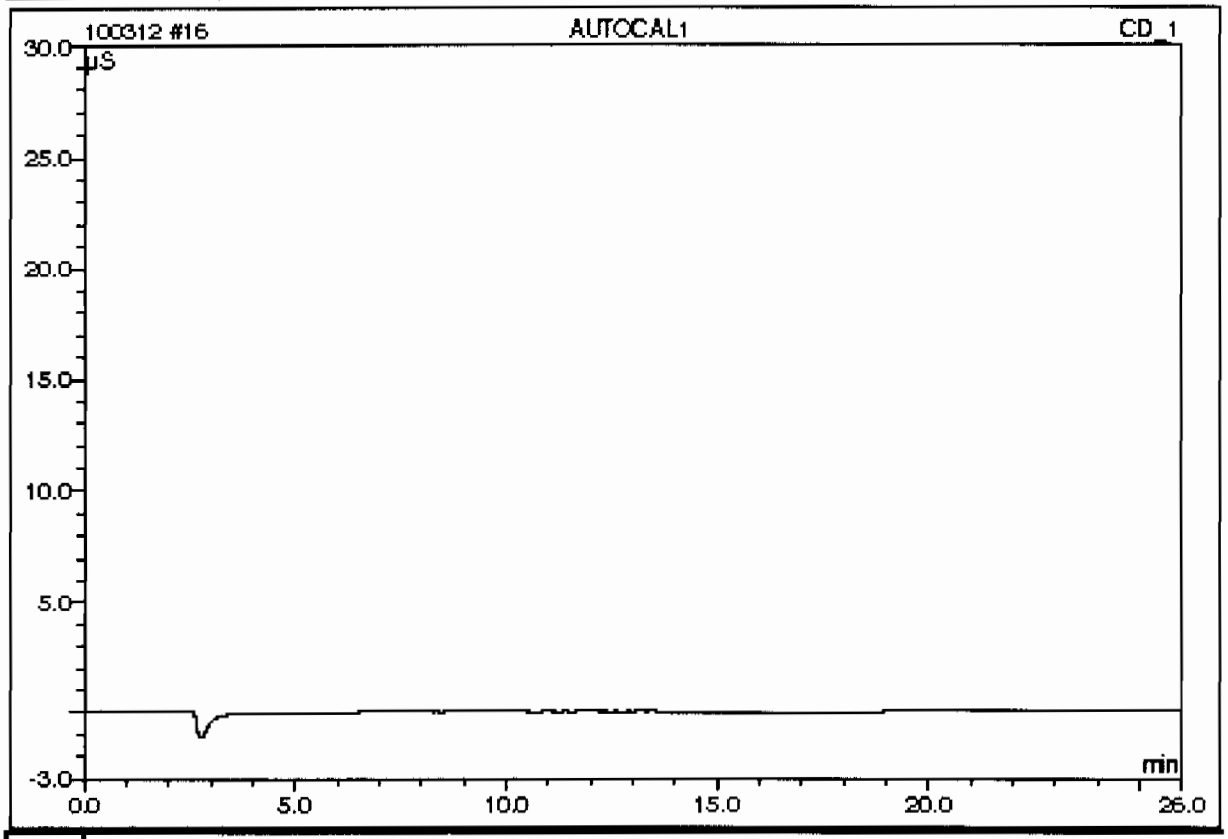
Sample Name:	AUTOCAL2	*Injection Volume:*	1.0
Vial Number:	8	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100312an	*Sample Amount:*	1.0000
Recording Time:	3/12/2010 14:37	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GLGCE086;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	0.1393		0.05352	9.78
2	7.11	Chloride	0.2000	0.3635		0.09592	17.52
3	9.09	Nitrite-N	0.1000	0.1457		0.07635	13.95
4	10.48	Chlorate	0.2000	0.2155		0.02807	5.13
5	11.39	Bromide	0.2000	0.2128		0.03286	6.00
6	13.35	Nitrate-N	0.1000	0.1770		0.07876	14.39
7	18.52	O-Phosphate-P	0.2000	0.2166		0.04829	8.82
8	20.60	Sulfate	0.4000	0.7224		0.13373	24.43
Total:				2.1926	0.000	0.548	100.00

16 AUTOCAL1

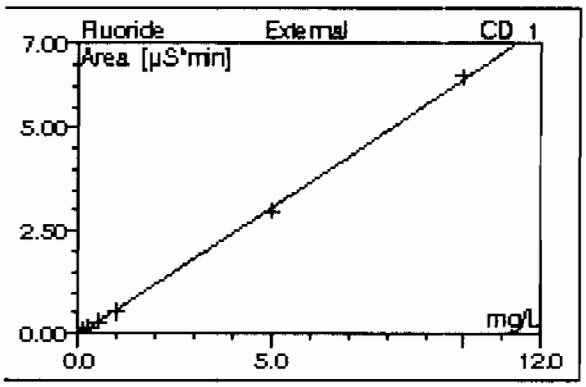
Sample Name:	AUTOCAL1	*Injection Volume:*	1.0
Vial Number:	9	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	100312an	*Sample Amount:*	1.0000
Recording Time:	3/12/2010 15:06	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001526; GLGCB086;300;9056

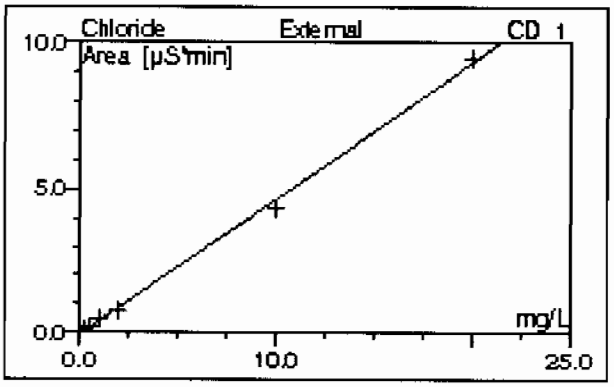


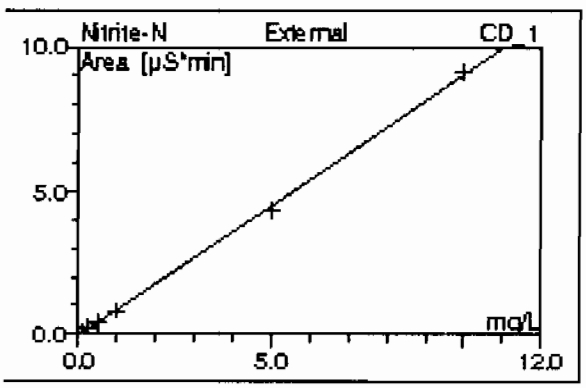
No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.0000	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

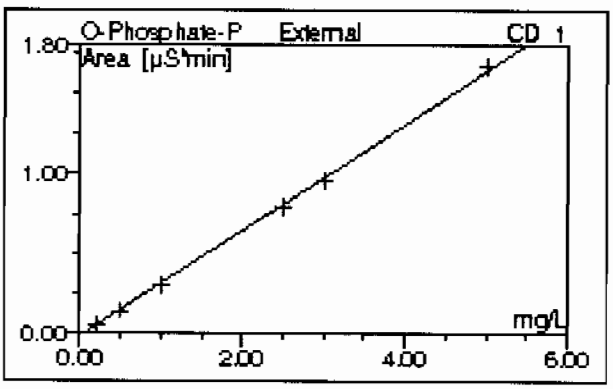
16 AUTOCAL1

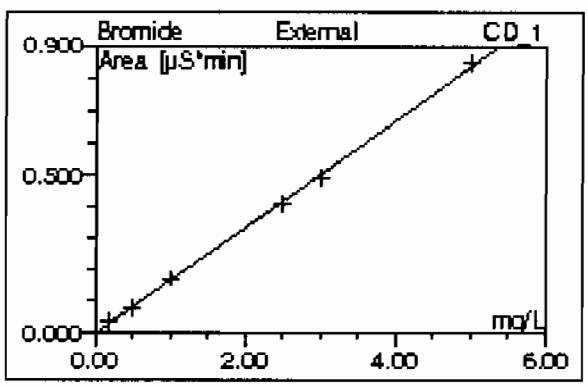
Sample Name:	AUTOCAL1	*Injection Volume:*	1.0
Vial Number:	9	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	100312an	*Sample Amount:*	1.0000
Recording Time:	3/12/2010 15:06	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-002712; GLGCE086;300;9056

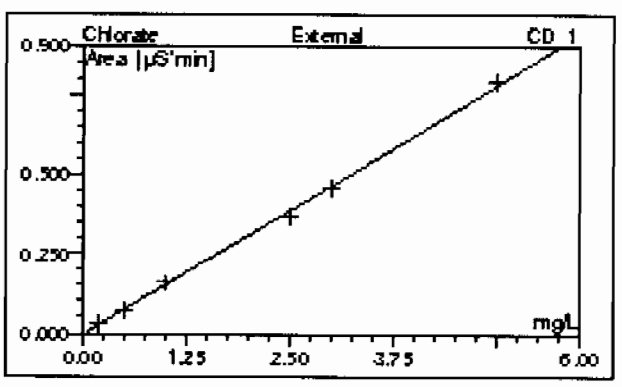


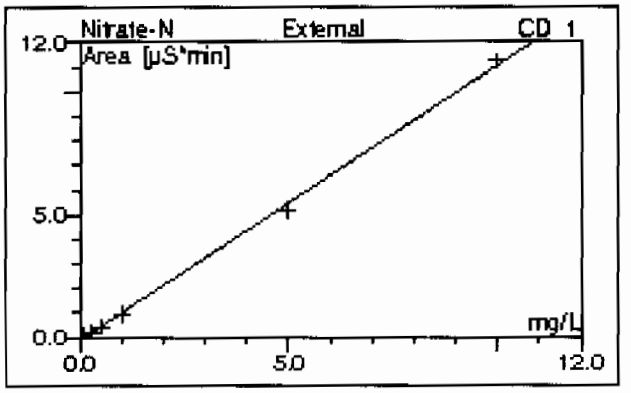


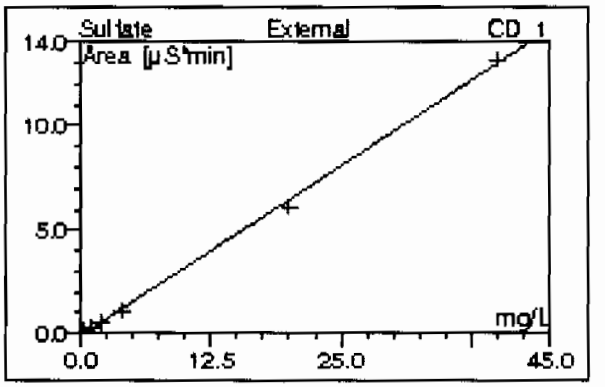








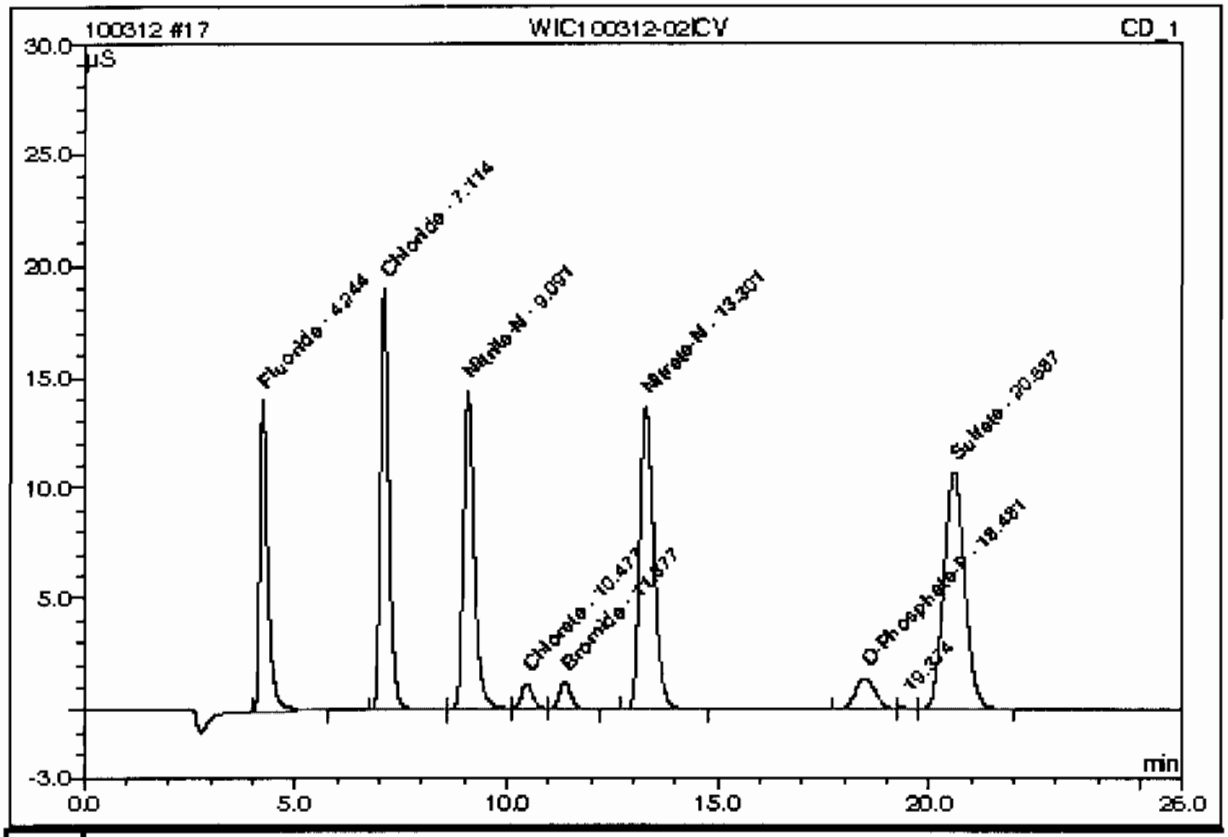




No. CD_1	Ret.Time CD_1 min	Peak Name CD_1	Cal.Type CD_1	Coeff.Det. CD_1 %	Offset CD_1	Slope CD_1	Curve CD_1
n.a.	n.a.	Fluoride	0LOfit	99.9627	-0.0330	0.6210	0.0000
n.a.	n.a.	Chloride	0LOfit	99.8225	-0.0749	0.4699	0.0000
n.a.	n.a.	Nitrite-N	0LOfit	99.9452	-0.0564	0.9115	0.0000
n.a.	n.a.	Chlorate	0LOfit	99.8605	-0.0058	0.1574	0.0000
n.a.	n.a.	Bromide	0LOfit	99.9304	-0.0029	0.1680	0.0000
n.a.	n.a.	Nitrate-N	0LOfit	99.8475	-0.1191	1.1179	0.0000
n.a.	n.a.	O-Phosphate-P	0LOfit	99.9176	-0.0239	0.3332	0.0000
n.a.	n.a.	Sulfate	0LOfit	99.8762	-0.1033	0.3281	0.0000
Average:				99.8953	-0.0524	0.5134	0.0000

17 WIC100312-02ICV

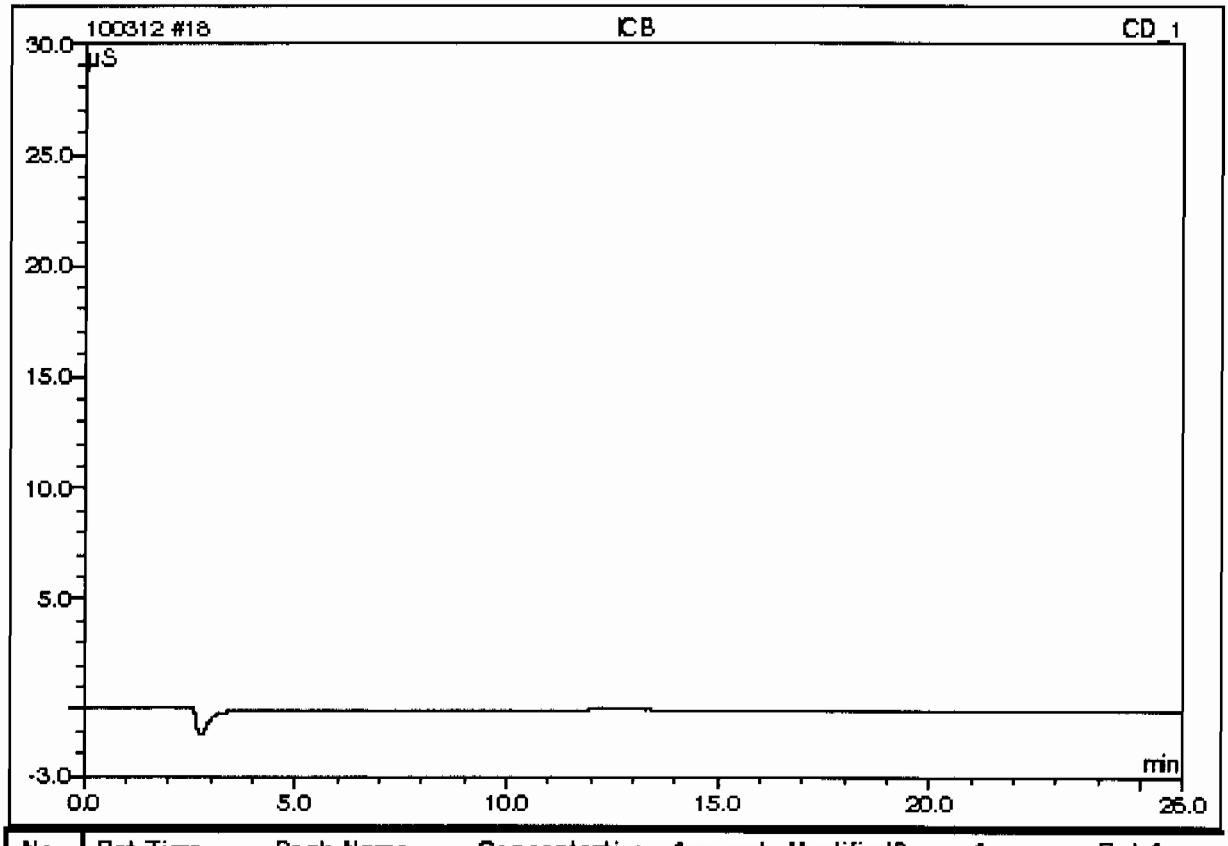
Sample Name:	WIC100312-02ICV	*Injection Volume:*	1.0
Vial Number:	10	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100312an	*Sample Amount:*	1.0000
Recording Time:	3/12/2010 15:35	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GLGCB086;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.	4.8260		2.96419	12.10
2	7.11	Chloride	n.a.	9.4396		4.36065	17.80
3	9.09	Nitrite-N	n.a.	4.7879		4.30795	17.58
4	10.48	Chlorate	n.a.	2.5037		0.38815	1.58
5	11.38	Bromide	n.a.	2.5123		0.41911	1.71
6	13.30	Nitrate-N	n.a.	4.7318		5.17038	21.10
7	18.48	O-Phosphate-P	n.a.	2.4304		0.78590	3.21
9	20.59	Sulfate	n.a.	18.8328		6.07580	24.80
Total:				50.0645	0.000	24.472	99.88

