Monday, March 01, 2010

REQUEST NUMBER: 10-2155

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:10-2155
Per Agreement Number:126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 3/1/2010
TURNAROUND/REPORT DUE: 3/31/2010
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	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	

Monday, March 01, 2010

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PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
	SW-846:6010B	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
	SW-846:6020	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	

Monday, March 01, 2010

REQUEST NUMBER: 10-2155

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
		1	RE36-10-7533	W	2/24/2010	
		1	RE36-10-7535	W	2/24/2010	
	SW-846:6850	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
		1	RE36-10-7533	W	2/24/2010	
		1	RE36-10-7535	W	2/24/2010	
	SW-846:7470A	1	RE36-10-7533	W	2/24/2010	
		1	RE36-10-7535	W	2/24/2010	
	SW-846:7471A	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	

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REQUEST NUMBER: 10-2155

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
	SW-846:9012A	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
		1	RE36-10-7533	W	2/24/2010	
		1	RE36-10-7535	W	2/24/2010	
	SW-846:9045C	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	

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PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9045C	1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	

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Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2155

LOS ALAMOS

NATIONAL LABORATORY

REQUEST NUMBER: 10-2155

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 3/31/2010

TURNAROUND REQ'D: 30

Request Hard Copy Flag: True

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7494	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7494	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7493	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7493	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7492	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7492	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7491	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7491	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7496	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7496	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7499	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7499	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7497	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7497	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7495	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7495	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7498	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7498	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7500	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7500	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7523	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7523	1	POLY	Perchlorate+CN+N03+pH	Ice	R

Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2155

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7522	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7522	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7521	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7521	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7535	1	POLY	METALS+U-GEL	Nitric Acid	W
RE36-10-7535	1	POLY	SW-846:6850	Ice	W
RE36-10-7535	1	POLY	TCN	Sodium Hydroxide	W
RE36-10-7533	1	POLY	METALS+U-GEL	Nitric Acid	W
RE36-10-7533	1	POLY	SW-846:6850	Ice	W
RE36-10-7533	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]		3/1/10	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: 2485 **EVENT NAME:** 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7491 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/24/2010	MEDIA:	QBT3	ALLH
TIME COLLECTED (HH:MM)		13:30	SUB-MEDIA:	TUFF 1	NA
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	36-610618	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.5 ft	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 JKM 2/24/10 clear	Ice	Y	
1	↓	8270C+NMED Exp	500 ML AMBER GLASS	Ice	↓	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	↓	
1		H3	500 ML POLY	Ice	↓	
1		METALS+U-GEL	125 ML POLY	Ice	↓	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	↓	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	↓	

SAMPLE DESC: Dark brown, ~~moist~~ JKM 2/24/10, organic topsoil, dry, mossy

SAMPLE COMMENTS: NA

LOCATION DESC: 8-45

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 47 dpm
Beta/Gamma = 1693 dpm

PID Ambient/Reading = ppm

COLLECTED BY (PRINT) R. Saunders **REVIEWED BY (PRINT)** J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	02/25/10	(Printed Name) Sherri Sherwood	2/25/10
(Signature) Jon R. Marin	0700AM	(Signature) Sherri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485 **EVENT NAME:** 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7492 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/24/2010	MEDIA:	QBT3	ALLH
TIME COLLECTED (HH:MM)		13:40	SUB-MEDIA:	TUFF 1	NA
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	36-610618	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	2.0 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	3.0 ft	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	↓	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	↓	
1	↓	H3	500 ML POLY	Ice	↓	
1	↓	METALS+U-GEL	125 ML POLY	Ice	↓	
1	↓	Perchlorate+CN+N03+pH	500 ML POLY	Ice	↓	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	↓	

SAMPLE DESC:

Dark brown, dry, organic topsoil

SAMPLE COMMENTS:

LOCATION DESC: 8-45

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 41 dpm
Beta/Gamma = 1618 dpm

PID Ambient Reading 0/0 ppm

COLLECTED BY (PRINT) R. Saunders

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherrill Sherwood	2/25/10
(Signature) Jon R Marin	0750 Am	(Signature) Sherrill Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485 **EVENT NAME:** 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7493 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/24/2010	MEDIA:	QBT3	ALLH
TIME COLLECTED (HH:MM)		13:55	SUB-MEDIA:	TUFF 1	NA
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	36-610619	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.5 ft	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 2/25/10 clear	Ice	Y	
1	↓	8270C+NMED Exp	500 ML AMBER GLASS	Ice	↓	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	↓	
1	↓	H3	500 ML POLY	Ice	↓	
1	↓	METALS+U-GEL	125 ML POLY	Ice	↓	
1	↓	Perchlorate+CN+N03+pH	500 ML POLY	Ice	↓	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	↓	

SAMPLE DESC:

Dark brown, slightly moist, organic, silty sandy soil

SAMPLE COMMENTS: glass bitr

LOCATION DESC: 8-34

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 47 dpm
Beta/Gamma = 1805 dpm

PID Ambient Reading 0 ppm

COLLECTED BY (PRINT) R. Saunders

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherri Sherwood	2/25/10
(Signature) Jon R. Marin	0750AM	(Signature) Sherri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485 **EVENT NAME:** 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7494 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/24/2010	MEDIA:	QBT3	ALLH
TIME COLLECTED (HH:MM)		14:05	SUB-MEDIA:	TUFF 1	NA
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	36-610619	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	2.0 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	3.0 ft	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	↓	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1	✓	Perchlorate+CN+N03+pH	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Medium brown, dry, organic silty topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-34

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 29 **dpm**
Beta/Gamma = 1780 **dpm**

PID Ambient Reading 0/0 **ppm**

COLLECTED BY (PRINT) L. Lopez **REVIEWED BY (PRINT)** J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherry Sherwood	2/25/10
(Signature) Jon R. Marin	0750AM	(Signature) Sherry Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485 **EVENT NAME:** 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7495 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/24/	MEDIA:	QBT3	ALLH
TIME COLLECTED (HH:MM)		14:25	SUB-MEDIA:	TUFF 1	NA
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	36-610620	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.5 ft	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 2dm clear	Ice	Y	
1	↓	8270C+NMED Exp	500 ML AMBER GLASS	Ice	↓	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice		
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Brown, dry, organic, silty topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-44

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 88 dpm
Beta/Gamma = 1848 dpm

PID Ambient Reading 0/0 ppm

COLLECTED BY (PRINT) R. Saunders

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherri Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sherri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485 **EVENT NAME:** 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7496 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/24/2010	MEDIA:	OBT3	ALLH
TIME COLLECTED (HH:MM)		14:35	SUB-MEDIA:	TUFF 1	NA
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	36-610620	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	2.0 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	3.0 ft	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 2/24/10 clear	Ice	Y	
1	↓	8270C+NMED Exp	500 ML AMBER GLASS	Ice	↓	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	↓	
1	↓	H3	500 ML POLY	Ice	↓	
1	↓	METALS+U-GEL	125 ML POLY	Ice	↓	
1	↓	Perchlorate+CN+N03+pH	500 ML POLY	Ice	↓	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	↓	

SAMPLE DESC:

Brown, dry, silty organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-44

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 58 dpm
Beta/Gamma = 2160 dpm

PID Ambient Reading 0/0 ppm

COLLECTED BY (PRINT) L. Lopez

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherri Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sherri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485 **EVENT NAME:** 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7497 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/24/2010 2/24/10	MEDIA:	OBT3	ALH
TIME COLLECTED (HH:MM)		14:45	SUB-MEDIA:	TUFF 1	NA
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	36-610621	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.5 ft	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	↓	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	↓	
1	↓	H3	500 ML POLY	Ice	↓	
1	↓	METALS+U-GEL	125 ML POLY	Ice	↓	
1	↓	Perchlorate+CN+N03+pH	500 ML POLY	Ice	↓	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	↓	

SAMPLE DESC:

Brown, dry, silty, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-54

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 82 dpm
Beta/Gamma = 1517 dpm

PID Ambient/Reading 0/0 ppm

COLLECTED BY (PRINT) L. Lopez

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherri Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sherri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485 **EVENT NAME:** 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7498 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/24/2010	MEDIA:	QBT3	ALLH
TIME COLLECTED (HH:MM)		14:55	SUB-MEDIA:	TUFF 1	NA
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	36-610621	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	2.0 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	3.0 ft	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	↓	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	↓	
1	↓	H3	500 ML POLY	Ice	↓	
1	↓	METALS+U-GEL	125 ML POLY	Ice	↓	
1	↓	Perchlorate+CN+N03+pH	500 ML POLY	Ice	↓	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	↓	

SAMPLE DESC:

Medium brown, dry, silty, organic topsoil

SAMPLE COMMENTS:

LOCATION DESC: 8-54

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 58 dpm
Beta/Gamma = 1829 dpm

PID Ambient/Reading 0/0 ppm

COLLECTED BY (PRINT) JON BRANCA

REVIEWED BY (PRINT) JON MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherri Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sherri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485 **EVENT NAME:** 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7499 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/24/2010	MEDIA:	QBT3	ALLH
TIME COLLECTED (HH:MM)		15:20	SUB-MEDIA:	TUFF 1	NA
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	36-610622	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.5 ft	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 jam clear	Ice	Y	
1	↓	8270C+NMED Exp	500 ML AMBER GLASS	Ice	↓	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Dark brown, dry, silty, topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-55

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 29 dpm
Beta/Gamma = 1824 dpm

PID Ambient Reading 0/0 ppm

COLLECTED BY (PRINT) R. Saunders

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherry Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sherry Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485 **EVENT NAME:** 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7500 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/24/2010	MEDIA:	QBT3	ALLH
TIME COLLECTED (HH:MM)		15:30	SUB-MEDIA:	TUFF 1	NA
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	36-610622	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	2.0 ft	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	3.0 ft	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 jem 4/24/10 clear	Ice	Y	
1	↓	8270C+NMED Exp	500 ML AMBER GLASS	Ice	↓	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	↓	
1	↓	H3	500 ML POLY	Ice	↓	
1	↓	METALS+U-GEL	125 ML POLY	Ice	↓	
1	↓	Perchlorate+CN+N03+pH	500 ML POLY	Ice	↓	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	↓	

SAMPLE DESC:

Dark brown, dry, silty, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-55

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 53 dpm
Beta/Gamma = 1902 dpm

PID Ambient Reading 0/0 ppm

COLLECTED BY (PRINT) L. Lopez

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherri Sherwood	2/25/10
(Signature) Jon R. Marin	07:50 AM	(Signature) Sherri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485 **EVENT NAME:** 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7521 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/24/2010	MEDIA:	QBT3	ALLH
TIME COLLECTED (HH:MM)		11:35	SUB-MEDIA:	TUFF 1	NA
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	UNK	36-610614	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0	2.0 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	3.0 ft	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 4ml 2/24/10 clear	Ice		
1		AM241+GS+ISOPU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC: QC Sample of

Dark brown, moist, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-31

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 29 dpm
Beta/Gamma ≤ 1844 dpm

PID Ambient Reading 0/0 ppm

COLLECTED BY (PRINT) R. Saunders **REVIEWED BY (PRINT)** J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sheri Sherwood	2/25/10
(Signature) Jon R. Marin	0750AM	(Signature) Sheri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485 **EVENT NAME:** 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7522 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/24/2010	MEDIA:	QBT3	ALLH
TIME COLLECTED (HH:MM)		11:52	SUB-MEDIA:	TUFF 1	NA
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	UNK	36-610616	FIELD QC TYPE:	FD	↓
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	↓
TOP DEPTH:	0	2.0 ft	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	0	3.0 ft	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 2nm clear	Ice	↓	
1	↓	AM241+GS+ISOPU+ISOU	1 LITER POLY	None	↓	
1	↓	H3	500 ML POLY	Ice	↓	
1	↓	METALS+U-GEL	125 ML POLY	Ice	↓	
1	↓	Perchlorate+CN+N03+pH	500 ML POLY	Ice	↓	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	↓	

SAMPLE DESC: QC Sample of RE36-10-7488

Dark brown, dry, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-47

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 41 dpm
Beta/Gamma = 1844 dpm

PID Ambient Reading = 0 ppm

COLLECTED BY (PRINT) R. Saunders **REVIEWED BY (PRINT)** J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherri Sherwood	2/25/10
(Signature) Jon R. Marin	0750	(Signature) Sherri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485 **EVENT NAME:** 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7523 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/24/2010	MEDIA:	OBT3	ALL M
TIME COLLECTED (HH:MM)		13:40	SUB-MEDIA:	TUFF 1	NA
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	UNK	36-610618	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0	2.0 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	3.0 ft	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		
1		AM241+GS+ISOPU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC: QC Sample of RE36-10-7492

Dark brown, dry, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-45

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≐ 41 **dpm**
Beta/Gamma ≐ 1668 **dpm**

PID Ambient/Reading 0/0 **ppm**

COLLECTED BY (PRINT) L. Lopez **REVIEWED BY (PRINT)** J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherrie Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sherrie Sherwood	0750
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485 **EVENT NAME:** 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7533 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/24/2010	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		10:15	SUB-MEDIA:	OTHER	↓
PRS ID:	36-008	OK	SAMPLE TECH CODE:	DC	OK
LOCATION ID:	UNK		FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0	↓	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	0	↓	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / 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	normal	TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE36-10-7479

SAMPLE COMMENTS:

LOCATION DESC: 8-

FIELD SCREENING/MEASUREMENT RESULTS:
NA

COLLECTED BY (PRINT) R. Saunders **REVIEWED BY (PRINT)** J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN (Signature) Jon R Marin	2/25/10 0750 Am	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	2/25/10 0750
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) Esteban Lujan (Signature)	2/25/10 0750 Am	(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485 **EVENT NAME:** 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7535 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/24/2010	MEDIA:	NA	OK
TIME COLLECTED (HH:MM)		16:01	SUB-MEDIA:	OTHER	
PRS ID:	36-008	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	36-610621	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / 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)	Y 2/24/10 ~~N~~	
1	normal	SW-846:6850	250 ML POLY	Ice	Y	
1	normal	TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE36-10-7497

SAMPLE COMMENTS:
Field Rinsate

LOCATION DESC: 8-54

FIELD SCREENING/MEASUREMENT RESULTS:
NA

COLLECTED BY (PRINT) Lorey A. Lopez REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	02/25/10	(Printed Name) Sherri Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sherri Sherwood	0750
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485 **EVENT NAME:** 4th Qtr. FY09 - AOC 36-008 - Threemile Canyon

SAMPLE ID: RE36-10-7541 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/24/2010	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		10:11	SUB-MEDIA:	OTHER	
PRS ID:	36-008	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	36-61061Z	FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	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
TM 2/24/10						
1 2	Normal	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice		

SAMPLE DESC: QC Sample of RE36-10-7479

SAMPLE COMMENTS:

FTB

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT) R. Saunders **REVIEWED BY (PRINT)** J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN (Signature) Jon R. Marin	2/25/10 0750AM	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	2/25/10 0750
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

Rad Screening Data Release Form

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

RE36-10-7498	7494	7488	7481	7479
7499	7493	7487	7417	7478
7500	7523	7486	7482	7477
7497	7492	7485	7481	
7496	7491	7484	7416	
7495	7490	7521	7415	
7420	7489	[illegible]	7480	
7419	7522	7483	7541	

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):

RE36-10-7553
RE36-10-7534
RE36-10-7535

Reason:

Field Blank

Print Last Name Lujan Signature [signature] Date 2/25/10

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00074	Request or PO Number:	
Client Sample ID:	RE36-10-7491	ARS Sample ID:	ARS2-10-00074-021
Sample Collection Date:	02/24/10 13:30	Date Received:	02/25/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 σ	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	9.76	18.43	34.06	18.47		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	49.69	15.99	17.92	17.11		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.05	48.59	0.15	48.59		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	13.23	7.34	1.67	7.35		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.16	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.17	0.13	0.13	0.13		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.91	0.45	0.09	0.45		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.00	0.01	0.46	0.01		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.28	0.50	0.10	0.51		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	0.00	0.00	0.41	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	1.28	1.04	0.55	1.04		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	4.43	4.13	1.66	4.25		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	-0.04	48.50	0.10	48.50		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 3.86

Quality Assurance Review

LELAP Certificate# 3065B NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00074	Request or PO Number:	
Client Sample ID:	RE36-10-7492	ARS Sample ID:	ARS2-10-00074-022
Sample Collection Date:	02/24/10 13:40	Date Received:	02/25/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	2.77	13.70	32.65	13.70		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	28.50	13.76	18.12	14.19		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.05	48.84	0.16	48.84		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	17.39	8.44	1.68	8.48		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.16	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.13	0.15	0.14	0.15		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.34	0.28	0.09	0.28		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.66	189.07	0.42	189.07		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.38	0.59	0.18	0.59		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.24	1.11	0.41	1.11		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.17	0.84	0.57	0.84		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	3.35	3.47	1.59	3.56		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.11	0.26	0.13	0.26		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 2.48

Matthew J. Eder

Quality Assurance Review

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00074	Request or PO Number:	
Client Sample ID:	RE36-10-7493	ARS Sample ID:	ARS2-10-00074-023
Sample Collection Date:	02/24/10 13:55	Date Received:	02/25/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 σ	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	14.34	20.42	33.91	20.50		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	18.98	12.45	17.73	12.67		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.05	48.42	0.15	48.42		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	21.30	9.30	1.67	9.32		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.16	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.15	0.28	0.21	0.28		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.85	0.44	0.09	0.44		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.01	0.01	0.45	0.01		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.72	0.57	0.26	0.57		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-226	1.84	0.93	0.41	0.93		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.32	0.56	0.65	0.56		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	1.94	3.46	1.70	3.49		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.42	0.32	0.21	0.32		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 3.90

Quality Assurance Review

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00074	Request or PO Number:	
Client Sample ID:	RE36-10-7494	ARS Sample ID:	ARS2-10-00074-024
Sample Collection Date:	02/24/10 14:05	Date Received:	02/25/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	24.52	26.00	37.46	26.18		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	49.17	16.31	18.42	17.39		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	44.41	0.14	44.41		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	33.49	11.16	1.53	11.20		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.26	0.20	0.13	0.20		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.21	0.30	0.39	0.30		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.98	0.46	0.14	0.46		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.43	0.62	0.59	0.63		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.67	0.67	0.53	0.67		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	4.31	3.35	1.39	3.49		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	-0.02	-0.22	0.10	-0.22		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 1.40

Quality Assurance Review

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00074	Request or PO Number:	
Client Sample ID:	RE36-10-7495	ARS Sample ID:	ARS2-10-00074-025
Sample Collection Date:	02/24/10 14:25	Date Received:	02/25/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	-4.08	9.70	34.07	9.71		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	43.44	15.17	18.08	16.08		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.05	54.69	0.17	54.69		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	25.20	10.75	1.88	10.77		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.18	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.43	0.38	0.12	0.38		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.57	0.38	0.11	0.38		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.20	-0.32	0.50	-0.32		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.41	0.64	0.21	0.65		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	2.36	1.14	0.46	1.14		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.81	0.95	0.80	0.95		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	3.04	4.03	1.62	4.19		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.04	0.16	0.10	0.16		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 2.85

Quality Assurance Review

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00074	Request or PO Number:	
Client Sample ID:	RE36-10-7496	ARS Sample ID:	ARS2-10-00074-026
Sample Collection Date:	02/24/10 14:35	Date Received:	02/25/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	22.09	23.39	32.78	23.55		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	54.14	18.25	18.31	19.86		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	42.58	0.14	42.58		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	2.23	8.22	4.02	8.22		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.14	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.29	0.26	0.11	0.26		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.40	0.28	0.08	0.28		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.57	164.82	0.37	164.82		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.25	0.55	0.20	0.56		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-226	0.00	158.99	0.36	158.99		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	1.48	0.96	0.44	0.97		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	3.76	3.68	1.54	3.78		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.11	0.32	0.15	0.32		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 1.36

Quality Assurance Review

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00074	Request or PO Number:	
Client Sample ID:	R536-10-7497	ARS Sample ID:	ARS2-10-00074-027
Sample Collection Date:	02/24/10 14:45	Date Received:	02/25/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	9.74	18.83	33.91	18.37		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	34.86	14.32	17.73	14.94		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.02	25.38	0.05	25.38		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	0.50	4.78	2.39	4.78		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.08	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.10	0.08	0.09	0.08		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.21	0.16	0.08	0.16		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.14	0.18	0.22	0.18		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.19	0.36	0.07	0.35		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.29	0.54	0.21	0.55		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.73	0.65	0.38	0.65		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	2.84	2.30	0.98	2.38		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.19	0.24	0.09	0.24		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 3.63

Quality Assurance Review

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00074	Request or PO Number:	
Client Sample ID:	RE36-10-7498	ARS Sample ID:	ARS2-10-00074-028
Sample Collection Date:	02/24/10 14:55	Date Received:	02/25/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/26/10 14:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	9.67	19.79	37.39	19.82		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	41.32	15.15	18.23	15.97		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	45.35	0.14	45.35		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	4.27	9.52	3.98	9.52		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.18	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.38	0.34	0.19	0.34		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.32	0.26	0.09	0.26		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.61	175.54	0.39	175.54		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.19	0.53	0.17	0.53		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.89	0.92	0.38	0.92		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.58	0.43	0.62	0.43		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	8.58	3.66	1.15	4.15		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.08	0.19	0.10	0.19		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 2.87

Quality Assurance Review

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00074	Request or PO Number:	
Client Sample ID:	RE36-10-7499	ARS Sample ID:	ARS2-10-00074-029
Sample Collection Date:	02/24/10 15:20	Date Received:	02/25/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/26/10 14:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	9.78	18.42	34.06	18.46		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	29.05	13.70	17.92	14.15		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	44.34	0.14	44.34		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	34.37	11.30	1.53	11.34		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.12	0.13	0.10	0.13		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.31	0.25	0.09	0.25		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.60	171.63	0.38	171.63		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.34	0.50	0.11	0.51		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	2.93	1.62	0.37	1.63		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.26	0.31	0.51	0.31		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	2.43	2.81	1.27	2.86		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	-0.02	-0.14	0.07	-0.14		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 2.51

Quality Assurance Review

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00074	Request or PO Number:	
Client Sample ID:	RE36-10-7500	ARS Sample ID:	ARS2-10-00074-030
Sample Collection Date:	02/24/10 15:30	Date Received:	02/25/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/26/10 14:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	2.77	13.70	32.65	13.70		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	26.66	13.52	18.12	13.91		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	45.13	0.14	45.13		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	18.91	8.46	1.56	8.47		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	-0.06	43.88	0.10	43.88		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.26	0.24	0.09	0.24		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.42	-1.46	0.39	-1.46		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.28	0.56	0.19	0.56		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.12	0.53	0.38	0.53		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.20	1.22	0.65	1.22		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	1.24	3.35	1.60	3.36		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.10	0.19	0.10	0.19		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 2.64

Quality Assurance Review

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00074	Request or PO Number:	
Client Sample ID:	RE36-10-7521	ARS Sample ID:	ARS2-10-00074-031
Sample Collection Date:	02/24/10 11:35	Date Received:	02/25/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/26/10 14:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	5.15	15.97	33.91	15.98		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	25.79	13.13	17.73	13.50		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.05	51.27	0.16	51.27		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	11.45	9.22	2.70	9.23		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.17	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.20	0.34	0.17	0.34		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.65	0.40	0.10	0.40		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
SU-152	-0.59	-2.55	0.44	-2.55		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.67	0.51	0.22	0.51		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-226	0.88	0.53	0.43	0.53		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	-0.33	-1.24	0.53	-1.24		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	4.67	4.08	1.68	4.22		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	-0.04	48.55	0.11	48.55		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 3.33

Quality Assurance Review

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	AR52-10-00074	Request or PO Number:	
Client Sample ID:	RE36-10-7522	ARS Sample ID:	ARS2-10-00074-032
Sample Collection Date:	02/24/10 11:52	Date Received:	02/25/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/26/10 14:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	9.68	19.78	37.39	19.82		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	32.85	14.21	18.23	14.77		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	45.35	0.14	45.35		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	9.50	6.01	1.56	6.01		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	-0.06	44.09	0.10	44.09		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.26	0.39	0.39	0.39		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.47	0.58	0.18	0.58		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	0.00	169.33	0.38	169.33		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	2.01	1.07	0.54	1.08		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	1.82	3.24	1.59	3.27		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.11	0.32	0.16	0.32		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 1.28

Matthew S. Eden

Quality Assurance Review

LELAP Certificate# 30658 NELAP Certificate # E87558

AMERICAN RADIATION SERVICES, INC.

133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group:	ARS2-10-00074	Request or PO Number:	
Client Sample ID:	RE36-10-7523	ARS Sample ID:	ARS2-10-00074-033
Sample Collection Date:	02/24/10 13:40	Date Received:	02/25/10 00:00
Sample Matrix:	Soil/Solid	Report Date:	02/26/10 14:38

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	14.34	20.45	33.94	20.53		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	30.99	13.93	17.78	14.44		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.05	47.35	0.18	47.35		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	27.77	10.50	1.63	10.53		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.16	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.31	0.19	0.21	0.20		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.05	-0.10	0.41	-0.10		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.89	0.61	0.12	0.61		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	3.00	1.22	0.40	1.23		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.51	0.55	0.54	0.55		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	6.97	5.35	1.95	5.58		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.16	0.23	0.11	0.23		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 1.91

Quality Assurance Review

LELAP Certificate# 30658 NELAP Certificate # E87558

DATA VALIDATION COVER SHEET

5121-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Section I.

REQUEST NUMBER: 10-2155 VALIDATION DATE: 04/28/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: David Schwent 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. The water LCS %R of perchlorate was > the laboratory UAL. All associated sample results were NDs and, thus, were not qualified.

2. It should be noted that the MS/MSD analyses for the water samples were performed on a LANL sample from another RN and that the raw data for the parent sample was not included 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: David Schmidt	DATE: 04/28/10
Form 5121-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST

5121-2

LC/MS/MS Perchlorate Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

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

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

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

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

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

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7494

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374001

Date Filtered: 17-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	.57	2.28	6.04	ug/kg		1	23-MAR-10 03:01	per0322078a
	Perchlorate Isotope Ratio			3.06			1	23-MAR-10 03:01	per0322078a
14797-73-0	Perchlorate-101	.57	2.28	6.00	ug/kg		1	23-MAR-10 03:01	per0322078a
	Perchlorate-O(18)			5.51	ug/kg		1	23-MAR-10 03:01	per0322078a

^ 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 =

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

DJS
04/28/10

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7493

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374002

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 75

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.671	2.68	9.31	ug/kg		1	23-MAR-10 03:13	per0322079a
	Perchlorate Isotope Ratio			3.05			1	23-MAR-10 03:13	per0322079a
14797-73-0	Perchlorate-101	.671	2.68	9.27	ug/kg		1	23-MAR-10 03:13	per0322079a
	Perchlorate-O(18)			6.42	ug/kg		1	23-MAR-10 03:13	per0322079a

^ 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 =

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

DJS
04/28/10

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7492

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374003

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 79

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.634	2.54	1.18	ug/kg	J	1	23-MAR-10 03:49	per0322082a
	Perchlorate Isotope Ratio			2.86			1	23-MAR-10 03:49	per0322082a
14797-73-0	Perchlorate-101	.634	2.54	1.25	ug/kg	J	1	23-MAR-10 03:49	per0322082a
	Perchlorate-O(18)			6.18	ug/kg		1	23-MAR-10 03:49	per0322082a

^ 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 =

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

DJS
04/28/10

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7491

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374004

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 65

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.772	3.09	2.64	ug/kg	J	1	23-MAR-10 04:01	per0322083a
	Perchlorate Isotope Ratio			2.97			1	23-MAR-10 04:01	per0322083a
14797-73-0	Perchlorate-101	.772	3.09	2.70	ug/kg	J	1	23-MAR-10 04:01	per0322083a
	Perchlorate-O(18)			7.54	ug/kg		1	23-MAR-10 04:01	per0322083a

^ 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 =

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

DJS
04/28/10

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7496

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374005

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.565	2.26	2.05	ug/kg	J	1	23-MAR-10 04:13	per0322084a
	Perchlorate Isotope Ratio			3.26			1	23-MAR-10 04:13	per0322084a
14797-73-0	Perchlorate-101	.565	2.26	1.92	ug/kg	J	1	23-MAR-10 04:13	per0322084a
	Perchlorate-O(18)			5.31	ug/kg		1	23-MAR-10 04:13	per0322084a

^ 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 =

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

DJS
04/28/10

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7499

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374006

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 73

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.685	2.74	0.685	ug/kg	U	1	23-MAR-10 05:02	per0322088a
	Perchlorate Isotope Ratio						1	23-MAR-10 05:02	per0322088a
14797-73-0	Perchlorate-101	.685	2.74	0.685	ug/kg	U	1	23-MAR-10 05:02	per0322088a
	Perchlorate-O(18)			6.57	ug/kg		1	23-MAR-10 05:02	per0322088a

^ 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 =

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

DJS
04/28/10

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7497

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374007

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 68

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.741	2.96	0.741	ug/kg	U	1	23-MAR-10 05:14	per0322089a
	Perchlorate Isotope Ratio						1	23-MAR-10 05:14	per0322089a
14797-73-0	Perchlorate-101	.741	2.96	0.741	ug/kg	U	1	23-MAR-10 05:14	per0322089a
	Perchlorate-O(18)			7.49	ug/kg		1	23-MAR-10 05:14	per0322089a

^ 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 =

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

DJS
04/28/10

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7495

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374008

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 73

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.688	2.75	2.18	ug/kg	J	1	23-MAR-10 05:26	per0322090a
	Perchlorate Isotope Ratio			2.88			1	23-MAR-10 05:26	per0322090a
14797-73-0	Perchlorate-101	.688	2.75	2.30	ug/kg	J	1	23-MAR-10 05:26	per0322090a
	Perchlorate-O(18)			6.85	ug/kg		1	23-MAR-10 05:26	per0322090a

^ 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 =

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

DJS
04/28/10

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7498

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374009

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 77

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.647	2.59	0.647	ug/kg	U	1	23-MAR-10 05:38	per0322091a
	Perchlorate Isotope Ratio						1	23-MAR-10 05:38	per0322091a
14797-73-0	Perchlorate-101	.647	2.59	0.647	ug/kg	U	1	23-MAR-10 05:38	per0322091a
	Perchlorate-O(18)			6.26	ug/kg		1	23-MAR-10 05:38	per0322091a

^ 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 =

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

DJS
04/28/10

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7500

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374010

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 78

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.64	2.56	0.640	ug/kg	U	1	23-MAR-10 05:50	per0322092a
	Perchlorate Isotope Ratio						1	23-MAR-10 05:50	per0322092a
14797-73-0	Perchlorate-101	.64	2.56	0.640	ug/kg	U	1	23-MAR-10 05:50	per0322092a
	Perchlorate-O(18)			6.46	ug/kg		1	23-MAR-10 05:50	per0322092a

^ 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 =

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

DJS
04/28/10

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7523

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374011

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.594	2.38	0.840	ug/kg	J	1	23-MAR-10 06:02	per0322093a
	Perchlorate Isotope Ratio			2.82			1	23-MAR-10 06:02	per0322093a
14797-73-0	Perchlorate-101	.594	2.38	0.906	ug/kg	J	1	23-MAR-10 06:02	per0322093a
	Perchlorate-O(18)			6.02	ug/kg		1	23-MAR-10 06:02	per0322093a

^ 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 =

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

DJS
04/28/10

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7522

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374012

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.563	2.25	0.563	ug/kg	U	1	23-MAR-10 06:14	per0322094a
	Perchlorate Isotope Ratio						1	23-MAR-10 06:14	per0322094a
14797-73-0	Perchlorate-101	.563	2.25	0.567	ug/kg	J	1	23-MAR-10 06:14	per0322094a
	Perchlorate-O(18)			5.55	ug/kg		1	23-MAR-10 06:14	per0322094a

^ 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 =

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

DJS
04/28/10

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7521

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374013

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 77

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.649	2.59	0.839	ug/kg	J	1	23-MAR-10 06:26	per0322095a
	Perchlorate Isotope Ratio			2.91			1	23-MAR-10 06:26	per0322095a
14797-73-0	Perchlorate-101	.649	2.59	0.875	ug/kg	J	1	23-MAR-10 06:26	per0322095a
	Perchlorate-O(18)			6.55	ug/kg		1	23-MAR-10 06:26	per0322095a

^ 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 =

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

DJS
04/28/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 962135

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE36-10-7535

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155-1

GEL Sample ID: 248375001

Date Filtered: 08-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	17-MAR-10 04:05	per0316091a
	Perchlorate Isotope Ratio						1	17-MAR-10 04:05	per0316091a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	17-MAR-10 04:05	per0316091a
	Perchlorate-O(18)			0.461	ug/L		1	17-MAR-10 04:05	per0316091a

^ 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 =

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

DJS
04/28/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 962135

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE36-10-7533

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155-1

GEL Sample ID: 248375002

Date Filtered: 08-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	17-MAR-10 04:13	per0316092a
	Perchlorate Isotope Ratio						1	17-MAR-10 04:13	per0316092a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	17-MAR-10 04:13	per0316092a
	Perchlorate-O(18)			0.458	ug/L		1	17-MAR-10 04:13	per0316092a

^ 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 =

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

DJS
04/28/10

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Section I.

REQUEST NUMBER: 10-2155 VALIDATION DATE: 04/29/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: David Schwent 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 MB associated with the soil samples, Fe was detected. All associated sample results were detects >50X the MB concentration and, thus, were not qualified, based on professional judgment.

2. In the CCB associated with the soil samples, Sb was detected. All associated sample results were NDs and, thus, were not qualified. In the ICB and CCB associated with the water samples, Tl was detected. The Tl result of sample RE36-10-7533 was a detect ≤5X the greatest calibration blank concentration and, thus, was qualified U,I4b. The Tl result of sample -7535 was ND and, thus, was not qualified.

3. In the FR blanks, samples -7533 and -7535, associated with all the soil samples, K, Na, and Zn were detected. All associated Na sample results, <u>except</u> the results of samples -7523 and -7522 were detects ≤5X the greatest FR blank concentration and, thus, were qualified U,I4d. All other associated sample results were detects >5X the greatest FR blank concentrations and, thus, were not qualified.

4. The soil MS %Rs of Mg and K were > the laboratory UAL. All associated sample results were detects and, thus, were

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

qualified J+,I6b. Also, the soil MS %Rs of Al, Fe, and Mn were outside laboratory acceptance limits. However, the parent sample concentrations were >4X the spike concentrations. Based on professional judgment, no sample data were qualified.