18 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:	100312an	*Sample Amount:*	1.0000
Recording Time:	3/12/2010 16:04	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GLGCE086;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

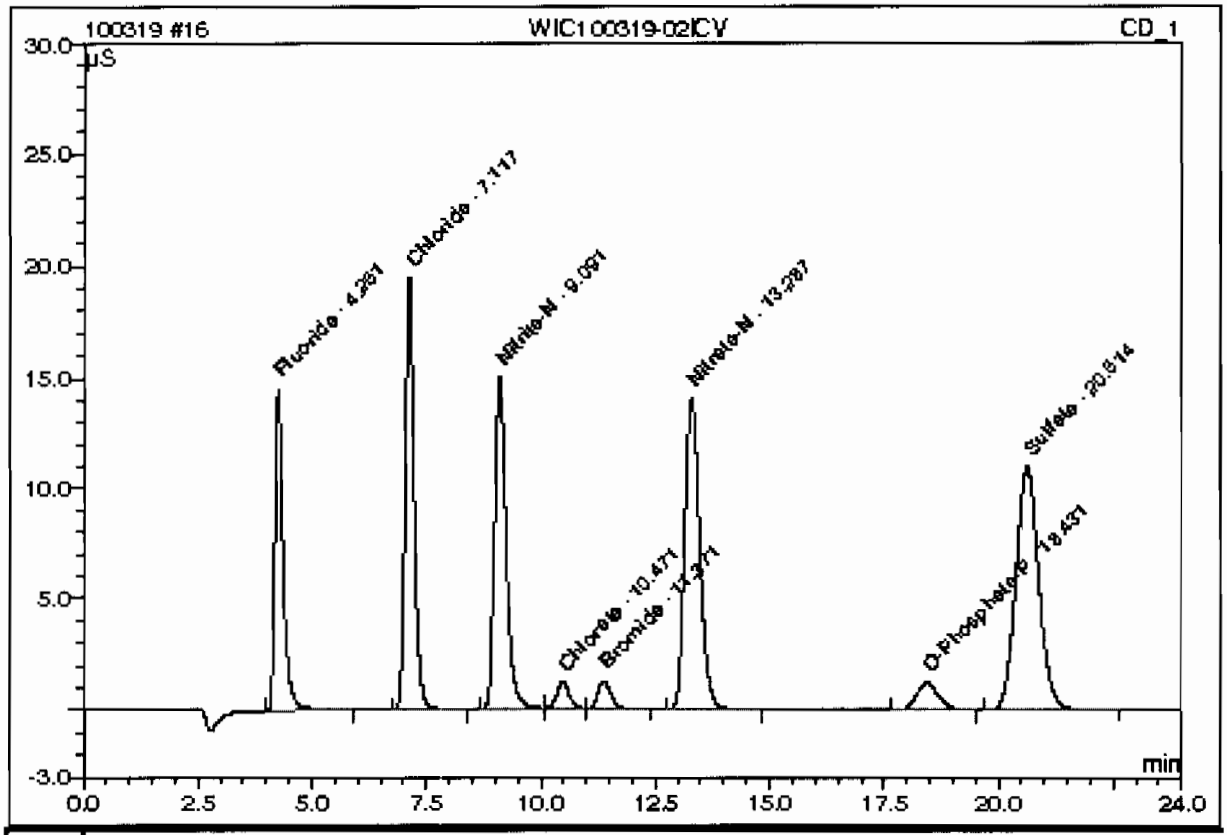
This is runlog for Sequence 100319.seq for IC6

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	03/19/10 09:38		1	100319	MAR1
BLK	03/19/10 10:04		1	100319	MAR1
ICV	03/19/10 10:31		1	100319	MAR1
ICB	03/19/10 10:58		1	100319	MAR1
1202063590	03/19/10 11:25	962073	1	100319	MAR1
1202063597	03/19/10 11:52	962073	1	100319	MAR1
248025001	03/19/10 12:19	962073	1	100319	MAR1
1202063591	03/19/10 12:45	962073	1	100319	MAR1
1202063593	03/19/10 13:12	962073	1	100319	MAR1
1202063595	03/19/10 13:39	962073	1	100319	MAR1
248025002	03/19/10 14:06	962073	1	100319	MAR1
248025003	03/19/10 14:33	962073	1	100319	MAR1
248025004	03/19/10 15:00	962073	1	100319	MAR1
248025005	03/19/10 15:26	962073	1	100319	MAR1
CVH	03/19/10 15:53		1	100319	MAR1
CCB	03/19/10 16:20		1	100319	MAR1
248025006	03/19/10 16:47	962073	1	100319	MAR1
248025007	03/19/10 17:14	962073	1	100319	MAR1
248041001	03/19/10 17:41	962073	1	100319	MAR1
248041002	03/19/10 18:08	962073	1	100319	MAR1
248041003	03/19/10 18:35	962073	1	100319	MAR1
248041004	03/19/10 19:01	962073	1	100319	MAR1
248041005	03/19/10 19:28	962073	1	100319	MAR1
1202063592	03/19/10 19:55	962073	1	100319	MAR1
1202063594	03/19/10 20:22	962073	1	100319	MAR1
1202063596	03/19/10 20:49	962073	1	100319	MAR1
CCV	03/19/10 21:16		1	100319	MAR1
CCB	03/19/10 21:43		1	100319	MAR1

1202063582	03/19/10 22:10 962071 1	100319	MAR1
1202063589	03/19/10 22:37 962071 1	100319	MAR1
248000001	03/19/10 23:04 962071 1	100319	MAR1
1202063583	03/19/10 23:30 962071 1	100319	MAR1
1202063585	03/19/10 23:57 962071 1	100319	MAR1

16 WIC100319-02ICV

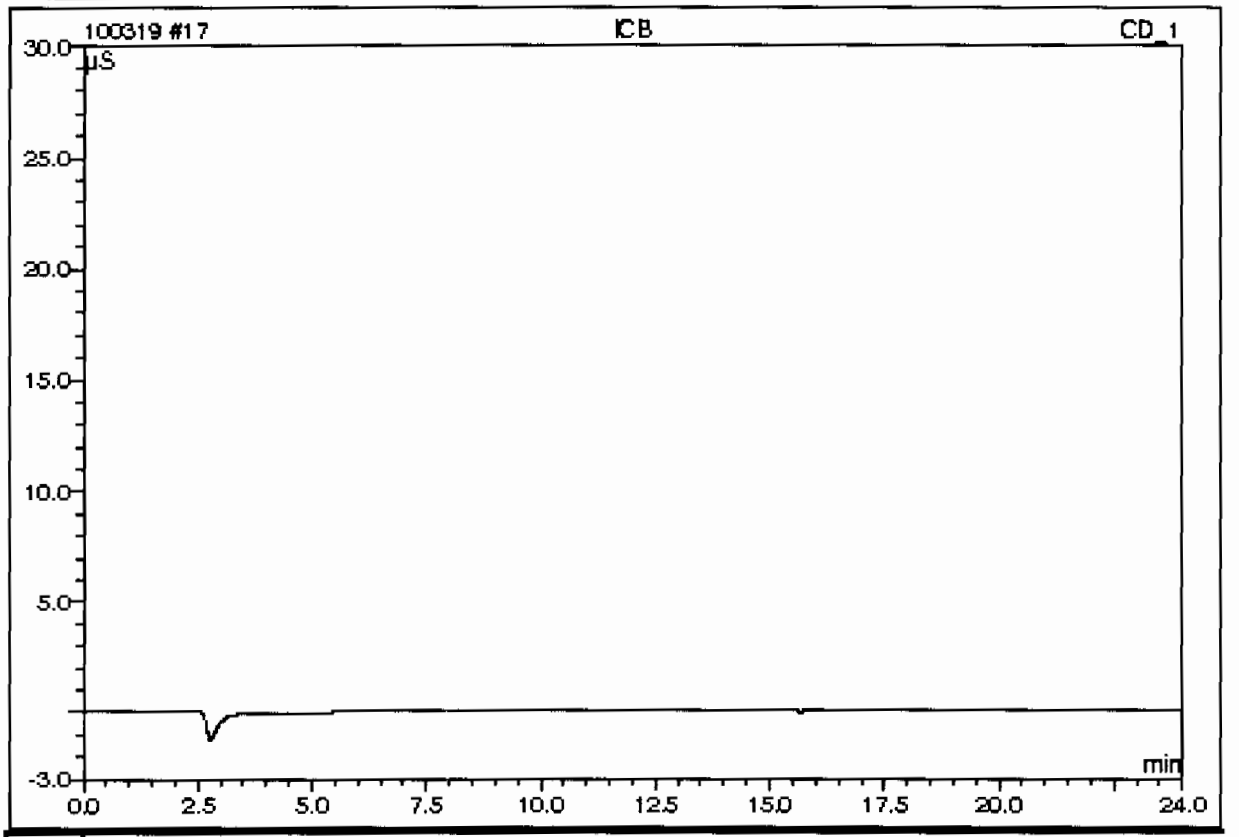
Sample Name:	WIC100319-02ICV	*Injection Volume:*	1.0
Vial Number:	3	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/19/2010 10:31	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	4.8208		3.06031	12.21
2	7.12	Chloride	n.a.	9.2239		4.42948	17.67
3	9.09	Nitrite-N	n.a.	4.8059		4.46472	17.81
4	10.47	Chlorate	n.a.	2.6276		0.41076	1.64
5	11.37	Bromide	n.a.	2.6109		0.43832	1.75
6	13.29	Nitrate-N	n.a.	4.6689		5.28947	21.10
7	18.43	O-Phosphate-P	n.a.	2.0940		0.66759	2.66
8	20.61	Sulfate	n.a.	18.8821		6.31276	25.18
Total:				49.7341	0.000	25.073	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:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/19/2010 10:58	Analyst:	MAR1
Run Time (min):	24.00	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	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

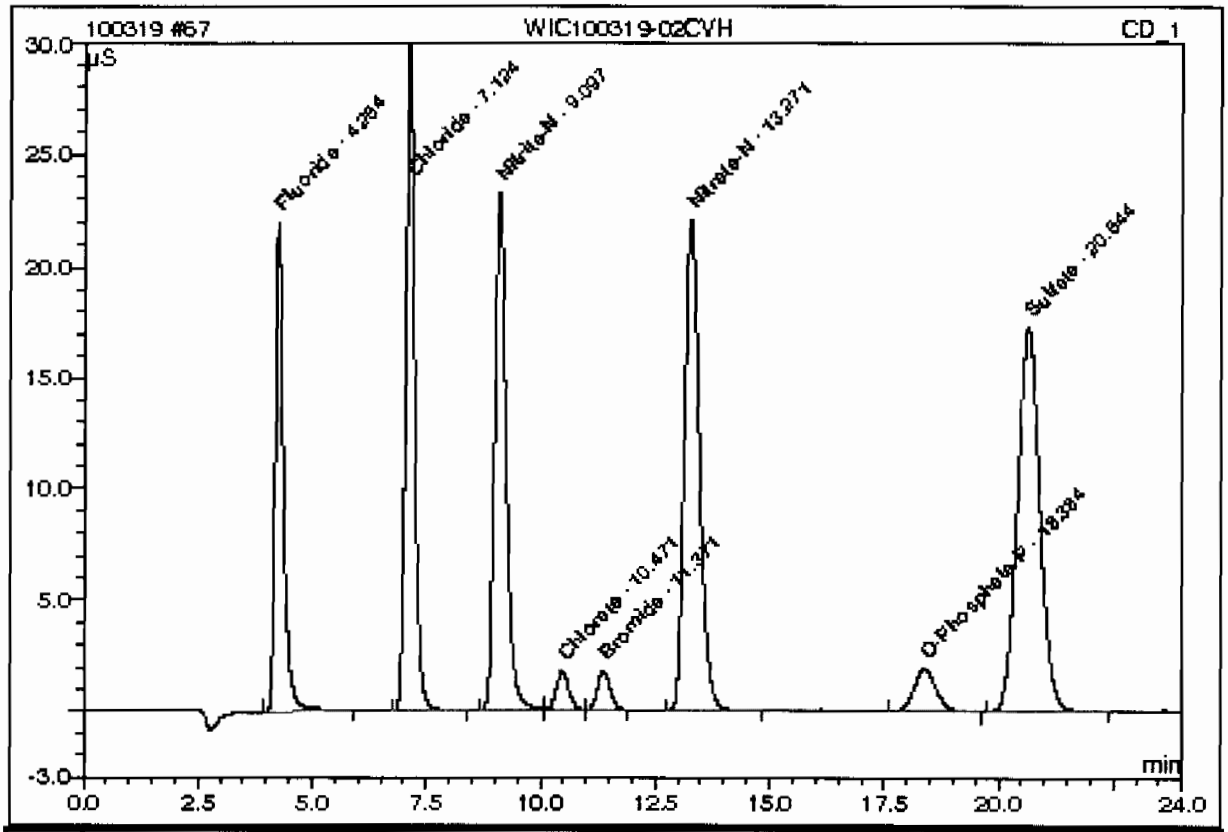
This is runlog for Sequence 100319.seq for IC6

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
1202063587	03/20/10 00:24	962071	1	100319	MAR1
248000002	03/20/10 00:51	962071	1	100319	MAR1
248000003	03/20/10 01:18	962071	1	100319	MAR1
248000004	03/20/10 01:45	962071	1	100319	MAR1
248000005	03/20/10 02:12	962071	1	100319	MAR1
CVH	03/20/10 02:39		1	100319	MAR1
CCB	03/20/10 03:06		1	100319	MAR1
248002001	03/20/10 03:33	962071	1	100319	MAR1
248002002	03/20/10 04:00	962071	1	100319	MAR1
248002003	03/20/10 04:27	962071	1	100319	MAR1
248002004	03/20/10 04:53	962071	1	100319	MAR1
248002005	03/20/10 05:20	962071	1	100319	MAR1
248002006	03/20/10 05:47	962071	1	100319	MAR1
CCV	03/20/10 06:14		1	100319	MAR1
CCB	03/20/10 06:41		1	100319	MAR1
248002007	03/20/10 07:08	962071	1	100319	MAR1
248002008	03/20/10 07:35	962071	1	100319	MAR1
1202063584	03/20/10 08:02	962071	1	100319	MAR1
1202063586	03/20/10 08:29	962071	1	100319	MAR1
1202063588	03/20/10 08:56	962071	1	100319	MAR1
CVH	03/20/10 09:23		1	100319	MAR1
CCB	03/20/10 09:49		1	100319	MAR1
1202063606	03/20/10 10:16	962078	1	100319	MAR1
1202063613	03/20/10 10:43	962078	1	100319	MAR1
248110001	03/20/10 11:10	962078	1	100319	MAR1
1202063607	03/20/10 11:37	962078	1	100319	MAR1
1202063609	03/20/10 12:04	962078	1	100319	MAR1
1202063611	03/20/10 12:31	962078	1	100319	MAR1

248110002	03/20/10	12:58	962078	1	100319	MAR1
248110003	03/20/10	13:25	962078	1	100319	MAR1
248110004	03/20/10	13:52	962078	1	100319	MAR1
248110005	03/20/10	14:19	962078	1	100319	MAR1
CCV	03/20/10	14:45		1	100319	MAR1
CCB	03/20/10	15:12		1	100319	MAR1
248110006	03/20/10	15:39	962078	1	100319	MAR1
248110007	03/20/10	16:06	962078	1	100319	MAR1
248110008	03/20/10	16:33	962078	1	100319	MAR1
248118001	03/20/10	17:00	962078	1	100319	MAR1
248118002	03/20/10	17:01	962078	1	100319	MAR1
248118003	03/20/10	17:01	962078	1	100319	MAR1
248118004	03/20/10	17:01	962078	1	100319	MAR1
248118005	03/20/10	17:01	962078	1	100319	MAR1
CVH	03/20/10	17:01		1	100319	MAR1
CCB	03/20/10	17:01		1	100319	MAR1
248118006	03/20/10	17:01	962078	1	100319	MAR1
248118007	03/20/10	17:01	962078	1	100319	MAR1
1202063608	03/20/10	17:01	962078	1	100319	MAR1
1202063610	03/20/10	17:02	962078	1	100319	MAR1
1202063612	03/20/10	17:02	962078	1	100319	MAR1
CCV	03/20/10	17:02		1	100319	MAR1
CCB	03/20/10	17:02		1	100319	MAR1

67 WIC100319-02CVH

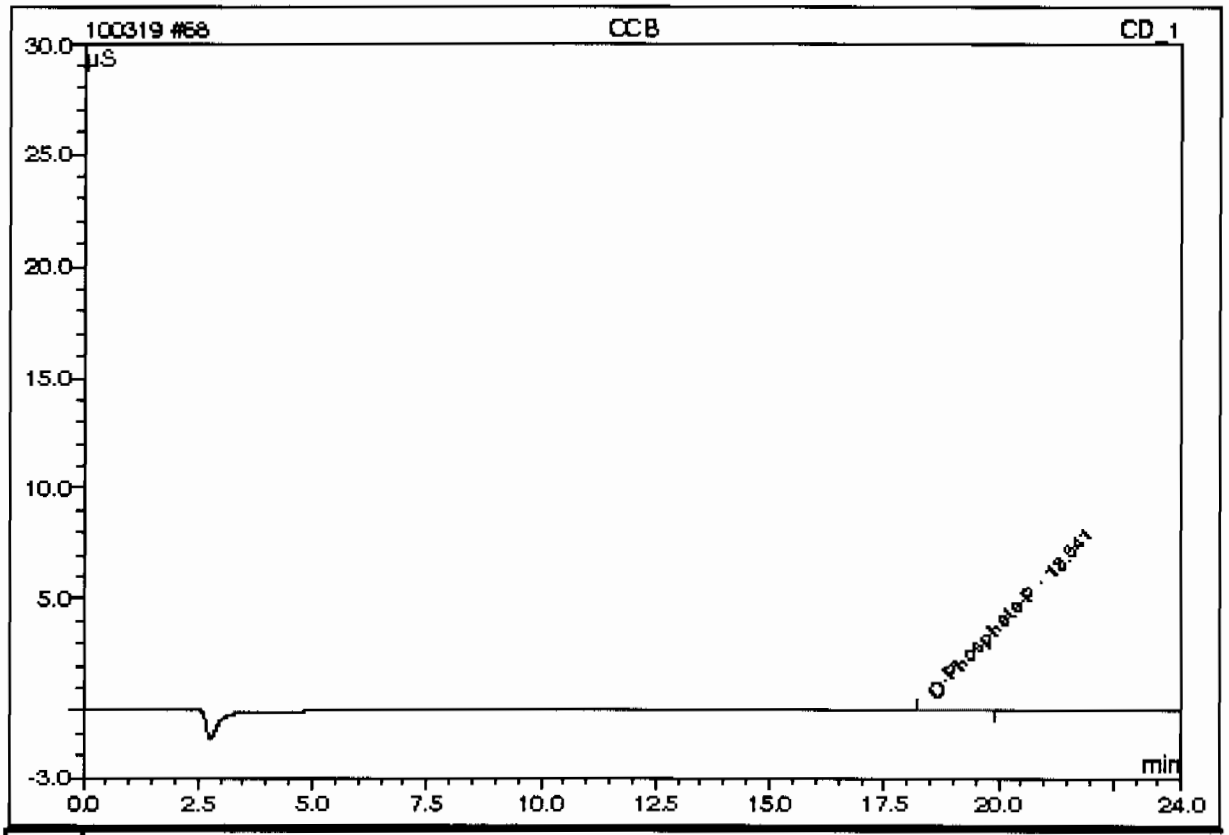
Sample Name:	WIC100319-02CVH	*Injection Volume:*	1.0
Vial Number:	4	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/20/2010 9:23	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCB086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	7.3290		4.67235	12.03
2	7.12	Chloride	n.a.	14.4082		6.96312	17.93
3	9.10	Nitrite-N	n.a.	7.3580		6.87612	17.71
4	10.47	Chlorate	n.a.	3.7179		0.58307	1.50
5	11.37	Bromide	n.a.	3.5255		0.59305	1.53
6	13.27	Nitrate-N	n.a.	7.2587		8.30240	21.38
7	18.38	O-Phosphate-P	n.a.	3.3396		1.07784	2.78
8	20.64	Sulfate	n.a.	29.0187		9.76237	25.14
Total:				75.9556	0.000	38.830	100.00

68 CCB

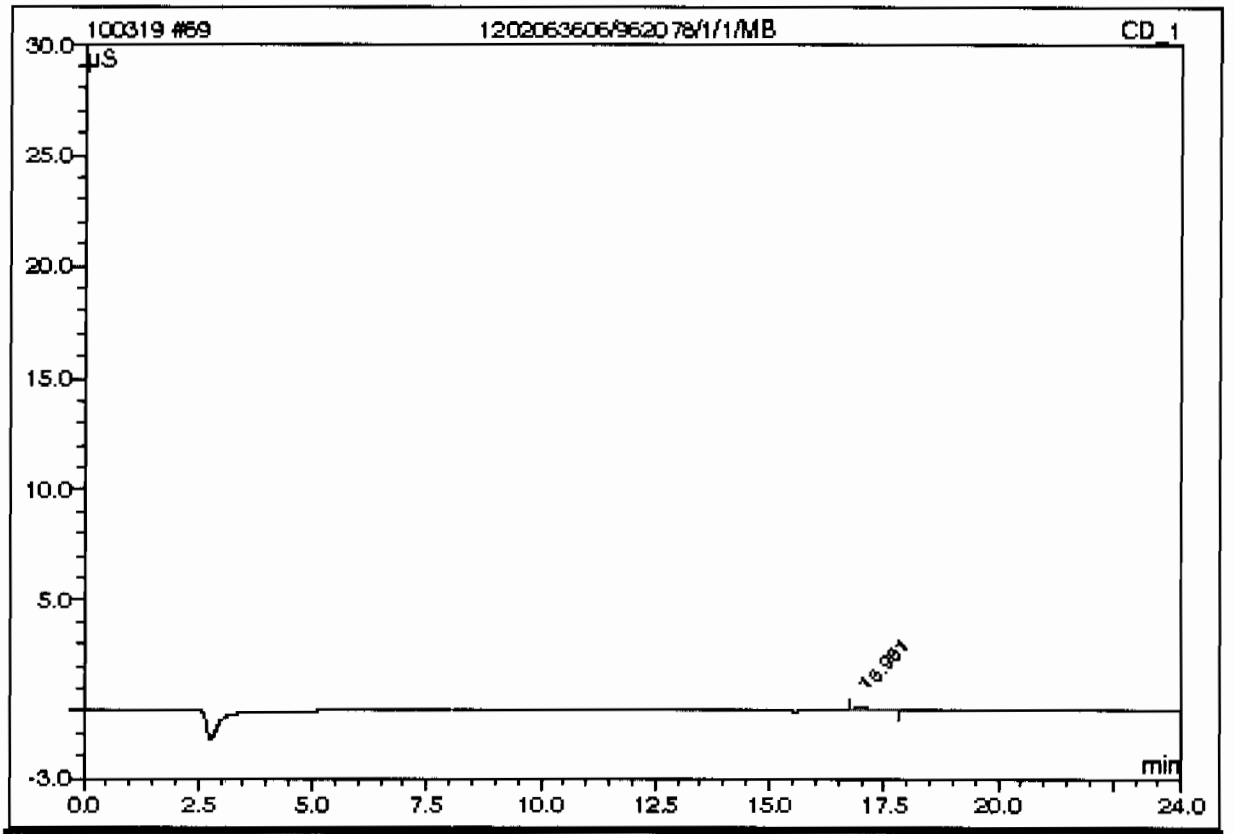
Sample Name:	CCB	*Injection Volume:*	1.0
Vial Number:	5	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantit. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/20/2010 9:49	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCB086;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.
1	18.54	O-Phosphate-P	n.a.	0.1971		0.04281	100.00
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.1971	0.000	0.043	100.00

69 1202063606/962078/1/1/MB

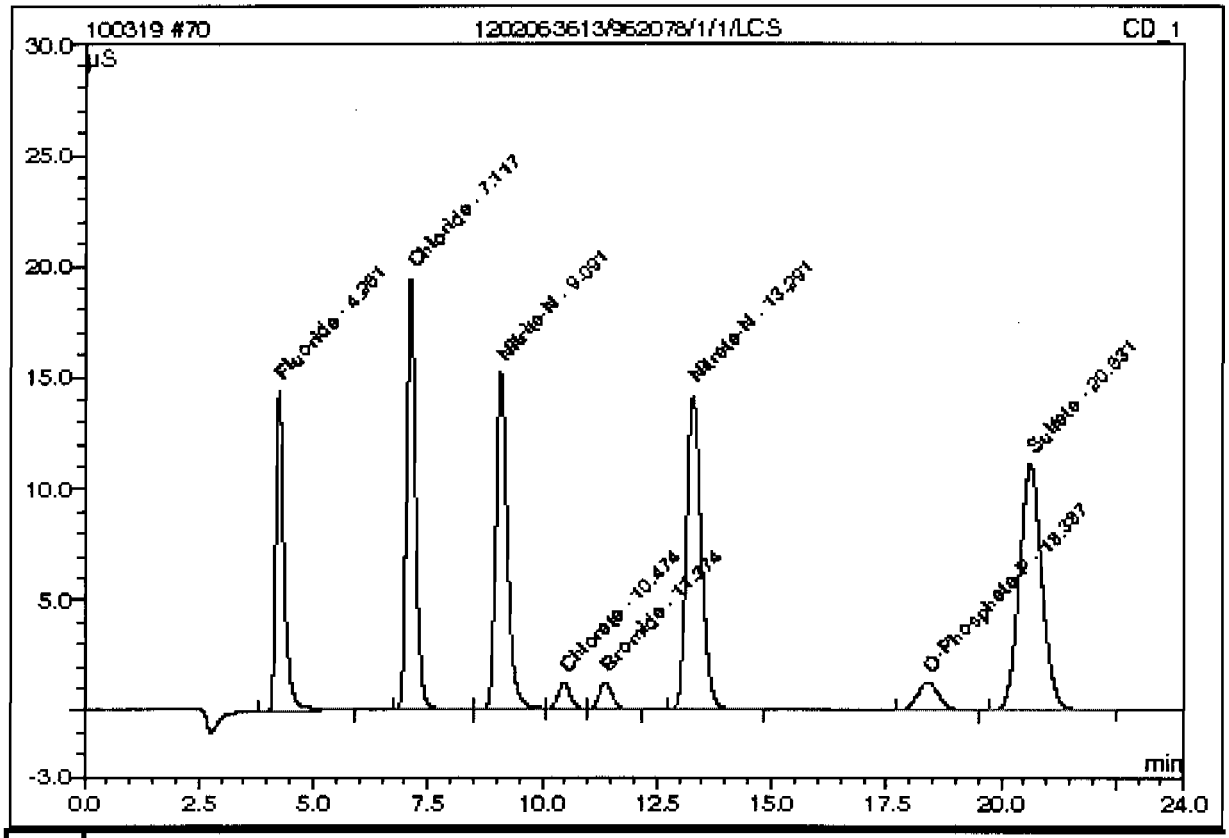
Sample Name:	1202063606/962078/1/1/MB	*Injection Volume:*	1.0
Vial Number:	6	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/20/2010 10:16	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCE086;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

70 1202063613/962078/1/1/LCS

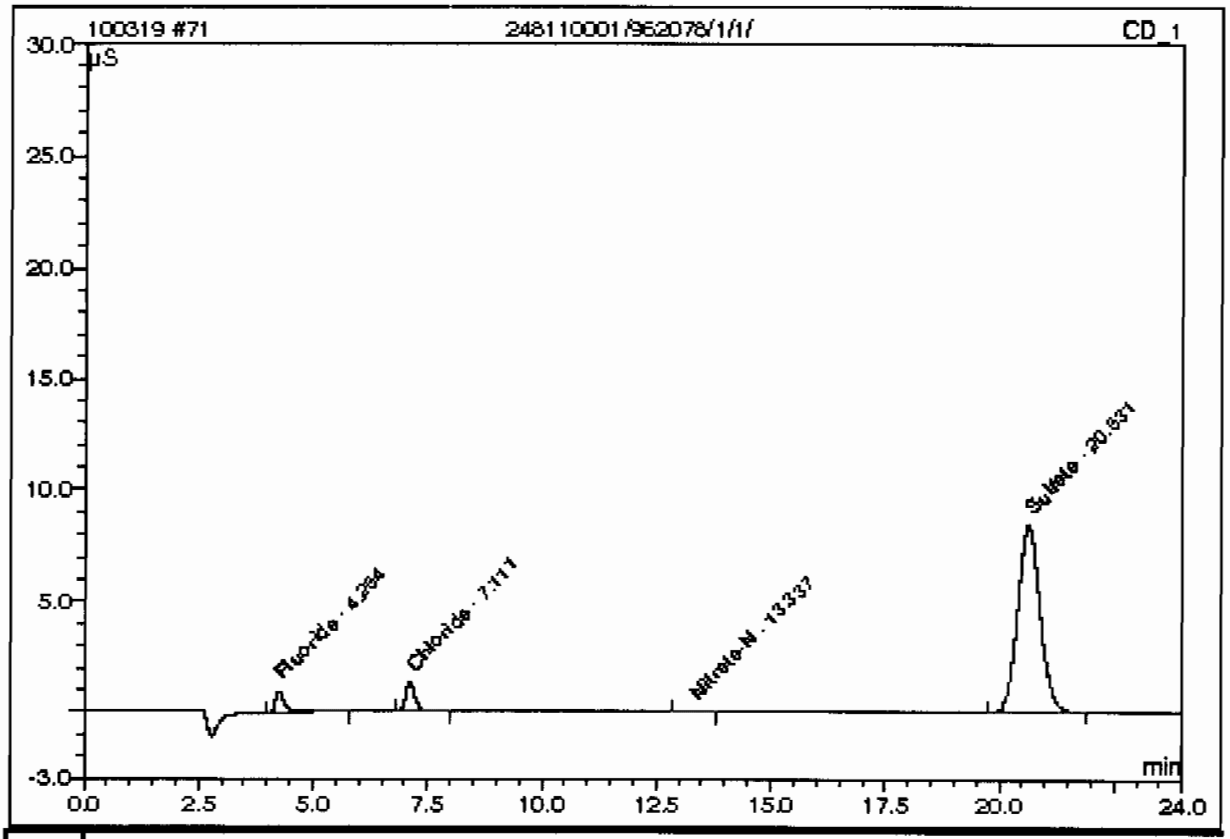
Sample Name:	1202063613/962078/1/1/LCS	*Injection Volume:*	1.0
Vial Number:	7	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/20/2010 10:43	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCB086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	4.8365		3.07043	12.17
2	7.12	Chloride	n.a.	9.2872		4.46043	17.68
3	9.09	Nitrite-N	n.a.	4.8533		4.50947	17.87
4	10.47	Chlorate	n.a.	2.5722		0.40200	1.59
5	11.37	Bromide	n.a.	2.5390		0.42617	1.69
6	13.29	Nitrate-N	n.a.	4.6930		5.31756	21.08
7	18.39	O-Phosphate-P	n.a.	2.2134		0.70692	2.80
8	20.63	Sulfate	n.a.	18.9569		6.33821	25.12
Total:				49.9516	0.000	25.231	100.00

71 248110001/962078/1/1/

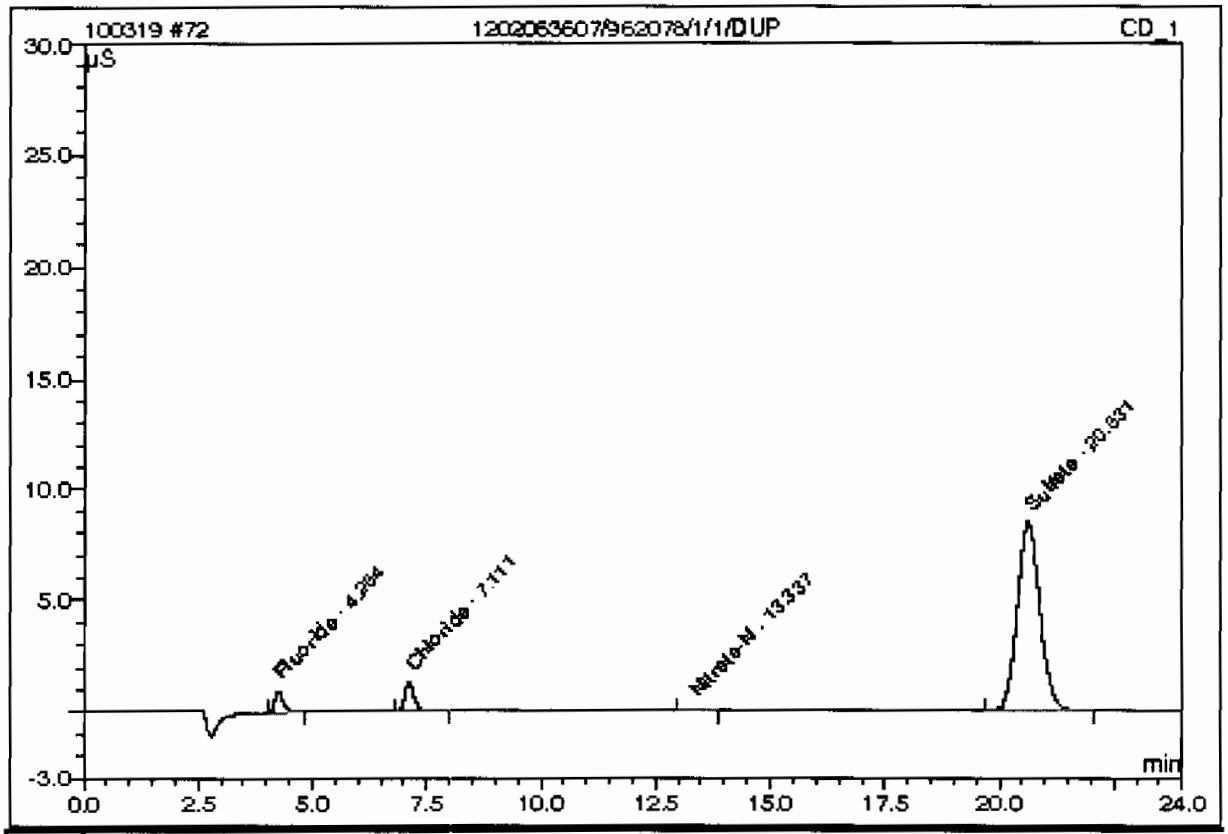
Sample Name:	248110001/962078/1/1/	*Injection Volume:*	1.0
Vial Number:	8	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/20/2010 11:10	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	0.4335		0.24066	4.42
2	7.11	Chloride	n.a.	0.8072		0.31618	5.81
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	13.34	Nitrate-N	n.a.	0.1469		0.02874	0.53
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	20.63	Sulfate	n.a.	14.6016		4.85607	89.24
Total:				15.9892	0.000	5.442	100.00