5. It should be noted that the matrix QC analyses for the water CVAA analysis were performed on a LANL sample from another RN and that the raw data for the parent sample was not included 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: David Schmoll DATE: 04/29/10

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

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

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

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

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

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2 Metals Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

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

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

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

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374001 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7494 **LEVEL:** Low **DATE RECEIVED** 02-MAR-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	4580000	ug/Kg		7670	22500	22500	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-36-0	Antimony	1130	ug/Kg	U	372	1130	1130	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-38-2	Arsenic	1.22	mg/kg		0.224	1.12	1.12	2	MS	SKJ	04/13/10 21:35	100413-2	960822
7440-39-3	Barium	48500	ug/Kg		113	564	564	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-41-7	Beryllium	0.690	mg/kg		0.0224	0.112	0.112	2	MS	SKJ	04/14/10 13:28	100414-3	960822
7440-43-9	Cadmium	564	ug/Kg	U	113	564	564	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-70-2	Calcium	1520000	ug/Kg		9020	28200	28200	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-47-3	Chromium	10500	ug/Kg		169	564	564	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-48-4	Cobalt	1700	ug/Kg		169	564	564	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-50-8	Copper	4080	ug/Kg		338	1130	1130	1	P	HSC	04/01/10 14:11	040110-1	960819
7439-89-6	Iron	9490000	ug/Kg		9020	28200	28200	1	P	HSC	04/01/10 14:11	040110-1	960819
7439-92-1	Lead	7400	ug/Kg		282	1130	1130	1	P	HSC	04/01/10 14:11	040110-1	960819
7439-95-4	Magnesium J+,I6b	1030000	ug/Kg	N	9580	33800	33800	1	P	HSC	04/01/10 14:11	040110-1	960819
7439-96-5	Manganese	549000	ug/Kg		225	1130	1130	1	P	HSC	04/01/10 14:11	040110-1	960819
7439-97-6	Mercury	32.5	ug/kg		4.43	13	13	1	AV	JXL1	03/17/10 09:26	031710S1-4	964730
7440-02-0	Nickel	5.44	mg/kg		0.112	0.448	0.448	2	MS	SKJ	04/13/10 21:35	100413-2	960822
7440-09-7	Potassium J+,I6b	921000	ug/Kg	N	7210	28200	28200	1	P	HSC	04/01/10 14:11	040110-1	960819
7782-49-2	Selenium	1.12	mg/kg	U	0.56	1.12	1.12	2	MS	SKJ	04/13/10 21:35	100413-2	960822
7440-22-4	Silver	564	ug/Kg	U	113	564	564	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-23-5	Sodium U,I4d	86200	ug/Kg		7890	28200	28200	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-28-0	Thallium	0.224	mg/kg	U	0.0672	0.224	0.224	2	MS	SKJ	04/13/10 21:35	100413-2	960822
7440-61-1	Uranium	0.587	mg/kg		0.0148	0.0448	0.0448	2	MS	SKJ	04/13/10 21:35	100413-2	960822
7440-62-2	Vanadium	10000	ug/Kg		113	564	564	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-66-6	Zinc	51500	ug/Kg		372	1130	1130	1	P	HSC	04/01/10 14:11	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.506	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.509	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.525	g	30	mL	03/16/10	TXB3

DJS
04/28/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374002 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7493 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 75

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4370000	ug/Kg		8810	25900	25900	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-36-0	Antimony	1300	ug/Kg	U	428	1300	1300	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-38-2	Arsenic	1.72	mg/kg		0.268	1.34	1.34	2	MS	SKJ	04/13/10 21:56	100413-2	960822
7440-39-3	Barium	70000	ug/Kg		130	648	648	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-41-7	Beryllium	0.834	mg/kg		0.0268	0.134	0.134	2	MS	SKJ	04/14/10 13:37	100414-3	960822
7440-43-9	Cadmium	648	ug/Kg	U	130	648	648	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-70-2	Calcium	2870000	ug/Kg		10400	32400	32400	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-47-3	Chromium	5660	ug/Kg		194	648	648	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-48-4	Cobalt	1550	ug/Kg		194	648	648	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-50-8	Copper	5750	ug/Kg		389	1300	1300	1	P	HSC	04/01/10 15:01	040110-1	960819
7439-89-6	Iron	8960000	ug/Kg		10400	32400	32400	1	P	HSC	04/01/10 15:01	040110-1	960819
7439-92-1	Lead	10100	ug/Kg		324	1300	1300	1	P	HSC	04/01/10 15:01	040110-1	960819
7439-95-4	Magnesium J+,I6b	1170000	ug/Kg	N	11000	38900	38900	1	P	HSC	04/01/10 15:01	040110-1	960819
7439-96-5	Manganese	893000	ug/Kg		259	1300	1300	1	P	HSC	04/01/10 15:01	040110-1	960819
7439-97-6	Mercury	186	ug/kg		5.48	16.1	16.1	1	AV	JXL1	03/17/10 09:36	031710S1-4	964730
7440-02-0	Nickel	8.35	mg/kg		0.134	0.537	0.537	2	MS	SKJ	04/13/10 21:56	100413-2	960822
7440-09-7	Potassium J+,I6b	993000	ug/Kg	N	8290	32400	32400	1	P	HSC	04/01/10 15:01	040110-1	960819
7782-49-2	Selenium	1.34	mg/kg	U	0.671	1.34	1.34	2	MS	SKJ	04/13/10 21:56	100413-2	960822
7440-22-4	Silver	349	ug/Kg	J	130	648	648	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-23-5	Sodium U,I4d	66300	ug/Kg		9070	32400	32400	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-28-0	Thallium	0.268	mg/kg	U	0.0805	0.268	0.268	2	MS	SKJ	04/13/10 21:56	100413-2	960822
7440-61-1	Uranium	1.25	mg/kg		0.0177	0.0537	0.0537	2	MS	SKJ	04/13/10 21:56	100413-2	960822
7440-62-2	Vanadium	8440	ug/Kg		130	648	648	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-66-6	Zinc	46700	ug/Kg		428	1300	1300	1	P	HSC	04/01/10 15:01	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.518	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.5	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.5	g	30	mL	03/16/10	TXB3

DJS
04/28/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374003 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7492 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 79

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12600000	ug/Kg		8130	23900	23900	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-36-0	Antimony	1200	ug/Kg	U	395	1200	1200	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-38-2	Arsenic	2.29	mg/kg		0.245	1.23	1.23	2	MS	SKJ	04/13/10 22:08	100413-2	960822
7440-39-3	Barium	139000	ug/Kg		120	598	598	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-41-7	Beryllium	0.699	mg/kg		0.0245	0.123	0.123	2	MS	SKJ	04/14/10 13:42	100414-3	960822
7440-43-9	Cadmium	598	ug/Kg	U	120	598	598	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-70-2	Calcium	3690000	ug/Kg		9570	29900	29900	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-47-3	Chromium	12900	ug/Kg		179	598	598	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-48-4	Cobalt	3280	ug/Kg		179	598	598	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-50-8	Copper	5990	ug/Kg		359	1200	1200	1	P	HSC	04/01/10 15:08	040110-1	960819
7439-89-6	Iron	11000000	ug/Kg		9570	29900	29900	1	P	HSC	04/01/10 15:08	040110-1	960819
7439-92-1	Lead	8700	ug/Kg		299	1200	1200	1	P	HSC	04/01/10 15:08	040110-1	960819
7439-95-4	Magnesium J+,I6b	1610000	ug/Kg	N	10200	35900	35900	1	P	HSC	04/01/10 15:08	040110-1	960819
7439-96-5	Manganese	220000	ug/Kg		239	1200	1200	1	P	HSC	04/01/10 15:08	040110-1	960819
7439-97-6	Mercury	38.3	ug/kg		4.86	14.3	14.3	1	AV	JXL1	03/17/10 09:38	031710S1-4	964730
7440-02-0	Nickel	6.26	mg/kg		0.123	0.491	0.491	2	MS	SKJ	04/13/10 22:08	100413-2	960822
7440-09-7	Potassium J+,I6b	1560000	ug/Kg	N	7660	29900	29900	1	P	HSC	04/01/10 15:08	040110-1	960819
7782-49-2	Selenium	1.23	mg/kg	U	0.613	1.23	1.23	2	MS	SKJ	04/13/10 22:08	100413-2	960822
7440-22-4	Silver	188	ug/Kg	J	120	598	598	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-23-5	Sodium U,I4d	121000	ug/Kg		8370	29900	29900	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-28-0	Thallium	0.0912	mg/kg	J	0.0736	0.245	0.245	2	MS	SKJ	04/13/10 22:08	100413-2	960822
7440-61-1	Uranium	1.35	mg/kg		0.0162	0.0491	0.0491	2	MS	SKJ	04/13/10 22:08	100413-2	960822
7440-62-2	Vanadium	21400	ug/Kg		120	598	598	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-66-6	Zinc	25500	ug/Kg		395	1200	1200	1	P	HSC	04/01/10 15:08	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.53	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.517	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.532	g	30	mL	03/16/10	TXB3

DJS
04/28/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374004 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7491 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 65

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7410000	ug/Kg		10400	30600	30600	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-36-0	Antimony	1530	ug/Kg	U	504	1530	1530	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-38-2	Arsenic	2.62	mg/kg		0.309	1.54	1.54	2	MS	SKJ	04/13/10 22:12	100413-2	960822
7440-39-3	Barium	91900	ug/Kg		153	764	764	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-41-7	Beryllium	0.819	mg/kg		0.0309	0.154	0.154	2	MS	SKJ	04/14/10 13:43	100414-3	960822
7440-43-9	Cadmium	764	ug/Kg	U	153	764	764	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-70-2	Calcium	3780000	ug/Kg		12200	38200	38200	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-47-3	Chromium	8700	ug/Kg		229	764	764	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-48-4	Cobalt	2410	ug/Kg		229	764	764	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-50-8	Copper	5980	ug/Kg		459	1530	1530	1	P	HSC	04/01/10 15:15	040110-1	960819
7439-89-6	Iron	8100000	ug/Kg		12200	38200	38200	1	P	HSC	04/01/10 15:15	040110-1	960819
7439-92-1	Lead	9570	ug/Kg		382	1530	1530	1	P	HSC	04/01/10 15:15	040110-1	960819
7439-95-4	Magnesium J+,I6b	1220000	ug/Kg	N	13000	45900	45900	1	P	HSC	04/01/10 15:15	040110-1	960819
7439-96-5	Manganese	283000	ug/Kg		306	1530	1530	1	P	HSC	04/01/10 15:15	040110-1	960819
7439-97-6	Mercury	65.8	ug/kg		6.21	18.3	18.3	1	AV	JXL1	03/17/10 09:40	031710S1-4	964730
7440-02-0	Nickel	7.6	mg/kg		0.154	0.618	0.618	2	MS	SKJ	04/13/10 22:12	100413-2	960822
7440-09-7	Potassium J+,I6b	1210000	ug/Kg	N	9780	38200	38200	1	P	HSC	04/01/10 15:15	040110-1	960819
7782-49-2	Selenium	1.54	mg/kg	U	0.772	1.54	1.54	2	MS	SKJ	04/13/10 22:12	100413-2	960822
7440-22-4	Silver	764	ug/Kg	U	153	764	764	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-23-5	Sodium U,I4d	101000	ug/Kg		10700	38200	38200	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-28-0	Thallium	0.102	mg/kg	J	0.0926	0.309	0.309	2	MS	SKJ	04/13/10 22:12	100413-2	960822
7440-61-1	Uranium	4.12	mg/kg		0.0204	0.0618	0.0618	2	MS	SKJ	04/13/10 22:12	100413-2	960822
7440-62-2	Vanadium	15000	ug/Kg		153	764	764	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-66-6	Zinc	29300	ug/Kg		504	1530	1530	1	P	HSC	04/01/10 15:15	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.505	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.5	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.507	g	30	mL	03/16/10	TXB3

DJS
04/28/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374005 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7496 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5350000	ug/Kg		6970	20500	20500	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-36-0	Antimony	1020	ug/Kg	U	338	1020	1020	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-38-2	Arsenic	1.48	mg/kg		0.2	0.999	0.999	2	MS	SKJ	04/13/10 22:16	100413-2	960822
7440-39-3	Barium	58600	ug/Kg		102	512	512	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-41-7	Beryllium	0.617	mg/kg		0.02	0.0999	0.0999	2	MS	SKJ	04/14/10 13:45	100414-3	960822
7440-43-9	Cadmium	512	ug/Kg	U	102	512	512	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-70-2	Calcium	2070000	ug/Kg		8200	25600	25600	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-47-3	Chromium	8900	ug/Kg		154	512	512	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-48-4	Cobalt	2340	ug/Kg		154	512	512	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-50-8	Copper	4900	ug/Kg		307	1020	1020	1	P	HSC	04/01/10 15:22	040110-1	960819
7439-89-6	Iron	9810000	ug/Kg		8200	25600	25600	1	P	HSC	04/01/10 15:22	040110-1	960819
7439-92-1	Lead	9780	ug/Kg		256	1020	1020	1	P	HSC	04/01/10 15:22	040110-1	960819
7439-95-4	Magnesium J+,I6b	1090000	ug/Kg	N	8710	30700	30700	1	P	HSC	04/01/10 15:22	040110-1	960819
7439-96-5	Manganese	378000	ug/Kg		205	1020	1020	1	P	HSC	04/01/10 15:22	040110-1	960819
7439-97-6	Mercury	65.7	ug/kg		4.12	12.1	12.1	1	AV	JXL1	03/17/10 09:46	031710S1-4	964730
7440-02-0	Nickel	4.38	mg/kg		0.0999	0.4	0.4	2	MS	SKJ	04/13/10 22:16	100413-2	960822
7440-09-7	Potassium J+,I6b	1020000	ug/Kg	N	6560	25600	25600	1	P	HSC	04/01/10 15:22	040110-1	960819
7782-49-2	Selenium	0.999	mg/kg	U	0.5	0.999	0.999	2	MS	SKJ	04/13/10 22:16	100413-2	960822
7440-22-4	Silver	644	ug/Kg		102	512	512	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-23-5	Sodium U,I4d	67800	ug/Kg		7170	25600	25600	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-28-0	Thallium	0.20	mg/kg	U	0.06	0.2	0.2	2	MS	SKJ	04/13/10 22:16	100413-2	960822
7440-61-1	Uranium	0.972	mg/kg		0.0132	0.04	0.04	2	MS	SKJ	04/13/10 22:16	100413-2	960822
7440-62-2	Vanadium	11600	ug/Kg		102	512	512	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-66-6	Zinc	44200	ug/Kg		338	1020	1020	1	P	HSC	04/01/10 15:22	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.551	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.565	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.559	g	30	mL	03/16/10	TXB3

DJS
04/28/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374006 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7499 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 73

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6900000	ug/Kg		8000	23500	23500	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-36-0	Antimony	1180	ug/Kg	U	388	1180	1180	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-38-2	Arsenic	1.53	mg/kg		0.266	1.33	1.33	2	MS	SKJ	04/13/10 22:20	100413-2	960822
7440-39-3	Barium	93600	ug/Kg		118	588	588	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-41-7	Beryllium	0.593	mg/kg		0.0266	0.133	0.133	2	MS	SKJ	04/14/10 13:47	100414-3	960822
7440-43-9	Cadmium	588	ug/Kg	U	118	588	588	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-70-2	Calcium	2900000	ug/Kg		9410	29400	29400	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-47-3	Chromium	9200	ug/Kg		177	588	588	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-48-4	Cobalt	3600	ug/Kg		177	588	588	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-50-8	Copper	5720	ug/Kg		353	1180	1180	1	P	HSC	04/01/10 15:29	040110-1	960819
7439-89-6	Iron	9800000	ug/Kg		9410	29400	29400	1	P	HSC	04/01/10 15:29	040110-1	960819
7439-92-1	Lead	10300	ug/Kg		294	1180	1180	1	P	HSC	04/01/10 15:29	040110-1	960819
7439-95-4	Magnesium J+,I6b	1280000	ug/Kg	N	10000	35300	35300	1	P	HSC	04/01/10 15:29	040110-1	960819
7439-96-5	Manganese	326000	ug/Kg		235	1180	1180	1	P	HSC	04/01/10 15:29	040110-1	960819
7439-97-6	Mercury	21.2	ug/kg		5.24	15.4	15.4	1	AV	JXL1	03/17/10 09:48	031710S1-4	964730
7440-02-0	Nickel	5.06	mg/kg		0.133	0.532	0.532	2	MS	SKJ	04/13/10 22:20	100413-2	960822
7440-09-7	Potassium J+,I6b	1430000	ug/Kg	N	7530	29400	29400	1	P	HSC	04/01/10 15:29	040110-1	960819
7782-49-2	Selenium	1.33	mg/kg	U	0.665	1.33	1.33	2	MS	SKJ	04/13/10 22:20	100413-2	960822
7440-22-4	Silver	588	ug/Kg	U	118	588	588	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-23-5	Sodium U,I4d	64700	ug/Kg		8240	29400	29400	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-28-0	Thallium	0.266	mg/kg	U	0.0798	0.266	0.266	2	MS	SKJ	04/13/10 22:20	100413-2	960822
7440-61-1	Uranium	3.09	mg/kg		0.0176	0.0532	0.0532	2	MS	SKJ	04/13/10 22:20	100413-2	960822
7440-62-2	Vanadium	17000	ug/Kg		118	588	588	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-66-6	Zinc	32800	ug/Kg		388	1180	1180	1	P	HSC	04/01/10 15:29	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.582	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.515	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.533	g	30	mL	03/16/10	TXB3

DJS
04/28/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374007 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7497 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 68

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7150000	ug/Kg		9930	29200	29200	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-36-0	Antimony	1460	ug/Kg	U	482	1460	1460	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-38-2	Arsenic	1.63	mg/kg		0.268	1.34	1.34	2	MS	SKJ	04/13/10 22:24	100413-2	960822
7440-39-3	Barium	111000	ug/Kg		146	730	730	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-41-7	Beryllium	0.647	mg/kg		0.0268	0.134	0.134	2	MS	SKJ	04/14/10 13:48	100414-3	960822
7440-43-9	Cadmium	730	ug/Kg	U	146	730	730	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-70-2	Calcium	2440000	ug/Kg		11700	36500	36500	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-47-3	Chromium	16600	ug/Kg		219	730	730	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-48-4	Cobalt	3620	ug/Kg		219	730	730	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-50-8	Copper	6020	ug/Kg		438	1460	1460	1	P	HSC	04/01/10 15:36	040110-1	960819
7439-89-6	Iron	10400000	ug/Kg		11700	36500	36500	1	P	HSC	04/01/10 15:36	040110-1	960819
7439-92-1	Lead	9330	ug/Kg		365	1460	1460	1	P	HSC	04/01/10 15:36	040110-1	960819
7439-95-4	Magnesium J+,I6b	1440000	ug/Kg	N	12400	43800	43800	1	P	HSC	04/01/10 15:36	040110-1	960819
7439-96-5	Manganese	361000	ug/Kg		292	1460	1460	1	P	HSC	04/01/10 15:36	040110-1	960819
7439-97-6	Mercury	13.5	ug/kg	J	5.4	15.9	15.9	1	AV	JXL1	03/17/10 09:50	031710S1-4	964730
7440-02-0	Nickel	6.62	mg/kg		0.134	0.537	0.537	2	MS	SKJ	04/13/10 22:24	100413-2	960822
7440-09-7	Potassium J+,I6b	1510000	ug/Kg	N	9350	36500	36500	1	P	HSC	04/01/10 15:36	040110-1	960819
7782-49-2	Selenium	1.34	mg/kg	U	0.671	1.34	1.34	2	MS	SKJ	04/13/10 22:24	100413-2	960822
7440-22-4	Silver	152	ug/Kg	J	146	730	730	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-23-5	Sodium U,I4d	85500	ug/Kg		10200	36500	36500	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-28-0	Thallium	0.268	mg/kg	U	0.0805	0.268	0.268	2	MS	SKJ	04/13/10 22:24	100413-2	960822
7440-61-1	Uranium	2.43	mg/kg		0.0177	0.0537	0.0537	2	MS	SKJ	04/13/10 22:24	100413-2	960822
7440-62-2	Vanadium	17100	ug/Kg		146	730	730	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-66-6	Zinc	35300	ug/Kg		482	1460	1460	1	P	HSC	04/01/10 15:36	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.507	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.552	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.56	g	30	mL	03/16/10	TXB3

DJS
04/28/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10--2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374008 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7495 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 73

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5310000	ug/Kg		8560	25200	25200	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-36-0	Antimony	1260	ug/Kg	U	416	1260	1260	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-38-2	Arsenic	1.53	mg/kg		0.253	1.26	1.26	2	MS	SKJ	04/13/10 22:28	100413-2	960822
7440-39-3	Barium	80700	ug/Kg		126	630	630	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-41-7	Beryllium	0.561	mg/kg		0.0253	0.126	0.126	2	MS	SKJ	04/14/10 13:50	100414-3	960822
7440-43-9	Cadmium	160	ug/Kg	J	126	630	630	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-70-2	Calcium	3450000	ug/Kg		10100	31500	31500	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-47-3	Chromium	7810	ug/Kg		189	630	630	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-48-4	Cobalt	2110	ug/Kg		189	630	630	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-50-8	Copper	6880	ug/Kg		378	1260	1260	1	P	HSC	04/01/10 15:57	040110-1	960819
7439-89-6	Iron	9350000	ug/Kg		10100	31500	31500	1	P	HSC	04/01/10 15:57	040110-1	960819
7439-92-1	Lead	11700	ug/Kg		315	1260	1260	1	P	HSC	04/01/10 15:57	040110-1	960819
7439-95-4	Magnesium J+,I6b	1190000	ug/Kg	N	10700	37800	37800	1	P	HSC	04/01/10 15:57	040110-1	960819
7439-96-5	Manganese	477000	ug/Kg		252	1260	1260	1	P	HSC	04/01/10 15:57	040110-1	960819
7439-97-6	Mercury	135	ug/kg		5.04	14.8	14.8	1	AV	JXL1	03/17/10 09:52	031710S1-4	964730
7440-02-0	Nickel	5.01	mg/kg		0.126	0.506	0.506	2	MS	SKJ	04/13/10 22:28	100413-2	960822
7440-09-7	Potassium J+,I6b	1170000	ug/Kg	N	8060	31500	31500	1	P	HSC	04/01/10 15:57	040110-1	960819
7782-49-2	Selenium	1.26	mg/kg	U	0.632	1.26	1.26	2	MS	SKJ	04/13/10 22:28	100413-2	960822
7440-22-4	Silver	791	ug/Kg		126	630	630	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-23-5	Sodium U,I4d	67600	ug/Kg		8810	31500	31500	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-28-0	Thallium	0.253	mg/kg	U	0.0758	0.253	0.253	2	MS	SKJ	04/13/10 22:28	100413-2	960822
7440-61-1	Uranium	1.88	mg/kg		0.0167	0.0506	0.0506	2	MS	SKJ	04/13/10 22:28	100413-2	960822
7440-62-2	Vanadium	11600	ug/Kg		126	630	630	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-66-6	Zinc	47900	ug/Kg		416	1260	1260	1	P	HSC	04/01/10 15:57	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.546	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.544	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.557	g	30	mL	03/16/10	TXB3

DJS
04/28/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374009 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7498 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 77

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7340000	ug/Kg		8430	24800	24800	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-36-0	Antimony	1240	ug/Kg	U	409	1240	1240	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-38-2	Arsenic	1.41	mg/kg		0.227	1.14	1.14	2	MS	SKJ	04/13/10 22:41	100413-2	960822
7440-39-3	Barium	106000	ug/Kg		124	620	620	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-41-7	Beryllium	0.581	mg/kg		0.0227	0.114	0.114	2	MS	SKJ	04/14/10 13:55	100414-3	960822
7440-43-9	Cadmium	124	ug/Kg	J	124	620	620	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-70-2	Calcium	2520000	ug/Kg		9910	31000	31000	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-47-3	Chromium	16800	ug/Kg		186	620	620	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-48-4	Cobalt	4550	ug/Kg		186	620	620	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-50-8	Copper	5680	ug/Kg		372	1240	1240	1	P	HSC	04/01/10 16:04	040110-1	960819
7439-89-6	Iron	11200000	ug/Kg		9910	31000	31000	1	P	HSC	04/01/10 16:04	040110-1	960819
7439-92-1	Lead	9590	ug/Kg		310	1240	1240	1	P	HSC	04/01/10 16:04	040110-1	960819
7439-95-4	Magnesium J+,I6b	1370000	ug/Kg	N	10500	37200	37200	1	P	HSC	04/01/10 16:04	040110-1	960819
7439-96-5	Manganese	398000	ug/Kg		248	1240	1240	1	P	HSC	04/01/10 16:04	040110-1	960819
7439-97-6	Mercury	11.8	ug/kg	J	4.61	13.5	13.5	1	AV	JXL1	03/17/10 09:54	031710S1-4	964730
7440-02-0	Nickel	5.83	mg/kg		0.114	0.455	0.455	2	MS	SKJ	04/13/10 22:41	100413-2	960822
7440-09-7	Potassium J+,I6b	1380000	ug/Kg	N	7930	31000	31000	1	P	HSC	04/01/10 16:04	040110-1	960819
7782-49-2	Selenium	1.14	mg/kg	U	0.568	1.14	1.14	2	MS	SKJ	04/13/10 22:41	100413-2	960822
7440-22-4	Silver	620	ug/Kg	U	124	620	620	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-23-5	Sodium U,I4d	79600	ug/Kg		8670	31000	31000	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-28-0	Thallium	0.0916	mg/kg	J	0.0682	0.227	0.227	2	MS	SKJ	04/13/10 22:41	100413-2	960822
7440-61-1	Uranium	1.79	mg/kg		0.015	0.0455	0.0455	2	MS	SKJ	04/13/10 22:41	100413-2	960822
7440-62-2	Vanadium	20100	ug/Kg		124	620	620	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-66-6	Zinc	36900	ug/Kg		409	1240	1240	1	P	HSC	04/01/10 16:04	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.522	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.569	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.573	g	30	mL	03/16/10	TXB3

DJS
04/28/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374010 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7500 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 78

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7400000	ug/Kg		8000	23500	23500	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-36-0	Antimony	1180	ug/Kg	U	388	1180	1180	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-38-2	Arsenic	1.37	mg/kg		0.247	1.23	1.23	2	MS	SKJ	04/13/10 22:45	100413-2	960822
7440-39-3	Barium	98600	ug/Kg		118	588	588	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-41-7	Beryllium	0.589	mg/kg		0.0247	0.123	0.123	2	MS	SKJ	04/14/10 13:57	100414-3	960822
7440-43-9	Cadmium	588	ug/Kg	U	118	588	588	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-70-2	Calcium	2710000	ug/Kg		9410	29400	29400	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-47-3	Chromium	15700	ug/Kg		176	588	588	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-48-4	Cobalt	4310	ug/Kg		176	588	588	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-50-8	Copper	5830	ug/Kg		353	1180	1180	1	P	HSC	04/01/10 16:11	040110-1	960819
7439-89-6	Iron	11900000	ug/Kg		9410	29400	29400	1	P	HSC	04/01/10 16:11	040110-1	960819
7439-92-1	Lead	10500	ug/Kg		294	1180	1180	1	P	HSC	04/01/10 16:11	040110-1	960819
7439-95-4	Magnesium J+,I6b	1390000	ug/Kg	N	10000	35300	35300	1	P	HSC	04/01/10 16:11	040110-1	960819
7439-96-5	Manganese	362000	ug/Kg		235	1180	1180	1	P	HSC	04/01/10 16:11	040110-1	960819
7439-97-6	Mercury	13.8	ug/kg	J	4.88	14.3	14.3	1	AV	JXL1	03/17/10 09:56	031710S1-4	964730
7440-02-0	Nickel	5.33	mg/kg		0.123	0.493	0.493	2	MS	SKJ	04/13/10 22:45	100413-2	960822
7440-09-7	Potassium J+,I6b	1490000	ug/Kg	N	7530	29400	29400	1	P	HSC	04/01/10 16:11	040110-1	960819
7782-49-2	Selenium	1.23	mg/kg	U	0.616	1.23	1.23	2	MS	SKJ	04/13/10 22:45	100413-2	960822
7440-22-4	Silver	588	ug/Kg	U	118	588	588	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-23-5	Sodium U,I4d	75300	ug/Kg		8230	29400	29400	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-28-0	Thallium	0.0796	mg/kg	J	0.074	0.247	0.247	2	MS	SKJ	04/13/10 22:45	100413-2	960822
7440-61-1	Uranium	1.35	mg/kg		0.0163	0.0493	0.0493	2	MS	SKJ	04/13/10 22:45	100413-2	960822
7440-62-2	Vanadium	20500	ug/Kg		118	588	588	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-66-6	Zinc	38600	ug/Kg		388	1180	1180	1	P	HSC	04/01/10 16:11	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.544	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.519	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.535	g	30	mL	03/16/10	TXB3

DJS
04/28/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374011 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7523 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13100000	ug/Kg		7700	22600	22600	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-36-0	Antimony	1130	ug/Kg	U	373	1130	1130	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-38-2	Arsenic	2.24	mg/kg		0.225	1.13	1.13	2	MS	SKJ	04/13/10 22:49	100413-2	960822
7440-39-3	Barium	120000	ug/Kg		113	566	566	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-41-7	Beryllium	0.742	mg/kg		0.0225	0.113	0.113	2	MS	SKJ	04/14/10 13:58	100414-3	960822
7440-43-9	Cadmium	566	ug/Kg	U	113	566	566	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-70-2	Calcium	2690000	ug/Kg		9050	28300	28300	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-47-3	Chromium	11100	ug/Kg		170	566	566	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-48-4	Cobalt	3080	ug/Kg		170	566	566	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-50-8	Copper	4690	ug/Kg		339	1130	1130	1	P	HSC	04/01/10 16:18	040110-1	960819
7439-89-6	Iron	9610000	ug/Kg		9050	28300	28300	1	P	HSC	04/01/10 16:18	040110-1	960819
7439-92-1	Lead	7360	ug/Kg		283	1130	1130	1	P	HSC	04/01/10 16:18	040110-1	960819
7439-95-4	Magnesium J+,I6b	1570000	ug/Kg	N	9620	33900	33900	1	P	HSC	04/01/10 16:18	040110-1	960819
7439-96-5	Manganese	143000	ug/Kg		226	1130	1130	1	P	HSC	04/01/10 16:18	040110-1	960819
7439-97-6	Mercury	28.8	ug/kg		4.2	12.4	12.4	1	AV	JXLI	03/17/10 09:58	031710S1-4	964730
7440-02-0	Nickel	5.52	mg/kg		0.113	0.451	0.451	2	MS	SKJ	04/13/10 22:49	100413-2	960822
7440-09-7	Potassium J+,I6b	1480000	ug/Kg	N	7240	28300	28300	1	P	HSC	04/01/10 16:18	040110-1	960819
7782-49-2	Selenium	1.13	mg/kg	U	0.564	1.13	1.13	2	MS	SKJ	04/13/10 22:49	100413-2	960822
7440-22-4	Silver	566	ug/Kg	U	113	566	566	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-23-5	Sodium	131000	ug/Kg		7920	28300	28300	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-28-0	Thallium	0.225	mg/kg	U	0.0676	0.225	0.225	2	MS	SKJ	04/13/10 22:49	100413-2	960822
7440-61-1	Uranium	0.722	mg/kg		0.0149	0.0451	0.0451	2	MS	SKJ	04/13/10 22:49	100413-2	960822
7440-62-2	Vanadium	18300	ug/Kg		113	566	566	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-66-6	Zinc	19600	ug/Kg		373	1130	1130	1	P	HSC	04/01/10 16:18	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.525	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.527	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.577	g	30	mL	03/16/10	TXB3

DJS
04/28/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374012 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7522 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11800000	ug/Kg		7280	21400	21400	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-36-0	Antimony	1070	ug/Kg	U	353	1070	1070	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-38-2	Arsenic	2.43	mg/kg		0.204	1.02	1.02	2	MS	SKJ	04/13/10 22:53	100413-2	960822
7440-39-3	Barium	105000	ug/Kg		107	536	536	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-41-7	Beryllium	0.876	mg/kg		0.0204	0.102	0.102	2	MS	SKJ	04/14/10 14:00	100414-3	960822
7440-43-9	Cadmium	536	ug/Kg	U	107	536	536	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-70-2	Calcium	2420000	ug/Kg		8570	26800	26800	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-47-3	Chromium	17500	ug/Kg		161	536	536	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-48-4	Cobalt	4090	ug/Kg		161	536	536	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-50-8	Copper	7010	ug/Kg		321	1070	1070	1	P	HSC	04/01/10 16:25	040110-1	960819
7439-89-6	Iron	12300000	ug/Kg		8570	26800	26800	1	P	HSC	04/01/10 16:25	040110-1	960819
7439-92-1	Lead	9010	ug/Kg		268	1070	1070	1	P	HSC	04/01/10 16:25	040110-1	960819
7439-95-4	Magnesium J+,I6b	2000000	ug/Kg	N	9100	32100	32100	1	P	HSC	04/01/10 16:25	040110-1	960819
7439-96-5	Manganese	173000	ug/Kg		214	1070	1070	1	P	HSC	04/01/10 16:25	040110-1	960819
7439-97-6	Mercury	17.4	ug/kg		4.39	12.9	12.9	1	AV	JXL1	03/17/10 10:00	031710S1-4	964730
7440-02-0	Nickel	7.38	mg/kg		0.102	0.408	0.408	2	MS	SKJ	04/13/10 22:53	100413-2	960822
7440-09-7	Potassium J+,I6b	1480000	ug/Kg	N	6860	26800	26800	1	P	HSC	04/01/10 16:25	040110-1	960819
7782-49-2	Selenium	1.02	mg/kg	U	0.509	1.02	1.02	2	MS	SKJ	04/13/10 22:53	100413-2	960822
7440-22-4	Silver	536	ug/Kg	U	107	536	536	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-23-5	Sodium	185000	ug/Kg		7500	26800	26800	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-28-0	Thallium	0.130	mg/kg	J	0.0611	0.204	0.204	2	MS	SKJ	04/13/10 22:53	100413-2	960822
7440-61-1	Uranium	1.09	mg/kg		0.0134	0.0408	0.0408	2	MS	SKJ	04/13/10 22:53	100413-2	960822
7440-62-2	Vanadium	22700	ug/Kg		107	536	536	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-66-6	Zinc	27600	ug/Kg		353	1070	1070	1	P	HSC	04/01/10 16:25	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.526	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.553	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.524	g	30	mL	03/16/10	TXB3