72 1202063607/962078/1/1/DUP

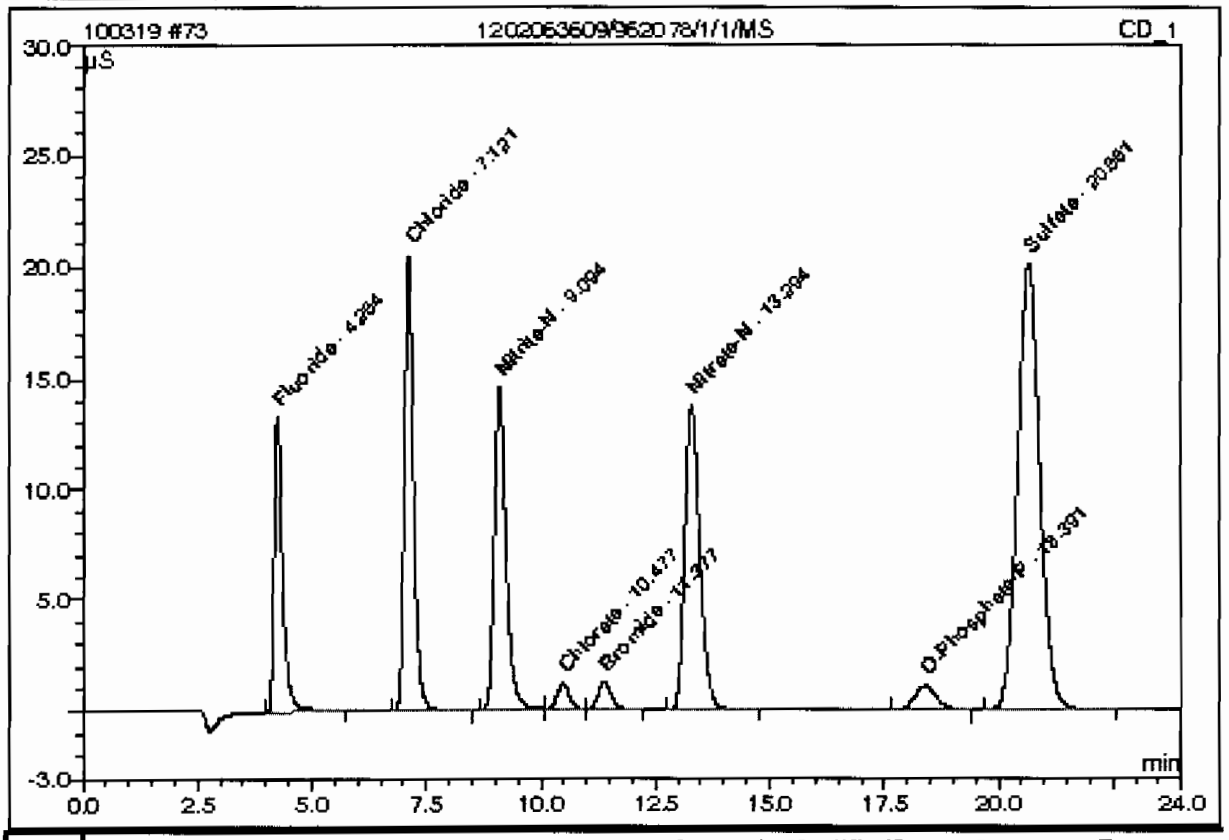
Sample Name:	1202063607/962078/1/1/DUP	*Injection Volume:*	1.0
Vial Number:	9	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/20/2010 11:37	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	0.3872		0.21093	3.89
2	7.11	Chloride	n.a.	0.8086		0.31689	5.84
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	13.34	Nitrate-N	n.a.	0.1453		0.02685	0.50
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	20.63	Sulfate	n.a.	14.6387		4.86868	89.77
Total:				15.9798	0.000	5.423	100.00

73 1202063609/962078/1/1/MS

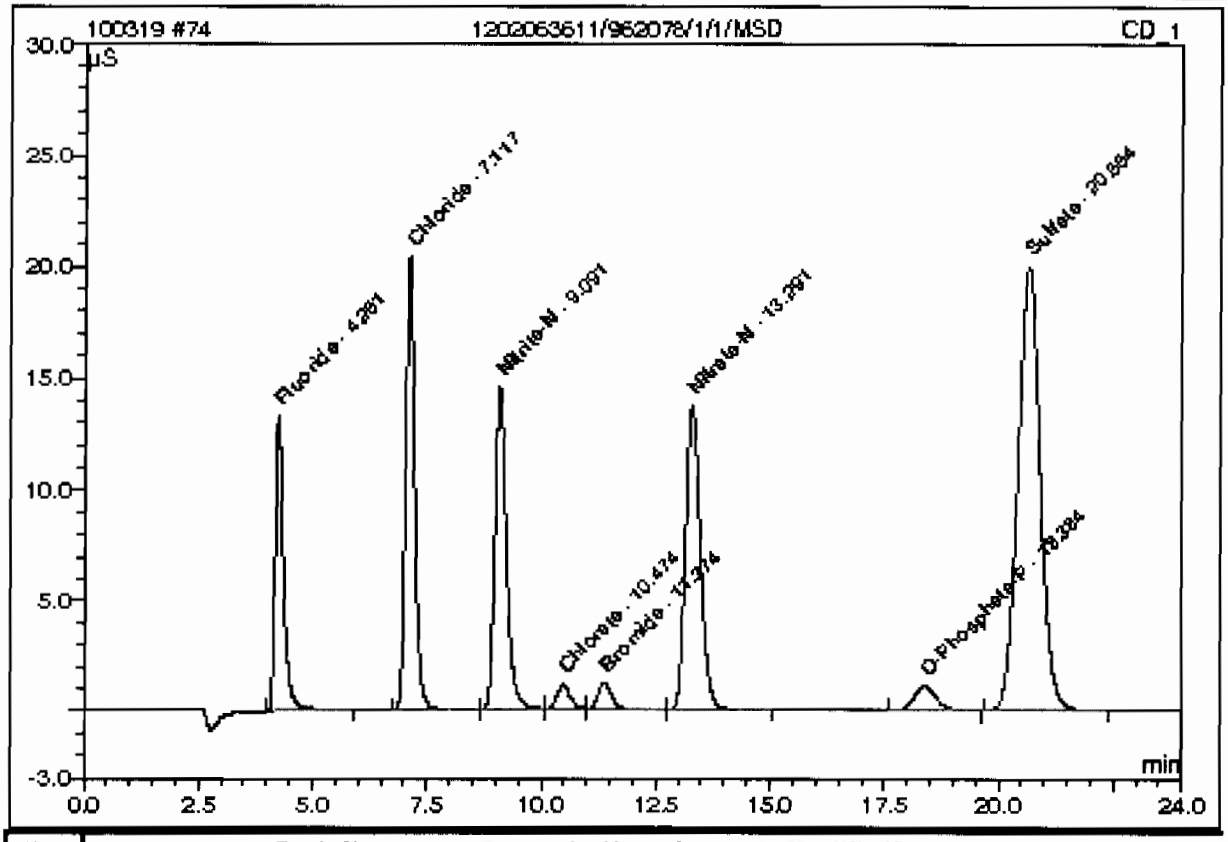
Sample Name:	1202063609/962078/1/1/MS	*Injection Volume:*	1.0
Vial Number:	10	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/20/2010 12:04	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCB086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	4.4862		2.84527	9.54
2	7.12	Chloride	n.a.	9.7889		4.70560	15.78
3	9.09	Nitrite-N	n.a.	4.6833		4.34887	14.58
4	10.48	Chlorate	n.a.	2.4844		0.38812	1.30
5	11.38	Bromide	n.a.	2.4647		0.41359	1.39
6	13.29	Nitrate-N	n.a.	4.5734		5.17835	17.36
7	18.39	O-Phosphate-P	n.a.	1.8588		0.59013	1.98
8	20.66	Sulfate	n.a.	33.6981		11.35485	38.07
Total:				64.0379	0.000	29.825	100.00

74 1202063611/962078/1/1/MSD

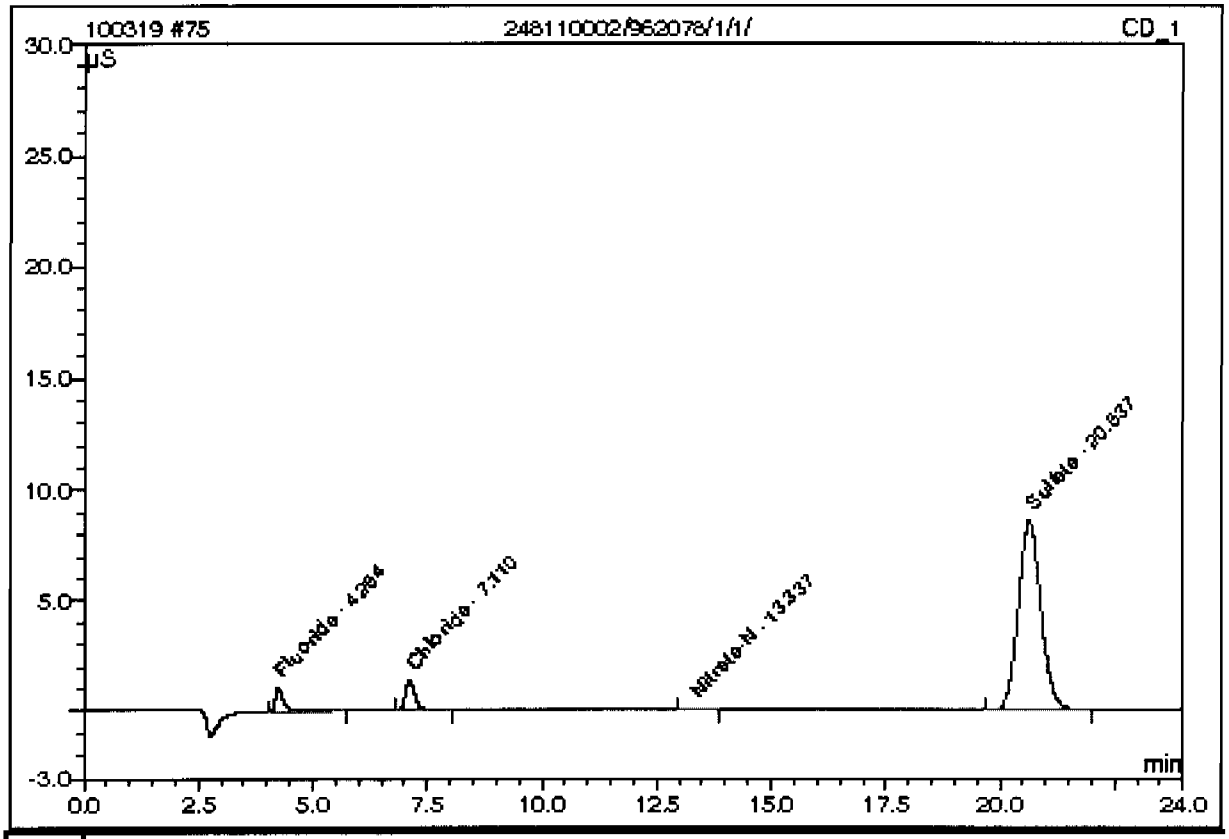
Sample Name:	1202063611/962078/1/1/MSD	*Injection Volume:*	1.0
Vial Number:	11	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/20/2010 12:31	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	4.4666		2.83271	9.53
2	7.12	Chloride	n.a.	9.7497		4.68648	15.76
3	9.09	Nitrite-N	n.a.	4.6627		4.32934	14.56
4	10.47	Chlorate	n.a.	2.6137		0.40855	1.37
5	11.37	Bromide	n.a.	2.5883		0.43451	1.46
6	13.29	Nitrate-N	n.a.	4.5603		5.16310	17.36
7	18.38	O-Phosphate-P	n.a.	1.8877		0.59962	2.02
8	20.65	Sulfate	n.a.	33.4826		11.28152	37.94
Total:				64.0117	0.000	29.736	100.00

75 248110002/962078/1/1/

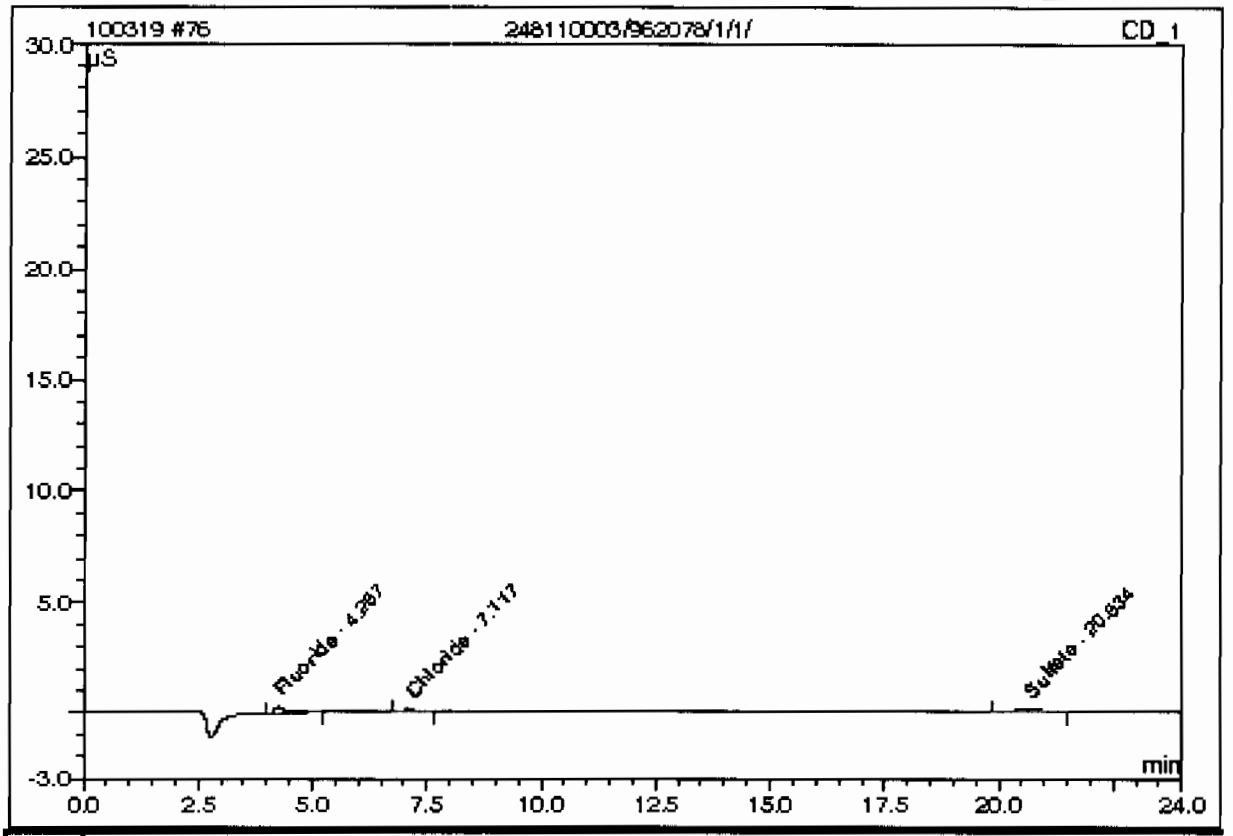
Sample Name:	248110002/962078/1/1/	*Injection Volume:*	1.0
Vial Number:	12	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantit. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/20/2010 12:58	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCB086;300;8056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	0.4541		0.25390	4.56
2	7.11	Chloride	n.a.	0.8500		0.33712	6.06
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	13.34	Nitrate-N	n.a.	0.1430		0.02418	0.43
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	20.64	Sulfate	n.a.	14.8742		4.94883	88.94
Total:				16.3213	0.000	5.564	100.00

76 248110003/962078/1/1/

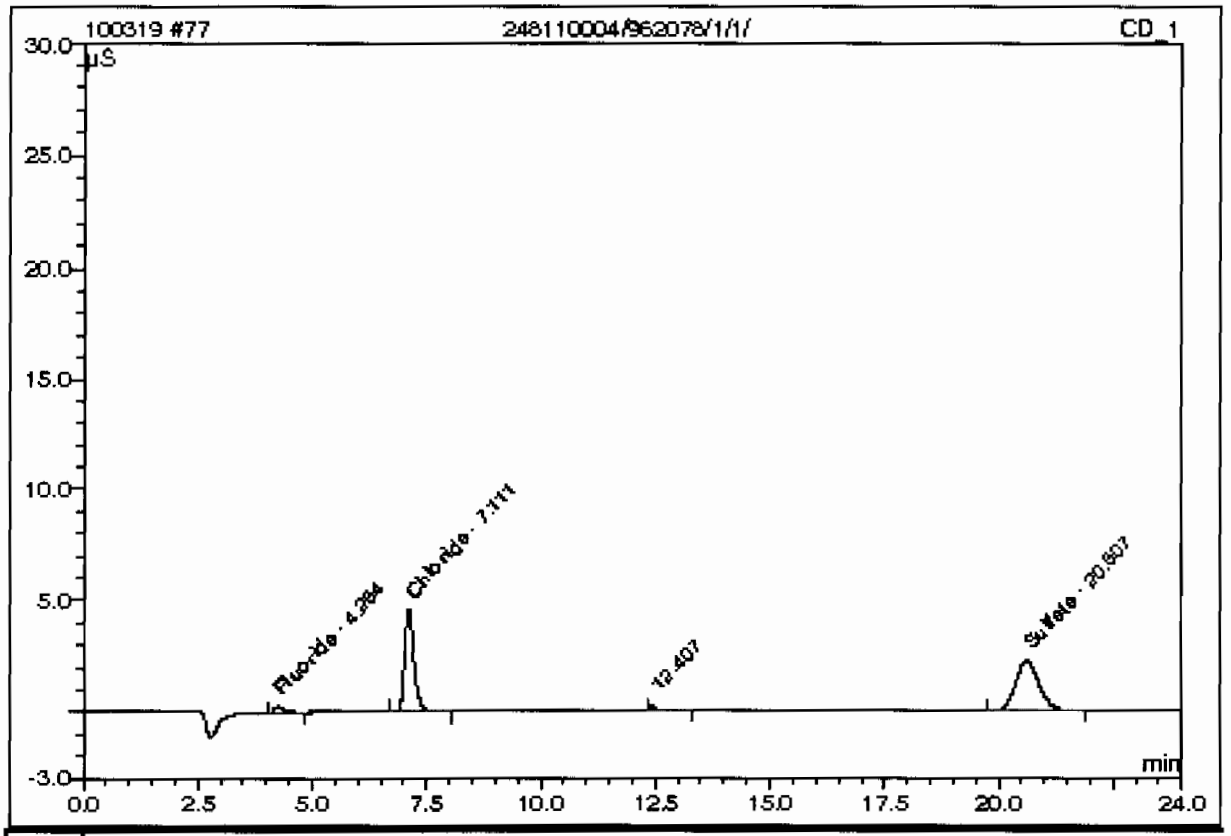
Sample Name:	248110003/962078/1/1/	*Injection Volume:*	1.0
Vial Number:	13	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/20/2010 13:25	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.26	Fluoride	n.a.	0.1685		0.07038	32.65
2	7.12	Chloride	n.a.	0.2287		0.03350	15.54
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	20.63	Sulfate	n.a.	0.6603		0.11166	51.81
Total:				1.0576	0.000	0.216	100.00

77 248110004/962078/1/1/

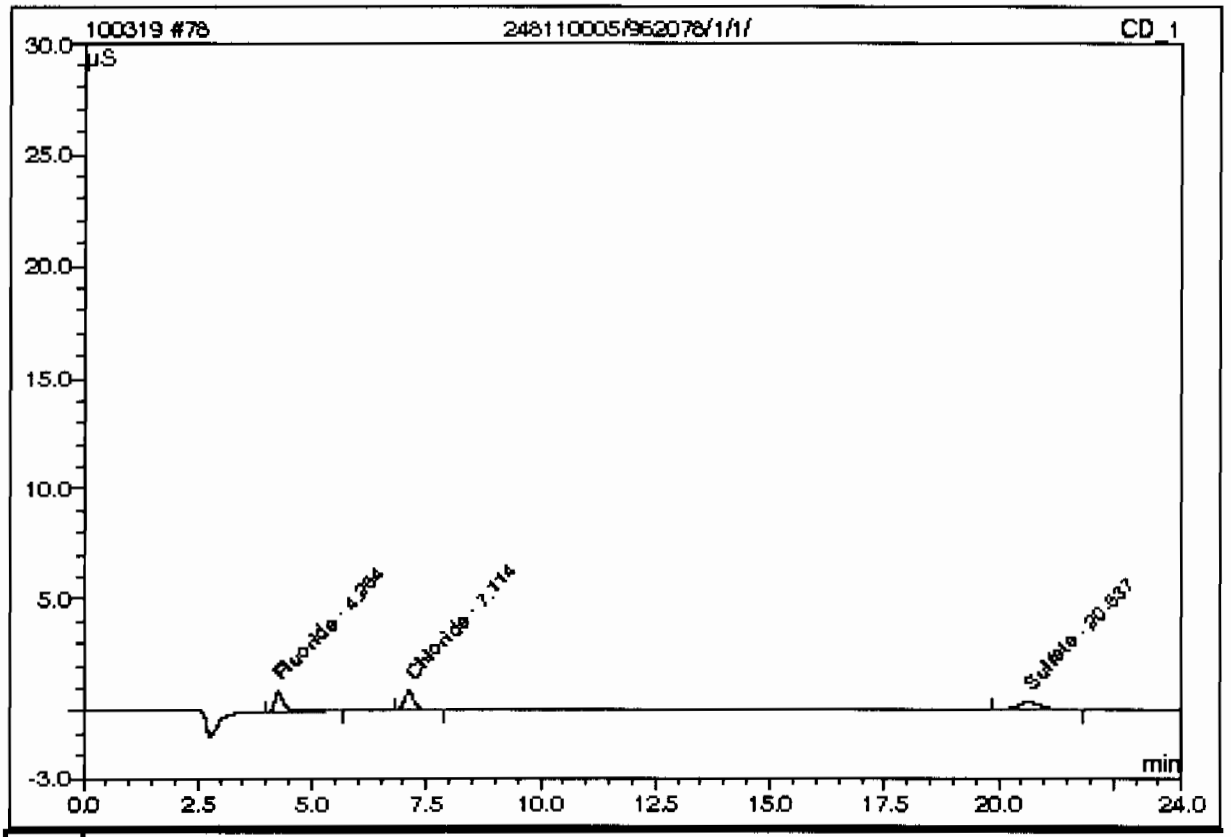
Sample Name:	248110004/962078/1/1/	*Injection Volume:*	1.0
Vial Number:	14	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/20/2010 13:52	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCB086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	0.1533		0.06060	2.40
2	7.11	Chloride	n.a.	2.3860		1.08776	43.16
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.
4	20.61	Sulfate	n.a.	4.2475		1.33245	52.86
Total:				6.7869	0.000	2.481	98.42

78 248110005/962078/1/1/

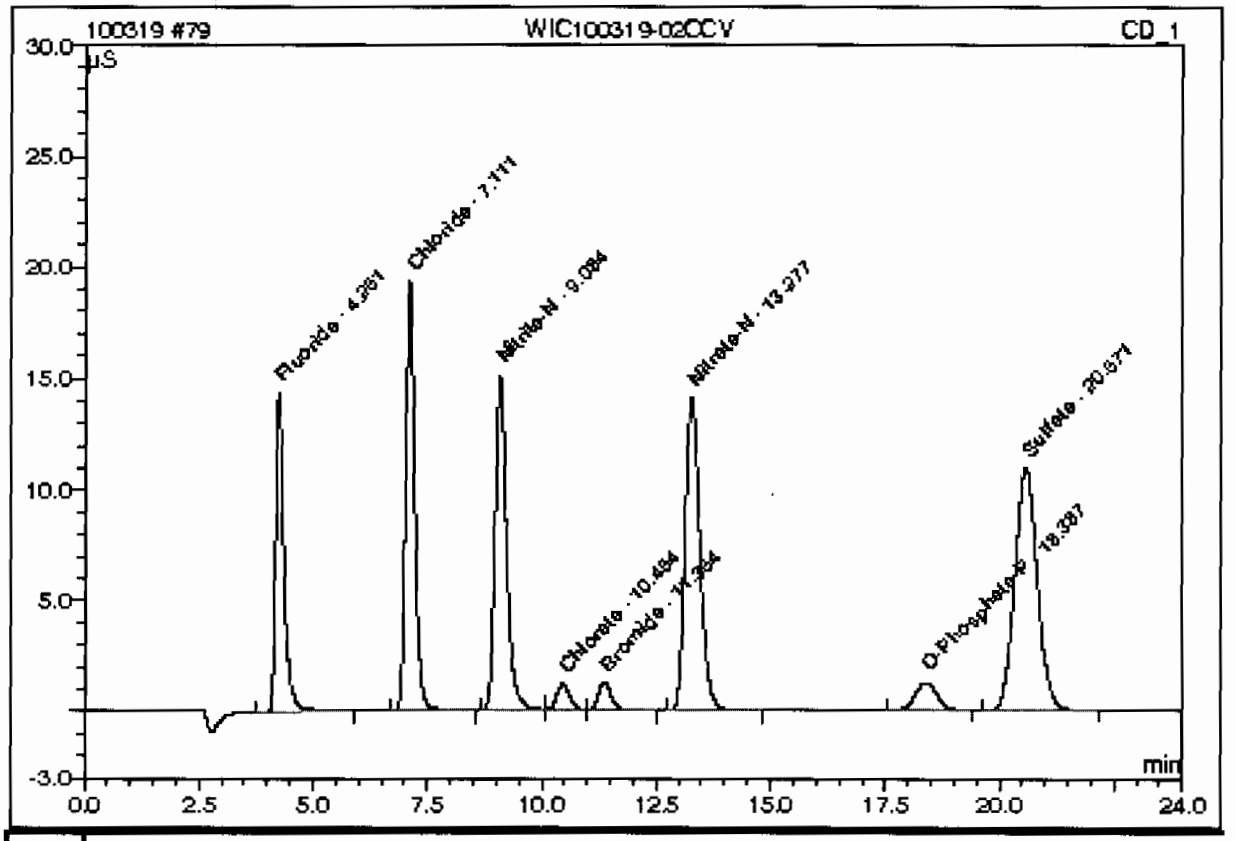
Sample Name:	248110005/962078/1/1/	*Injection Volume:*	1.0
Vial Number:	15	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/20/2010 14:19	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GCB086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	0.3797		0.20606	31.49
2	7.11	Chloride	n.a.	0.5853		0.20775	31.75
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	20.64	Sulfate	n.a.	1.0388		0.24049	36.75
Total:				2.0038	0.000	0.654	100.00

79 WIC100319-02CCV

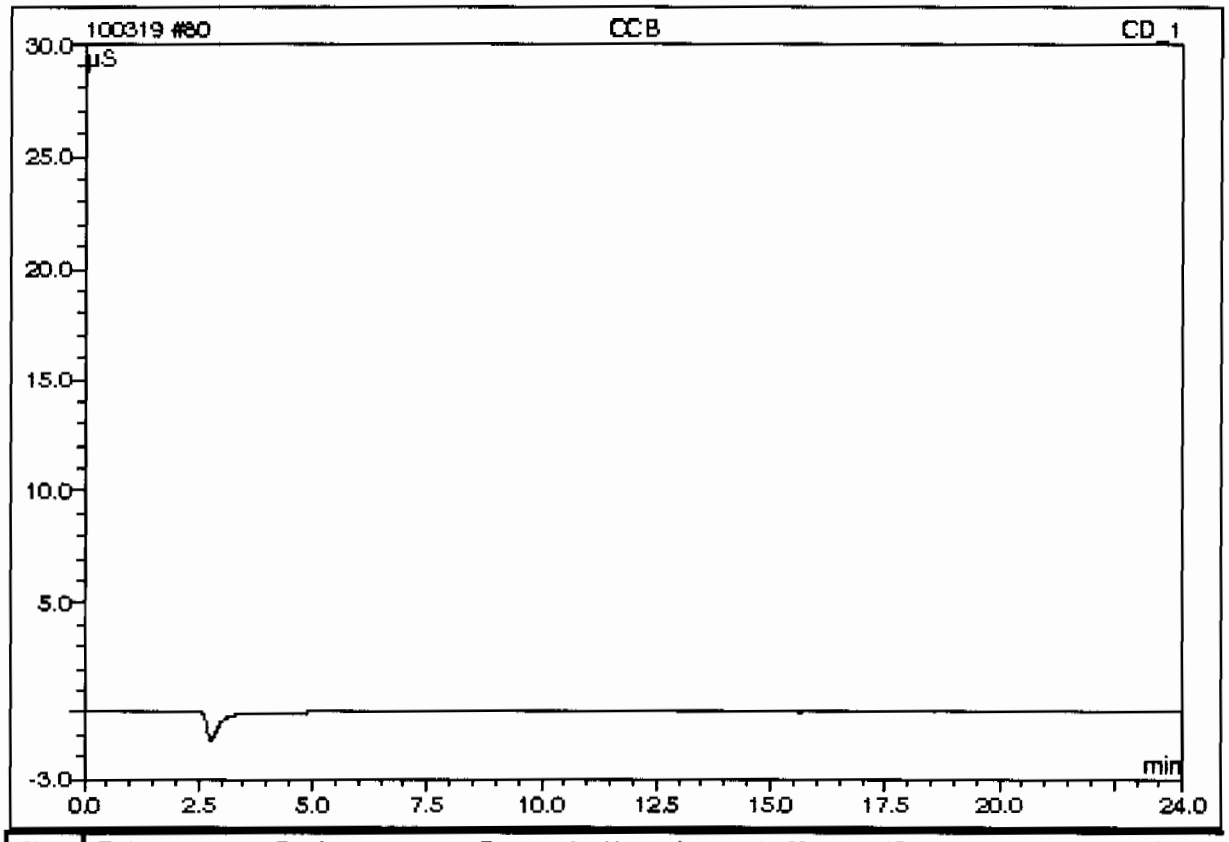
Sample Name:	WIC100319-02CCV	*Injection Volume:*	1.0
Vial Number:	16	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/20/2010 14:45	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GCB086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	4.7969		3.04496	12.14
2	7.11	Chloride	n.a.	9.2285		4.43174	17.67
3	9.08	Nitrite-N	n.a.	4.8195		4.47753	17.85
4	10.46	Chlorate	n.a.	2.5794		0.40314	1.61
5	11.36	Bromide	n.a.	2.5729		0.43189	1.72
6	13.28	Nitrate-N	n.a.	4.6740		5.29541	21.11
7	18.39	O-Phosphate-P	n.a.	2.2344		0.71382	2.85
8	20.57	Sulfate	n.a.	18.7945		6.28296	25.05
Total:				49.7000	0.000	25.081	100.00

80 CCB

Sample Name:	CCB	*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:	3/20/2010 15:12	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCE086;300;9056



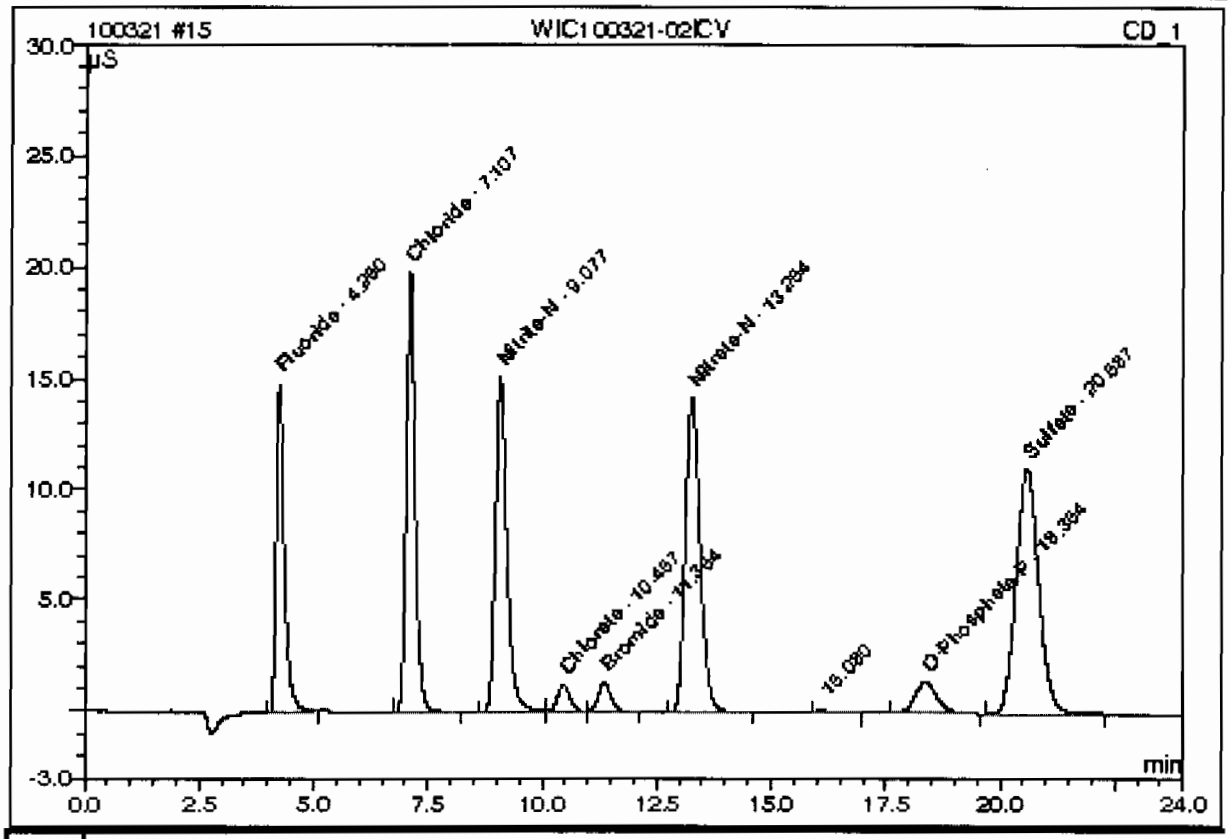
No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	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 100321.seq for IC6

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	03/21/10 11:06		1	100321	MAR1
ICV	03/21/10 11:32		1	100321	MAR1
ICB	03/21/10 12:53		1	100321	MAR1
248110006	03/21/10 13:19	962078	1	100321	MAR1
248110007	03/21/10 13:46	962078	1	100321	MAR1
248110008	03/21/10 14:13	962078	1	100321	MAR1
248118001	03/21/10 14:40	962078	1	100321	MAR1
248118002	03/21/10 15:07	962078	1	100321	MAR1
248118003	03/21/10 15:34	962078	1	100321	MAR1
248118004	03/21/10 16:01	962078	1	100321	MAR1
248118005	03/21/10 16:27	962078	1	100321	MAR1
CVH	03/21/10 16:54		1	100321	MAR1
CCB	03/21/10 17:21		1	100321	MAR1
248118006	03/21/10 17:48	962078	1	100321	MAR1
248118007	03/21/10 18:15	962078	1	100321	MAR1
1202063608	03/21/10 18:42	962078	1	100321	MAR1
1202063610	03/21/10 19:09	962078	1	100321	MAR1
1202063612	03/21/10 19:36	962078	1	100321	MAR1
CCV	03/21/10 20:03		1	100321	MAR1
CCB	03/21/10 20:30		1	100321	MAR1
1202073527	03/21/10 20:57	966227	1	100321	MAR1
1202073534	03/21/10 21:23	966227	1	100321	MAR1
248386003	03/21/10 21:50	966227	1	100321	MAR1
248386004	03/21/10 22:17	966227	1	100321	MAR1
1202073529	03/21/10 22:44	966227	1	100321	MAR1
1202073531	03/21/10 23:11	966227	1	100321	MAR1
1202073533	03/21/10 23:38	966227	1	100321	MAR1