DJS
04/28/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374013 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7521 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 77

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6840000	ug/Kg		8340	24500	24500	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-36-0	Antimony	1230	ug/Kg	U	405	1230	1230	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-38-2	Arsenic	1.89	mg/kg		0.229	1.15	1.15	2	MS	SKJ	04/13/10 22:57	100413-2	960822
7440-39-3	Barium	74000	ug/Kg		123	613	613	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-41-7	Beryllium	0.675	mg/kg		0.0229	0.115	0.115	2	MS	SKJ	04/14/10 14:02	100414-3	960822
7440-43-9	Cadmium	185	ug/Kg	J	123	613	613	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-70-2	Calcium	4910000	ug/Kg		9810	30700	30700	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-47-3	Chromium	7520	ug/Kg		184	613	613	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-48-4	Cobalt	1890	ug/Kg		184	613	613	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-50-8	Copper	7240	ug/Kg		368	1230	1230	1	P	HSC	04/01/10 16:33	040110-1	960819
7439-89-6	Iron	8680000	ug/Kg		9810	30700	30700	1	P	HSC	04/01/10 16:33	040110-1	960819
7439-92-1	Lead	10900	ug/Kg		307	1230	1230	1	P	HSC	04/01/10 16:33	040110-1	960819
7439-95-4	Magnesium J+,I6b	1550000	ug/Kg	N	10400	36800	36800	1	P	HSC	04/01/10 16:33	040110-1	960819
7439-96-5	Manganese	444000	ug/Kg		245	1230	1230	1	P	HSC	04/01/10 16:33	040110-1	960819
7439-97-6	Mercury	43.1	ug/kg		4.46	13.1	13.1	1	AV	JXL1	03/17/10 10:02	031710S1-4	964730
7440-02-0	Nickel	4.67	mg/kg		0.115	0.458	0.458	2	MS	SKJ	04/13/10 22:57	100413-2	960822
7440-09-7	Potassium J+,I6b	1540000	ug/Kg	N	7850	30700	30700	1	P	HSC	04/01/10 16:33	040110-1	960819
7782-49-2	Selenium	1.15	mg/kg	U	0.573	1.15	1.15	2	MS	SKJ	04/13/10 22:57	100413-2	960822
7440-22-4	Silver	613	ug/Kg	U	123	613	613	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-23-5	Sodium U,I4d	70100	ug/Kg		8580	30700	30700	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-28-0	Thallium	0.229	mg/kg	U	0.0688	0.229	0.229	2	MS	SKJ	04/13/10 22:57	100413-2	960822
7440-61-1	Uranium	2.15	mg/kg		0.0151	0.0458	0.0458	2	MS	SKJ	04/13/10 22:57	100413-2	960822
7440-62-2	Vanadium	12500	ug/Kg		123	613	613	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-66-6	Zinc	42900	ug/Kg		405	1230	1230	1	P	HSC	04/01/10 16:33	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.529	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.566	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.593	g	30	mL	03/16/10	TXB3

DJS
04/28/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248375001 **BASIS:** As Received **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7535 **LEVEL:** Low **DATE RECEIVED** 02-MAR-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	04/01/10 17:07	040110-1	960825
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	PRB	04/21/10 19:27	100421-2	960827
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	PRB	04/22/10 11:33	100421-12	960827
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	PRB	04/21/10 19:27	100421-2	960827
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	04/01/10 17:07	040110-1	960825
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	04/01/10 17:07	040110-1	960825
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	PRB	04/21/10 19:27	100421-2	960827
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	04/01/10 17:07	040110-1	960825
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	PRB	04/21/10 19:27	100421-2	960827
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	03/04/10 11:02	030410W1-13	960265
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-09-7	Potassium	199	ug/L		50	150	150	1	P	HSC	04/01/10 17:07	040110-1	960825
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-23-5	Sodium	202	ug/L	J	100	300	300	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	04/21/10 19:27	100421-2	960827
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	04/21/10 19:27	100421-2	960827
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-66-6	Zinc	4.08	ug/L	J	3.3	10	10	1	P	HSC	04/01/10 17:07	040110-1	960825

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960265	960260	SW846 7470A Prep	20	mL	20	mL	03/03/10	TXB3
960825	960824	SW846 3005A	25	mL	25	mL	04/01/10	AXG2
960827	960826	SW846 3005A	50	mL	50	mL	03/12/10	LYH1

DJS
04/28/10

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248375002 **BASIS:** As Received **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7533 **LEVEL:** Low **DATE RECEIVED** 02-MAR-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	04/01/10 17:35	040110-1	960825
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	PRB	04/21/10 19:47	100421-2	960827
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	PRB	04/22/10 11:40	100421-12	960827
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	PRB	04/21/10 19:47	100421-2	960827
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	04/01/10 17:35	040110-1	960825
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	04/01/10 17:35	040110-1	960825
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	PRB	04/21/10 19:47	100421-2	960827
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	04/01/10 17:35	040110-1	960825
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	PRB	04/21/10 19:47	100421-2	960827
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	03/04/10 11:04	030410W1-13	960265
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-09-7	Potassium	173	ug/L		50	150	150	1	P	HSC	04/01/10 17:35	040110-1	960825
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-23-5	Sodium	172	ug/L	J	100	300	300	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-28-0	Thallium U,I4b	0.524	ug/L	J	0.3	1	1	1	MS	PRB	04/21/10 19:47	100421-2	960827
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	04/21/10 19:47	100421-2	960827
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	04/01/10 17:35	040110-1	960825

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960265	960260	SW846 7470A Prep	20	mL	20	mL	03/03/10	TXB3
960825	960824	SW846 3005A	25	mL	25	mL	04/01/10	AXG2
960827	960826	SW846 3005A	50	mL	50	mL	03/12/10	LYH1

DJS
04/28/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-2155 VALIDATION DATE: 04/29/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: David Schwent 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 analyses included multiple matrix QC samples. For each batch, the QC sample most comparable to the matrix of this RN was selected for data validation purposes, and the extraneous QC samples were not evaluated. Sample results were not qualified.

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

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

VALIDATOR'S SIGNATURE: David Schwartz

DATE: 04/29/10

Form 5120-1, Revision 0.0

LOS ALAMOS
Environmental Restoration Project

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

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

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

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

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2 General Chemistry Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

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

GEL LABORATORIES LLC

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 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7494	Project:	LANL01004
Sample ID:	248374001	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	12.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 18.1C	H	6.28	0.010	0.100	SU	1	EXF1	03/05/10	1426	961559	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	J	179	69.3	255	ug/kg	1	AXC2	03/10/10	1629	960263	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	0.313	1.04	mg/kg	1	VH1	03/23/10	0057	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1111	960261

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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04/29/10

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7493	Project:	LANL01004
Sample ID:	248374002	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	25.5%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 17.7C	H	6.34	0.010	0.100	SU	1	EXF1	03/05/10	1431	961559	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total		591	84.5	311	ug/kg	1	AXC2	03/10/10	1624	960263	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	0.349	1.16	mg/kg	1	VH1	03/23/10	0215	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1111	960261

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 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7492	Project:	LANL01004
Sample ID:	248374003	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	21.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis										
SW9045C pH "As Received"										
pH at Temp 18.1C	H	6.28	0.010	0.100	SU	1	EXF1 03/05/10	1437	961559	1
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total		305	78.4	288	ug/kg	1	AXC2 03/10/10	1625	960263	2
Ion Chromatography										
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"										
Nitrate-N		5.34	0.324	1.08	mg/kg	1	VH1 03/23/10	0241	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1111	960261

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7491	Project:	LANL01004
Sample ID:	248374004	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	35.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 19.0C	H	6.71	0.010	0.100	SU	1	EXF1	03/05/10	1440	961559	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total		697	92.1	339	ug/kg	1	AXC2	03/10/10	1630	960263	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N		1.93	0.408	1.36	mg/kg	1	VH1	03/23/10	0308	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1111	960261

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7496	Project:	LANL01004
Sample ID:	248374005	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	11.4%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis										
SW9045C pH "As Received"										
pH at Temp 18.1C	H	6.07	0.010	0.100	SU	1	EXF1 03/05/10	1443	961559	1
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	J	143	72.4	266	ug/kg	1	AXC2 03/10/10	1631	960263	2
Ion Chromatography										
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"										
Nitrate-N		5.04	0.287	0.957	mg/kg	1	VH1 03/23/10	0334	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1111	960261

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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04/29/10

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7499	Project:	LANL01004
Sample ID:	248374006	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	27%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 18.4C	H	6.76	0.010	0.100	SU	1	EXF1	03/05/10	1444	961559	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	J	276	84.7	311	ug/kg	1	AXC2	03/10/10	1632	960263	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N		1.55	0.368	1.23	mg/kg	1	VH1	03/23/10	0400	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1111	960261

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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04/29/10

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7497	Project:	LANL01004
Sample ID:	248374007	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	32.5%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 18.7C	H	6.44	0.010	0.100	SU	1	EXF1	03/05/10	1446	961559	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	J	213	95.0	349	ug/kg	1	AXC2	03/10/10	1633	960263	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N		2.91	0.436	1.45	mg/kg	1	VH1	03/23/10	0426	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1111	960261

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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04/29/10

GEL LABORATORIES LLC

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7495	Project:	LANL01004
Sample ID:	248374008	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	27.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis										
SW9045C pH "As Received"										
pH at Temp 18.1C	H	6.17	0.010	0.100	SU	1	EXF1 03/05/10	1451	961559	1
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total		355	82.0	302	ug/kg	1	AXC2 03/10/10	1533	960266	2
Ion Chromatography										
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"										
Nitrate-N		1.81	0.378	1.26	mg/kg	1	VH1 03/23/10	0452	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1109	960264

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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04/29/10

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7498	Project:	LANL01004
Sample ID:	248374009	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	22.7%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis										
SW9045C pH "As Received"										
pH at Temp 18.8C	H	6.49	0.010	0.100	SU	1	EXF1 03/05/10	1455	961559	1
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	J	192	83.0	305	ug/kg	1	AXC2 03/10/10	1540	960266	2
Ion Chromatography										
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"										
Nitrate-N		1.90	0.387	1.29	mg/kg	1	VH1 03/23/10	0518	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1109	960264

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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04/29/10

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

Certificate of Analysis

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7500	Project:	LANL01004
Sample ID:	248374010	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	21.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 18.2C	H	6.85	0.010	0.100	SU	1	EXF1	03/05/10	1456	961559	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	J	103	83.7	308	ug/kg	1	AXC2	03/10/10	1543	960266	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N		2.61	0.350	1.17	mg/kg	1	VH1	03/23/10	0544	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1109	960264

The following Analytical Methods were performed

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

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Certificate of Analysis

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7523	Project:	LANL01004
Sample ID:	248374011	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	15.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 19.0C	H	6.14	0.010	0.100	SU	1	EXF1	03/05/10	1458	961559	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	U	ND	76.2	280	ug/kg	1	AXC2	03/10/10	1544	960266	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	0.309	1.03	mg/kg	1	VH1	03/23/10	0610	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1109	960264

The following Analytical Methods were performed

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

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Certificate of Analysis

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7522	Project:	LANL01004
Sample ID:	248374012	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	11.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis										
SW9045C pH "As Received"										
pH at Temp 18.5C	H	6.70	0.010	0.100	SU	1	EXF1 03/05/10	1501	961559	1
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	75.1	276	ug/kg	1	AXC2 03/10/10	1545	960266	2
Ion Chromatography										
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"										
Nitrate-N		1.35	0.281	0.937	mg/kg	1	VH1 03/23/10	0728	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1109	960264

The following Analytical Methods were performed

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

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Certificate of Analysis

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7521	Project:	LANL01004
Sample ID:	248374013	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	22.9%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis										
SW9045C pH "As Received"										
pH at Temp 18.7C	H	6.85	0.010	0.100	SU	1	EXF1 03/05/10	1506	961559	1
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total		580	81.7	300	ug/kg	1	AXC2 03/10/10	1546	960266	2
Ion Chromatography										
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"										
Nitrate-N	U	ND	0.380	1.27	mg/kg	1	VH1 03/23/10	0755	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1109	960264

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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04/29/10

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: 10-2155-1

Client Sample ID:	RE36-10-7535	Project:	LANL01004
Sample ID:	248375001	Client ID:	LANL010
Matrix:	W		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-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	1133	960271	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/05/10	1552	960269

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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04/29/10

GEL LABORATORIES LLC

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Certificate of Analysis

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

Report Date: March 24, 2010

Client SDG: 10-2155-1

Client Sample ID:	RE36-10-7533	Project:	LANL01004
Sample ID:	248375002	Client ID:	LANL010
Matrix:	W		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-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	1134	960271	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/05/10	1552	960269

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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04/29/10

Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2155

REQUEST NUMBER: 10-2155

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 3/31/2010

TURNAROUND REQ'D: 30

Request Hard Copy Flag: True

LAB REQUEST COMMENTS: 248374, 248375/.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7494	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7494	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7493	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7493	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7492	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7492	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7491	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7491	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7496	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7496	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7499	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7499	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7497	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7497	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7495	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7495	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7498	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7498	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7500	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7500	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7523	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7523	1	POLY	Perchlorate+CN+N03+pH	Ice	R

Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2155

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7522	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7522	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7521	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7521	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7535	1	POLY	METALS+U-GEL	Nitric Acid	W
RE36-10-7535	1	POLY	SW-846:6850	Ice	W
RE36-10-7535	1	POLY	TCN	Sodium Hydroxide	W
RE36-10-7533	1	POLY	METALS+U-GEL	Nitric Acid	W
RE36-10-7533	1	POLY	SW-846:6850	Ice	W
RE36-10-7533	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	3/1/10	1400	Greg Tyler	[illegible]	3-2-10	0850
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

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

Monday, March 01, 2010

REQUEST NUMBER: 10-2155

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:10-2155
Per Agreement Number:126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 3/1/2010
TURNAROUND/REPORT DUE: 3/31/2010
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	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	

Monday, March 01, 2010

REQUEST NUMBER: 10-2155

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
	SW-846:6010B	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
	SW-846:6020	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	

Monday, March 01, 2010

REQUEST NUMBER: 10-2155

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
		1	RE36-10-7533	W	2/24/2010	
		1	RE36-10-7535	W	2/24/2010	
	SW-846:6850	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
		1	RE36-10-7533	W	2/24/2010	
		1	RE36-10-7535	W	2/24/2010	
	SW-846:7470A	1	RE36-10-7533	W	2/24/2010	
		1	RE36-10-7535	W	2/24/2010	
	SW-846:7471A	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	

Monday, March 01, 2010

REQUEST NUMBER: 10-2155

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
	SW-846:9012A	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
		1	RE36-10-7533	W	2/24/2010	
		1	RE36-10-7535	W	2/24/2010	
	SW-846:9045C	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	

Monday, March 01, 2010

REQUEST NUMBER: 10-2155

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9045C	1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	

Final Page of REQUEST NUMBER 10-2155

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 09, 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: 248374 248375
SDG: 10-2155

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on March 02, 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,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-2155
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 248374 and 248375
SDG: 10-2155

Table of Contents

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 248374 and 248375
SDG # : 10-2155

March 09, 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 March 02, 2010 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
248374001	RE36-10-7494
248374002	RE36-10-7493
248374003	RE36-10-7492
248374004	RE36-10-7491
248374005	RE36-10-7496
248374006	RE36-10-7499
248374007	RE36-10-7497
248374008	RE36-10-7495
248374009	RE36-10-7498
248374010	RE36-10-7500
248374011	RE36-10-7523
248374012	RE36-10-7522
248374013	RE36-10-7521
248375001	RE36-10-7535
248375002	RE36-10-7533

Case Narrative

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

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

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

for

Valerie Davis

Project Manager

List of current GEL Certifications as of 09 March 2010

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

Chain of Custody and Supporting Documentation

Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2155

REQUEST NUMBER: 10-2155

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 3/31/2010

TURNAROUND REQ'D: 30

Request Hard Copy Flag: True

LAB REQUEST COMMENTS: 248374, 248375.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7494	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7494	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7493	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7493	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7492	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7492	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7491	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7491	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7496	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7496	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7499	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7499	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7497	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7497	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7495	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7495	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7498	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7498	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7500	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7500	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7523	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7523	1	POLY	Perchlorate+CN+N03+pH	Ice	R

Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2155

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7522	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7522	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7521	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7521	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7535	1	POLY	METALS+U-GEL	Nitric Acid	W
RE36-10-7535	1	POLY	SW-846:6850	Ice	W
RE36-10-7535	1	POLY	TCN	Sodium Hydroxide	W
RE36-10-7533	1	POLY	METALS+U-GEL	Nitric Acid	W
RE36-10-7533	1	POLY	SW-846:6850	Ice	W
RE36-10-7533	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	3/1/10	1400	Greg Tyler	[illegible]	3-2-10	0850
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

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

Monday, March 01, 2010

REQUEST NUMBER: 10-2155

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:10-2155

Per Agreement Number:126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 3/1/2010

TURNAROUND/REPORT DUE: 3/31/2010

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	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	

Monday, March 01, 2010

REQUEST NUMBER: 10-2155

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
	SW-846:6010B	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
	SW-846:6020	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	

Monday, March 01, 2010

REQUEST NUMBER: 10-2155

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
		1	RE36-10-7533	W	2/24/2010	
		1	RE36-10-7535	W	2/24/2010	
	SW-846:6850	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
		1	RE36-10-7533	W	2/24/2010	
		1	RE36-10-7535	W	2/24/2010	
	SW-846:7470A	1	RE36-10-7533	W	2/24/2010	
		1	RE36-10-7535	W	2/24/2010	
	SW-846:7471A	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	

Monday, March 01, 2010

REQUEST NUMBER: 10-2155

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
	SW-846:9012A	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	
		1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	
		1	RE36-10-7533	W	2/24/2010	
		1	RE36-10-7535	W	2/24/2010	
	SW-846:9045C	1	RE36-10-7491	R	2/24/2010	
		1	RE36-10-7492	R	2/24/2010	
		1	RE36-10-7493	R	2/24/2010	
		1	RE36-10-7494	R	2/24/2010	
		1	RE36-10-7495	R	2/24/2010	
		1	RE36-10-7496	R	2/24/2010	
		1	RE36-10-7497	R	2/24/2010	

Monday, March 01, 2010

REQUEST NUMBER: 10-2155

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9045C	1	RE36-10-7498	R	2/24/2010	
		1	RE36-10-7499	R	2/24/2010	
		1	RE36-10-7500	R	2/24/2010	
		1	RE36-10-7521	R	2/24/2010	
		1	RE36-10-7522	R	2/24/2010	
		1	RE36-10-7523	R	2/24/2010	

Final Page of REQUEST NUMBER 10-2155

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL	**SDG/ARCOC/Work Order: 10-2155**
Received By: Greg Tyler	**Date Received: 3/2/10**

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*: **40cpm**
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 **0-4,6** **13-15,17**
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:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:

Fed Ex Tracking Numbers:

7209 7850 2797 0C	**7209 7850 2889 3C**	**7209 7850 2786 4C**
7209 7850 2764 1C	**7209 7850 2867 3C**	**7209 7850 2890 6C**
7209 7850 2775 2C	**7209 7850 2904 3C**	**7209 7850 2683 13C**
7209 7850 2856 2C	**7209 7850 2753 3C**	**7209 7850 2661 13C**
7209 7850 2801 2C	**7209 7850 2710 3C**	**7209 7850 2672 14C**
7209 7850 2834 2C	**7209 7850 2845 3C**	**7209 7850 2650 14C**
7209 7850 2878 2C	**7209 7850 2742 4C**	**7209 7850 2694 15C**
7209 7850 2720 2C	**7209 7850 2731 4C**	**7209 7850 2709 17C**

PM (or PMA) review: Initials [illegible] Date 3/3/10

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: 01MAR10
ACTWGT: 61.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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

0c

FedEx Express

2 of 2
MPS# 0263 7209 7850 2797
Mstr# 7209 7850 2786 0201

TUE - 02MAR 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: 01MAR10
ACTWGT: 65.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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

1c

FedEx Express

1 of 2
TRK# 0201 7209 7850 2764
MASTER

TUE - 02MAR 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

ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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

2c

FedEx Express

2 of 2
MPS# 0263 7209 7850 2775
Mstr# 7209 7850 2764 0201

TUE - 02MAR 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

ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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

2c

FedEx Express

1 of 2
TRK# 0201 7209 7850 2856
MASTER

TUE - 02MAR 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: 01MAR10
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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

2c

FedEx Express

TRK# 0201 7209 7850 2801

TUE - 02MAR 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: 01MAR10
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: 6B010AMR3A0532VA00

2c

FedEx Express

1 of 2
TRK# 0201 7209 7850 2834
MASTER

TUE - 02MAR A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID:
JOYLENE VALDEZ
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: 6B010AMR3A0532VA00

2c

FedEx Express

1 of 2
TRK# 0201 7209 7850 2878
MASTER

TUE - 02MAR 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

014176 CAFE2450

SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR2A051BYD0

2c

FedEx Express

RK# 201 7209 7850 2720

TUE - 02MAR 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: 01MAR10
ACTWGT: 41.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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

3C

FedEx Express

2 of 2
MPS# 0263 7209 7850 2889
Mstr# 7209 7850 2878 0201

TUE - 02MAR 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: 01MAR10
ACTWGT: 17.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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

3C

FedEx Express

2 of 2
MPS# 0263 7209 7850 2904
Mstr# 7209 7850 2890 0201

TUE - 02MAR A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01MAR10
ACTWGT: 69.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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

3C

FedEx Express

2 of 2
MPS# 0263 7209 7850 2867
Mstr# 7209 7850 2856 0201

TUE - 02MAR 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: 01MAR10
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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

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

OS ALAMOS, NM 87545
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SHIP DATE: 01MAR10
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JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 51.0 LB MAN
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JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 56.0 LB MAN
CAD: 0014176/CAFE2450

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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
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CHARLESTON SC 29407
(843) 556-8171
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(505) 665-9968
NE VALDEZ
LAMOS NATL LAB.
BLDG 1237 DPU 03

LAMOS, NM 87545
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SHIP DATE: 01MAR10
ACTWGT: 48.0 LB MAN
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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: 01MAR10
ACTWGT: 47.0 LB MAN
CAD: 0014176/CAFE2450

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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: 01MAR10
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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CHARLESTON SC 29407
(843) 556-8171
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(843) 556-8171
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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

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2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
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PRIORITY OVERNIGHT

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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: 6B010AMR3A05529E00

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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 64.0 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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TUE - 02MAR A1
PRIORITY OVERNIGHT

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01MAR10
ACTWGT: 61.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
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PRIORITY OVERNIGHT

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Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

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

LC/MS/MS PERCHLORATE ANALYSIS

Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-2155

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:	963899
Prep Batch Number:	963897

Sample Analysis

Sample ID	Client ID
248374001	RE36-10-7494
248374002	RE36-10-7493
248374003	RE36-10-7492
248374004	RE36-10-7491
248374005	RE36-10-7496
248374006	RE36-10-7499
248374007	RE36-10-7497
248374008	RE36-10-7495
248374009	RE36-10-7498
248374010	RE36-10-7500
248374011	RE36-10-7523
248374012	RE36-10-7522
248374013	RE36-10-7521
1202067814	Interference Check Sample (ICS)
1202067810	Method Blank (MB)
1202067811	Laboratory Control Sample (LCS)
1202067812	248374002(RE36-10-7493) Matrix Spike (MS)
1202067813	248374002(RE36-10-7493) Matrix Spike Duplicate (MSD)

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

Preparation/Analytical Method Verification

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

Calibration Information

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

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

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

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

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

Quality Control (QC) Information

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

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.

Laboratory Control Sample Duplicate (LCSD) Recovery
A laboratory control sample duplicate (LCSD) was not extracted.

LCS/LCSD Relative Percent Difference (RPD) Statement
A laboratory control sample duplicate (LCSD) was not extracted.

QC Sample Designation
Sample 248374002 (RE36-10-7493) was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement
Low recovery for Perchlorate-101 was observed in 1202067812 (MS). The recovery was 71% and the acceptance range is 75-125%. The low recovery may be the result of the background concentration present in the parent sample, 248374002, and the non-homogeneity of the sample matrix. 1202067812 (RE36-10-7493).

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

MS/MSD Relative Percent Difference (RPD) Statement

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

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

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

Technical Information

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

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

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

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

Miscellaneous Information

Data Exception (DER) Documentation
The following DER was generated for this SDG: 808569 1202067812 (RE36-10-7493).

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

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

Additional Comments
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value. The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

Perchlorate Isotope Ratio

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

System Configuration

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

Chromatographic Columns

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

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

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

Review Validation:

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

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

Reviewer: _____ **Date:** 3/28/2010

SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7494

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374001

Date Filtered: 17-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	.57	2.28	6.04	ug/kg		1	23-MAR-10 03:01	per0322078a
	Perchlorate Isotope Ratio			3.06			1	23-MAR-10 03:01	per0322078a
14797-73-0	Perchlorate-101	.57	2.28	6.00	ug/kg		1	23-MAR-10 03:01	per0322078a
	Perchlorate-O(18)			5.51	ug/kg		1	23-MAR-10 03:01	per0322078a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7493

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374002

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 75

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.671	2.68	9.31	ug/kg		1	23-MAR-10 03:13	per0322079a
	Perchlorate Isotope Ratio			3.05			1	23-MAR-10 03:13	per0322079a
14797-73-0	Perchlorate-101	.671	2.68	9.27	ug/kg		1	23-MAR-10 03:13	per0322079a
	Perchlorate-O(18)			6.42	ug/kg		1	23-MAR-10 03:13	per0322079a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7492

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374003

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 79

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.634	2.54	1.18	ug/kg	J	1	23-MAR-10 03:49	per0322082a
	Perchlorate Isotope Ratio			2.86			1	23-MAR-10 03:49	per0322082a
14797-73-0	Perchlorate-101	.634	2.54	1.25	ug/kg	J	1	23-MAR-10 03:49	per0322082a
	Perchlorate-O(18)			6.18	ug/kg		1	23-MAR-10 03:49	per0322082a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7491

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374004

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 65

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.772	3.09	2.64	ug/kg	J	1	23-MAR-10 04:01	per0322083a
	Perchlorate Isotope Ratio			2.97			1	23-MAR-10 04:01	per0322083a
14797-73-0	Perchlorate-101	.772	3.09	2.70	ug/kg	J	1	23-MAR-10 04:01	per0322083a
	Perchlorate-O(18)			7.54	ug/kg		1	23-MAR-10 04:01	per0322083a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7496

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374005

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.565	2.26	2.05	ug/kg	J	1	23-MAR-10 04:13	per0322084a
	Perchlorate Isotope Ratio			3.26			1	23-MAR-10 04:13	per0322084a
14797-73-0	Perchlorate-101	.565	2.26	1.92	ug/kg	J	1	23-MAR-10 04:13	per0322084a
	Perchlorate-O(18)			5.31	ug/kg		1	23-MAR-10 04:13	per0322084a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7499

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374006

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 73

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.685	2.74	0.685	ug/kg	U	1	23-MAR-10 05:02	per0322088a
	Perchlorate Isotope Ratio						1	23-MAR-10 05:02	per0322088a
14797-73-0	Perchlorate-101	.685	2.74	0.685	ug/kg	U	1	23-MAR-10 05:02	per0322088a
	Perchlorate-O(18)			6.57	ug/kg		1	23-MAR-10 05:02	per0322088a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7497

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374007

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 68

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.741	2.96	0.741	ug/kg	U	1	23-MAR-10 05:14	per0322089a
	Perchlorate Isotope Ratio						1	23-MAR-10 05:14	per0322089a
14797-73-0	Perchlorate-101	.741	2.96	0.741	ug/kg	U	1	23-MAR-10 05:14	per0322089a
	Perchlorate-O(18)			7.49	ug/kg		1	23-MAR-10 05:14	per0322089a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7495

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374008

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 73

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.688	2.75	2.18	ug/kg	J	1	23-MAR-10 05:26	per0322090a
	Perchlorate Isotope Ratio			2.88			1	23-MAR-10 05:26	per0322090a
14797-73-0	Perchlorate-101	.688	2.75	2.30	ug/kg	J	1	23-MAR-10 05:26	per0322090a
	Perchlorate-O(18)			6.85	ug/kg		1	23-MAR-10 05:26	per0322090a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7498

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374009

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 77

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.647	2.59	0.647	ug/kg	U	1	23-MAR-10 05:38	per0322091a
	Perchlorate Isotope Ratio						1	23-MAR-10 05:38	per0322091a
14797-73-0	Perchlorate-101	.647	2.59	0.647	ug/kg	U	1	23-MAR-10 05:38	per0322091a
	Perchlorate-O(18)			6.26	ug/kg		1	23-MAR-10 05:38	per0322091a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7500

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374010

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 78

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.64	2.56	0.640	ug/kg	U	1	23-MAR-10 05:50	per0322092a
	Perchlorate Isotope Ratio						1	23-MAR-10 05:50	per0322092a
14797-73-0	Perchlorate-101	.64	2.56	0.640	ug/kg	U	1	23-MAR-10 05:50	per0322092a
	Perchlorate-O(18)			6.46	ug/kg		1	23-MAR-10 05:50	per0322092a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7523

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374011

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.594	2.38	0.840	ug/kg	J	1	23-MAR-10 06:02	per0322093a
	Perchlorate Isotope Ratio			2.82			1	23-MAR-10 06:02	per0322093a
14797-73-0	Perchlorate-101	.594	2.38	0.906	ug/kg	J	1	23-MAR-10 06:02	per0322093a
	Perchlorate-O(18)			6.02	ug/kg		1	23-MAR-10 06:02	per0322093a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7522

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374012

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.563	2.25	0.563	ug/kg	U	1	23-MAR-10 06:14	per0322094a
	Perchlorate Isotope Ratio						1	23-MAR-10 06:14	per0322094a
14797-73-0	Perchlorate-101	.563	2.25	0.567	ug/kg	J	1	23-MAR-10 06:14	per0322094a
	Perchlorate-O(18)			5.55	ug/kg		1	23-MAR-10 06:14	per0322094a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7521

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374013

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 77

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.649	2.59	0.839	ug/kg	J	1	23-MAR-10 06:26	per0322095a
	Perchlorate Isotope Ratio			2.91			1	23-MAR-10 06:26	per0322095a
14797-73-0	Perchlorate-101	.649	2.59	0.875	ug/kg	J	1	23-MAR-10 06:26	per0322095a
	Perchlorate-O(18)			6.55	ug/kg		1	23-MAR-10 06:26	per0322095a

^ 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 =

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

QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–2155

Extract Batch Code: 963897

Date Filtered: 17–MAR–10

Matrix: SOIL

Sample ID: 1202067811

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	1.98	ug/kg	98.8		70 – 130
Perchlorate Isotope Ratio		3.27				–
Perchlorate–101	2.00	1.84	ug/kg	91.9		70 – 130
Perchlorate–O(18)		4.93	ug/kg			–

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

Form 5a

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–2155

Extract Batch Code: 963897

Date Filtered: 17–MAR–10

Matrix: SOIL

Sample ID: 1202067814

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.05	ug/kg	102		70 – 130
Perchlorate Isotope Ratio		2.9				
Perchlorate–101	2.00	2.15	ug/kg	108		70 – 130
Perchlorate–O(18)		4.97	ug/kg			

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

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

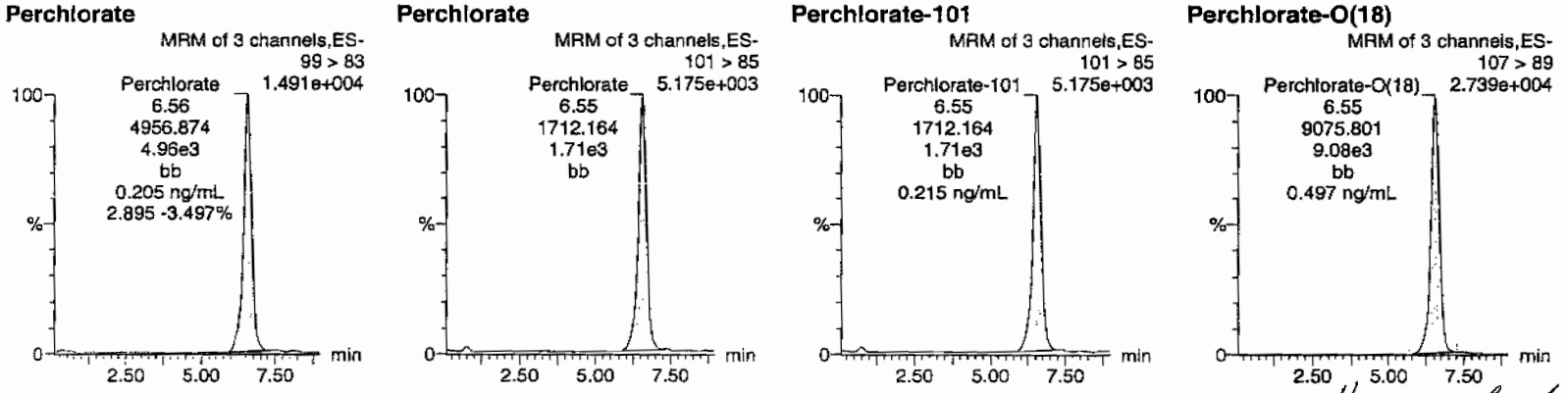
Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322077a
Date: 23-Mar-2010
Time: 02:49:43
ID: 1202067814
Vial: 3:1,C

|LANL|963899|5020|IG|

GWO 03-23-10



Hum 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202067814	Perchlorate	99 > 83	6.56	4956.874	4956.874	bb			0.2049	102.47	2.47	1986.4...	2.90
1202067814	Perchlorate-101	101 > 85	6.55	1712.164	1712.164	bb			0.2150	107.52	7.52	241.853	
1202067814	Perchlorate-O(18)	107 > 89	6.55	9075.801	9075.801	bb			0.4974	99.48	-0.52	2512.9...	