15 WIC100321-02ICV

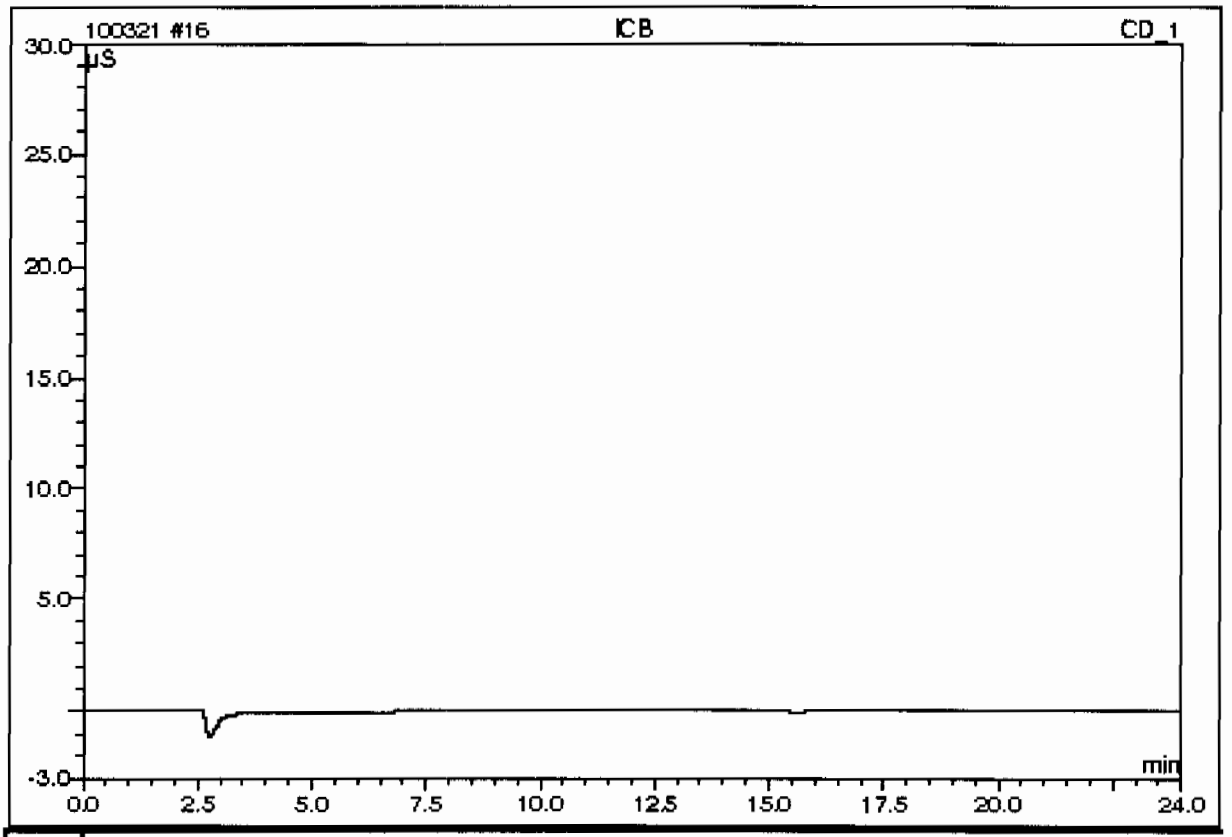
Sample Name:	WIC100321-02ICV	*Injection Volume:*	1.0
Vial Number:	2	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/21/2010 11:32	*Analyst:*	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCB086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	4.7492		3.01433	12.02
2	7.11	Chloride	n.a.	9.2029		4.41923	17.62
3	9.08	Nitrite-N	n.a.	4.7889		4.44859	17.74
4	10.46	Chlorate	n.a.	2.5430		0.39737	1.58
5	11.35	Bromide	n.a.	2.5104		0.42132	1.68
6	13.26	Nitrate-N	n.a.	4.6626		5.28214	21.06
8	18.36	O-Phosphate-P	n.a.	2.4391		0.78126	3.11
9	20.59	Sulfate	n.a.	18.7738		6.27592	25.02
Total:				49.6699	0.000	25.040	99.83

16 ICB

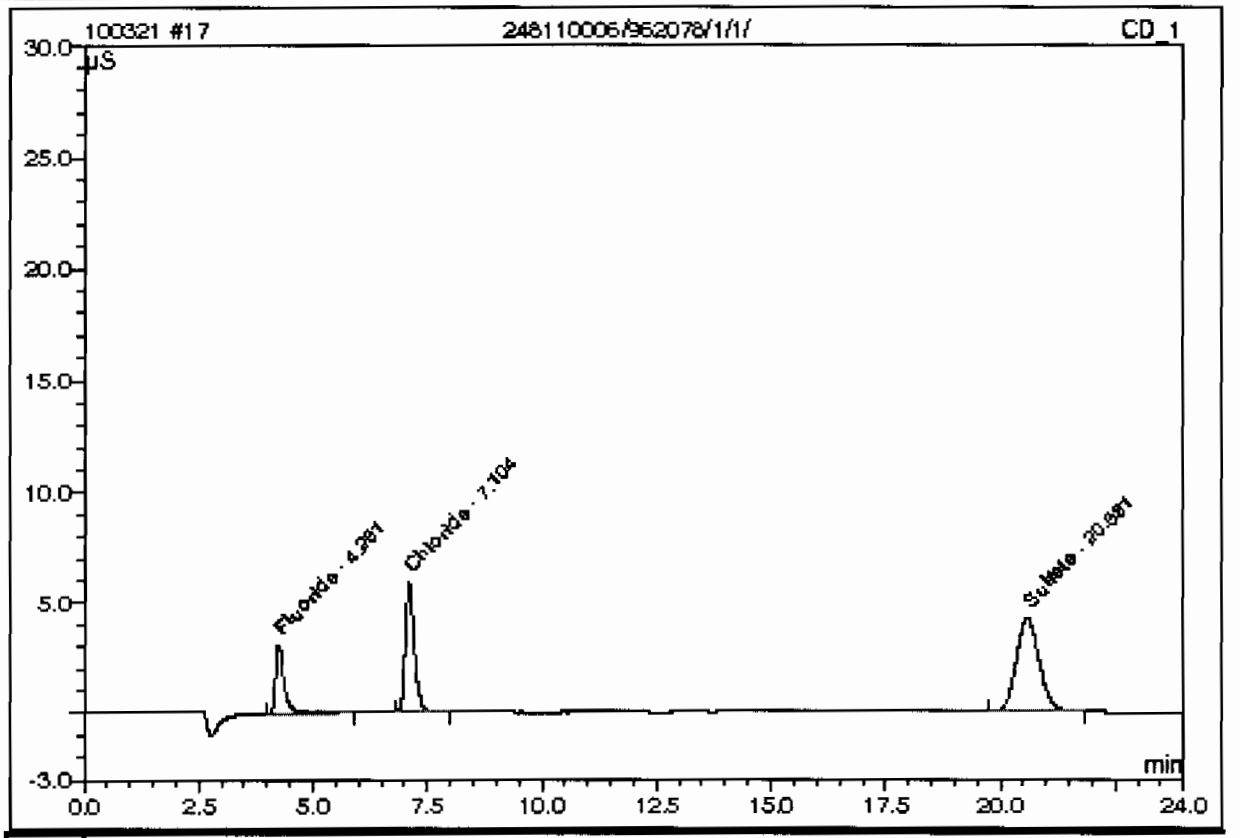
Sample Name:	ICB	*Injection Volume:*	1.0
Vial Number:	3	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/21/2010 12:53	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCE086;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

17 248110006/962078/1/1/

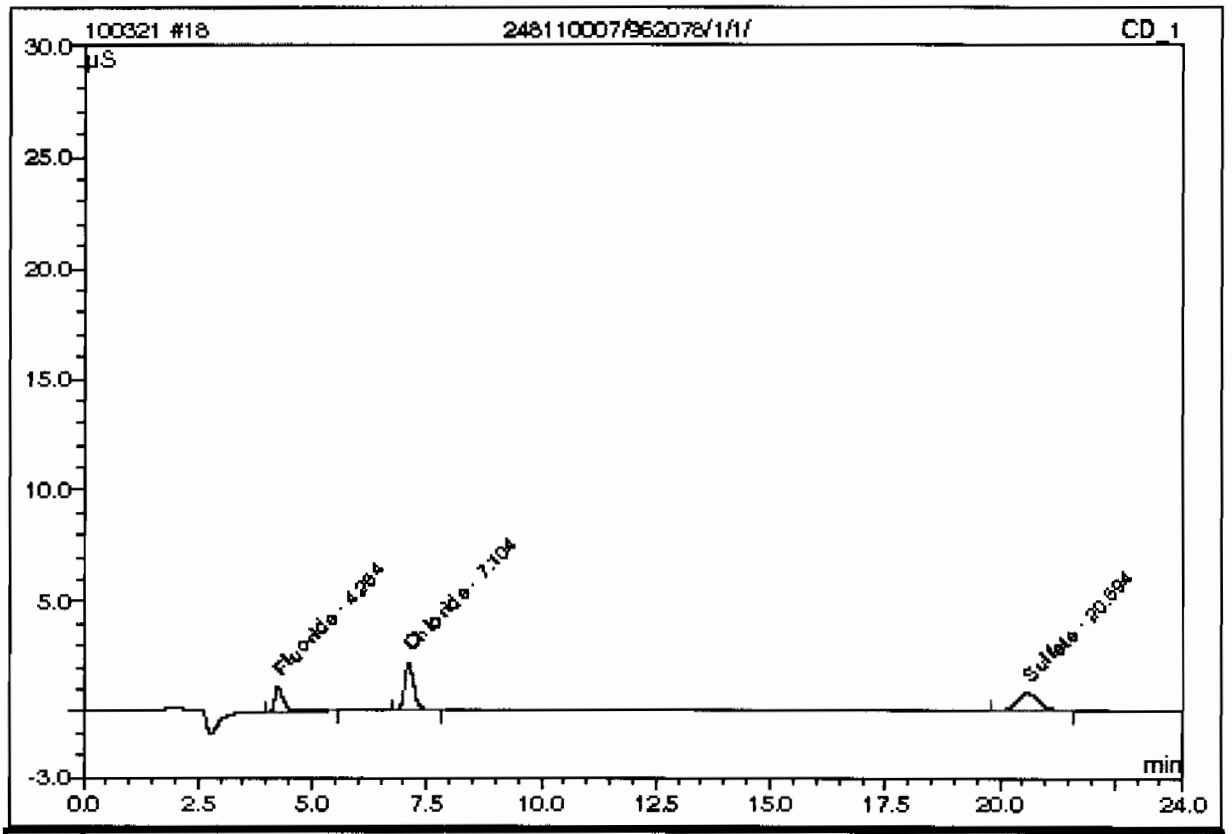
Sample Name:	248110006/962078/1/1/	*Injection Volume:*	1.0
Vial Number:	4	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/21/2010 13:19	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GCB086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	1.1640		0.71011	15.69
2	7.10	Chloride	n.a.	2.9350		1.35609	29.96
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	20.58	Sulfate	n.a.	7.5598		2.45966	54.35
Total:				11.6588	0.000	4.526	100.00

18 248110007/962078/1/1/

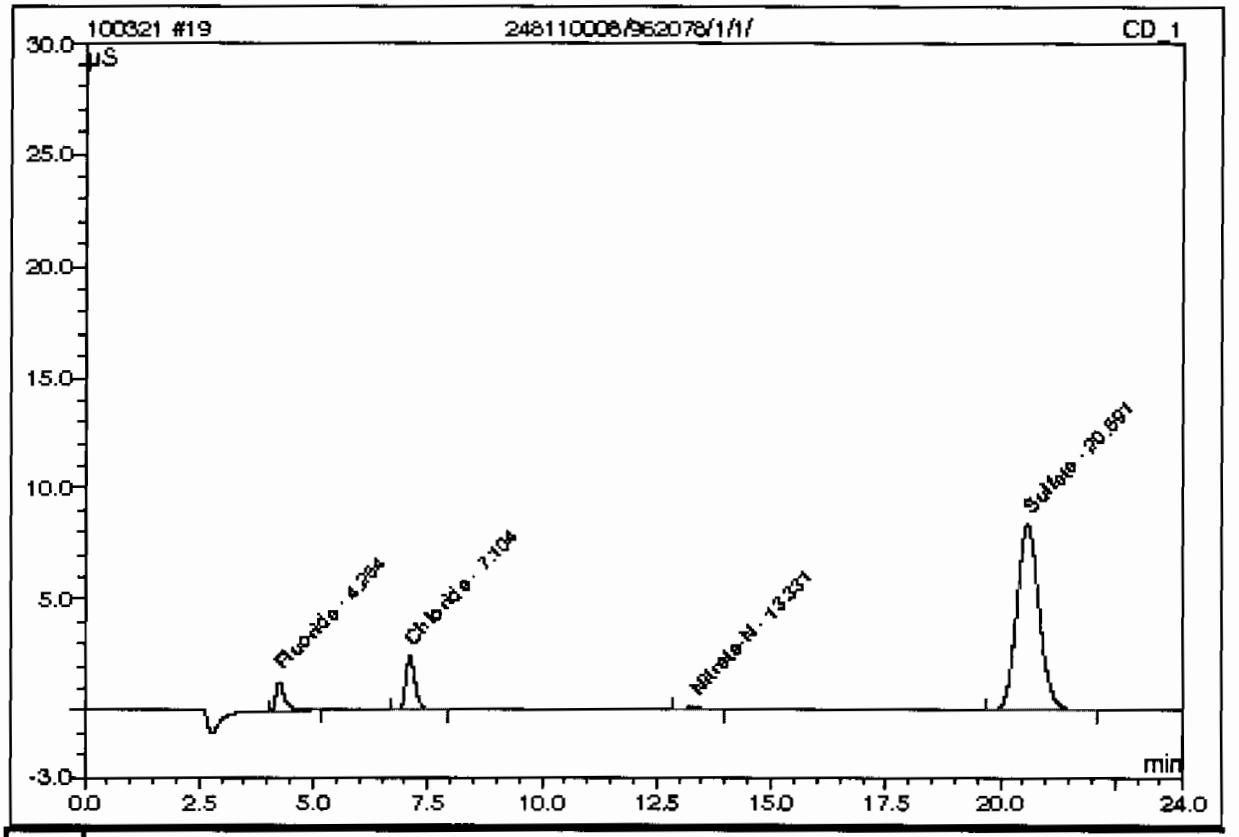
Sample Name:	248110007/962078/1/1/	*Injection Volume:*	1.0
Vial Number:	5	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/21/2010 13:46	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GCB086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	0.4865		0.27471	21.25
2	7.10	Chloride	n.a.	1.2475		0.53138	41.11
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	20.59	Sulfate	n.a.	1.7617		0.48650	37.64
Total:				3.4957	0.000	1.293	100.00

19 248110008/962078/1/1/

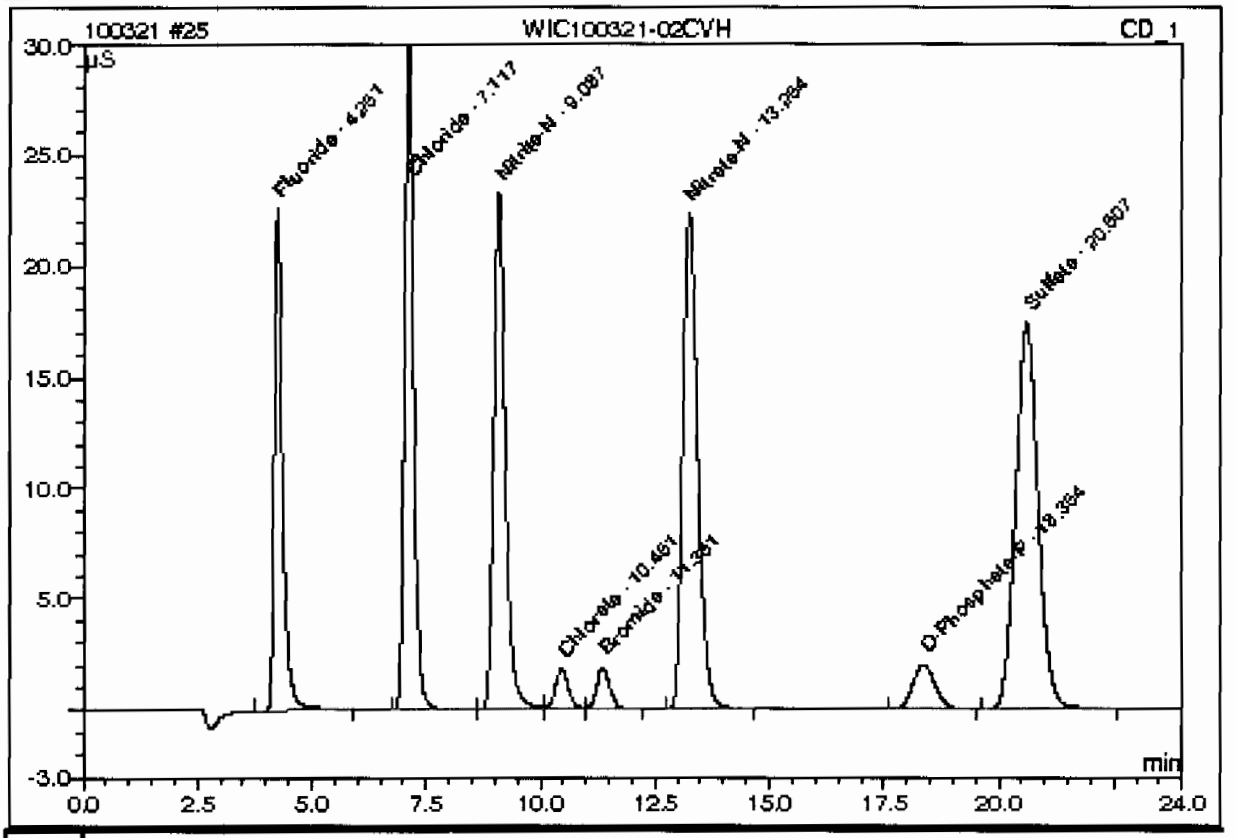
Sample Name:	248110008/962078/1/1/	*Injection Volume:*	1.0
Vial Number:	6	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/21/2010 14:13	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCB086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	0.5247		0.29930	5.22
2	7.10	Chloride	n.a.	1.3621		0.58736	10.25
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	13.33	Nitrate-N	n.a.	0.1811		0.06856	1.20
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	20.59	Sulfate	n.a.	14.3688		4.77685	83.34
Total:				16.4367	0.000	5.732	100.00