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): 10-2155

Extract Batch Code: 963897

Date Extracted: 17-MAR-10

GEL MS/PS ID: 1202067812

Client ID: RE36-10-7493

GEL MSD/PSD ID: 1202067813

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	2.68	9.31	ug/kg	11.4	77.8	11.8	93.8	3.71	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		3.1		3		0		–
Perchlorate-101	2.68	9.27	ug/kg	11.2	71.2 *	12	100	6.77	30	75 – 125
Perchlorate-O(18)	0	6.42	ug/kg	6.55		6.78		3.43		–

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

Comments:

Form 4

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2155

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	22-MAR-10	per0322001a	IPB001
Perchlorate-101	0.00	0	NA	22-MAR-10	per0322001a	IPB001
Perchlorate	0.00	0	NA	22-MAR-10	per0322002a	IPB001
Perchlorate-101	0.00	0	NA	22-MAR-10	per0322002a	IPB001

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

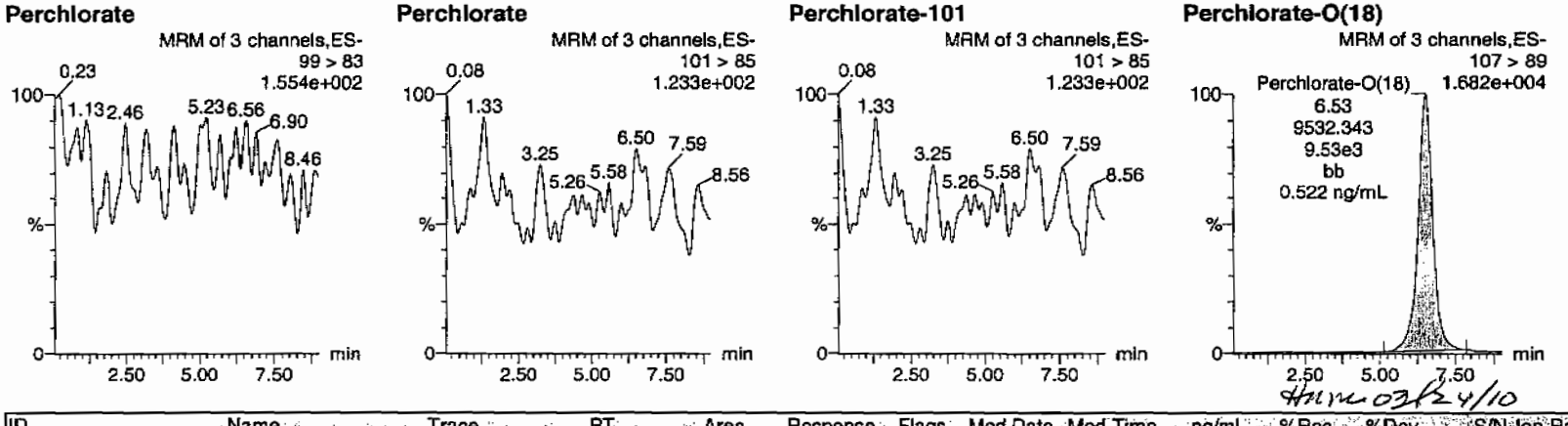
Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qid

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per032210a.mdb 23 Mar 2010 10:24:18
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per032210a.cdb 23 Mar 2010 10:24:34

Name: per0322001a
Date: 22-Mar-2010
Time: 11:30:33
ID: IPB001
Vial: 1:1,A

CWW 03-23-10



HMM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	6.53	9532.343	9532.343	bb			0.5224	104.48	4.48	384.191	

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

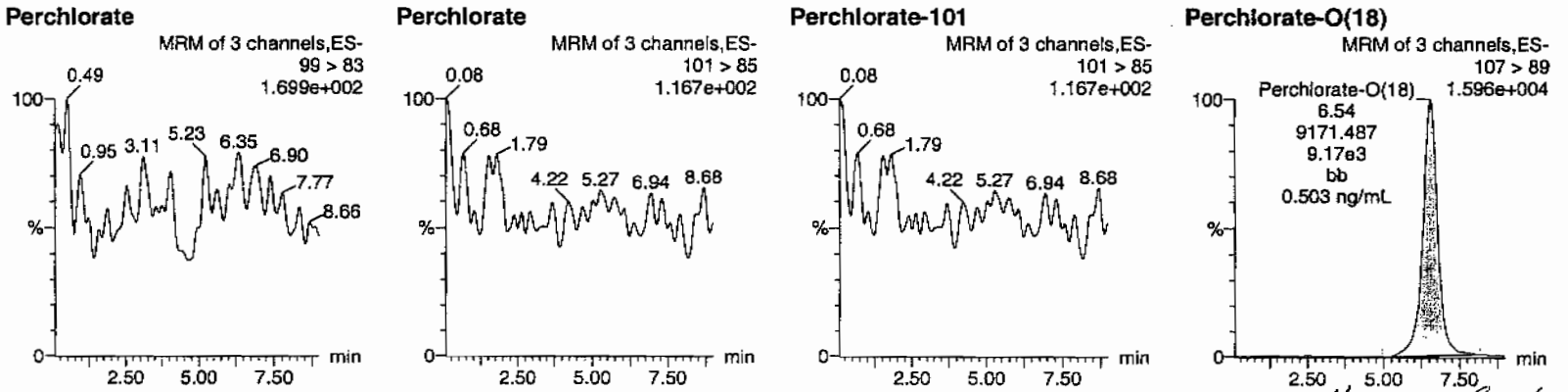
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322002a
Date: 22-Mar-2010
Time: 11:42:55
ID: IPB001
Vial: 1:1,A

03-23-10



HM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	6.54	9171.487	9171.487	bb			0.5026	100.53	0.53	692.431	

Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2155

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	22-MAR-10	per0322008a	IPB002
Perchlorate-101	0.00	0	NA	22-MAR-10	per0322008a	IPB002
Perchlorate	0.00	0	NA	22-MAR-10	per0322010a	IPB003
Perchlorate-101	0.00	0	NA	22-MAR-10	per0322010a	IPB003
Perchlorate	0.00	0	NA	22-MAR-10	per0322023a	IPB004
Perchlorate-101	0.00	0	NA	22-MAR-10	per0322023a	IPB004
Perchlorate	0.00	0	NA	22-MAR-10	per0322036a	IPB005
Perchlorate-101	0.00	0	NA	22-MAR-10	per0322036a	IPB005
Perchlorate	0.00	0	NA	22-MAR-10	per0322040a	IPB006
Perchlorate-101	0.00	0	NA	22-MAR-10	per0322040a	IPB006
Perchlorate	0.00	0	NA	22-MAR-10	per0322049a	IPB007
Perchlorate-101	0.00	0	NA	22-MAR-10	per0322049a	IPB007
Perchlorate	0.00	0	NA	22-MAR-10	per0322062a	IPB008

Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-2155

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	22-MAR-10	per0322062a	IPB008
Perchlorate	0.00	0	NA	23-MAR-10	per0322073a	IPB009
Perchlorate-101	0.00	0	NA	23-MAR-10	per0322073a	IPB009
Perchlorate	0.00	0	NA	23-MAR-10	per0322086a	IPB010
Perchlorate-101	0.00	0	NA	23-MAR-10	per0322086a	IPB010
Perchlorate	0.00	0	NA	23-MAR-10	per0322099a	IPB011
Perchlorate-101	0.00	0	NA	23-MAR-10	per0322099a	IPB011

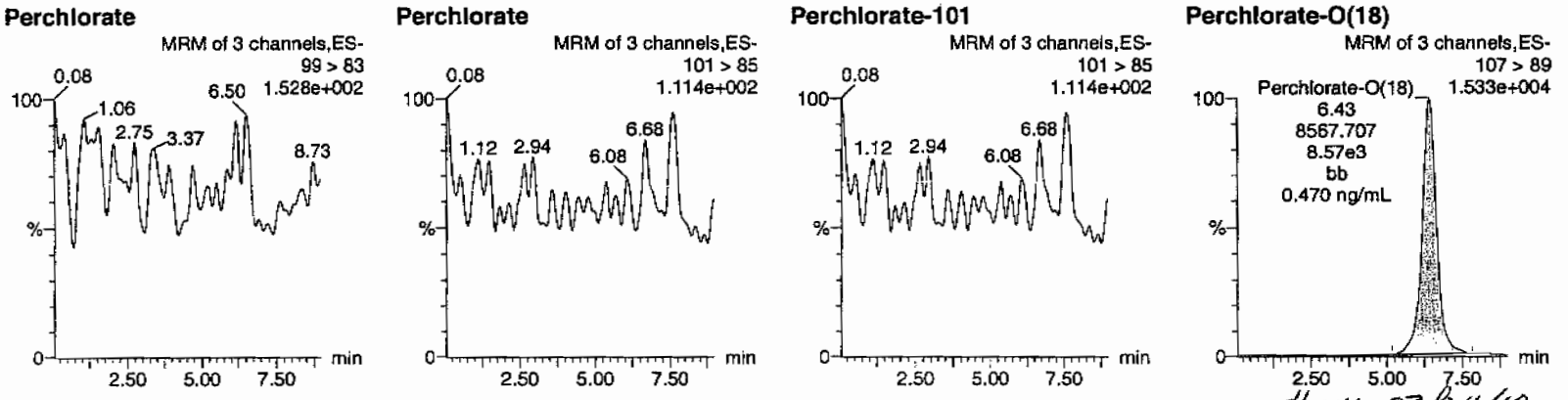
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322008a
Date: 22-Mar-2010
Time: 12:55:34
ID: IPB002
Vial: 1:1,A

CWW
03-23-10



HMM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB002	Perchlorate	99 > 83											0.00
IPB002	Perchlorate-101	101 > 85											
IPB002	Perchlorate-O(18)	107 > 89	6.43	8567.707	8567.707	bb			0.4695	93.91	-6.09	840.144	

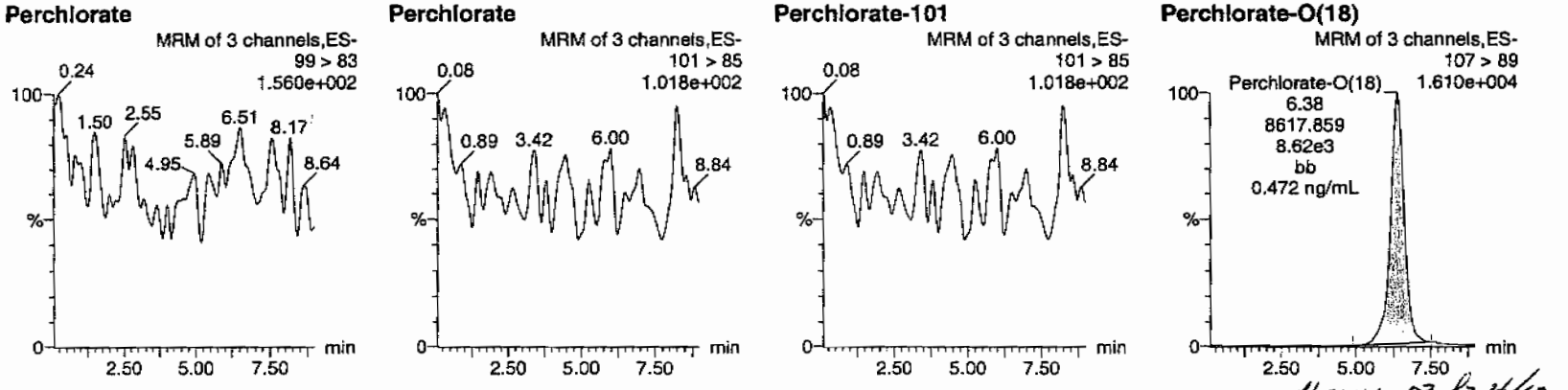
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322010a
Date: 22-Mar-2010
Time: 13:19:46
ID: IPB003
Vial: 1:1,A

03-23-10



HMM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB003	Perchlorate	99 > 83											0.00
IPB003	Perchlorate-101	101 > 85											
IPB003	Perchlorate-O(18)	107 > 89	6.38	8617.859	8617.859	bb			0.4723	94.46	-5.54	154.848	

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

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

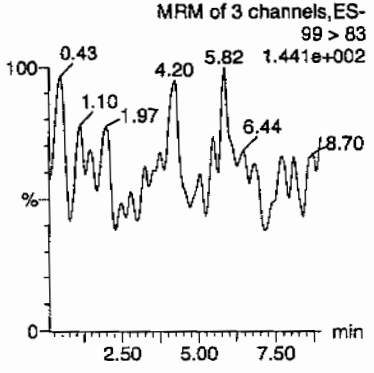
Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

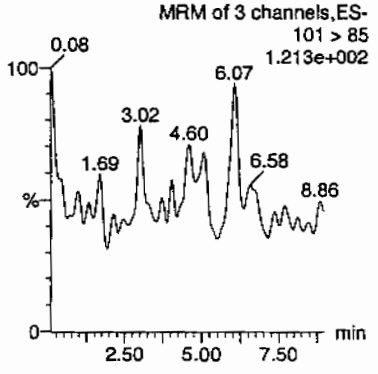
Name: per0322023a
Date: 22-Mar-2010
Time: 15:56:51
ID: IPB004
Vial: 1:1,A

CWW
03-23-10

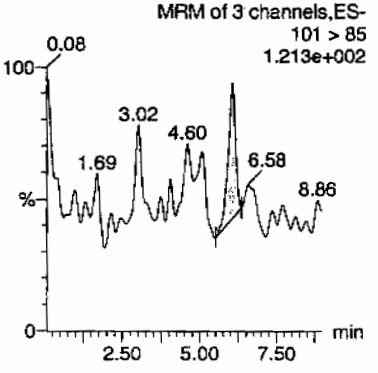
Perchlorate



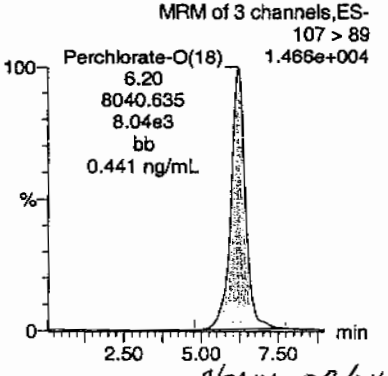
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HNM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB004	Perchlorate	99 > 83											0.00
IPB004	Perchlorate-101	101 > 85	6.07	18.185	18.185	bb			0.0023			12.061	
IPB004	Perchlorate-O(18)	107 > 89	6.20	8040.635	8040.635	bb			0.4407	88.13	-11.87	1279.6...	

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

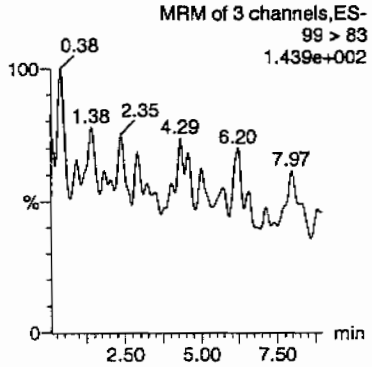
Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

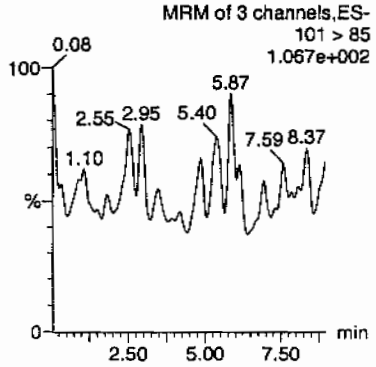
Name: per0322036a
Date: 22-Mar-2010
Time: 18:34:07
ID: IPB005
Vial: 1:1,A

03-23-10

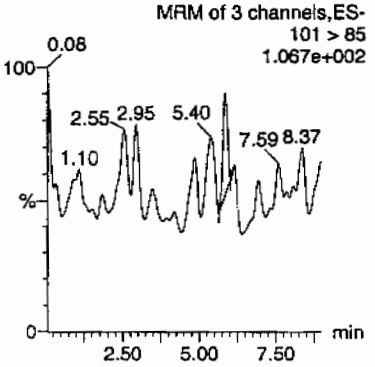
Perchlorate



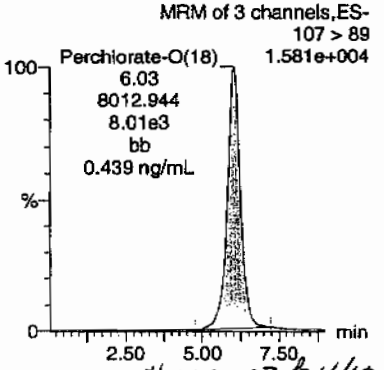
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMW 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB005	Perchlorate	99 > 83											0.00
IPB005	Perchlorate-101	101 > 85	5.87	7.461	7.461	bb			0.0009			13.240	
IPB005	Perchlorate-O(18)	107 > 89	6.03	8012.944	8012.944	bb			0.4391	87.83 ✓	-12.17	132.616	

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

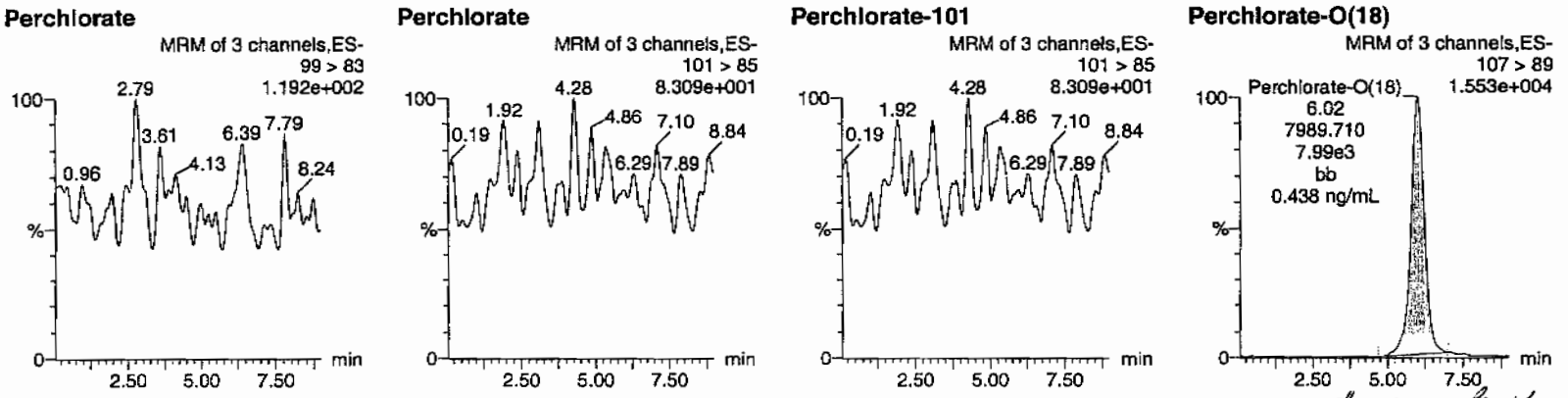
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322040a
Date: 22-Mar-2010
Time: 19:22:34
ID: IPB006
Vial: 1:1,A

CWW
03-23-10



dmk 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB006	Perchlorate	99 > 83											0.00
IPB006	Perchlorate-101	101 > 85											
IPB006	Perchlorate-O(18)	107 > 89	6.02	7989.710	7989.710	bb			0.4379	87.57	-12.43	2604.0...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

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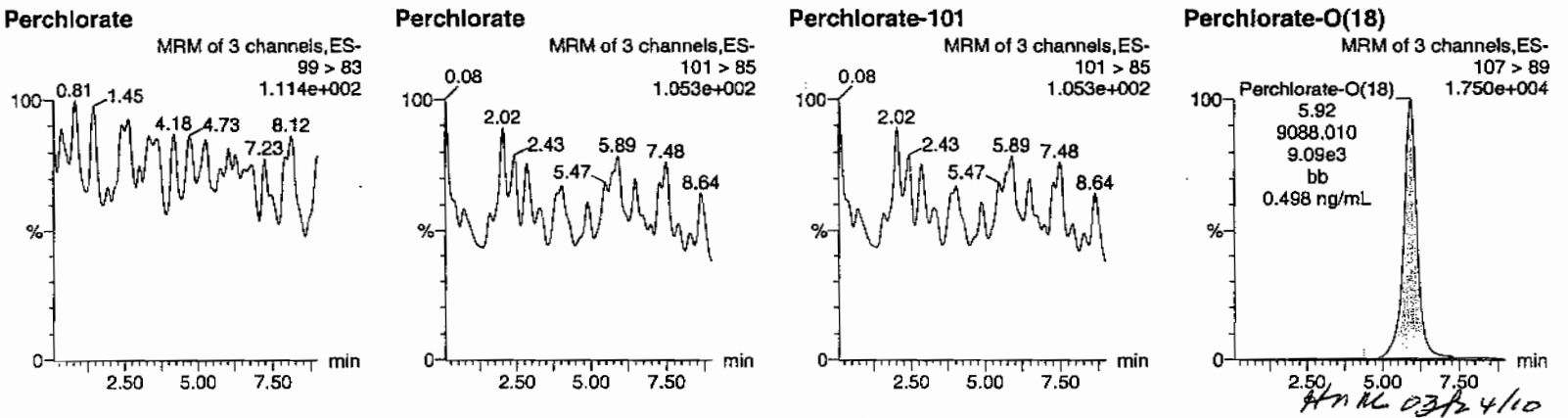
Date: 22-Mar-2010
Time: 21:11:37
ID: IPB007
Vial: 1:1,A

CWW 03-23-10



HMK 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB007	Perchlorate	99 > 83											0.00
IPB007	Perchlorate-101	101 > 85											
IPB007	Perchlorate-O(18)	107 > 89	5.92	9088.010	9088.010	bb			0.4981	99.61	-0.39	614.610	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qid

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

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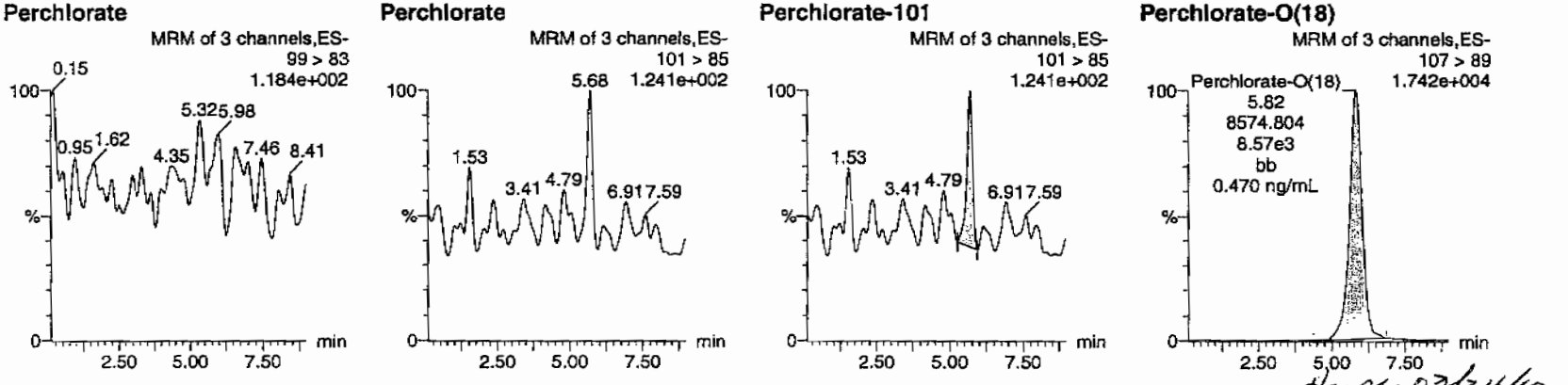
Date: 22-Mar-2010
Time: 23:48:27
ID: IPB008
Vial: 1:1,A

CWW 03-23-10



Hu 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB008	Perchlorate	99 > 83											0.00
IPB008	Perchlorate-101	101 > 85	5.68	18.142	18.142	bb			0.0023			14.270	
IPB008	Perchlorate-O(18)	107 > 89	5.82	8574.804	8574.804	bb			0.4699	93.99	-6.01	787.450	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

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Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

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Date: 23-Mar-2010
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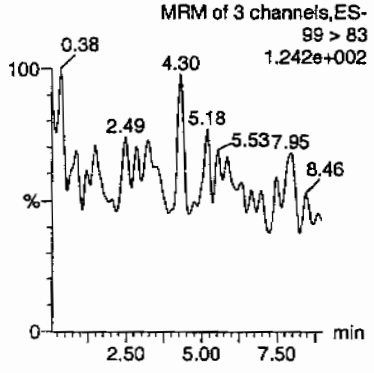
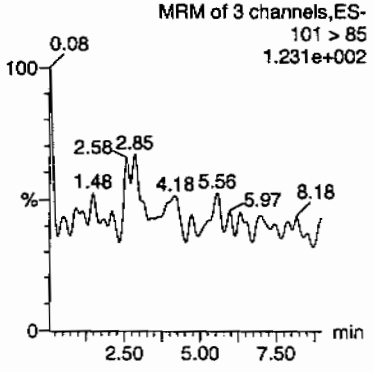
Vial: 1:1,A

CWW 03-23-10

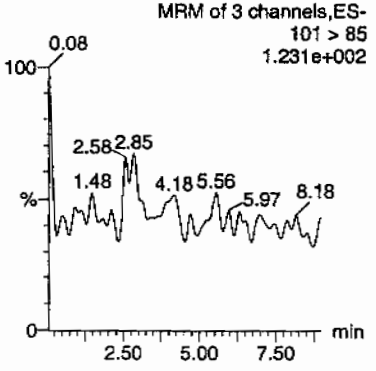
Perchlorate



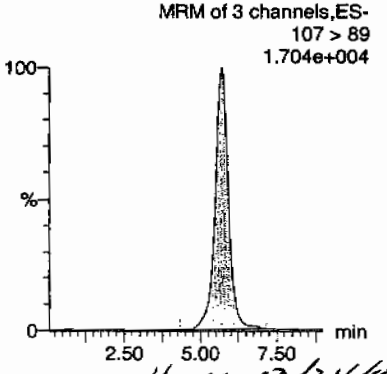
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB009	Perchlorate	99 > 83											0.00
IPB009	Perchlorate-101	101 > 85											
IPB009	Perchlorate-O(18)	107 > 89	5.71	8642.843	8642.843	bb			0.4737	94.73	-5.27	276.563	

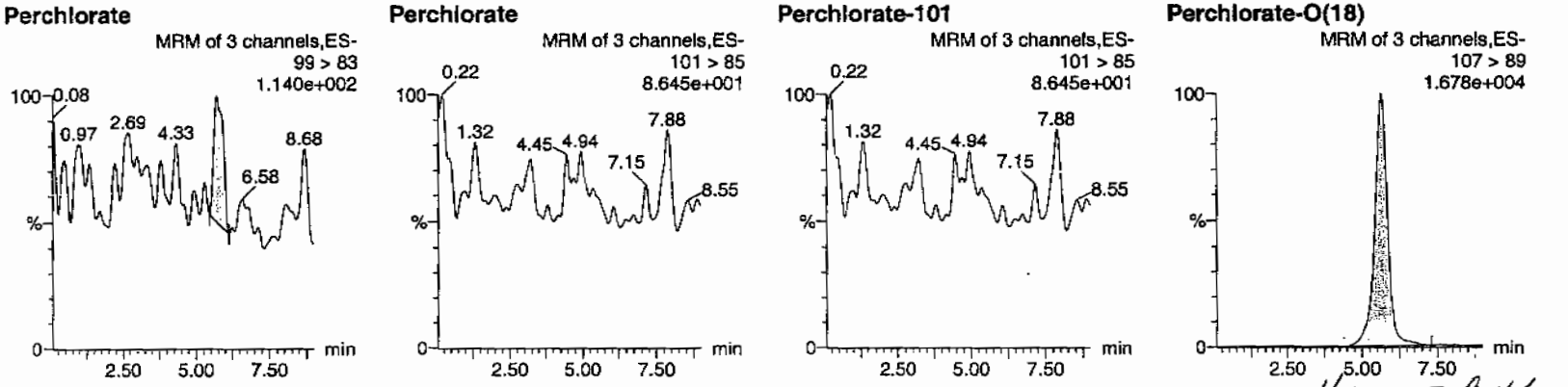
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322086a
Date: 23-Mar-2010
Time: 04:38:11
ID: IPB010
Vial: 1:1,A

CWW 03-23-10



HLM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB010	Perchlorate	99 > 83	5.71	22.210	22.210	bb			0.0009			12.081	0.00
IPB010	Perchlorate-101	101 > 85											
IPB010	Perchlorate-O(18)	107 > 89	5.64	8465.981	8465.981	bb			0.4640	92.79	-7.21	1511.7...	

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322099a
Date: 23-Mar-2010
Time: 07:18:34
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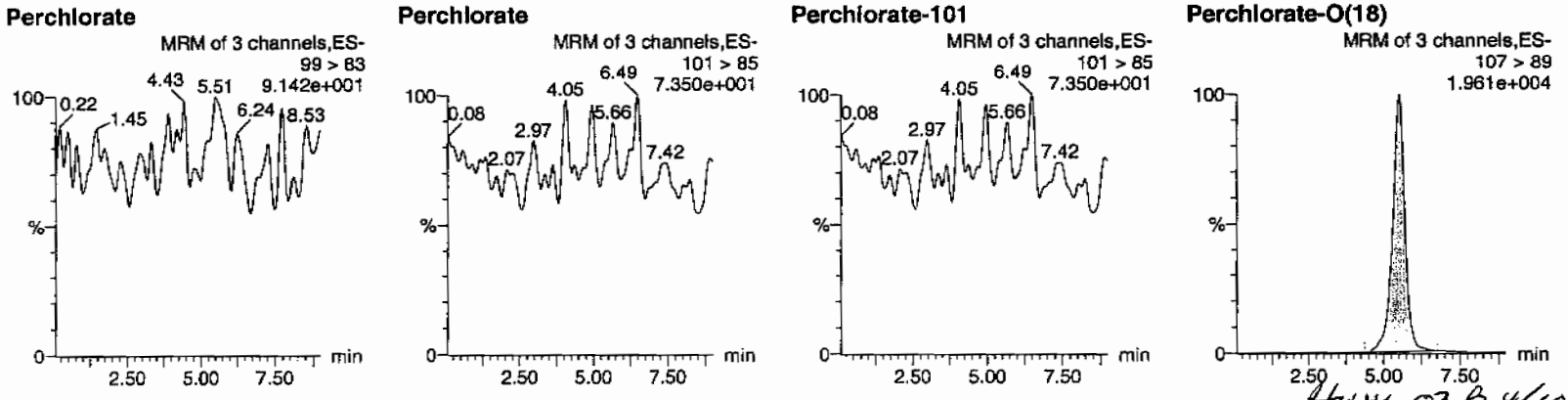
Vial: 1:1,A

03-23-10



Hmm 03-24-10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB011	Perchlorate	99 > 83											0.00
IPB011	Perchlorate-101	101 > 85											
IPB011	Perchlorate-O(18)	107 > 89	5.51	9257.950	9257.950	bb			0.5074	101.48	1.48	541.356	

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
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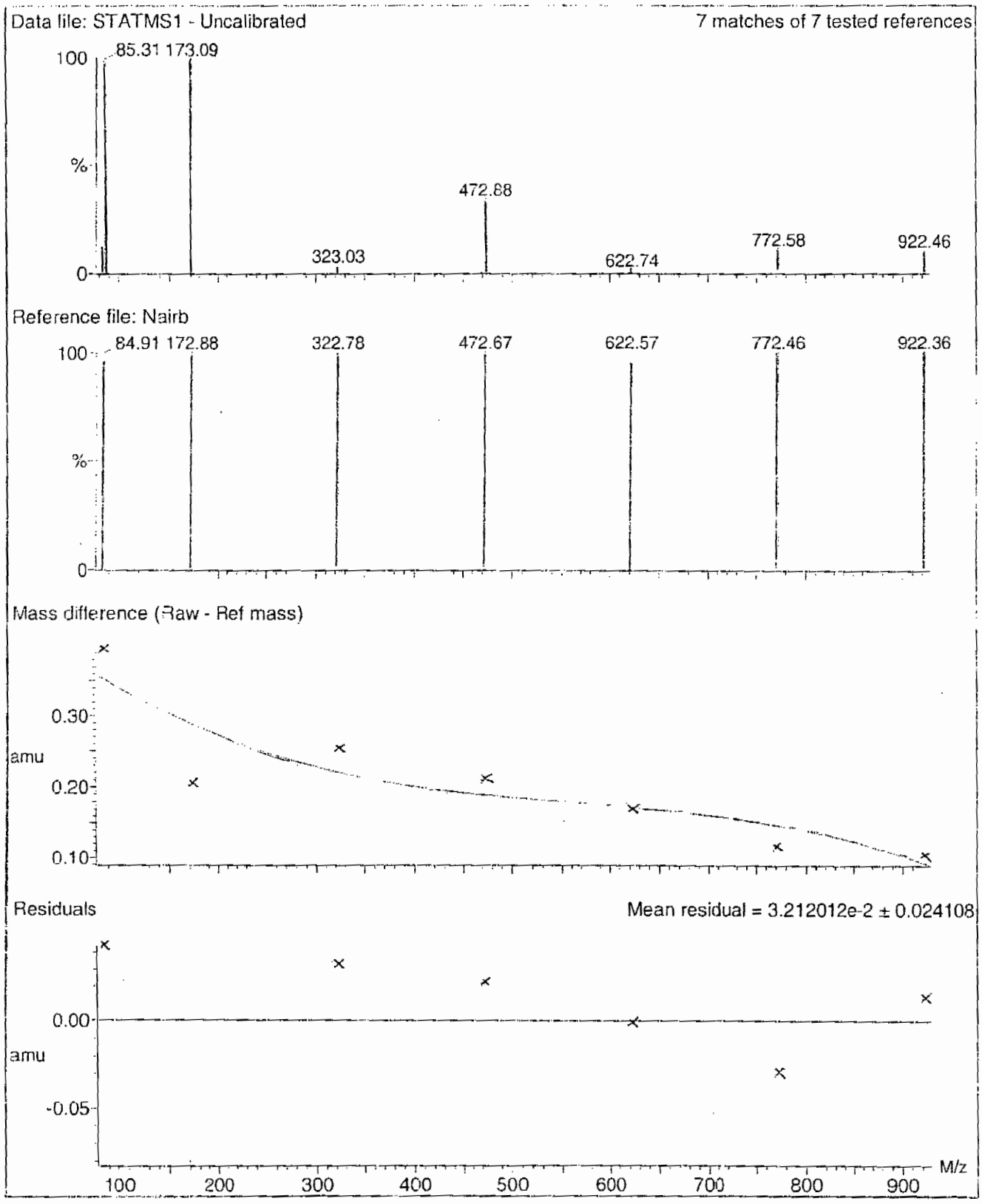
; 3920.2400	100

QUATTRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

Printed: Tue Jan 08 12:19:12 2008

PEAKS HIGHLIGHTED BY CJMJ 01-09-08



Calibration Report - MS1 Scanning

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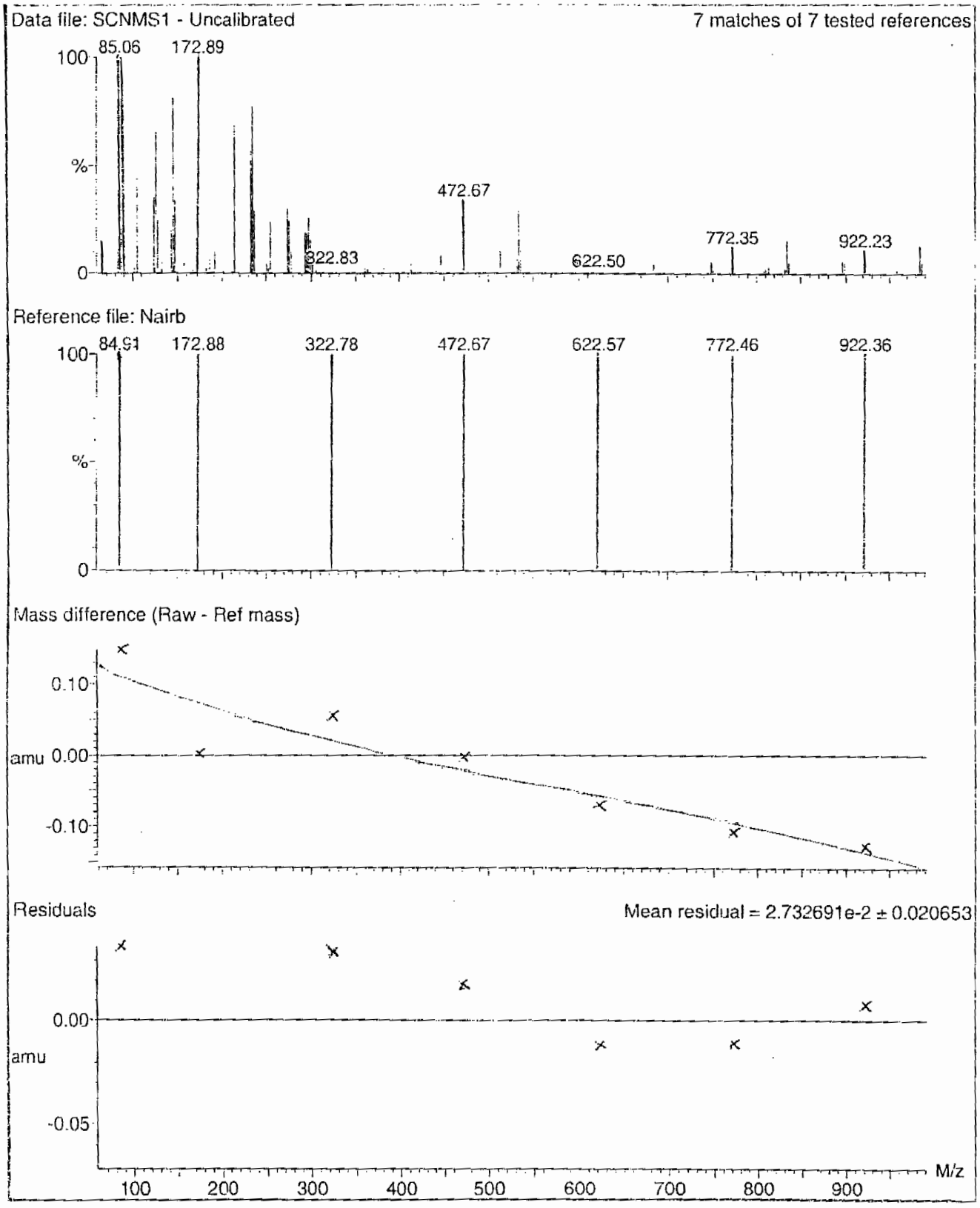

Calibration Report - MS1 Scan Speed Compensation

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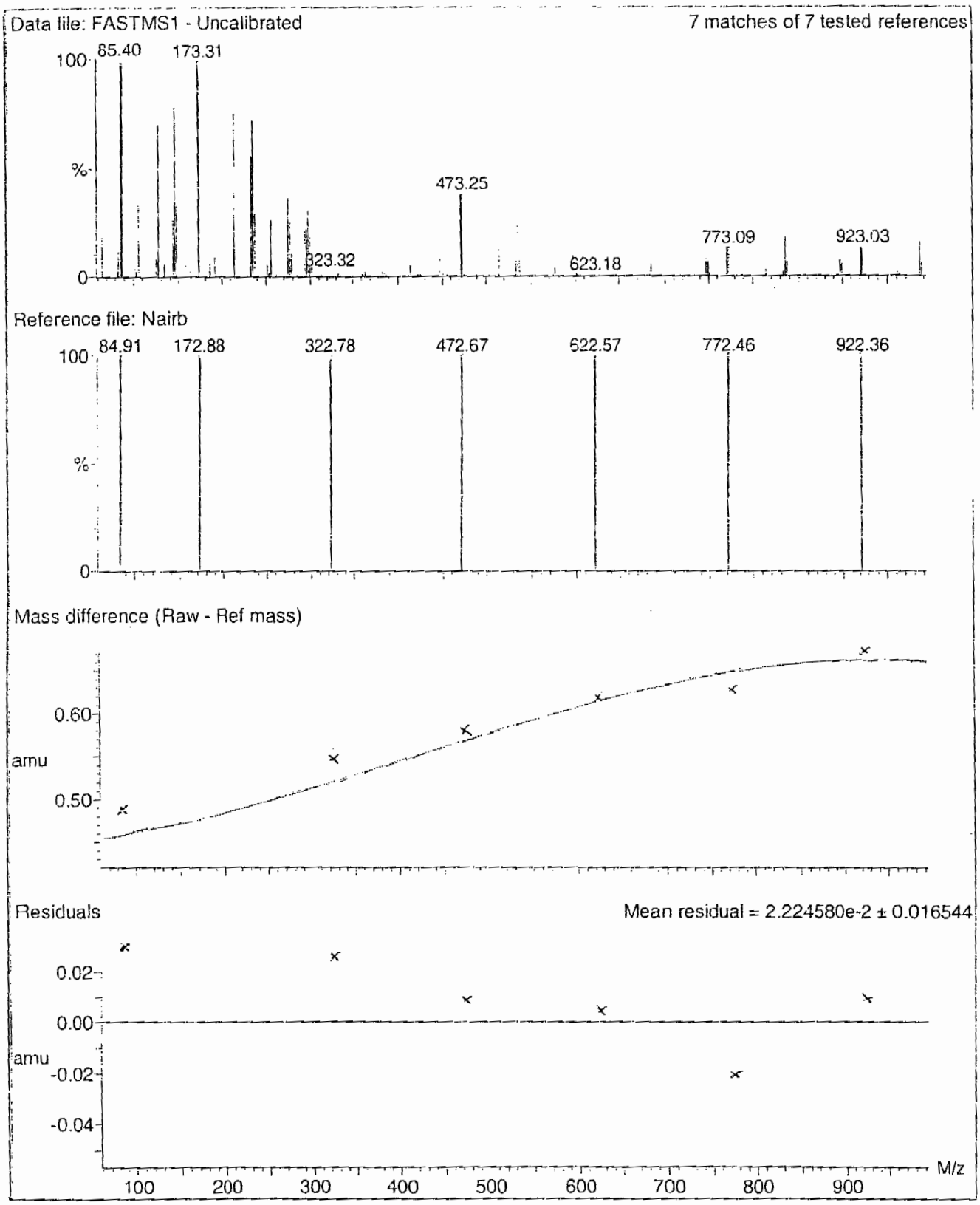

Calibration Report - MS2 Scan Speed Compensation

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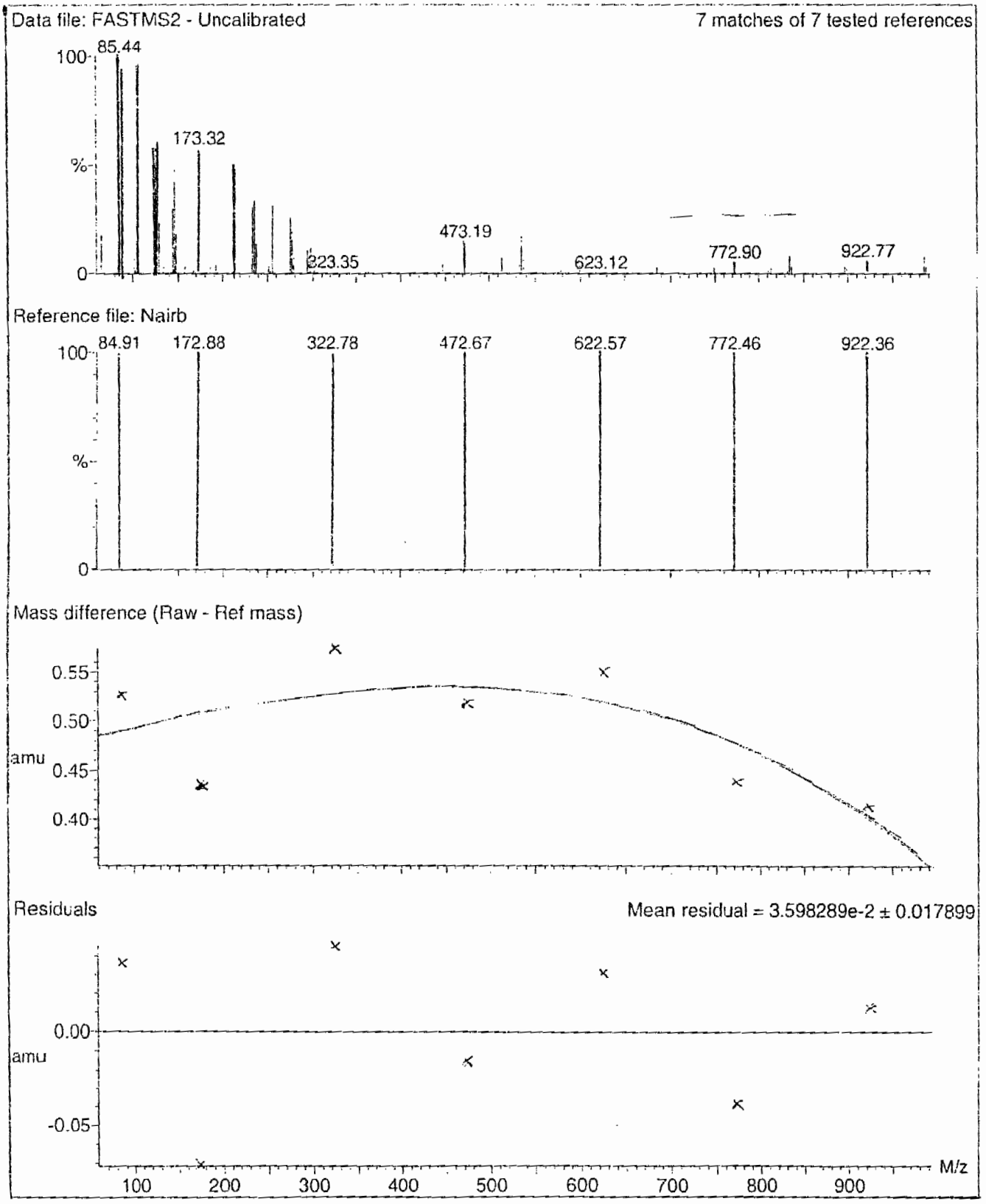

Calibration Report - MS2 Scanning

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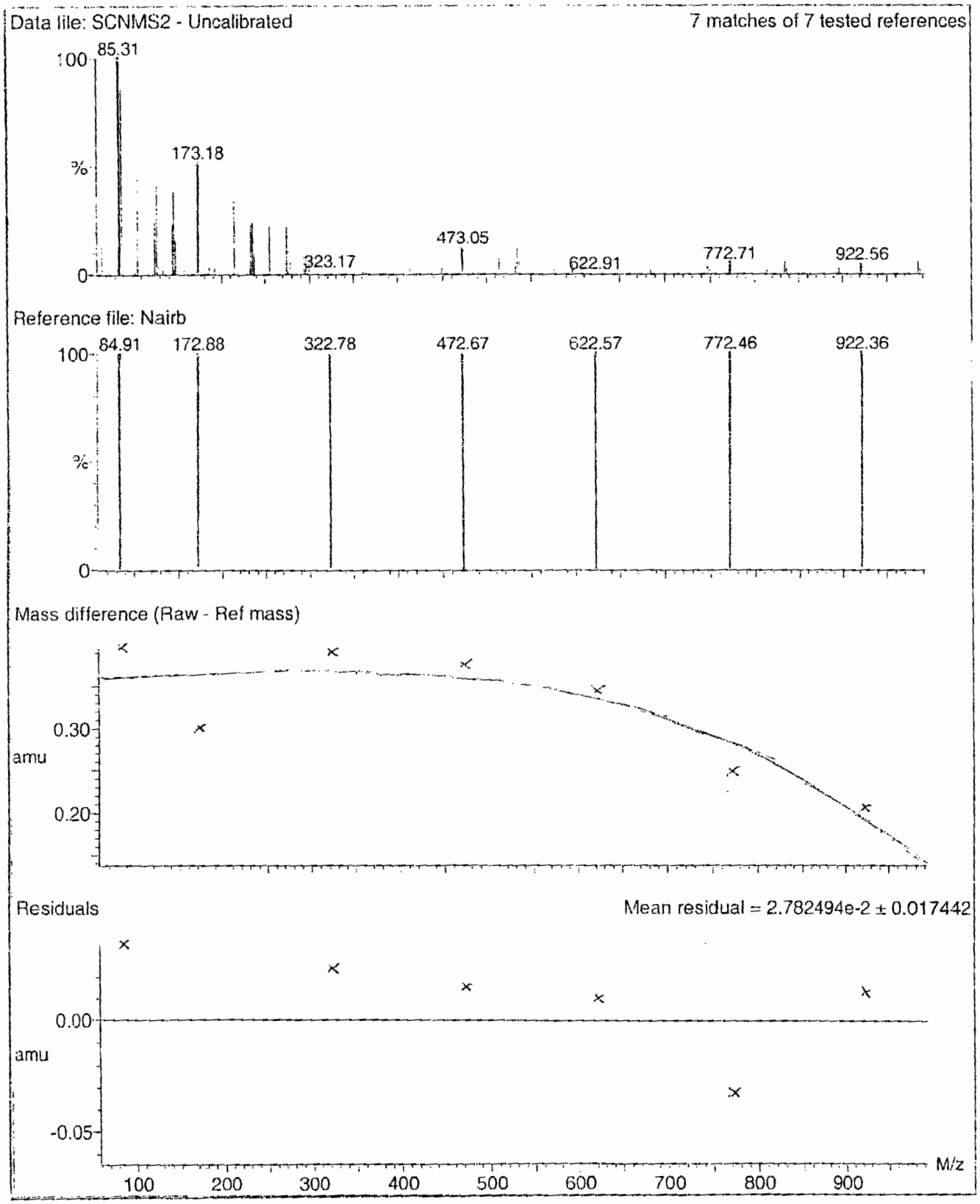
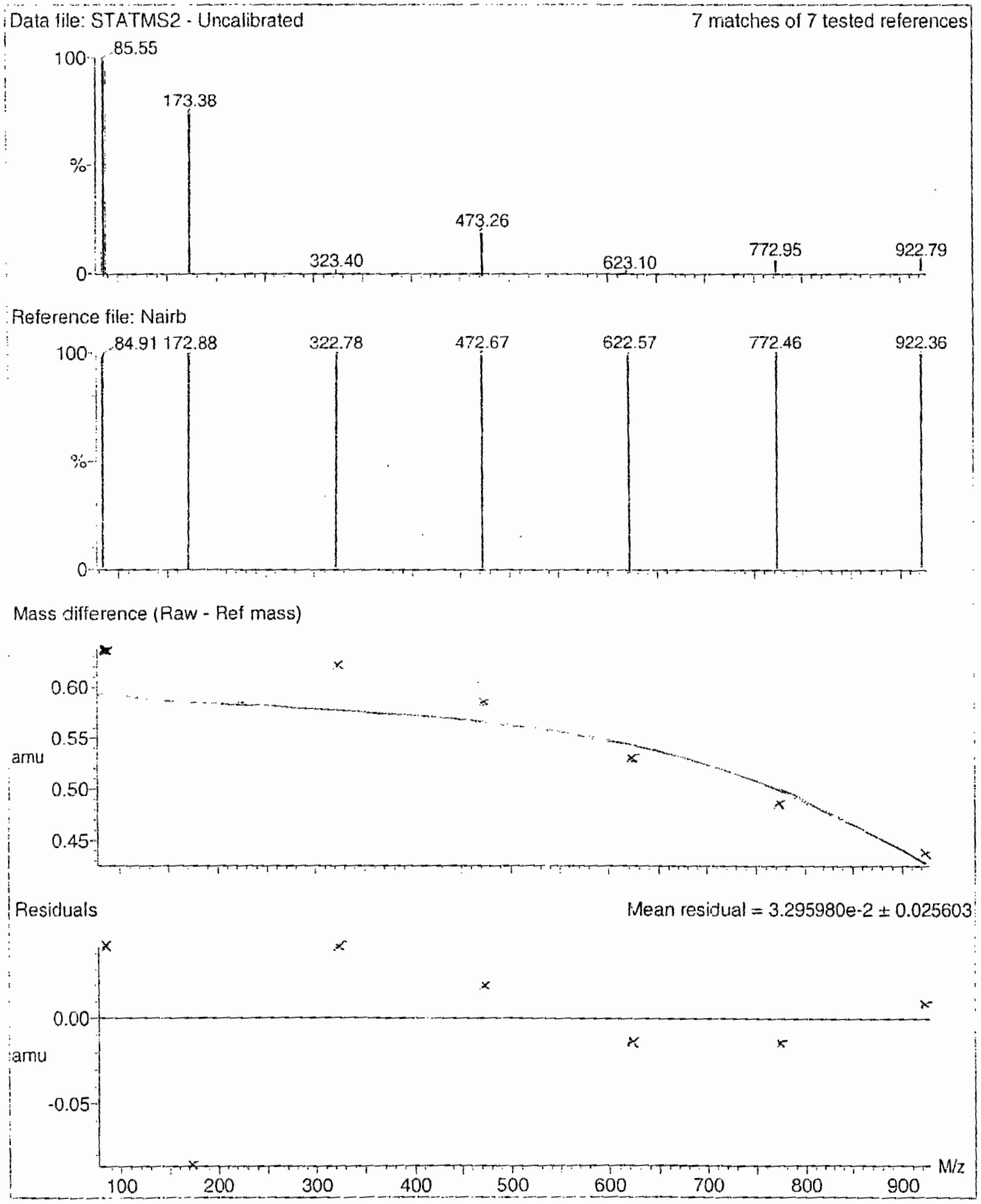


Calibration Report - MS2 Static

Printed: Tue Jan 08 12:21:59 2008



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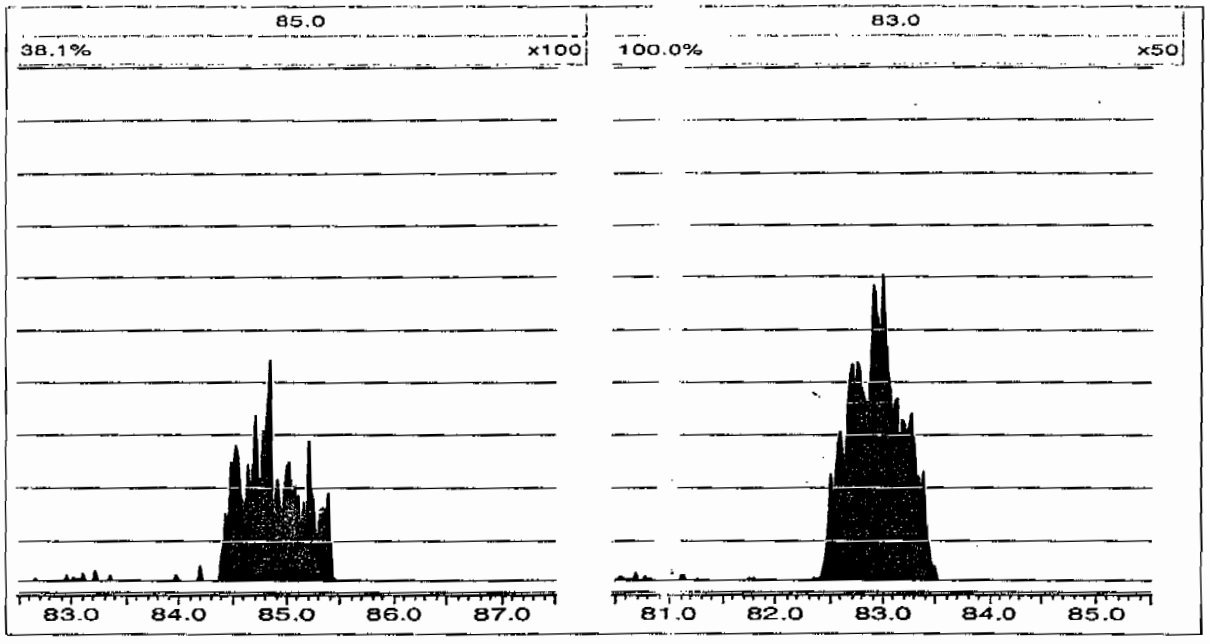
Printed: Monday, March 22, 2010 08:32:35 Eastern Standard Time



Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–2155

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	**per0322006a**	**22–MAR–10**	**9056.69**				
Lower Area Limit			**4528.345**				
Upper Area Limit			**18113.38**				
1202067810	per0322075a	23–MAR–10 02:25	8975.38	5.72	5.7686	1.008	
1202067811	per0322076a	23–MAR–10 02:37	8991.55	5.71	5.73125	1.004	
1202067814	per0322077a	23–MAR–10 02:49	9075.8	6.55	6.56365	1.002	
248374001	per0322078a	23–MAR–10 03:01	8821.19	5.71	5.71882	1.002	
248374002	per0322079a	23–MAR–10 03:13	8725.6	5.72	5.73128	1.002	
1202067812	per0322080a	23–MAR–10 03:25	8903.32	5.72	5.73143	1.002	
1202067813	per0322081a	23–MAR–10 03:37	9213.67	5.69	5.73135	1.007	
248374003	per0322082a	23–MAR–10 03:49	8885.92	5.67	5.69418	1.004	

Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–2155

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	**per0322006a**	**22–MAR–10**	**9056.69**				
Lower Area Limit			**4528.345**				
Upper Area Limit			**18113.38**				
248374004	per0322083a	23–MAR–10 04:01	8907.48	5.66	5.68162	1.004	
248374005	per0322084a	23–MAR–10 04:13	8575.72	5.64	5.65675	1.003	
248374006	per0322088a	23–MAR–10 05:02	8749.96	5.63	5.60713	.996	
248374007	per0322089a	23–MAR–10 05:14	9224.98	5.61	5.66935	1.011	
248374008	per0322090a	23–MAR–10 05:26	9093.6	5.61	5.6321	1.004	
248374009	per0322091a	23–MAR–10 05:38	8829.59	5.62	5.60723	.998	
248374010	per0322092a	23–MAR–10 05:50	9216.03	5.58	5.5947	1.003	
248374011	per0322093a	23–MAR–10 06:02	9238.95	5.58	5.61955	1.007	

Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–2155

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	**per0322006a**	**22–MAR–10**	**9056.69**				
Lower Area Limit			**4528.345**				
Upper Area Limit			**18113.38**				
248374012	per0322094a	23–MAR–10 06:14	8988.03	5.56	5.59485	1.006	
248374013	per0322095a	23–MAR–10 06:26	9218.61	5.51	5.52032	1.002	

SAMPLE
DATA

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7494

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374001

Date Filtered: 17-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	.57	2.28	6.04	ug/kg		1	23-MAR-10 03:01	per0322078a
	Perchlorate Isotope Ratio			3.06			1	23-MAR-10 03:01	per0322078a
14797-73-0	Perchlorate-101	.57	2.28	6.00	ug/kg		1	23-MAR-10 03:01	per0322078a
	Perchlorate-O(18)			5.51	ug/kg		1	23-MAR-10 03:01	per0322078a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

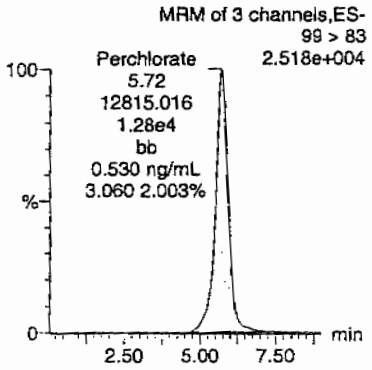
Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322078a
Date: 23-Mar-2010
Time: 03:01:44
ID: 248374001
Vial: 3:1,D

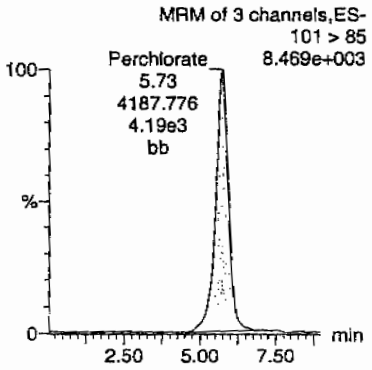
|LANL|963899|30120|1|

03-23-10

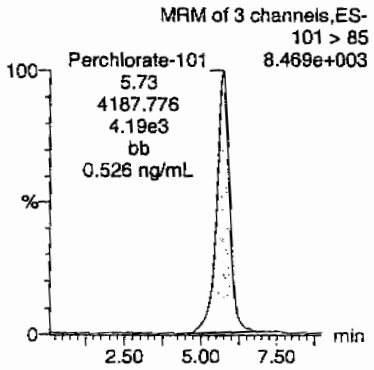
Perchlorate



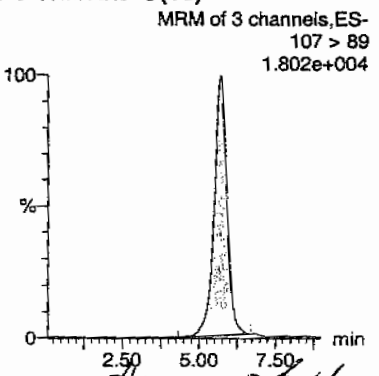
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248374001	Perchlorate	99 > 83	5.72	12815.016	12815.016	bb			0.5298			1682.7...	3.06
248374001	Perchlorate-101	101 > 85	5.73	4187.776	4187.776	bb			0.5260			255.446	
248374001	Perchlorate-O(18)	107 > 89	5.71	8821.195	8821.195	bb			0.4834	96.69	-3.31	868.682	

$$\frac{12815.016 \mid 10 \mid 100}{24126.2 \mid \mid 87.7} = 6.04$$

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7493

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374002

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 75

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.671	2.68	9.31	ug/kg		1	23-MAR-10 03:13	per0322079a
	Perchlorate Isotope Ratio			3.05			1	23-MAR-10 03:13	per0322079a
14797-73-0	Perchlorate-101	.671	2.68	9.27	ug/kg		1	23-MAR-10 03:13	per0322079a
	Perchlorate-O(18)			6.42	ug/kg		1	23-MAR-10 03:13	per0322079a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

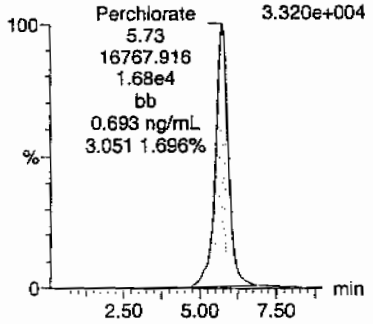
Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322079a
Date: 23-Mar-2010
Time: 03:13:46
ID: 248374002
Vial: 3:1,E

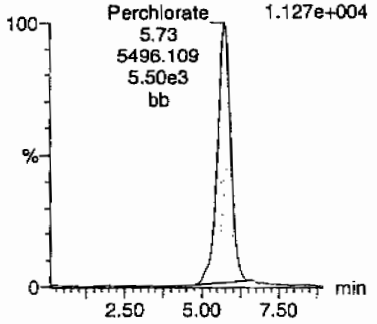
|LANL|963894|JD20|1|

03-23-10

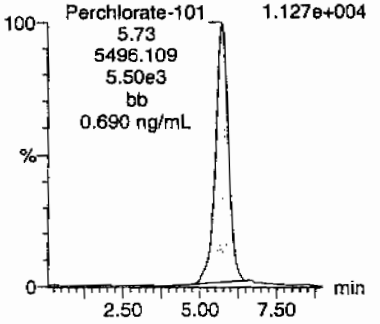
Perchlorate



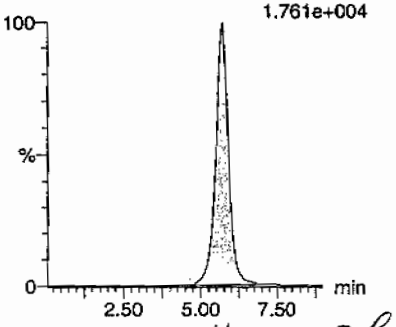
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hu 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248374002	Perchlorate	99 > 83	5.73	16767.916	16767.916	bb			0.6933			2557.4...	3.05
248374002	Perchlorate-101	101 > 85	5.73	5496.109	5496.109	bb			0.6903			785.683	
248374002	Perchlorate-O(18)	107 > 89	5.72	8725.601	8725.601	bb			0.4782	95.64	-4.36	1270.7...	

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7492

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374003

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 79

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.634	2.54	1.18	ug/kg	J	1	23-MAR-10 03:49	per0322082a
	Perchlorate Isotope Ratio			2.86			1	23-MAR-10 03:49	per0322082a
14797-73-0	Perchlorate-101	.634	2.54	1.25	ug/kg	J	1	23-MAR-10 03:49	per0322082a
	Perchlorate-O(18)			6.18	ug/kg		1	23-MAR-10 03:49	per0322082a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

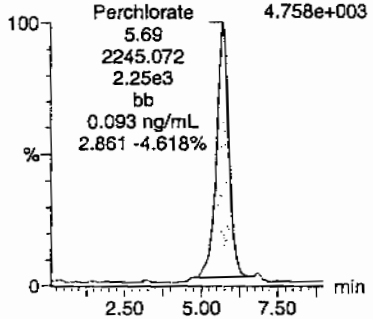
Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322082a
Date: 23-Mar-2010
Time: 03:49:49
ID: 248374003
Vial: 3:2,B

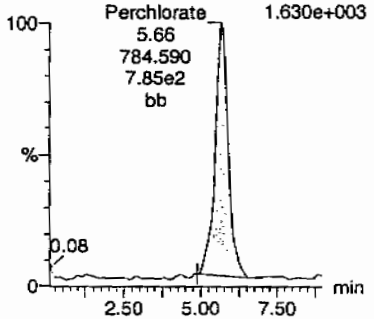
LAVC | 963894 | 50620 | 1 |

CWW 03-23-10

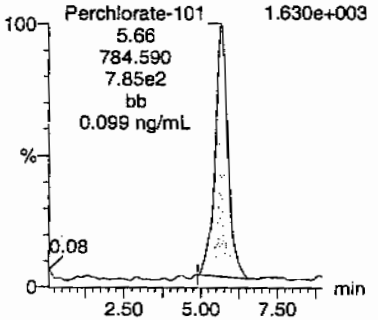
Perchlorate



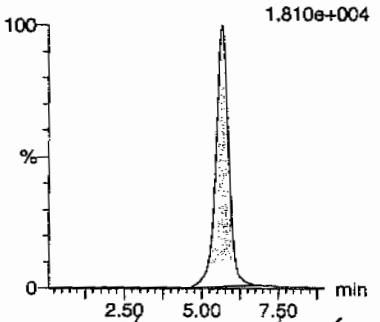
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248374003	Perchlorate	99 > 83	5.69	2245.072	2245.072	bb			0.0928			220.567	2.86
248374003	Perchlorate-101	101 > 85	5.66	784.590	784.590	bb			0.0985			86.606	
248374003	Perchlorate-O(18)	107 > 89	5.67	8885.925	8885.925	bb			0.4870	97.40	-2.60	1202.2...	

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7491

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374004

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 65

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.772	3.09	2.64	ug/kg	J	1	23-MAR-10 04:01	per0322083a
	Perchlorate Isotope Ratio			2.97			1	23-MAR-10 04:01	per0322083a
14797-73-0	Perchlorate-101	.772	3.09	2.70	ug/kg	J	1	23-MAR-10 04:01	per0322083a
	Perchlorate-O(18)			7.54	ug/kg		1	23-MAR-10 04:01	per0322083a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

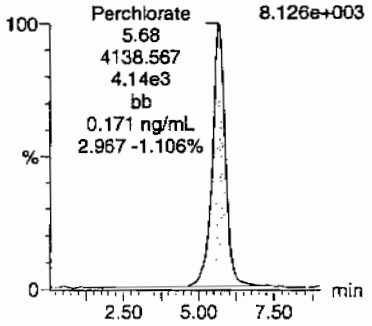
Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322083a
Date: 23-Mar-2010
Time: 04:01:52
ID: 248374004
Vial: 3:2,C

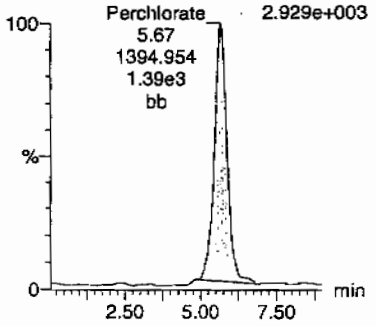
|LANL|963894|5020|1|

CW 03-23-10

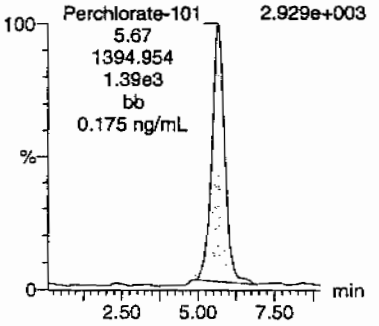
Perchlorate



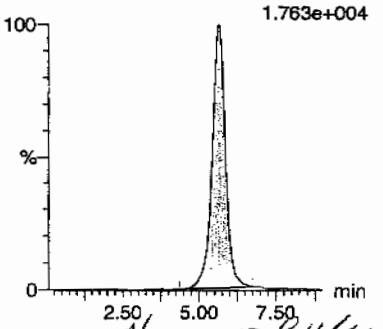
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 03-24-10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248374004	Perchlorate	99 > 83	5.68	4138.567	4138.567	bb			0.1711			111.220	2.97
248374004	Perchlorate-101	101 > 85	5.67	1394.954	1394.954	bb			0.1752			52.910	
248374004	Perchlorate-O(18)	107 > 89	5.66	8907.484	8907.484	bb			0.4882	97.63	-2.37	546.730	

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7496

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374005

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.565	2.26	2.05	ug/kg	J	1	23-MAR-10 04:13	per0322084a
	Perchlorate Isotope Ratio			3.26			1	23-MAR-10 04:13	per0322084a
14797-73-0	Perchlorate-101	.565	2.26	1.92	ug/kg	J	1	23-MAR-10 04:13	per0322084a
	Perchlorate-O(18)			5.31	ug/kg		1	23-MAR-10 04:13	per0322084a

^ 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 =

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

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

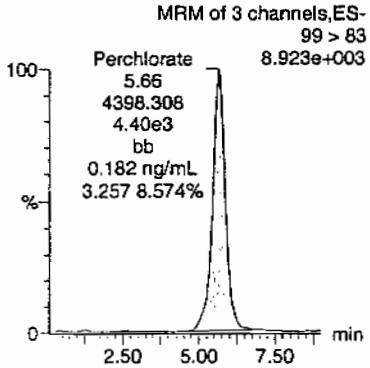
Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

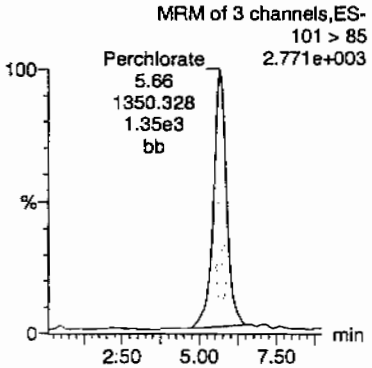
Name: per0322084a
Date: 23-Mar-2010
Time: 04:13:54
ID: 248374005
Vial: 3:2,D

LANL | 963899 | 50120 | 1 | 0323-10

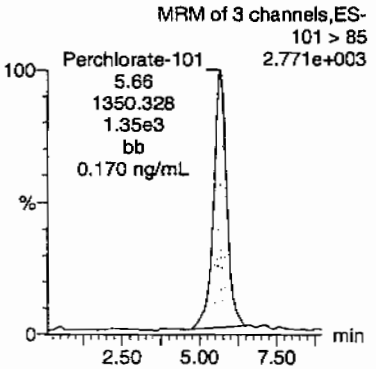
Perchlorate



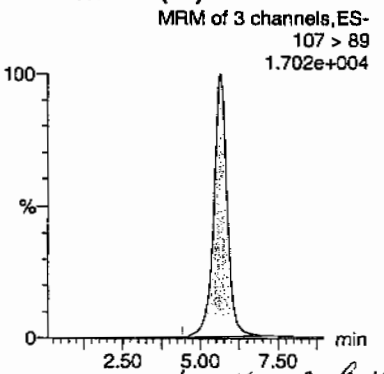
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248374005	Perchlorate	99 > 83	5.66	4398.308	4398.308	bb			0.1819			460.984	3.26
248374005	Perchlorate-101	101 > 85	5.66	1350.328	1350.328	bb			0.1696			210.588	
248374005	Perchlorate-O(18)	107 > 89	5.64	8575.724	8575.724	bb			0.4700	94.00	-6.00	1013.5...	

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7499

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374006

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 73

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.685	2.74	0.685	ug/kg	U	1	23-MAR-10 05:02	per0322088a
	Perchlorate Isotope Ratio						1	23-MAR-10 05:02	per0322088a
14797-73-0	Perchlorate-101	.685	2.74	0.685	ug/kg	U	1	23-MAR-10 05:02	per0322088a
	Perchlorate-O(18)			6.57	ug/kg		1	23-MAR-10 05:02	per0322088a

^ 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 =

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

Quantify Sample Report **MassLynx 4.0 SP4**

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

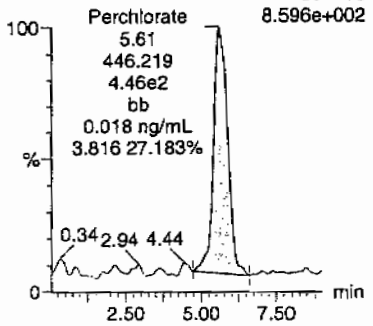
Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322088a
Date: 23-Mar-2010
Time: 05:02:22
ID: 248374006
Vial: 3:2,E

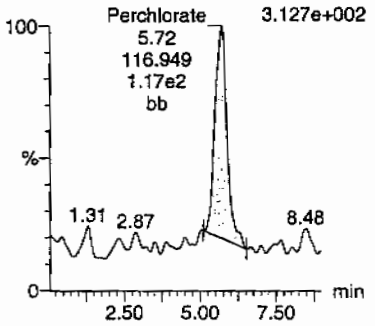
|LANL|963899|50120|1|

03-23-10

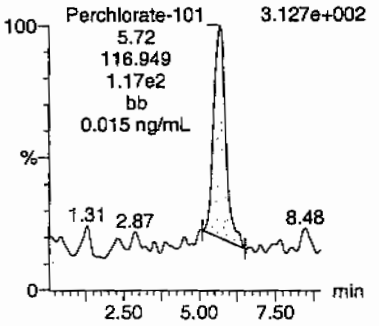
Perchlorate



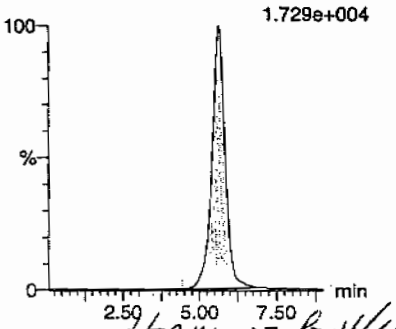
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248374006	Perchlorate	99 > 83	5.61	446.219	446.219	bb			0.0184			61.469	3.82
248374006	Perchlorate-101	101 > 85	5.72	116.949	116.949	bb			0.0147			23.224	
248374006	Perchlorate-O(18)	107 > 89	5.63	8749.959	8749.959	bb			0.4795	95.91	-4.09	1396.6...	

Form I

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7497

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374007

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 68

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.741	2.96	0.741	ug/kg	U	1	23-MAR-10 05:14	per0322089a
	Perchlorate Isotope Ratio						1	23-MAR-10 05:14	per0322089a
14797-73-0	Perchlorate-101	.741	2.96	0.741	ug/kg	U	1	23-MAR-10 05:14	per0322089a
	Perchlorate-O(18)			7.49	ug/kg		1	23-MAR-10 05:14	per0322089a

^ 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 =

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

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

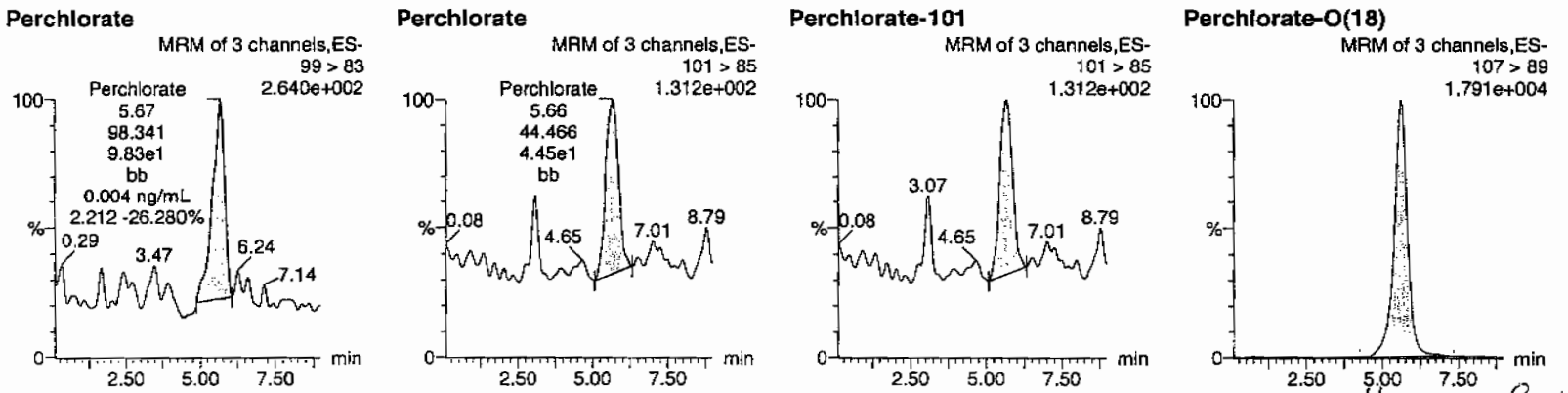
Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time

Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322089a
Date: 23-Mar-2010
Time: 05:14:36
ID: 248374007
Vial: 3:2,F

|LANL|963899|SD20|11

0323-10



Hmm 03-24-10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248374007	Perchlorate	99 > 83	5.67	98.341	98.341	bb			0.0041			36.332	2.21
248374007	Perchlorate-101	101 > 85	5.66	44.466	44.466	bb			0.0056			40.452	
248374007	Perchlorate-O(18)	107 > 89	5.61	9224.975	9224.975	bb			0.5056	101.11	1.11	382.210	

ON74
<0.0500

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7495

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374008

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 73

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.688	2.75	2.18	ug/kg	J	1	23-MAR-10 05:26	per0322090a
	Perchlorate Isotope Ratio			2.88			1	23-MAR-10 05:26	per0322090a
14797-73-0	Perchlorate-101	.688	2.75	2.30	ug/kg	J	1	23-MAR-10 05:26	per0322090a
	Perchlorate-O(18)			6.85	ug/kg		1	23-MAR-10 05:26	per0322090a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

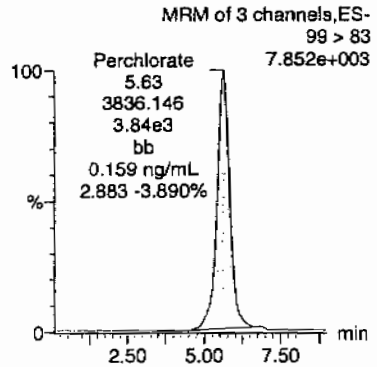
Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322090a
Date: 23-Mar-2010
Time: 05:26:37
ID: 248374008
Vial: 3:3,A

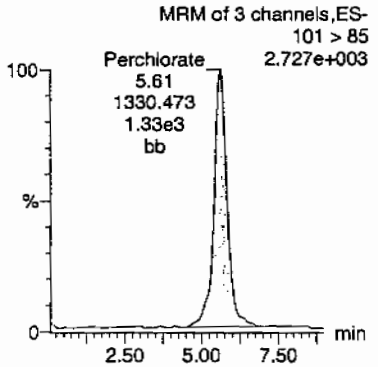
|LANL|963899|50125|1|

LMS 03-23-10

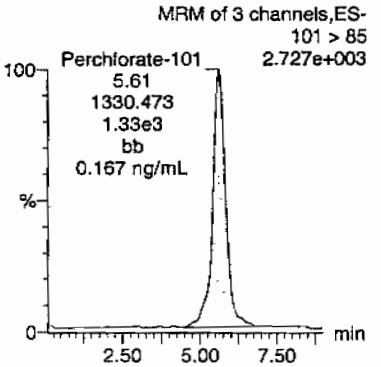
Perchlorate



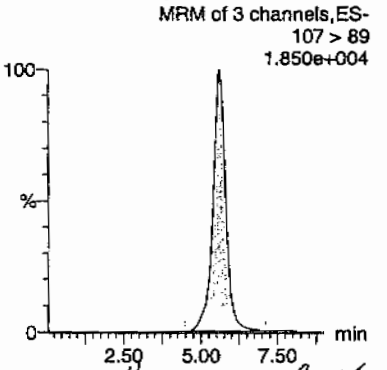
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248374008	Perchlorate	99 > 83	5.63	3836.146	3836.146	bb			0.1586			434.752	2.88
248374008	Perchlorate-101	101 > 85	5.61	1330.473	1330.473	bb			0.1671			150.544	
248374008	Perchlorate-O(18)	107 > 89	5.61	9093.604	9093.604	bb			0.4984	99.67	-0.33	330.274	

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7498

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374009

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 77

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.647	2.59	0.647	ug/kg	U	1	23-MAR-10 05:38	per0322091a
	Perchlorate Isotope Ratio						1	23-MAR-10 05:38	per0322091a
14797-73-0	Perchlorate-101	.647	2.59	0.647	ug/kg	U	1	23-MAR-10 05:38	per0322091a
	Perchlorate-O(18)			6.26	ug/kg		1	23-MAR-10 05:38	per0322091a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

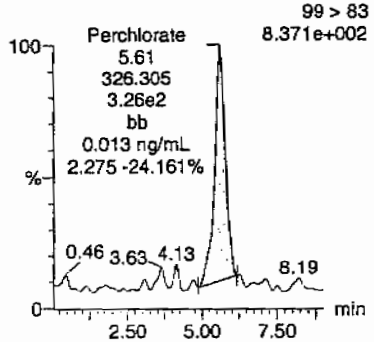
Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322091a
Date: 23-Mar-2010
Time: 05:38:40
ID: 248374009
Vial: 3:3,B

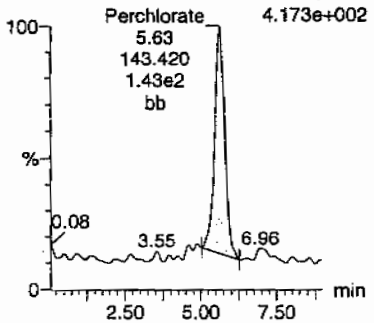
LCMS | 9638519 | 50120 | 1 |

03-23-10

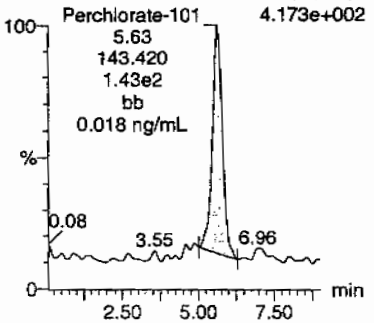
Perchlorate



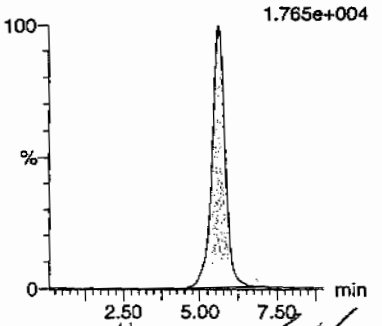
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMK 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248374009	Perchlorate	99 > 83	5.61	326.305	326.305	bb			0.0135			58.424	2.28
248374009	Perchlorate-101	101 > 85	5.63	143.420	143.420	bb			0.0180			70.345	
248374009	Perchlorate-O(18)	107 > 89	5.62	8829.591	8829.591	bb			0.4839	96.78	-3.22	2160.3...	

OKAY
<0.0500

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7500

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374010

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 78

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.64	2.56	0.640	ug/kg	U	1	23-MAR-10 05:50	per0322092a
	Perchlorate Isotope Ratio						1	23-MAR-10 05:50	per0322092a
14797-73-0	Perchlorate-101	.64	2.56	0.640	ug/kg	U	1	23-MAR-10 05:50	per0322092a
	Perchlorate-O(18)			6.46	ug/kg		1	23-MAR-10 05:50	per0322092a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

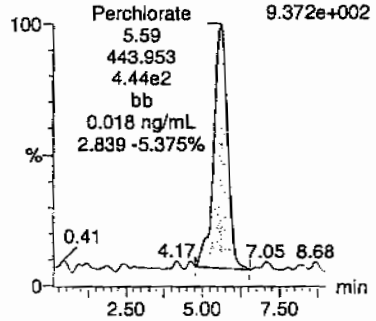
Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322092a
Date: 23-Mar-2010
Time: 05:50:42
ID: 248374010
Vial: 3:3,C

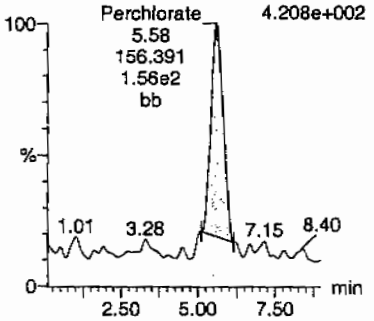
|LANL|963.849|50120|1|

03-23-10

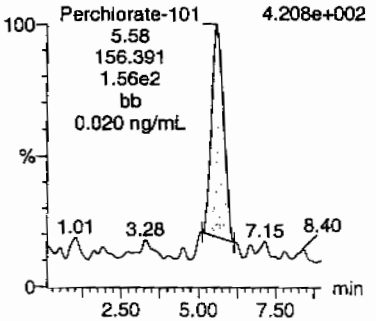
Perchlorate



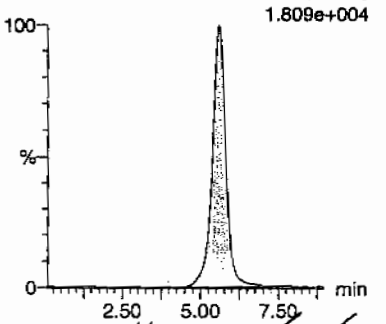
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HWM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248374010	Perchlorate	99 > 83	5.59	443.953	443.953	bb			0.0184			45.157	2.84
248374010	Perchlorate-101	101 > 85	5.58	156.391	156.391	bb			0.0196			36.909	
248374010	Perchlorate-O(18)	107 > 89	5.58	9216.029	9216.029	bb			0.5051	101.02	1.02	1081.8...	

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7523

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374011

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.594	2.38	0.840	ug/kg	J	1	23-MAR-10 06:02	per0322093a
	Perchlorate Isotope Ratio			2.82			1	23-MAR-10 06:02	per0322093a
14797-73-0	Perchlorate-101	.594	2.38	0.906	ug/kg	J	1	23-MAR-10 06:02	per0322093a
	Perchlorate-O(18)			6.02	ug/kg		1	23-MAR-10 06:02	per0322093a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qid

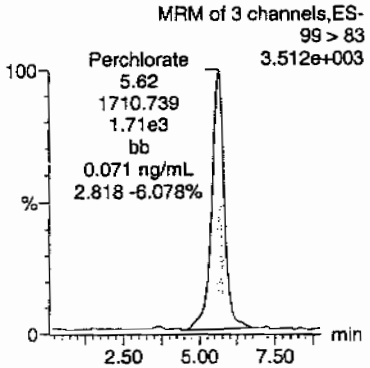
Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322093a
Date: 23-Mar-2010
Time: 06:02:45
ID: 248374011
Vial: 3:3,D

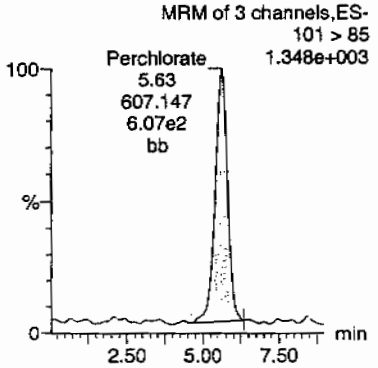
|LANL|963899|SDL20|11|

03-23-10

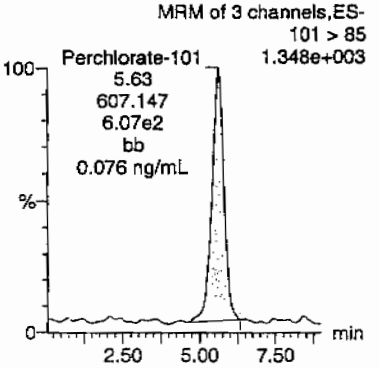
Perchlorate



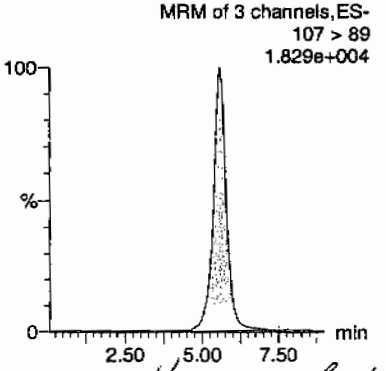
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hum 03-24-10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248374011	Perchlorate	99 > 83	5.62	1710.739	1710.739	bb			0.0707			128.568	2.82
248374011	Perchlorate-101	101 > 85	5.63	607.147	607.147	bb			0.0763			111.006	
248374011	Perchlorate-O(18)	107 > 89	5.58	9238.951	9238.951	bb			0.5063	101.27	1.27	2402.3...	

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7522

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374012

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.563	2.25	0.563	ug/kg	U	1	23-MAR-10 06:14	per0322094a
	Perchlorate Isotope Ratio						1	23-MAR-10 06:14	per0322094a
14797-73-0	Perchlorate-101	.563	2.25	0.567	ug/kg	J	1	23-MAR-10 06:14	per0322094a
	Perchlorate-O(18)			5.55	ug/kg		1	23-MAR-10 06:14	per0322094a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

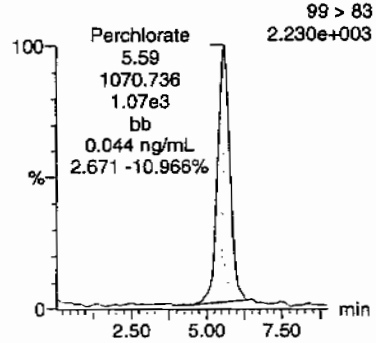
Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322094a
Date: 23-Mar-2010
Time: 06:14:46
ID: 248374012
Vial: 3:3,E

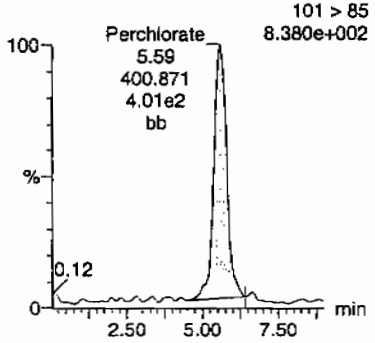
|LANL|963899|50120|11|

LWW 0323-10

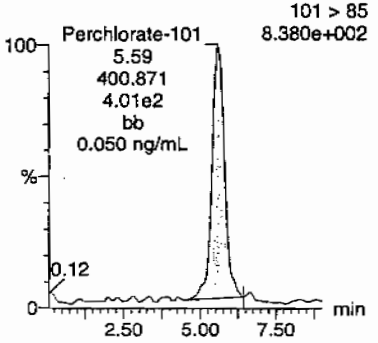
Perchlorate



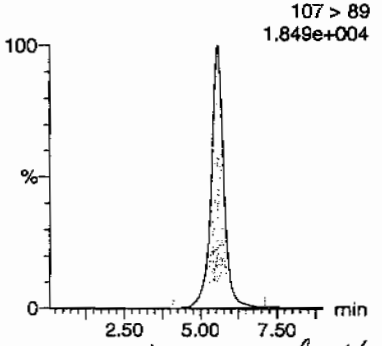
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248374012	Perchlorate	99 > 83	5.59	1070.736	1070.736	bb			0.0443			8.218	2.67
248374012	Perchlorate-101	101 > 85	5.59	400.871	400.871	bb			0.0503			207.901	
248374012	Perchlorate-O(18)	107 > 89	5.56	8988.028	8988.028	bb			0.4926	98.52	-1.48	1505.7...	

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7521

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 248374013

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 77

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.649	2.59	0.839	ug/kg	J	1	23-MAR-10 06:26	per0322095a
	Perchlorate Isotope Ratio			2.91			1	23-MAR-10 06:26	per0322095a
14797-73-0	Perchlorate-101	.649	2.59	0.875	ug/kg	J	1	23-MAR-10 06:26	per0322095a
	Perchlorate-O(18)			6.55	ug/kg		1	23-MAR-10 06:26	per0322095a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

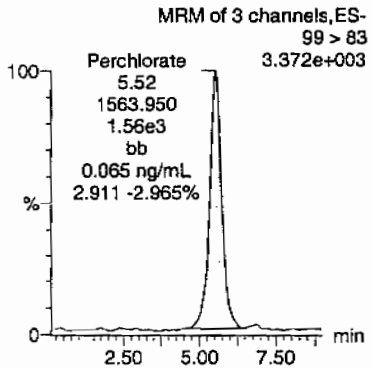
Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322095a
Date: 23-Mar-2010
Time: 06:26:47
ID: 248374013
Vial: 3:3,F

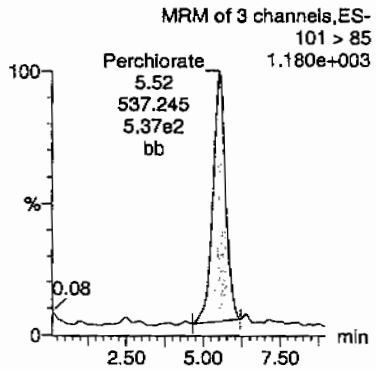
|LANL|963894|SDLCO|1|

CWW 03-23-10

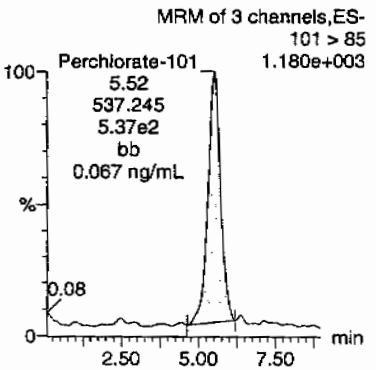
Perchlorate



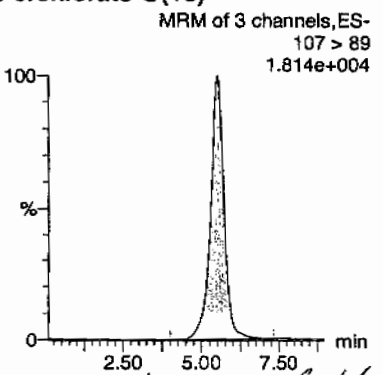
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248374013	Perchlorate	99 > 83	5.52	1563.950	1563.950	bb			0.0647			193.250	2.91
248374013	Perchlorate-101	101 > 85	5.52	537.245	537.245	bb			0.0675			131.311	
248374013	Perchlorate-O(18)	107 > 89	5.51	9218.611	9218.611	bb			0.5052	101.04	1.04	366.706	

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

STANDARDS DATA

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-2155

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 22-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: 24186.2

Response Type: External Standard

Curve Type: RF

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–2155

Lab Code: GEL

Instrument ID: LCMSMS **Date Analvzed:** 22–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: 7962.2

Response Type: External Standard

Curve Type: RF

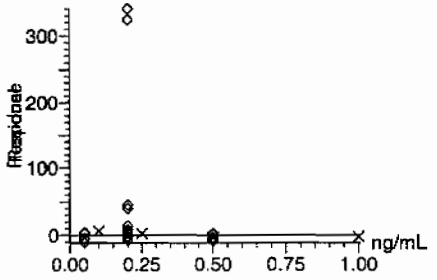
Quantify Calibration Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

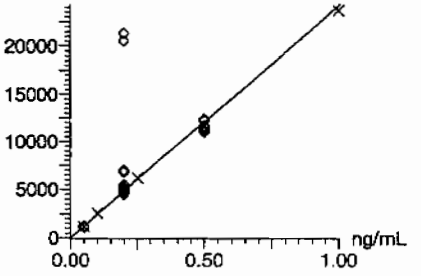
Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per032210a.mdb 23 Mar 2010 10:24:18
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per032210a.cdb 23 Mar 2010 10:24:34

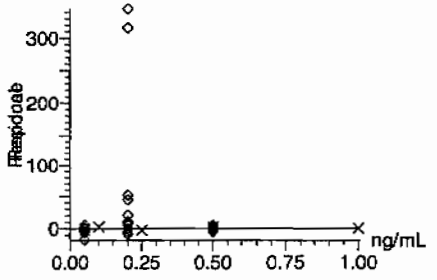
Compound name: Perchlorate
Response Factor: 24186.2
RRF SD: 1053.84, % Relative SD: 4.3572
Response type: External Std, Area
Curve type: RF

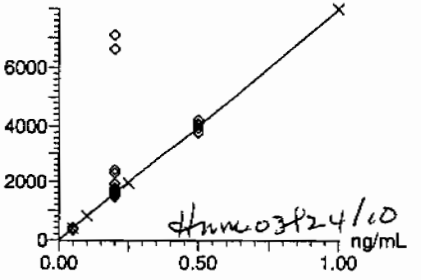




CW
03-23-10

Compound name: Perchlorate-101
Response Factor: 7962.2
RRF SD: 189.293, % Relative SD: 2.3774
Response type: External Std, Area
Curve type: RF





Hmm 03/24/10

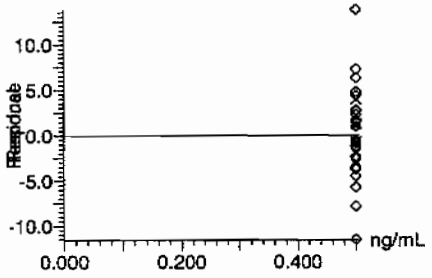
GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

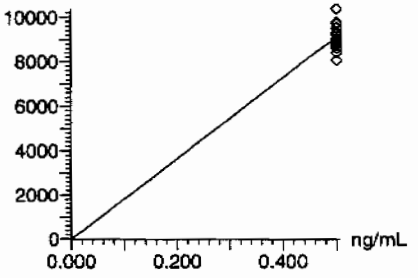
Quantify Calibration Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Compound name: Perchlorate-O(18)
Response Factor: 18246.7
RRF SD: 488.232, % Relative SD: 2.67573
Response type: External Std, Area
Curve type: RF





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

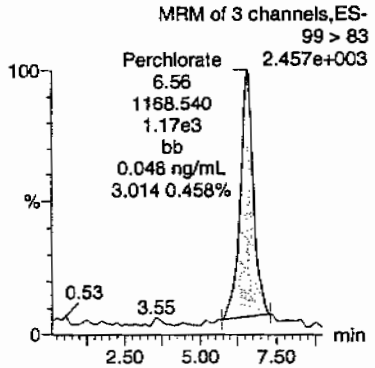
Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

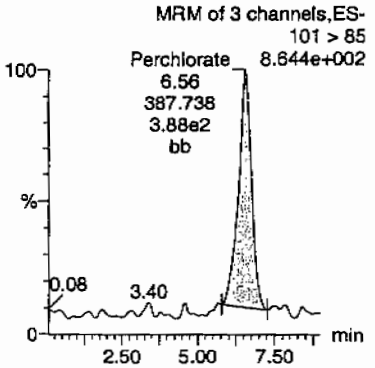
Name: per0322003a
Date: 22-Mar-2010
Time: 11:55:05
ID: WCL100318-01
Vial: 1:1,B

Perp
Gwo
03-23-10

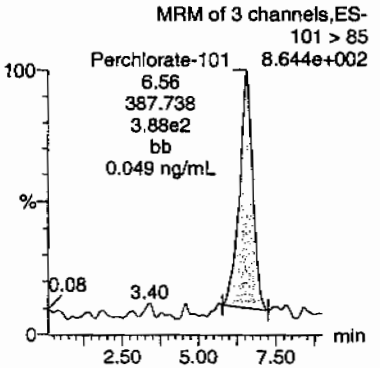
Perchlorate



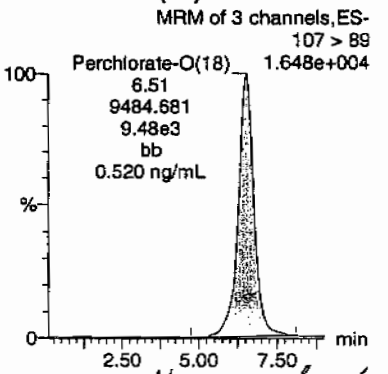
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-01	Perchlorate	99 > 83	6.56	1168.540	1168.540	bb			0.0483	96.63	-3.37	181.559	3.01
WCL100318-01	Perchlorate-101	101 > 85	6.56	387.738	387.738	bb			0.0487	97.39	-2.61	26.717	
WCL100318-01	Perchlorate-O(18)	107 > 89	6.51	9484.681	9484.681	bb			0.5198	103.96	3.96	868.186	

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

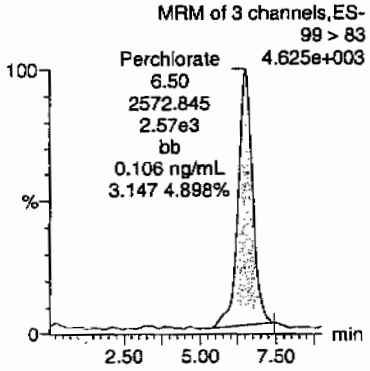
Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

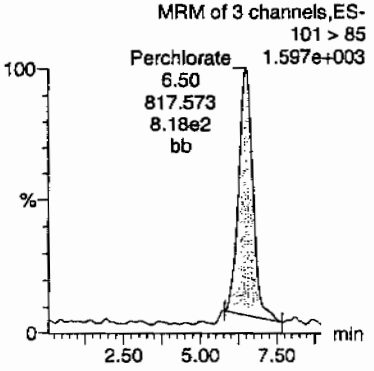
Name: per0322004a
Date: 22-Mar-2010
Time: 12:07:15
ID: WCL100318-02
Vial: 1:1,C

CWW
03-23-10

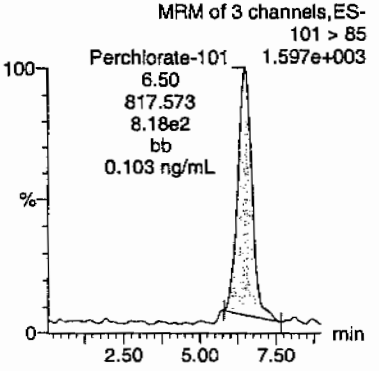
Perchlorate



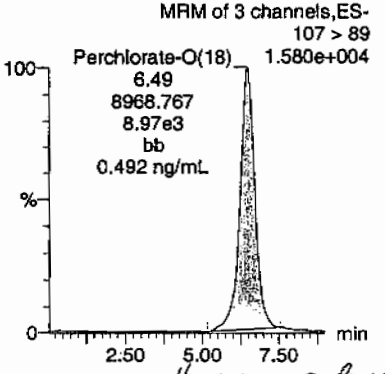
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hum 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-02	Perchlorate	99 > 83	6.50	2572.845	2572.845	bb			0.1064	106.38	6.38	133.894	3.15
WCL100318-02	Perchlorate-101	101 > 85	6.50	817.573	817.573	bb			0.1027	102.68	2.68	165.867	
WCL100318-02	Perchlorate-O(18)	107 > 89	6.49	8968.767	8968.767	bb			0.4915	98.31	-1.69	119.873	

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

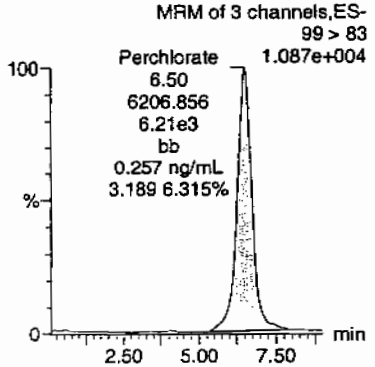
Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

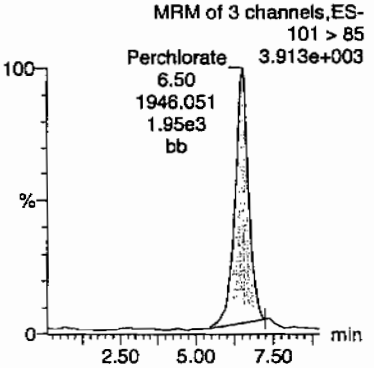
Name: per0322005a
Date: 22-Mar-2010
Time: 12:19:24
ID: WCL100318-03
Vial: 1:1,D

AWD
03-23-10

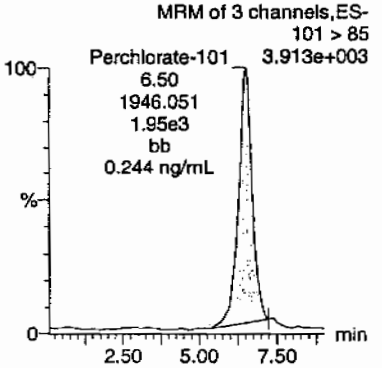
Perchlorate



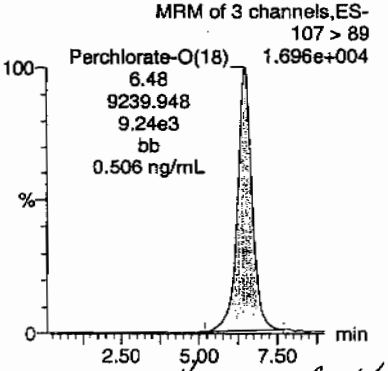
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HWW 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-03	Perchlorate	99 > 83	6.50	6206.856	6206.856	bb			0.2566	102.65	2.65	139.150	3.19
WCL100318-03	Perchlorate-101	101 > 85	6.50	1946.051	1946.051	bb			0.2444	97.76	-2.24	249.518	
WCL100318-03	Perchlorate-O(18)	107 > 89	6.48	9239.948	9239.948	bb			0.5064	101.28	1.28	2508.4...	