25 WIC100321-02CVH

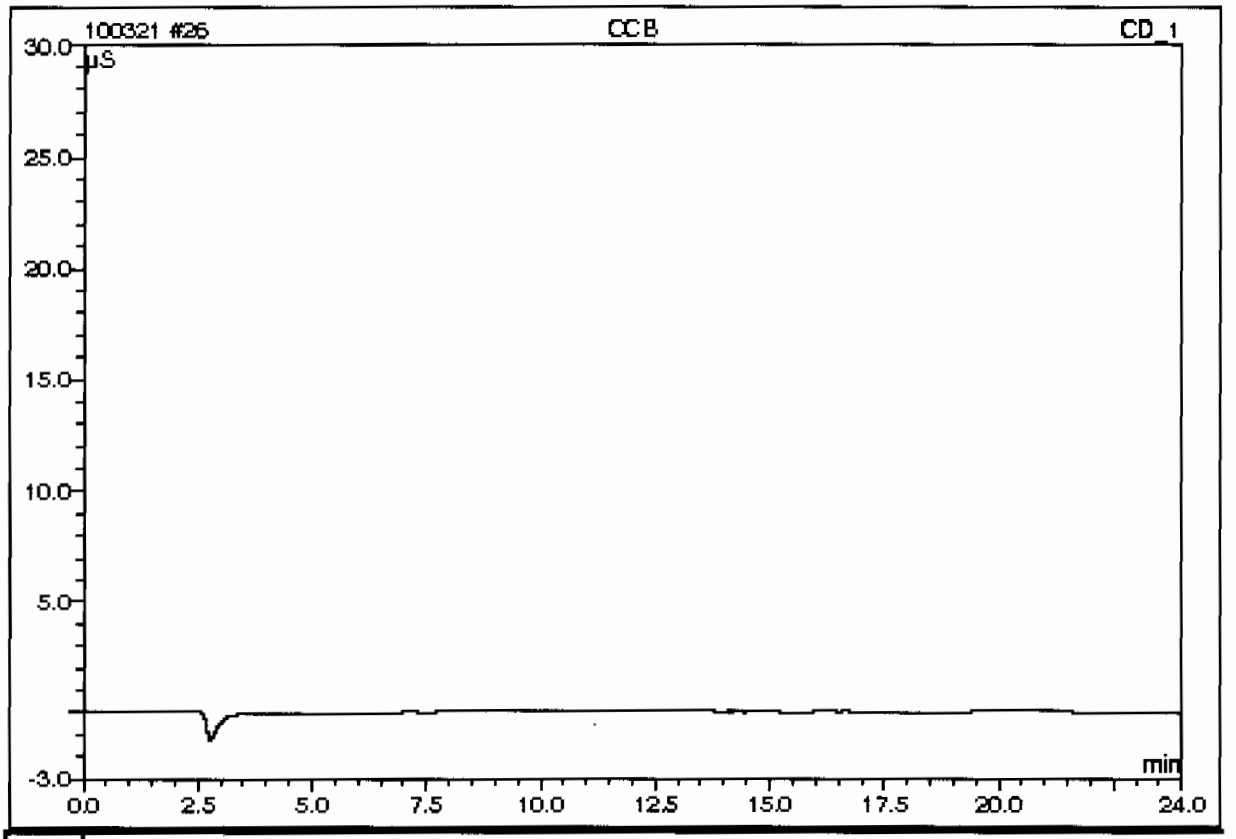
Sample Name:	WIC100321-02CVH	*Injection Volume:*	1.0
Vial Number:	12	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/21/2010 16:54	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GCB086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	7.3711		4.69937	12.06
2	7.12	Chloride	n.a.	14.4763		6.99638	17.96
3	9.09	Nitrite-N	n.a.	7.3083		6.82919	17.53
4	10.46	Chlorate	n.a.	3.8025		0.59645	1.53
5	11.36	Bromide	n.a.	3.6702		0.61755	1.59
6	13.25	Nitrate-N	n.a.	7.2640		8.30849	21.33
7	18.36	O-Phosphate-P	n.a.	3.4291		1.10731	2.84
8	20.61	Sulfate	n.a.	29.1400		9.80365	25.16
Total:				76.4615	0.000	38.958	100.00

26 CCB

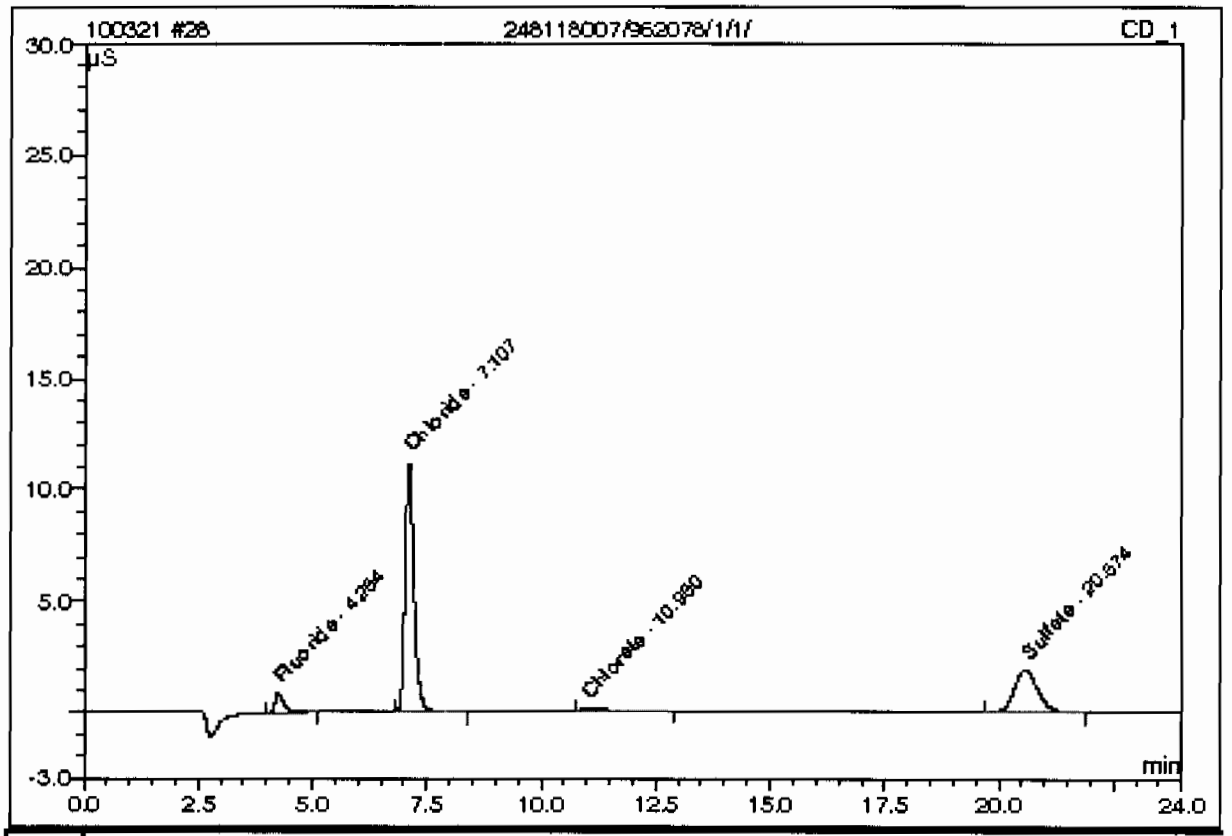
Sample Name:	CCB	*Injection Volume:*	1.0
Vial Number:	13	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/21/2010 17:21	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GCB086;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

28 248118007/962078/1/1/

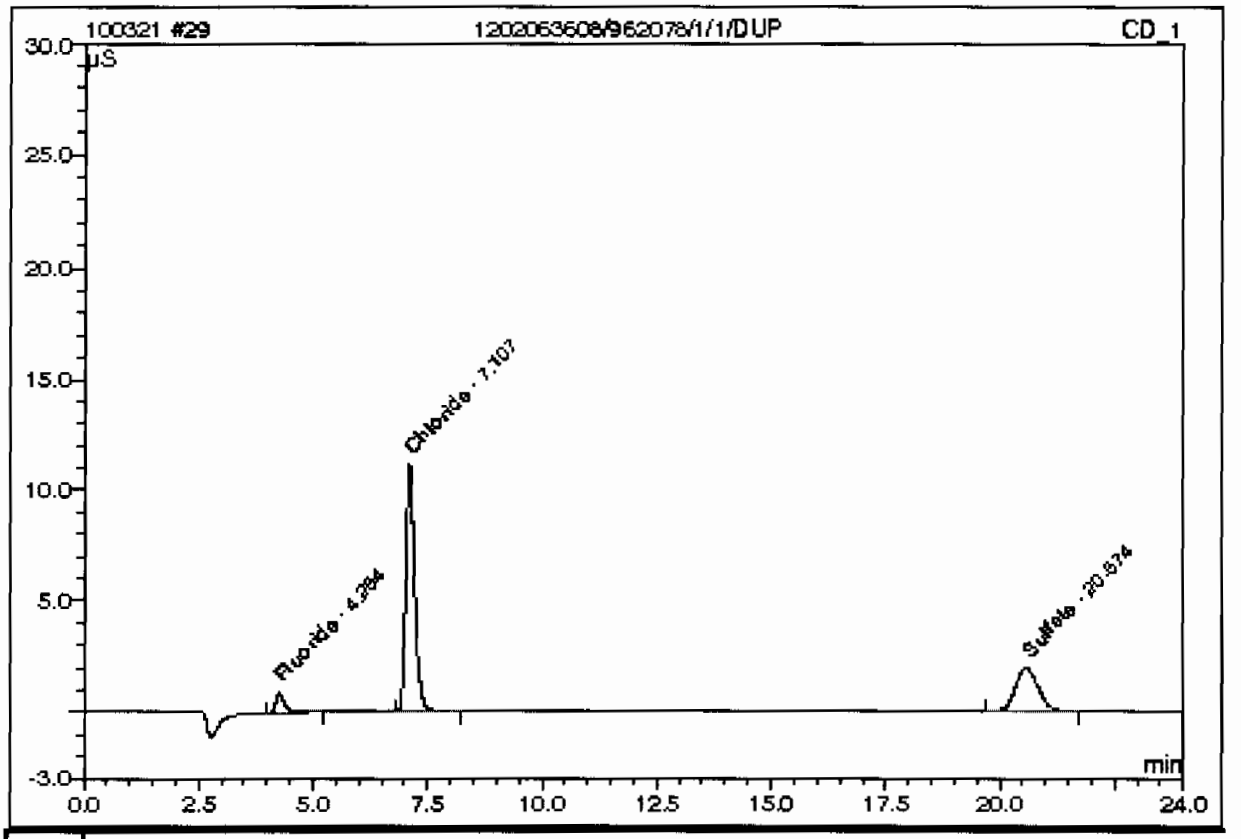
Sample Name:	248118007/962078/1/1/	*Injection Volume:*	1.0
Vial Number:	15	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/21/2010 18:15	Analyst:	MAR1
Run Time (min):	24.00	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	n.a.	0.3767		0.20414	5.08
2	7.11	Chloride	n.a.	5.3730		2.54754	63.35
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
3	10.96	Chlorate	n.a.	0.7110		0.10783	2.68
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.
4	20.57	Sulfate	n.a.	3.7454		1.16158	28.89
Total:				10.2061	0.000	4.021	100.00

29 1202063608/962078/1/1/DUP

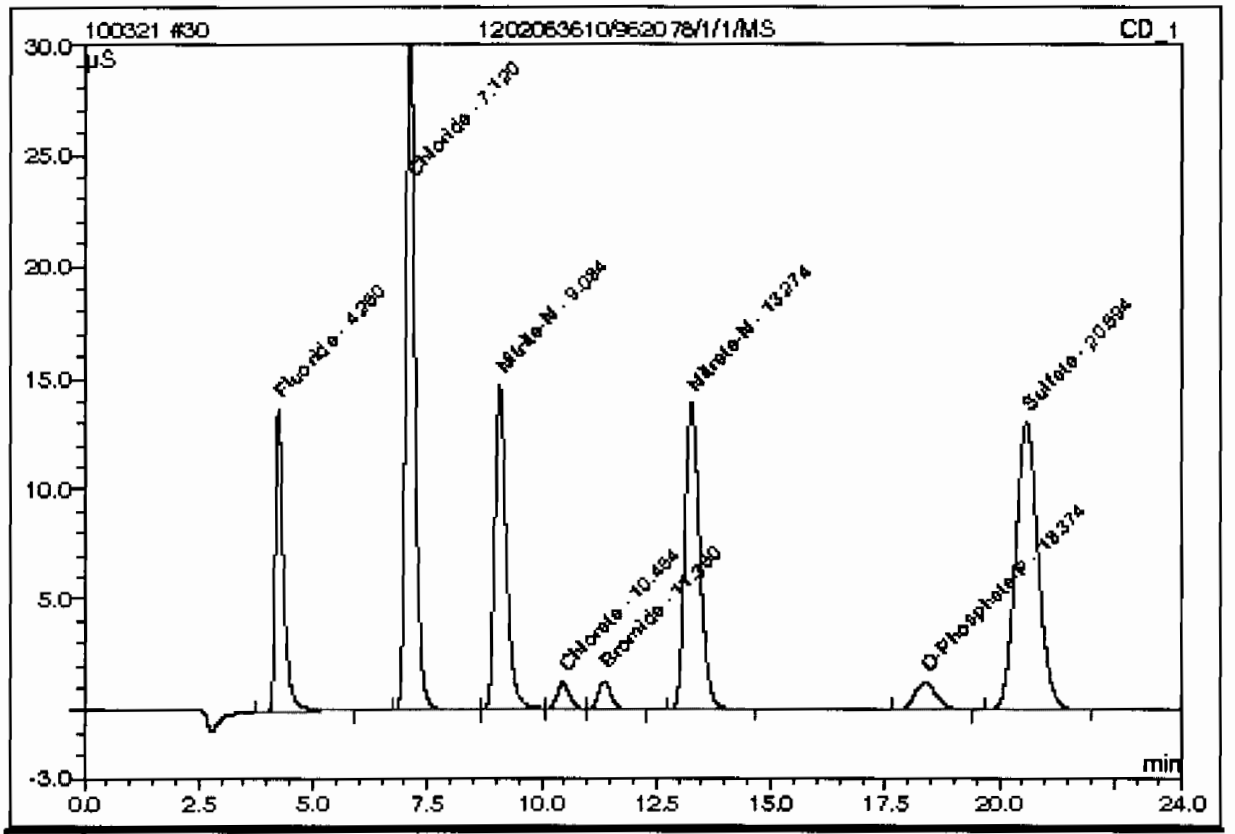
Sample Name:	1202063608/962078/1/1/DUP	*Injection Volume:*	1.0
Vial Number:	16	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/21/2010 18:42	Analyst:	MAR1
Run Time (min):	24.00	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	n.a.	0.3654		0.19687	5.08
2	7.11	Chloride	n.a.	5.3381		2.53047	65.25
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	20.57	Sulfate	n.a.	3.7138		1.15080	29.67
Total:				9.4172	0.000	3.878	100.00

30 1202063610/962078/1/1/MS

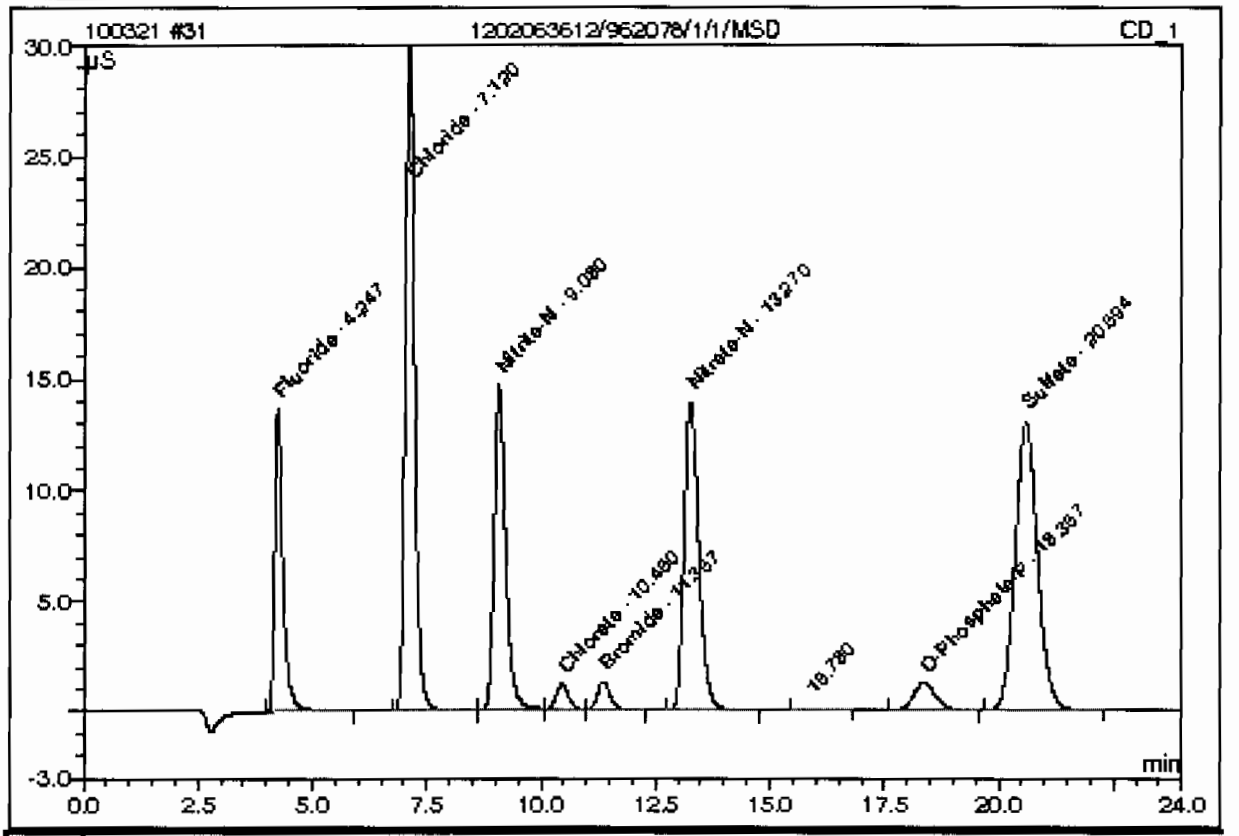
Sample Name:	1202063610/962078/1/1/MS	*Injection Volume:*	1.0
Vial Number:	17	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/21/2010 19:09	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCB086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	4.5224		2.86855	10.01
2	7.12	Chloride	n.a.	15.3139		7.40574	25.84
3	9.08	Nitrite-N	n.a.	4.6616		4.32829	15.10
4	10.46	Chlorate	n.a.	2.5114		0.39239	1.37
5	11.36	Bromide	n.a.	2.5815		0.42996	1.50
6	13.27	Nitrate-N	n.a.	4.5667		5.17054	18.04
7	18.37	O-Phosphate-P	n.a.	2.0973		0.66866	2.33
8	20.59	Sulfate	n.a.	22.0533		7.39198	25.80
Total:				58.2880	0.000	28.656	100.00