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

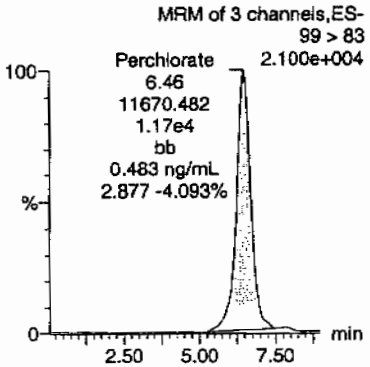
Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

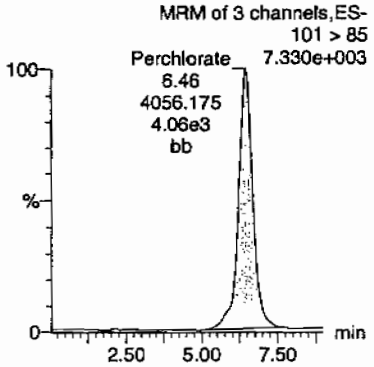
Name: per0322006a
Date: 22-Mar-2010
Time: 12:31:25
ID: WCL100318-04
Vial: 1:1,E

03·23-10

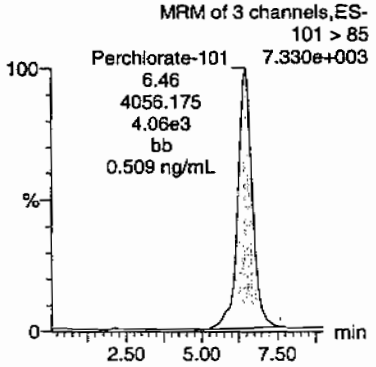
Perchlorate



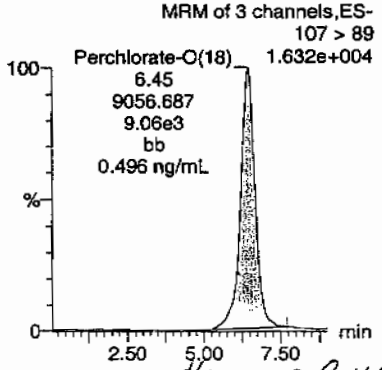
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#2 m 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-04	Perchlorate	99 > 83	6.46	11670.482	11670.482	bb			0.4825	96.51	-3.49	183.709	2.88
WCL100318-04	Perchlorate-101	101 > 85	6.46	4056.175	4056.175	bb			0.5094	101.89	1.89	236.673	
WCL100318-04	Perchlorate-O(18)	107 > 89	6.45	9056.687	9056.687	bb			0.4963	99.27	-0.73	520.805	

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

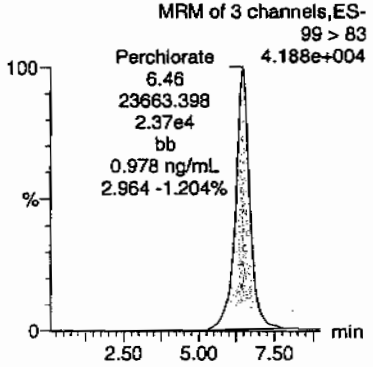
Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

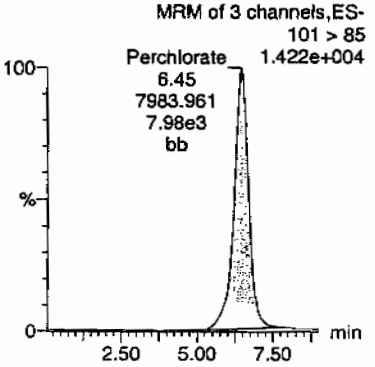
Name: per0322007a
Date: 22-Mar-2010
Time: 12:43:26
ID: WCL100318-05
Vial: 1:1,F

03-23-10

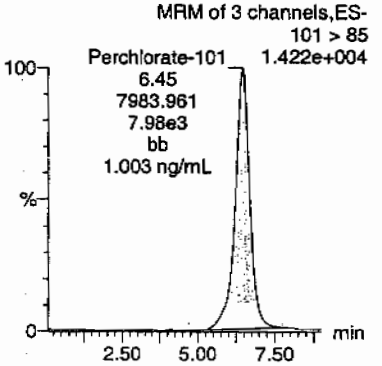
Perchlorate



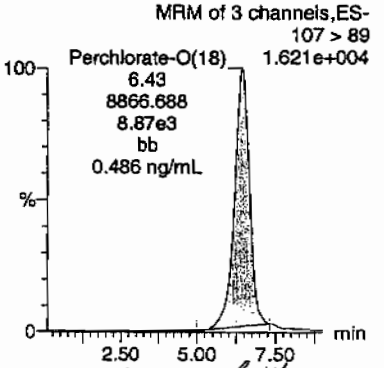
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-05	Perchlorate	99 > 83	6.46	23663.398	23663.398	bb			0.9784	97.84	-2.16	1973.6...	2.96
WCL100318-05	Perchlorate-101	101 > 85	6.45	7983.961	7983.961	bb			1.0027	100.27	0.27	257.728	
WCL100318-05	Perchlorate-O(18)	107 > 89	6.43	8866.688	8866.688	bb			0.4859	97.19	-2.81	581.435	

Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–2155

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.48	96.71	22–MAR–10 13:07	per0322009a
Perchlorate Isotope Ratio		2.87		22–MAR–10 13:07	per0322009a
Perchlorate–101	.5	.51	102.4	22–MAR–10 13:07	per0322009a

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

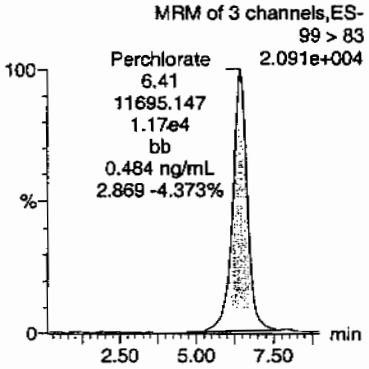
Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

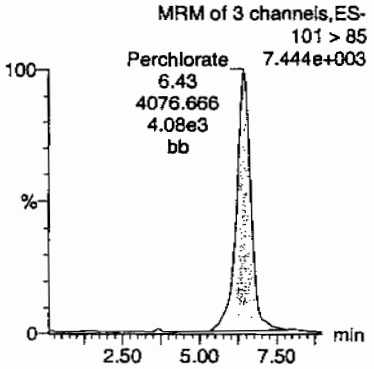
Name: per0322009a
Date: 22-Mar-2010
Time: 13:07:36
ID: WCL100318-06ICV
Vial: 1:2,A

Perchlorate
03-23-10

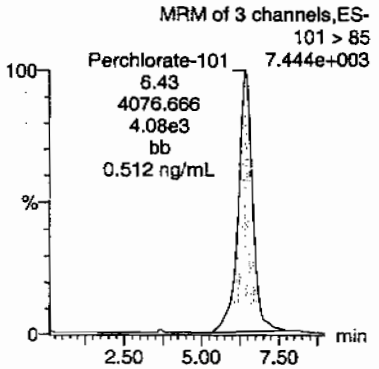
Perchlorate



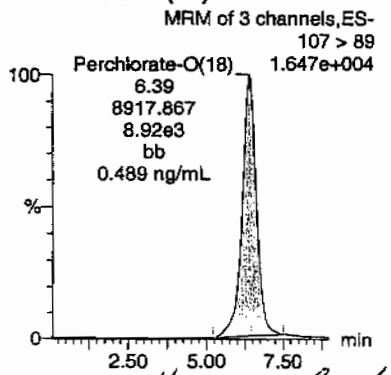
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-06ICV	Perchlorate	99 > 83	6.41	11695.147	11695.147	bb			0.4835	96.71	-3.29	250.846	2.87
WCL100318-06ICV	Perchlorate-101	101 > 85	6.43	4076.666	4076.666	bb			0.5120	102.40	2.40	1210.6...	
WCL100318-06ICV	Perchlorate-O(18)	107 > 89	6.39	8917.867	8917.867	bb			0.4887	97.75	-2.25	457.149	

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2155

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.47	93.78	22-MAR-10 15:44	per0322022a
Perchlorate Isotope Ratio		2.99		22-MAR-10 15:44	per0322022a
Perchlorate-101	.5	.48	95.32	22-MAR-10 15:44	per0322022a
Perchlorate	.5	.45	90.99	22-MAR-10 18:21	per0322035a
Perchlorate Isotope Ratio		2.88		22-MAR-10 18:21	per0322035a
Perchlorate-101	.5	.48	95.82	22-MAR-10 18:21	per0322035a
Perchlorate	.5	.51	102.25	22-MAR-10 20:59	per0322048a
Perchlorate Isotope Ratio		2.94		22-MAR-10 20:59	per0322048a
Perchlorate-101	.5	.53	105.57	22-MAR-10 20:59	per0322048a
Perchlorate	.5	.48	95.78	22-MAR-10 23:36	per0322061a
Perchlorate Isotope Ratio		2.93		22-MAR-10 23:36	per0322061a
Perchlorate-101	.5	.5	99.27	22-MAR-10 23:36	per0322061a
Perchlorate	.5	.51	102.76	23-MAR-10 01:49	per0322072a

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-2155

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate Isotope Ratio		3.08		23-MAR-10 01:49	per0322072a
Perchlorate-101	.5	.51	101.37	23-MAR-10 01:49	per0322072a
Perchlorate	.5	.46	92.01	23-MAR-10 04:25	per0322085a
Perchlorate Isotope Ratio		2.76		23-MAR-10 04:25	per0322085a
Perchlorate-101	.5	.51	101.12	23-MAR-10 04:25	per0322085a
Perchlorate	.5	.49	97.02	23-MAR-10 07:02	per0322098a
Perchlorate Isotope Ratio		3.11		23-MAR-10 07:02	per0322098a
Perchlorate-101	.5	.47	94.9	23-MAR-10 07:02	per0322098a

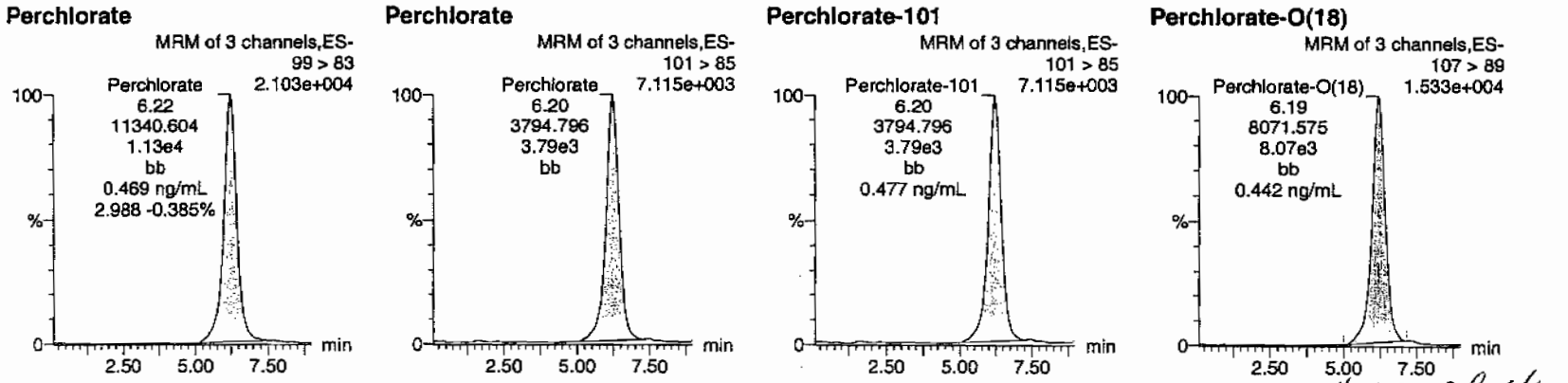
Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322022a
Date: 22-Mar-2010
Time: 15:44:41
ID: WCL100318-06CCV
Vial: 1:2,A

Pass
03-23-10



dm 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-06CCV	Perchlorate	99 > 83	6.22	11340.604	11340.604	bb			0.4689	93.78	-6.22	78.315	2.99
WCL100318-06CCV	Perchlorate-101	101 > 85	6.20	3794.796	3794.796	bb			0.4766	95.32	-4.68	121.502	
WCL100318-06CCV	Perchlorate-O(18)	107 > 89	6.19	8071.575	8071.575	bb			0.4424	88.47	-11.53	409.576	

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

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Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

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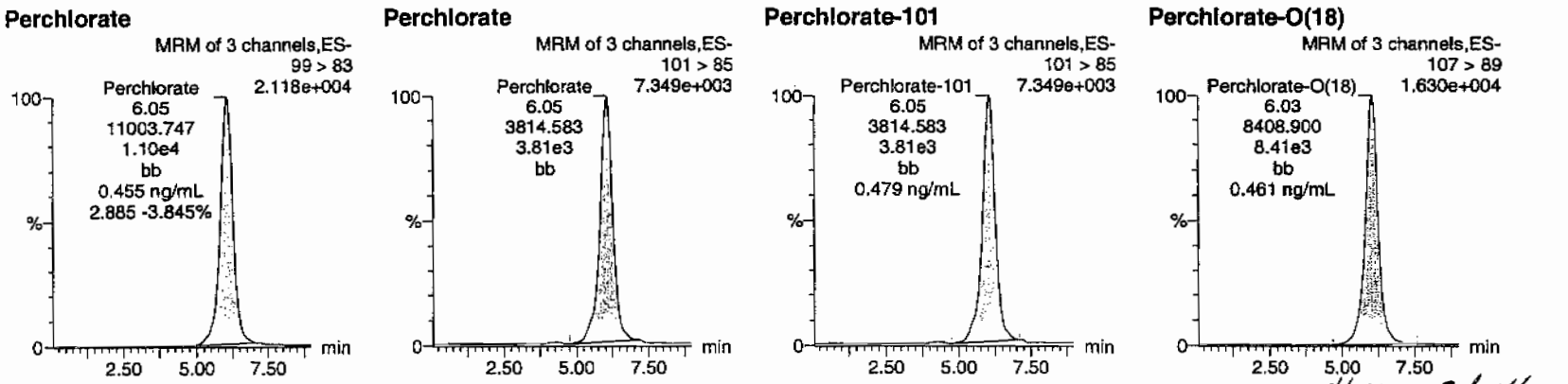
Date: 22-Mar-2010
Time: 18:21:57
ID: WCL100318-06CCV
Vial: 1:2,A

Pass
aw
03-23-10



HMM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-06CCV	Perchlorate	99 > 83	6.05	11003.747	11003.747	bb			0.4550	90.99	-9.01	623.072	2.88
WCL100318-06CCV	Perchlorate-101	101 > 85	6.05	3814.583	3814.583	bb			0.4791	95.82	-4.18	143.478	
WCL100318-06CCV	Perchlorate-O(18)	107 > 89	6.03	8408.900	8408.900	bb			0.4608	92.17	-7.83	575.189	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

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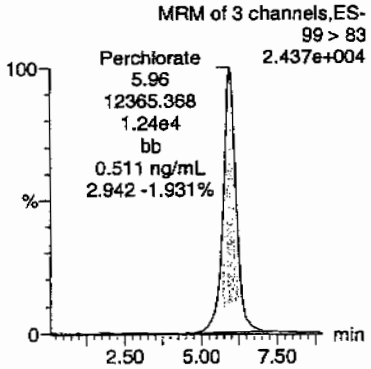
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

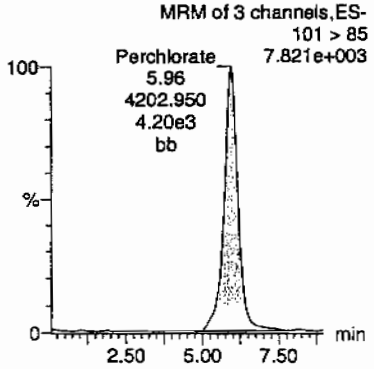
Name: per0322048a
Date: 22-Mar-2010
Time: 20:59:20
ID: WCL100318-06CCV
Vial: 1:2,A

Pass
ano
03-27-10

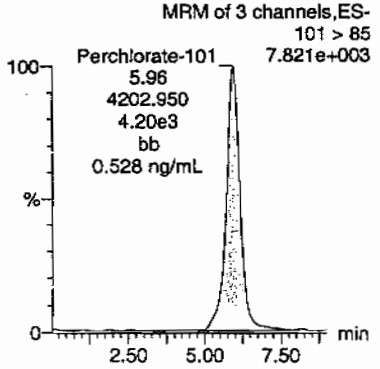
Perchlorate



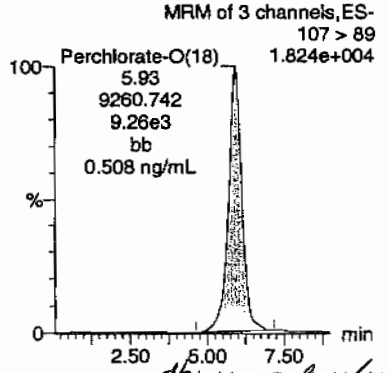
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMC 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-06CCV	Perchlorate	99 > 83	5.96	12365.368	12365.368	bb			0.5113	102.25	2.25	749.044	2.94
WCL100318-06CCV	Perchlorate-101	101 > 85	5.96	4202.950	4202.950	bb			0.5279	105.57	5.57	86.876	
WCL100318-06CCV	Perchlorate-O(18)	107 > 89	5.93	9260.742	9260.742	bb			0.5075	101.51	1.51	650.738	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

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Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

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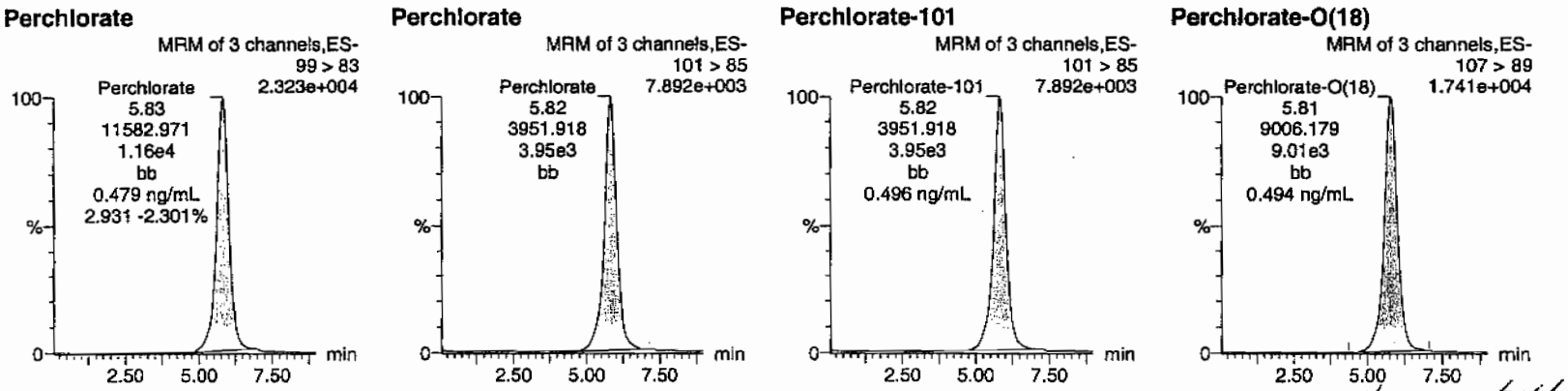
Date: 22-Mar-2010
Time: 23:36:10
ID: WCL100318-06CCV
Vial: 1:2,A

Perry 03-23-10



Hmm 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-06CCV	Perchlorate	99 > 83	5.83	11582.971	11582.971	bb			0.4789	95.78	-4.22	1071.2...	2.93
WCL100318-06CCV	Perchlorate-101	101 > 85	5.82	3951.918	3951.918	bb			0.4963	99.27	-0.73	628.944	
WCL100318-06CCV	Perchlorate-O(18)	107 > 89	5.81	9006.179	9006.179	bb			0.4936	98.72	-1.28	674.962	

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

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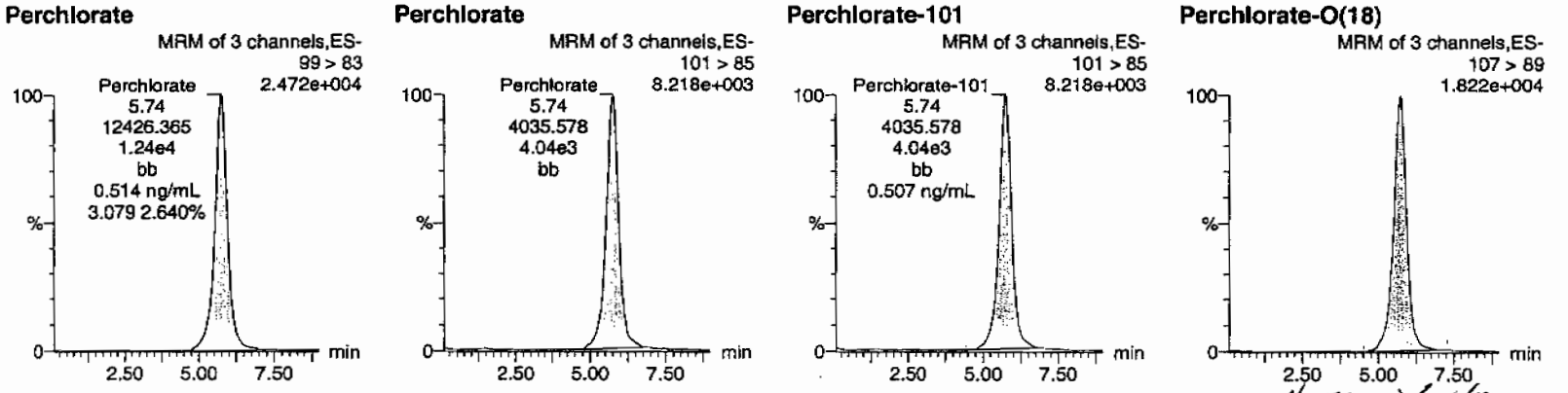
Date: 23-Mar-2010
Time: 01:49:03
ID: WCL100318-06CCV
Vial: 1:2,A

Pass
GMO
03-23-10



MM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-06CCV	Perchlorate	99 > 83	5.74	12426.365	12426.365	bb			0.5138	102.76	2.76	1822.7...	3.08
WCL100318-06CCV	Perchlorate-101	101 > 85	5.74	4035.578	4035.578	bb			0.5068	101.37	1.37	150.307	
WCL100318-06CCV	Perchlorate-O(18)	107 > 89	5.72	9219.264	9219.264	bb			0.5053	101.05	1.05	80.426	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

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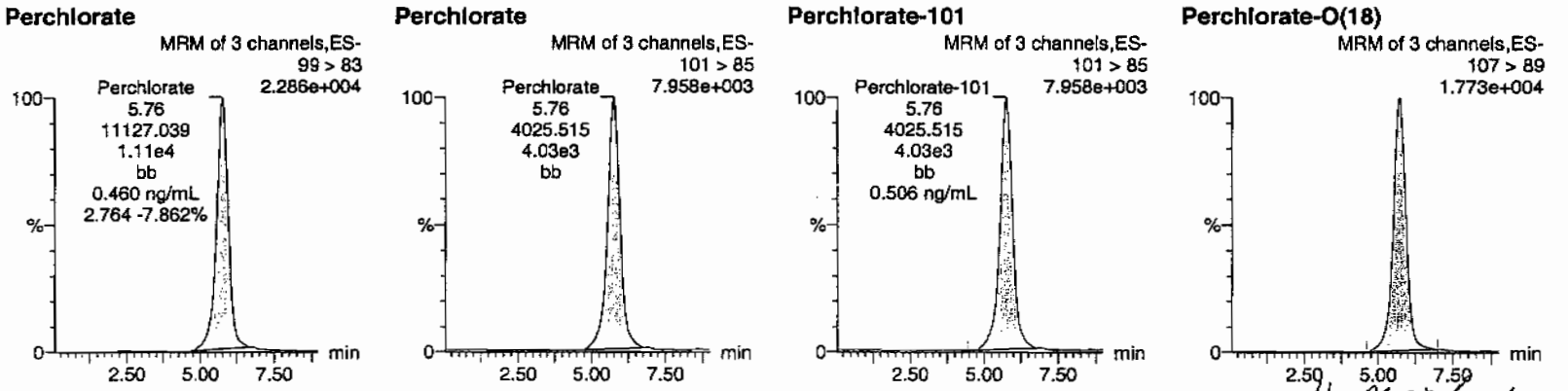
Date: 23-Mar-2010
Time: 04:25:55
ID: WCL100318-06CCV
Vial: 1:2,A

Pass
ano
03-23-10



Hm 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-06CCV	Perchlorate	99 > 83	5.76	11127.039	11127.039	bb			0.4601	92.01	-7.99	2466.7...	2.76
WCL100318-06CCV	Perchlorate-101	101 > 85	5.76	4025.515	4025.515	bb			0.5056	101.12	1.12	722.058	
WCL100318-06CCV	Perchlorate-O(18)	107 > 89	5.73	8780.086	8780.086	bb			0.4812	96.24	-3.76	438.076	

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

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Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

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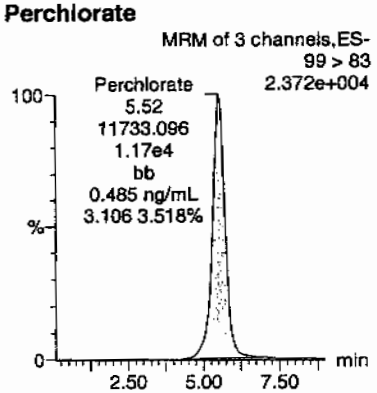
Date: 23-Mar-2010
Time: 07:02:53
ID: WCL100318-06CCV
Vial: 1:2,A

Page 33 03-23-10

Perchlorate



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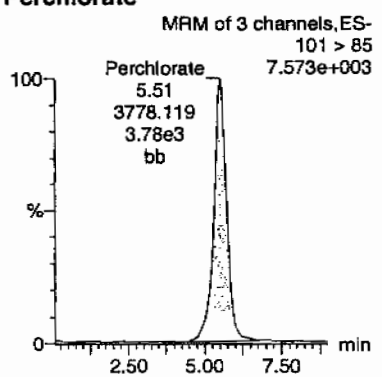
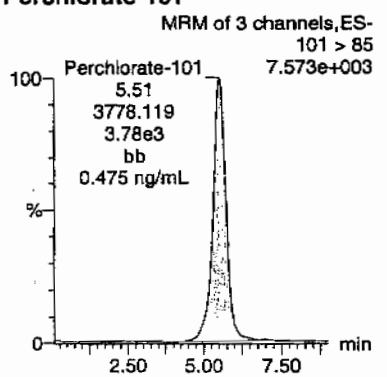
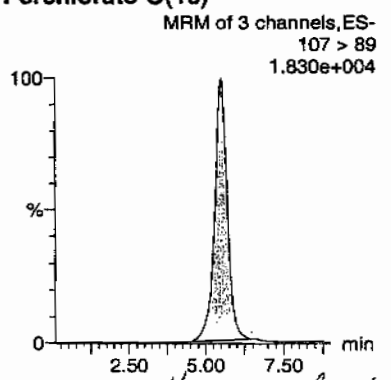


Perchlorate-101



Perchlorate-O(18)



HMM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-06CCV	Perchlorate	99 > 83	5.52	11733.096	11733.096	bb			0.4851	97.02	-2.98	2479.9...	3.11
WCL100318-06CCV	Perchlorate-101	101 > 85	5.51	3778.119	3778.119	bb			0.4745	94.90	-5.10	154.599	
WCL100318-06CCV	Perchlorate-O(18)	107 > 89	5.51	8716.706	8716.706	bb			0.4777	95.54	-4.46	1333.6...	