31 1202063612/962078/1/1/MSD

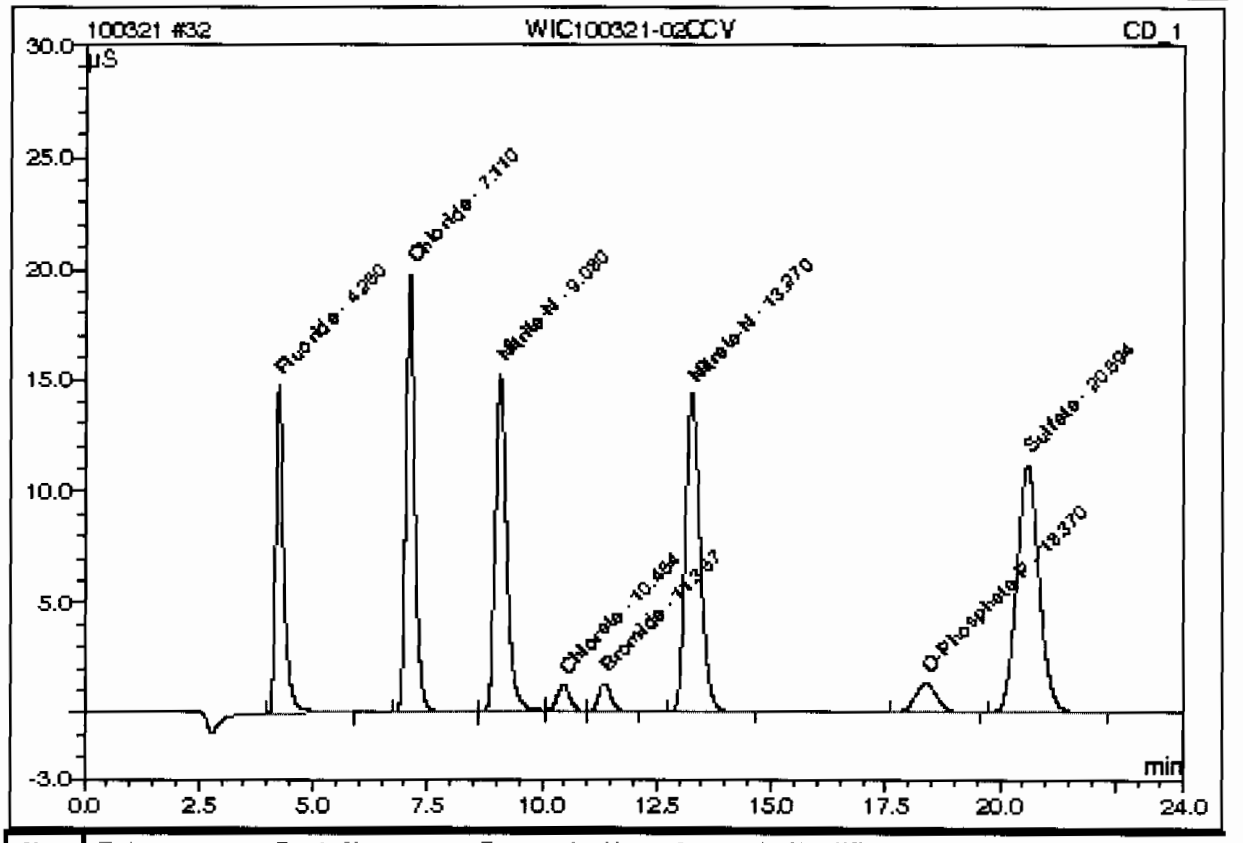
Sample Name:	1202063612/962078/1/1/MSD	*Injection Volume:*	1.0
Vial Number:	18	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/21/2010 19:36	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	4.5127		2.86229	9.96
2	7.12	Chloride	n.a.	15.3446		7.42071	25.82
3	9.08	Nitrite-N	n.a.	4.6800		4.34569	15.12
4	10.46	Chlorate	n.a.	2.4932		0.38950	1.36
5	11.36	Bromide	n.a.	2.5637		0.43034	1.50
6	13.27	Nitrate-N	n.a.	4.5787		5.18456	18.04
8	18.37	O-Phosphate-P	n.a.	2.1274		0.67858	2.36
9	20.59	Sulfate	n.a.	22.0554		7.39267	25.72
Total:				58.3558	0.000	28.704	99.86

32 WIC100321-02CCV

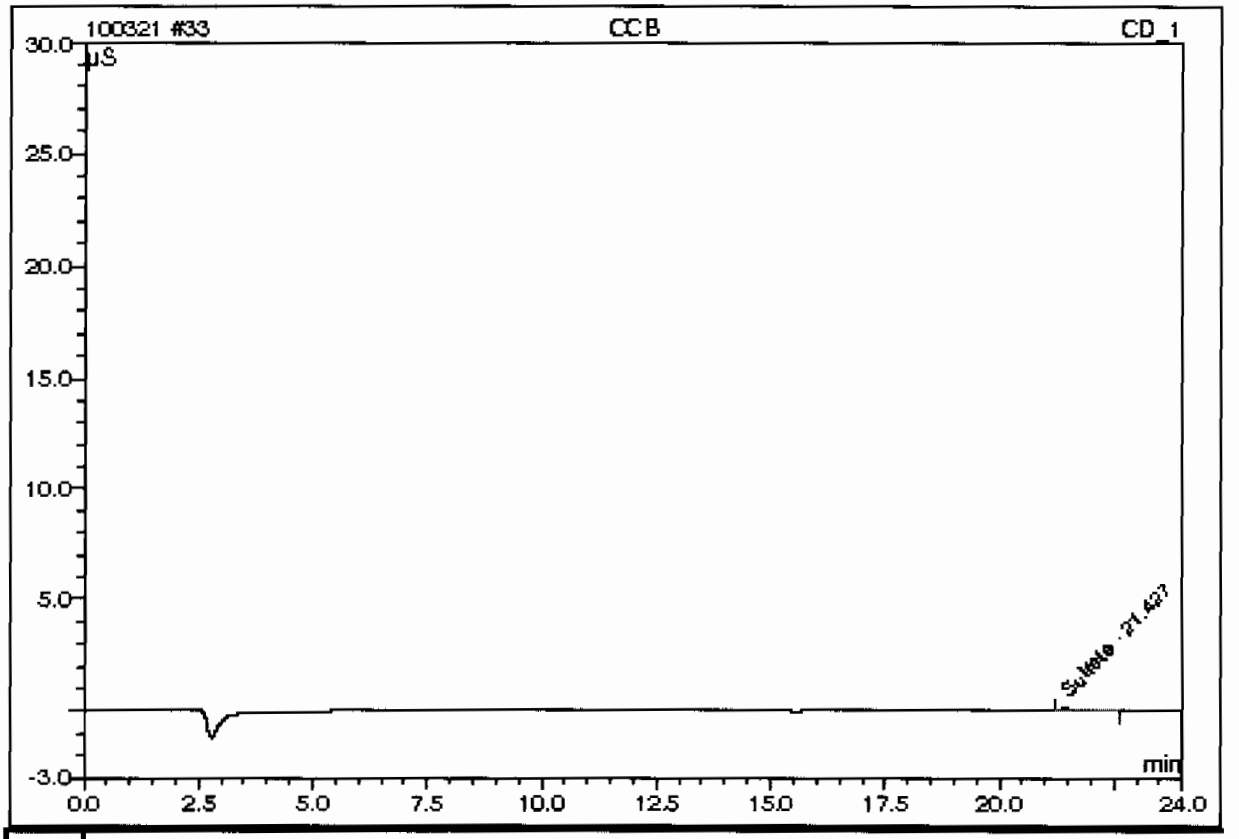
Sample Name:	WIC100321-02CCV	*Injection Volume:*	1.0
Vial Number:	19	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/21/2010 20:03	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCB086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	4.8444		3.07550	12.18
2	7.11	Chloride	n.a.	9.3012		4.46730	17.69
3	9.08	Nitrite-N	n.a.	4.8256		4.48329	17.75
4	10.46	Chlorate	n.a.	2.5695		0.40158	1.59
5	11.36	Bromide	n.a.	2.5245		0.42371	1.68
6	13.27	Nitrate-N	n.a.	4.7008		5.32661	21.09
7	18.37	O-Phosphate-P	n.a.	2.3245		0.74351	2.94
8	20.59	Sulfate	n.a.	18.9499		6.33585	25.09
Total:				50.0406	0.000	25.257	100.00

33 CCB

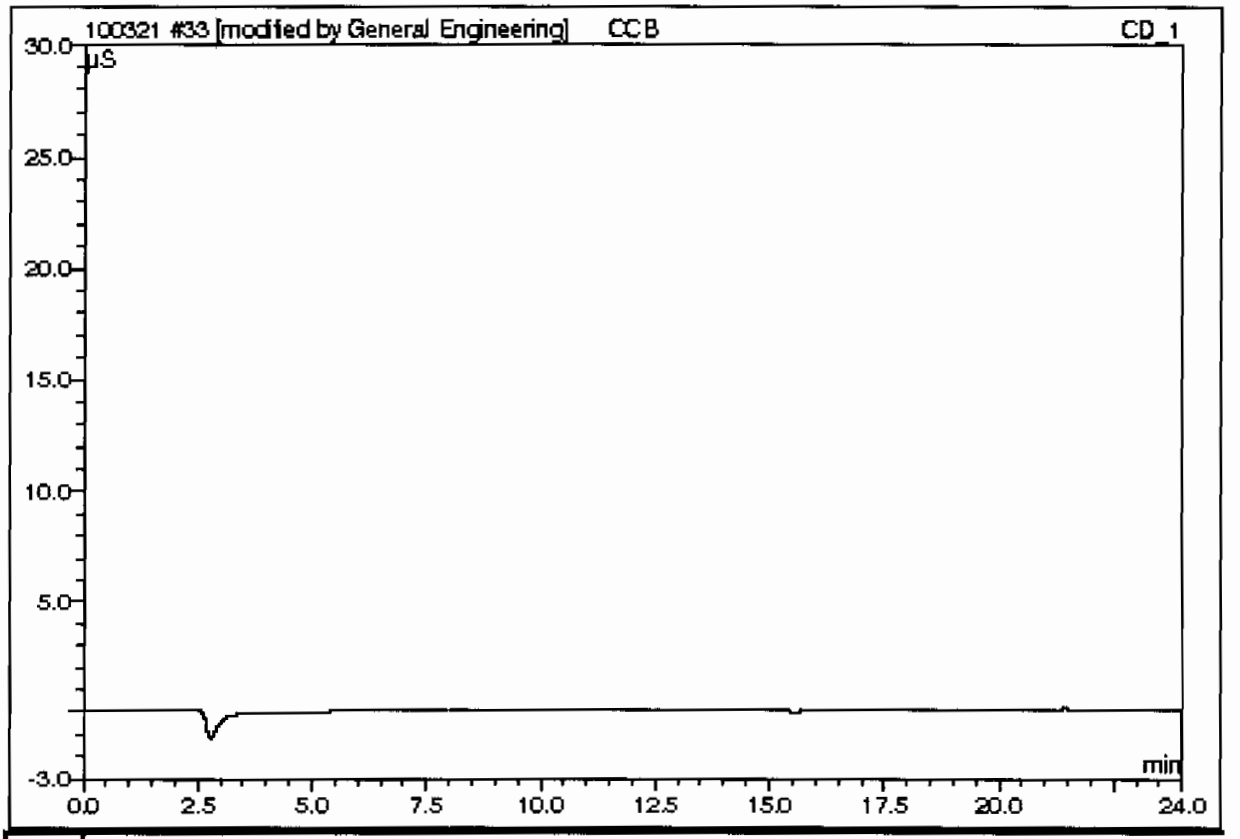
Sample Name:	CCB	*Injection Volume:*	1.0
Vial Number:	20	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/21/2010 20:30	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCB086;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.
1	21.43	Sulfate	n.a.	0.4804		0.05046	100.00
Total:				0.4804	0.000	0.050	100.00

33 CCB

Sample Name:	CCB	*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:	100311an	*Sample Amount:*	1.0000
Recording Time:	3/21/2010 20:30	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GCB086;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: LXA1
Batch: 959805
Lab SOP: GL-GC-E-008 REV# 17
Description: pH
Method: SW846 9045C/9045D

Type	Sample Id	Serial Number	Description
CCV	240	IMM091029-PH	PH 7 BUFFER FOR PH
LCS	1202058595	IMM100209-01	LCS BUFFER SOLUTION

Sample id	Parent Sample Id	Matrix	Start Time	Stop Time	Run Date	Parmname	Initial Wt(g)	Final Vol(mL)	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)
1202058595 LCS		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	6.99	20.4'C	7	99.857	
1202058595 LCS		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	6.99	20.4'C	7	99.857	
248025003		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	9.77	20.4'C			
248025003		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	9.77	20.4'C			
248025004		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	9.76	20.0'C			
248025004		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	9.76	20.0'C			
1202058593 DUP	248025004	Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	9.73	19.8'C			.308
1202058593 DUP	248025004	Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	9.72	19.9'C			.411
248025005		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	9.82	19.8'C			
248025005		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	9.82	19.8'C			
CCV			11:10	11:15	02-MAR-10 12:50	pH	20	20	7.02	19.4'C	7	100.286	
CCV			11:10	11:15	02-MAR-10 12:50	pH 2	20	20	7.02	19.4'C	7	100.286	
248025006		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	8.22	19.7'C			
248025006		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	8.22	19.7'C			
248025007		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	11.93	19.5'C			
248025007		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	11.93	19.5'C			
248110001		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	8.61	19.3'C			
248110001		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	8.59	19.3'C			
248110002		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	8.41	19.4'C			
248110002		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	8.41	19.4'C			
248110003		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	8.8	19.3'C			
248110003		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	8.79	19.3'C			
CCV			11:10	11:15	02-MAR-10 12:50	pH	20	20	7.01	19.2'C	7	100.143	
CCV			11:10	11:15	02-MAR-10 12:50	pH 2	20	20	7.01	19.2'C	7	100.143	
248110004		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	9.09	19.4'C			
248110004		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	9.09	19.4'C			
248110005		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	8.32	19.3'C			
248110005		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	8.32	19.3'C			

pH / Corrosivity LogBook

Analyst: LXA1
Batch: 959805
Lab SOP: GL-GC-E-008 REV# 17
Description: pH
Method: SW846 9045C/9045D

Type	Sample Id	Serial Number	Description
CCV	240	IMM091029-PH	PH 7 BUFFER FOR PH
LCS	1202058595	IMM100209-01	LCS BUFFER SOLUTION

Sample id	Parent Sample Id	Matrix	Start Time	Stop Time	Run Date	Parmname	Initial Wt(g)	Final Vol(mL)	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)
248110006		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	8.91	19.2'C			
248110006		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	8.89	19.2'C			
248110007		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	8.59	19.2'C			
248110007		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	8.59	19.2'C			
248110008		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	8.67	19.1'C			
248110008		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	8.66	19.1'C			
CCV			11:10	11:15	02-MAR-10 12:50	pH	20	20	7.02	19.2'C	7	100.286	
CCV			11:10	11:15	02-MAR-10 12:50	pH 2	20	20	7.01	19.2'C	7	100.143	
1202058594 DUP	248110008	Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	8.57	19.7'C			1.16
1202058594 DUP	248110008	Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	8.57	19.7'C			1.045
248118001		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	8.45	19.8'C			
248118001		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	8.45	19.8'C			
248118002		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	8.26	19.7'C			
248118002		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	8.26	19.7'C			
248118003		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	7.92	20.0'C			
248118003		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	7.92	20.0'C			
248118004		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	8.07	19.9'C			
248118004		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	8.07	19.9'C			
CCV			11:10	11:15	02-MAR-10 12:50	pH	20	20	7.01	19.6'C	7	100.143	
CCV			11:10	11:15	02-MAR-10 12:50	pH 2	20	20	7.01	19.6'C	7	100.143	
248118005		Soil	11:10	11:15	02-MAR-10 12:50	pH	20	20	8.62	20.0'C			
248118005		Soil	11:10	11:15	02-MAR-10 12:50	pH 2	20	20	8.62	20.0'C			
248118006		Soil	11:10	11:15	02-MAR-10 12:52	pH	20	20	8.6	20.1'C			
248118006		Soil	11:10	11:15	02-MAR-10 12:52	pH 2	20	20	8.6	20.1'C			
248118007		Soil	11:10	11:15	02-MAR-10 12:53	pH	20	20	8.23	20.1'C			
248118007		Soil	11:10	11:15	02-MAR-10 12:53	pH 2	20	20	8.23	20.1'C			
CCV			11:10	11:15	02-MAR-10 12:55	pH	20	20	7.02	20.0'C	7	100.286	
CCV			11:10	11:15	02-MAR-10 12:55	pH 2	20	20	7.02	20.0'C	7	100.286	

pH / Corrosivity LogBook

Calibration Information:
Run Date: 02-MAR-10 11:20
Instrument: PHX370
Analyst: LXA1

Comments:

	Standard	Observed	Theoretical		C	%Recovery
11:20	IMM100302-PH1	4.01	4	SU	20.4	100.25
11:20	IMM100302-PH2	7.02	7	SU	20.4	100.29
11:20	UPH100302-PH3	10.01	10	SU	20.4	100.1
11:20	UPH100302-PH4	2.04	2	SU	20.4	102
11:20	UPH100302-PH5	12.01	12	SU	20.4	100.08
11:20	IMM100302-PH6	7.02	7	SU	20.4	100.29

Miscellaneous

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
23-MAR-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
IC	EPA 300.0	Solid	LANL
Batch ID:	**Sample Numbers:**		
962078	See Below		

Potentially affected work order(s)(SDG): 248110(10-2090-1),248118(10-2093-1)

Application Issues:

Failed Recovery for MS/PS

Container scanning event for custody missed

Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:	DER Disposition:
1. Failed Recovery for MS/MSD: QC 1202063609MS, 1202063611MSD	1. The spike recovery falls outside of the GEL acceptance limits but within the client specified limits.
2. Container scanning event for custody missed: 248110 001,002,003,004,005,006,007,008 248118 001,002,003,004,005,006,007	2. The following samples were not scanned to batch prior to initial run. However, the samples were in the custody of analyst during analysis.

Originator's Name:
Mary Sherwood 23-MAR-10

Data Validator/Group Leader:
Elzbieta Szulc 24-MAR-10