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

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–2155

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	96.16	22–MAR–10 13:31	per0322011a
Perchlorate Isotope Ratio		2.76		22–MAR–10 13:31	per0322011a
Perchlorate–101	.05	.05	105.81	22–MAR–10 13:31	per0322011a
Perchlorate	.05	.04	89.47	22–MAR–10 16:09	per0322024a
Perchlorate Isotope Ratio		2.73		22–MAR–10 16:09	per0322024a
Perchlorate–101	.05	.05	99.55	22–MAR–10 16:09	per0322024a
Perchlorate	.05	.05	93.64	22–MAR–10 18:46	per0322037a
Perchlorate Isotope Ratio		2.96		22–MAR–10 18:46	per0322037a
Perchlorate–101	.05	.05	96.12	22–MAR–10 18:46	per0322037a
Perchlorate	.05	.05	101.99	22–MAR–10 21:23	per0322050a
Perchlorate Isotope Ratio		3.05		22–MAR–10 21:23	per0322050a

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–2155

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate–101	.05	.05	101.59	22–MAR–10 21:23	per0322050a
Perchlorate	.05	.05	105.21	23–MAR–10 00:00	per0322063a
Perchlorate Isotope Ratio		3.84		23–MAR–10 00:00	per0322063a
Perchlorate–101	.05	.04	83.13	23–MAR–10 00:00	per0322063a
Perchlorate	.05	.05	95.72	23–MAR–10 02:13	per0322074a
Perchlorate Isotope Ratio		3.07		23–MAR–10 02:13	per0322074a
Perchlorate–101	.05	.05	94.79	23–MAR–10 02:13	per0322074a
Perchlorate	.05	.04	89.53	23–MAR–10 04:50	per0322087a
Perchlorate Isotope Ratio		2.72		23–MAR–10 04:50	per0322087a
Perchlorate–101	.05	.05	99.81	23–MAR–10 04:50	per0322087a
Perchlorate	.05	.05	93.84	23–MAR–10 07:30	per0322100a

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–2155

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate Isotope Ratio		2.74		23–MAR–10 07:30	per0322100a
Perchlorate–101	.05	.05	104.14	23–MAR–10 07:30	per0322100a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322011a
Date: 22-Mar-2010
Time: 13:31:49
ID: WCL100318-07CRI
Vial: 1:2,B

PJS
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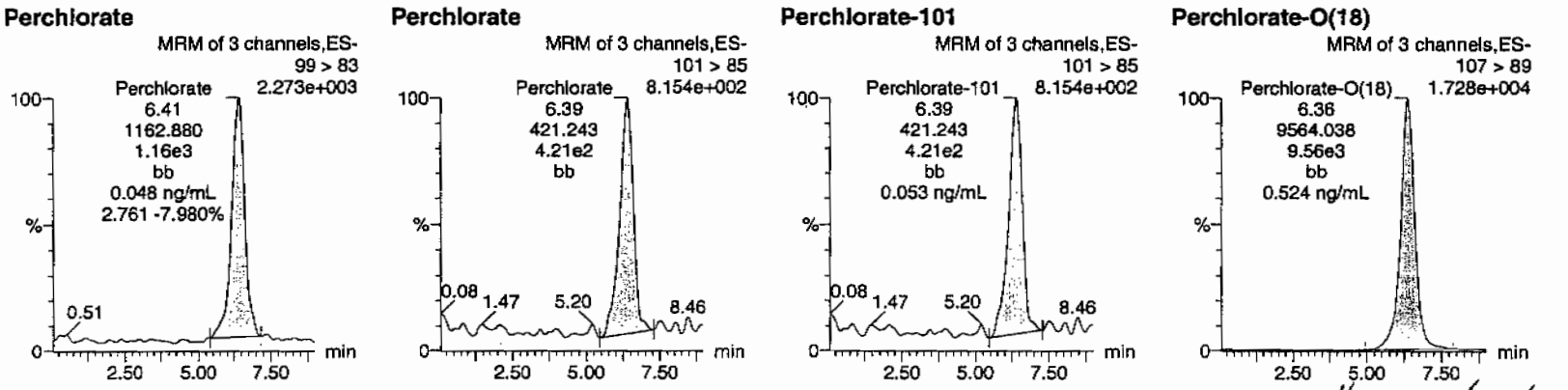
03-23-10



HMW 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-07CRI	Perchlorate	99 > 83	6.41	1162.880	1162.880	bb			0.0481	96.16	-3.84	155.349	2.76
WCL100318-07CRI	Perchlorate-101	101 > 85	6.39	421.243	421.243	bb			0.0529	105.81	5.81	21.022	
WCL100318-07CRI	Perchlorate-O(18)	107 > 89	6.36	9564.038	9564.038	bb			0.5242	104.83	4.83	664.087	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

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Date: 22-Mar-2010
Time: 16:09:02
ID: WCL100318-07CRI
Vial: 1:2,B

Pass
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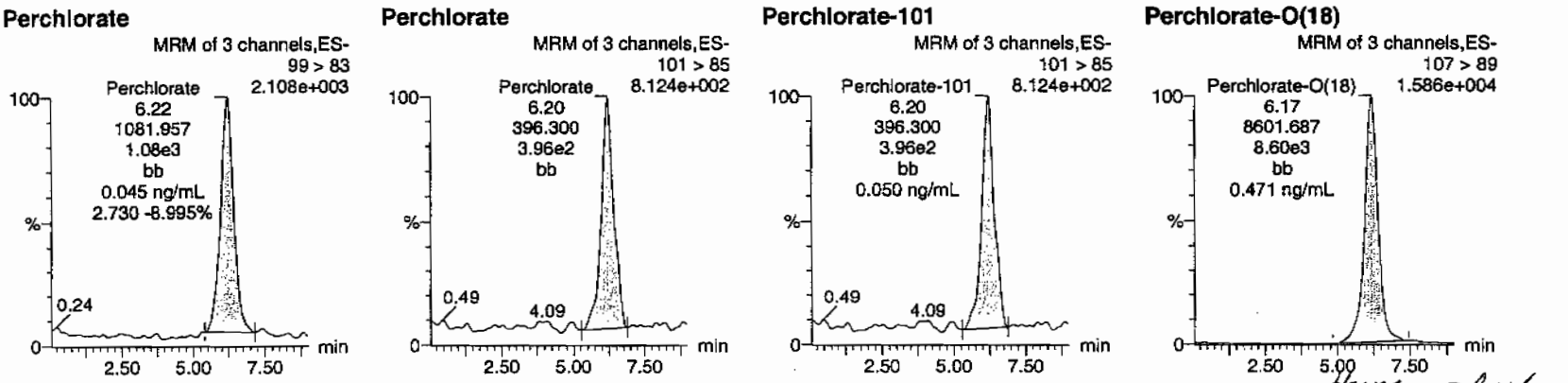
03-23-10



HUM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-07CRI	Perchlorate	99 > 83	6.22	1081.957	1081.957	bb			0.0447	89.47	-10.53	22.200	2.73
WCL100318-07CRI	Perchlorate-101	101 > 85	6.20	396.300	396.300	bb			0.0498	99.55	-0.45	148.246	
WCL100318-07CRI	Perchlorate-O(18)	107 > 89	6.17	8601.687	8601.687	bb			0.4714	94.28	-5.72	847.250	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

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Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322037a
Date: 22-Mar-2010
Time: 18:46:17
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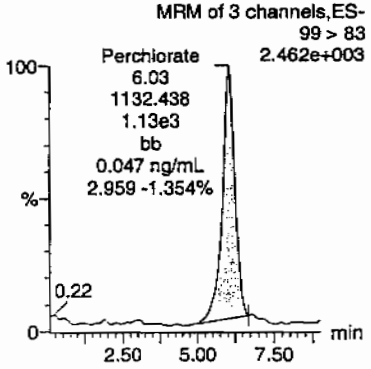
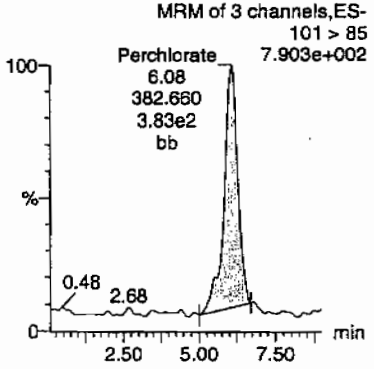
Vial: 1:2,B

Pass
ana
03-23-10

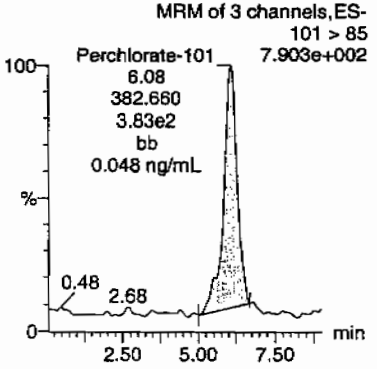
Perchlorate



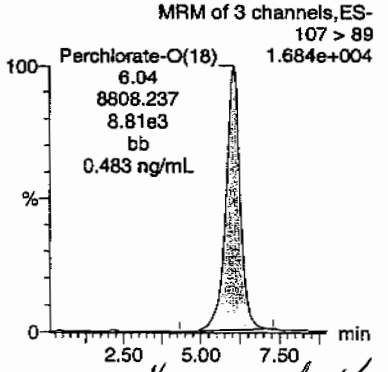
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-07CRI	Perchlorate	99 > 83	6.03	1132.438	1132.438	bb			0.0468	93.64	-6.36	134.965	2.96
WCL100318-07CRI	Perchlorate-101	101 > 85	6.08	382.660	382.660	bb			0.0481	96.12	-3.88	39.446	
WCL100318-07CRI	Perchlorate-O(18)	107 > 89	6.04	8808.237	8808.237	bb			0.4827	96.55	-3.45	1488.8...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

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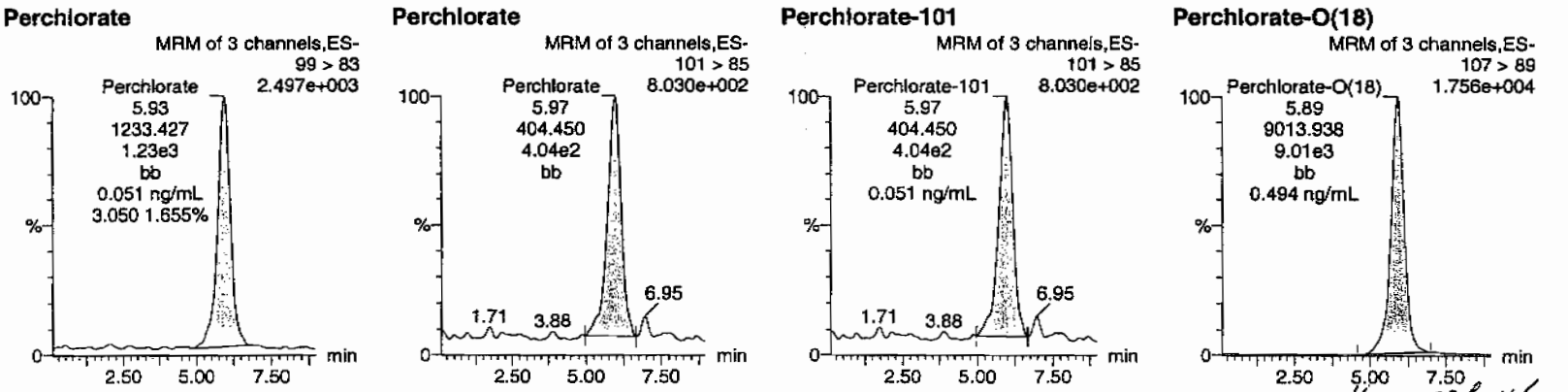
Date: 22-Mar-2010
Time: 21:23:39
ID: WCL100318-07CRI
Vial: 1:2,B

Pass
03-23-10



Hum 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-07CRI	Perchlorate	99 > 83	5.93	1233.427	1233.427	bb			0.0510	101.99	1.99	43.428	3.05
WCL100318-07CRI	Perchlorate-101	101 > 85	5.97	404.450	404.450	bb			0.0508	101.59	1.59	143.836	
WCL100318-07CRI	Perchlorate-O(18)	107 > 89	5.89	9013.938	9013.938	bb			0.4940	98.80	-1.20	1482.8...	

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

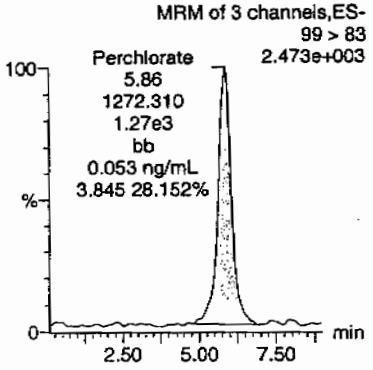
Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qid

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

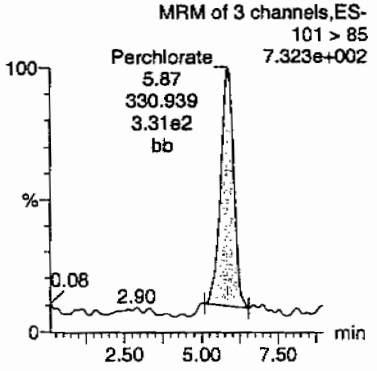
Name: per0322063a
Date: 23-Mar-2010
Time: 00:00:30
ID: WCL100318-07CRI
Vial: 1:2,B

03-23-10

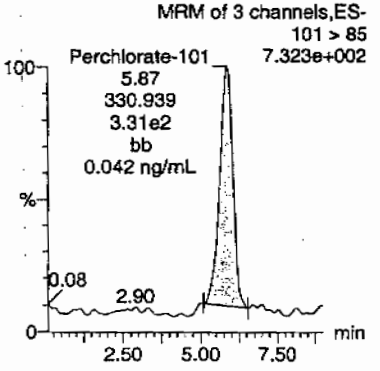
Perchlorate



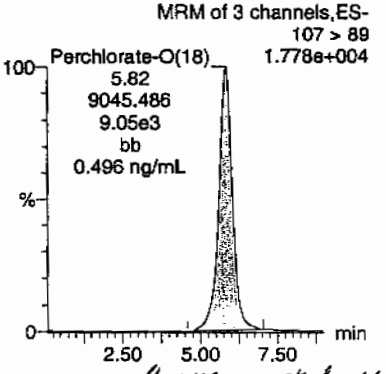
Perchlorate



Perchlorate-101



Perchlorate-O(18)



03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-07CRI	Perchlorate	99 > 83	5.86	1272.310	1272.310	bb			0.0526	105.21	5.21	262.204	3.84
WCL100318-07CRI	Perchlorate-101	101 > 85	5.87	330.939	330.939	bb			0.0416	83.13	-16.87	63.658	
WCL100318-07CRI	Perchlorate-O(18)	107 > 89	5.82	9045.486	9045.486	bb			0.4957	99.15	-0.85	2907.5...	

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

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

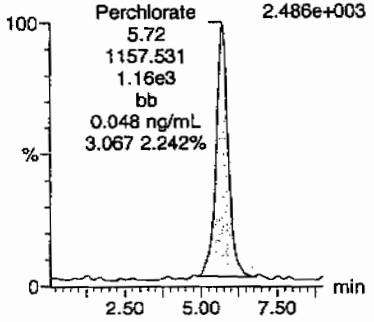
Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

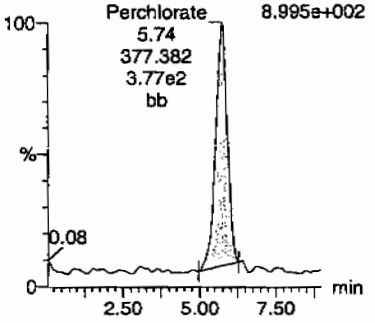
Name: per0322074a
Date: 23-Mar-2010
Time: 02:13:22
ID: WCL100318-07CRI
Vial: 1:2,B

Reg
03-23-10

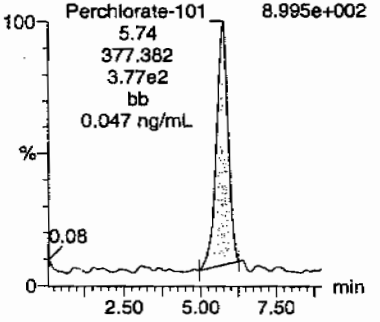
Perchlorate



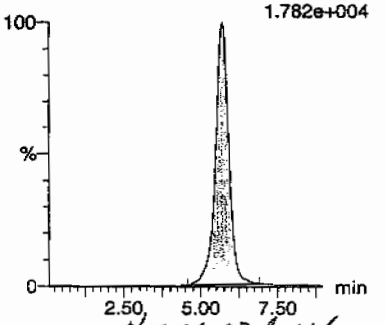
Perchlorate



Perchlorate-101



Perchlorate-O(18)



AMM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-07CRI	Perchlorate	99 > 83	5.72	1157.531	1157.531	bb			0.0479	95.72	-4.28	120.828	3.07
WCL100318-07CRI	Perchlorate-101	101 > 85	5.74	377.382	377.382	bb			0.0474	94.79	-5.21	159.729	
WCL100318-07CRI	Perchlorate-O(18)	107 > 89	5.69	9021.444	9021.444	bb			0.4944	98.88	-1.12	1276.9...	

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

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

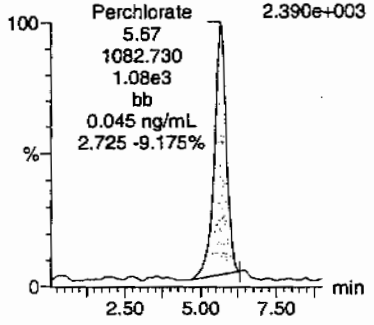
Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

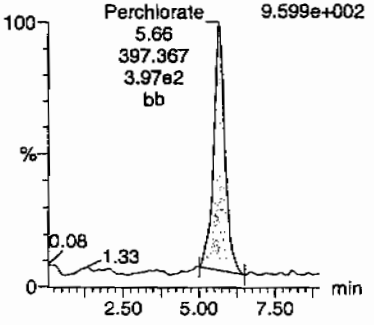
Name: per0322087a
Date: 23-Mar-2010
Time: 04:50:13
ID: WCL100318-07CRI
Vial: 1:2,B

Pass
03-23-10

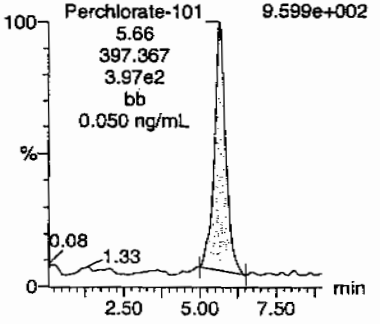
Perchlorate



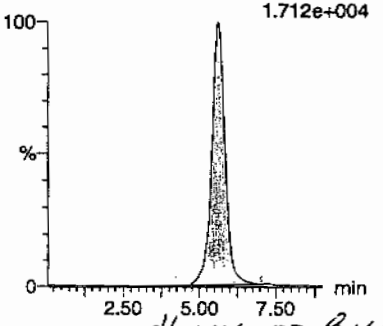
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HRM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-07CRI	Perchlorate	99 > 83	5.67	1082.730	1082.730	bb			0.0448	89.53	-10.47	225.488	2.72
WCL100318-07CRI	Perchlorate-101	101 > 85	5.66	397.367	397.367	bb			0.0499	99.81	-0.19	50.618	
WCL100318-07CRI	Perchlorate-O(18)	107 > 89	5.63	8884.880	8884.880	bb			0.4869	97.39	-2.61	1084.5...	

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

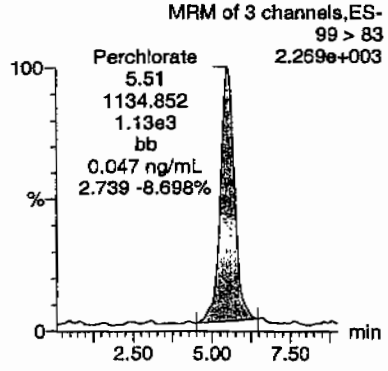
Last Altered: Thursday, March 25, 2010 8:00:40 AM Eastern Standard Time
Printed: Thursday, March 25, 2010 8:02:25 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per032210a.mdb 23 Mar 2010 10:24:18
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per032210a.cdb 23 Mar 2010 10:24:34

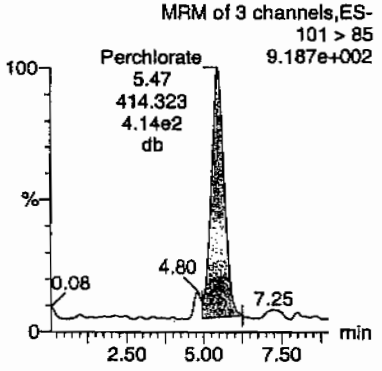
Name: per0322100a
Date: 23-Mar-2010
Time: 07:30:48
ID: WCL100318-07CRI
Vial: 1:2,B

CWW
03-25-10

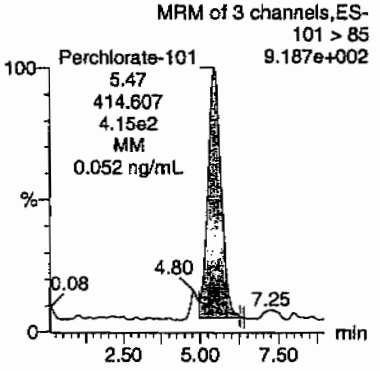
Perchlorate



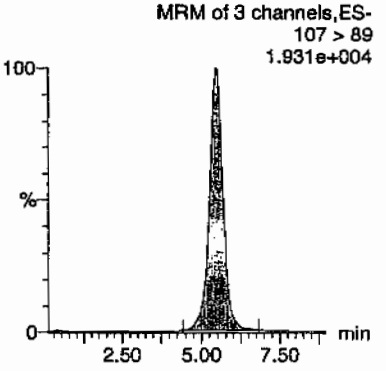
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-07CRI	Perchlorate	99 > 83	5.51	1134.852	1134.852	bb			0.0469	93.84	-6.16	33.301	2.74
WCL100318-07CRI	Perchlorate-101	101 > 85	5.47	414.607	414.607	MM	25-Mar-10	08:00:40	0.0521	104.14	4.14	267.625	
WCL100318-07CRI	Perchlorate-O(18)	107 > 89	5.47	9333.718	9333.718	bb			0.5115	102.31	2.31	645.193	

MMT
3/25/10

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

QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
MB

Date Received: 17-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 1202067810

Date Filtered: 17-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	23-MAR-10 02:25	per0322075a
	Perchlorate Isotope Ratio						1	23-MAR-10 02:25	per0322075a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	23-MAR-10 02:25	per0322075a
	Perchlorate-O(18)			4.92	ug/kg		1	23-MAR-10 02:25	per0322075a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

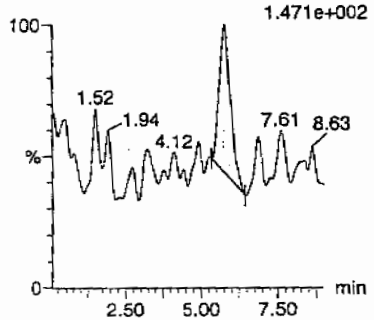
Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322075a
Date: 23-Mar-2010
Time: 02:25:26
ID: 1202067810
Vial: 3:1,A

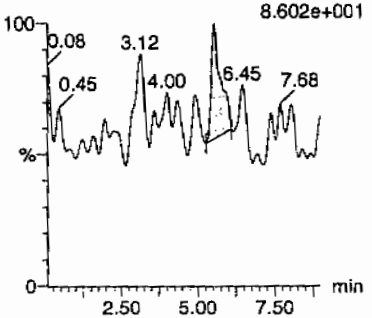
|LANL|963894|5020|MB|1|

0323-10

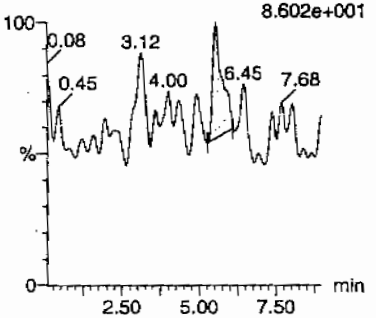
Perchlorate



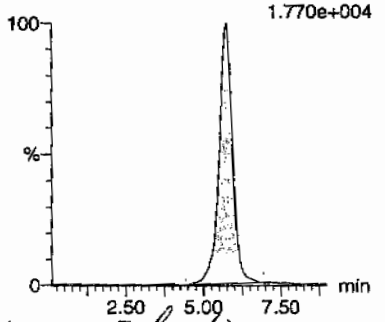
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202067810	Perchlorate	99 > 83	5.77	36.794	36.794	bb			0.0015			15.039	2.66
1202067810	Perchlorate-101	101 > 85	5.53	13.844	13.844	bb			0.0017			18.435	
1202067810	Perchlorate-O(18)	107 > 89	5.72	8975.383	8975.383	bb			0.4919	98.38	-1.62	747.834	

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: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
LCS

Date Received: 17-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 1202067811

Date Filtered: 17-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	1.98	ug/kg	J	1	23-MAR-10 02:37	per0322076a
	Perchlorate Isotope Ratio			3.27			1	23-MAR-10 02:37	per0322076a
14797-73-0	Perchlorate-101	.5	2	1.84	ug/kg	J	1	23-MAR-10 02:37	per0322076a
	Perchlorate-O(18)			4.93	ug/kg		1	23-MAR-10 02:37	per0322076a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

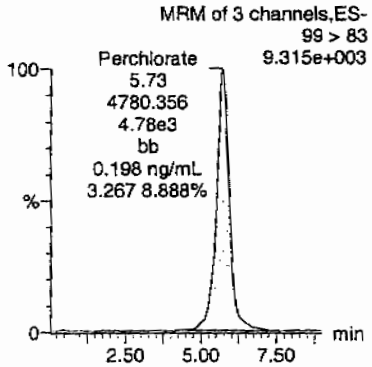
Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322076a
Date: 23-Mar-2010
Time: 02:37:41
ID: 1202067811
Vial: 3:1,B

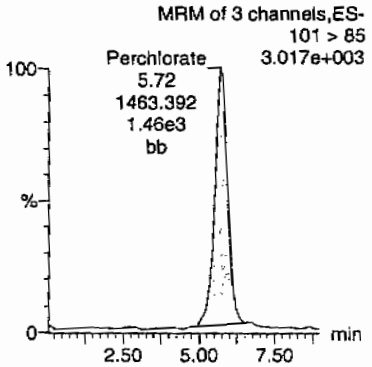
LZNL | 963899 | 30620 | LCS | 1 |

CWW
03-23-10

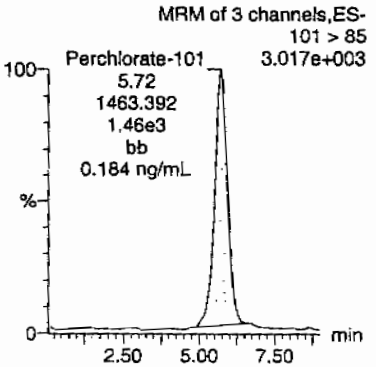
Perchlorate



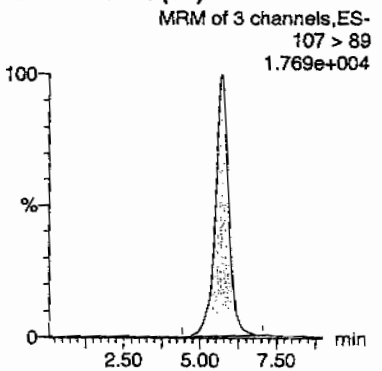
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202067811	Perchlorate	99 > 83	5.73	4780.356	4780.356	bb			0.1976	98.82	-1.18	82.782	3.27
1202067811	Perchlorate-101	101 > 85	5.72	1463.392	1463.392	bb			0.1838	91.90	-8.10	105.901	
1202067811	Perchlorate-O(18)	107 > 89	5.71	8991.550	8991.550	bb			0.4928	98.56	-1.44	1023.0...	

$\frac{4780.356}{24186.2} = 0.1976$

[illegible] 03/24/10

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7493MS

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 1202067812

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 75

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.671	2.68	11.4	ug/kg		1	23-MAR-10 03:25	per0322080a
	Perchlorate Isotope Ratio			3.1			1	23-MAR-10 03:25	per0322080a
14797-73-0	Perchlorate-101	.671	2.68	11.2	ug/kg		1	23-MAR-10 03:25	per0322080a
	Perchlorate-O(18)			6.55	ug/kg		1	23-MAR-10 03:25	per0322080a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

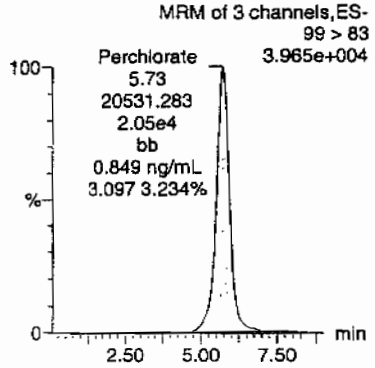
Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322080a
Date: 23-Mar-2010
Time: 03:25:46
ID: 1202067812
Vial: 3:1,F

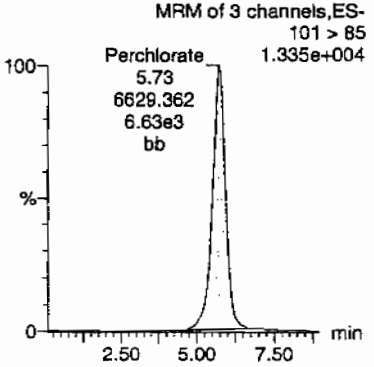
|LANL|96399|50120|MS|11

cw 03-23-10

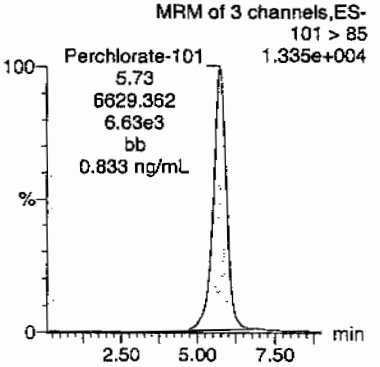
Perchlorate



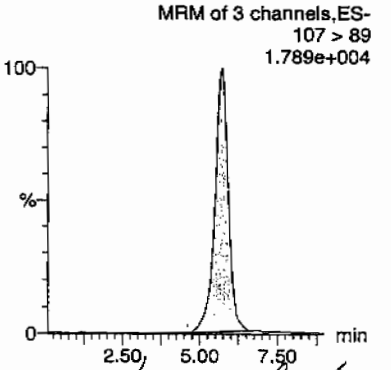
Perchlorate



Perchlorate-101



Perchlorate-O(18)



AWM 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202067812	Perchlorate	99 > 83	5.73	20531.283	20531.283	bb			0.8489	424.44	324.44	969.515	3.10
1202067812	Perchlorate-101	101 > 85	5.73	6629.362	6629.362	bb			0.8326	416.30	316.30	897.889	
1202067812	Perchlorate-O(18)	107 > 89	5.72	8903.322	8903.322	bb			0.4879	97.59	-2.41	1037.3...	

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: 963897

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7493MSD

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155

GEL Sample ID: 1202067813

Date Filtered: 17-MAR-10

Injection Volume (uL): 20

%Solids: 75

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.671	2.68	11.8	ug/kg		1	23-MAR-10 03:37	per0322081a
	Perchlorate Isotope Ratio			3			1	23-MAR-10 03:37	per0322081a
14797-73-0	Perchlorate-101	.671	2.68	12.0	ug/kg		1	23-MAR-10 03:37	per0322081a
	Perchlorate-O(18)			6.78	ug/kg		1	23-MAR-10 03:37	per0322081a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

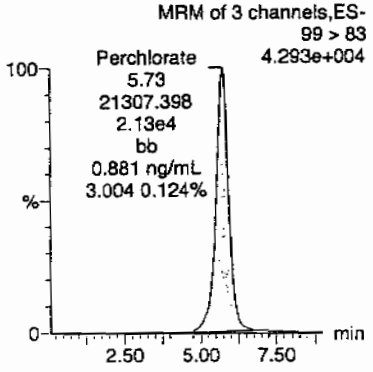
Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322081a
Date: 23-Mar-2010
Time: 03:37:47
ID: 1202067813
Vial: 3:2,A

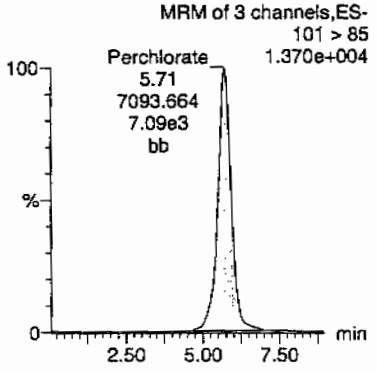
|LANL|963899|50120|MSD|1|

ans
0323-10

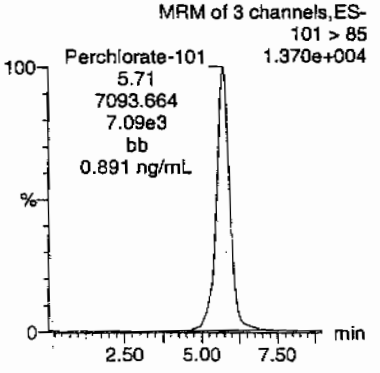
Perchlorate



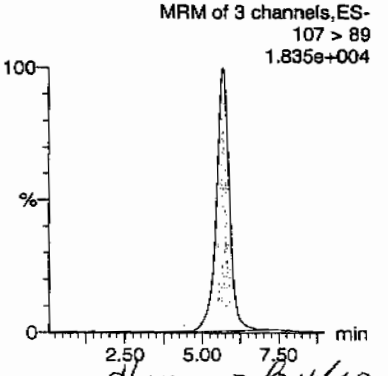
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 03/24/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202067813	Perchlorate	99 > 83	5.73	21307.398	21307.398	bb			0.8810	440.49	340.49	1914.2...	3.00
1202067813	Perchlorate-101	101 > 85	5.71	7093.664	7093.664	bb			0.8909	445.46	345.46	419.541	
1202067813	Perchlorate-O(18)	107 > 89	5.69	9213.674	9213.674	bb			0.5049	100.99	0.99	168.621	

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

MISCELLANEOUS DATA

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.

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: 963897 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)
1202067810 MB	17-MAR-2010 15:06:00	2	20	10
1202067811 LCS	17-MAR-2010 15:06:00	2	20	10
248374001	17-MAR-2010 15:06:00	2	20	10
248374002	17-MAR-2010 15:06:00	2	20	10
1202067812 MS (248374002)	17-MAR-2010 15:06:00	2	20	10
1202067813 MSD (248374002)	17-MAR-2010 15:06:00	2	20	10
248374003	17-MAR-2010 15:06:00	2	20	10
248374004	17-MAR-2010 15:06:00	2	20	10
248374005	17-MAR-2010 15:06:00	2	20	10
248374006	17-MAR-2010 15:06:00	2	20	10
248374007	17-MAR-2010 15:06:00	2	20	10
248374008	17-MAR-2010 15:06:00	2	20	10
248374009	17-MAR-2010 15:06:00	2	20	10
248374010	17-MAR-2010 15:06:00	2	20	10
248374011	17-MAR-2010 15:06:00	2	20	10
248374012	17-MAR-2010 15:06:00	2	20	10
248374013	17-MAR-2010 15:06:00	2	20	10
248422001	17-MAR-2010 15:06:00	2	20	10
248422002	17-MAR-2010 15:06:00	2	20	10
248515001	17-MAR-2010 15:06:00	2	20	10
248515002	17-MAR-2010 15:06:00	2	20	10
248515003	17-MAR-2010 15:06:00	2	20	10
248517001	17-MAR-2010 15:06:00	2	20	10
1202067814 ICS	17-MAR-2010 15:06:00	2	20	10

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1202067814	10 ug/L ICV/CCV Second Source	UCL100311-01.1	.4	mL
LCS	1202067811	10 ug/L ICV/CCV Second Source	UCL100311-01.1	.4	mL
MS	1202067812	10 ug/L ICV/CCV Second Source	UCL100311-01.1	.4	mL
MSD	1202067813	10 ug/L ICV/CCV Second Source	UCL100311-01.1	.4	mL

Comments:
Desalting cartridges used: 100223-1-Ba & 100216-1-H

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 03/22/10
Extr. Injection Volume: 20uL
Sequence Number: per032210a
Initial Calibration Date: 03/22/10

Method: EPA 6850-Modified
Int. Std.: UCL100210-01
Mobile Phase Lot#: 1278668, 1284736
Standard-Samp Reagent Lot#:: 1271949

Reviewed BY: HMNC
Date 03/24/10
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100318-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0322001a	IPB001	CWW	3/22/2010 11:30			1		USE	B
per0322002a	IPB001	CWW	3/22/2010 11:42			1		USE	B
per0322003a	WCLICAL-01	CWW	3/22/2010 11:55			1		USE	I
per0322004a	WCLICAL-02	CWW	3/22/2010 12:07			1		USE	I
per0322005a	WCLICAL-03	CWW	3/22/2010 12:19			1		USE	I
per0322006a	WCLICAL-04	CWW	3/22/2010 12:31			1		USE	I
per0322007a	WCLICAL-05	CWW	3/22/2010 12:43			1		USE	I
per0322008a	IPB002	CWW	3/22/2010 12:55			1		USE	B
per0322009a	WCLICV	CWW	3/22/2010 13:07			1		USE	C
per0322010a	IPB003	CWW	3/22/2010 13:19			1		USE	B
per0322011a	WCLCRI	CWW	3/22/2010 13:31			1		USE	C
per0322012a	1202056698	CWW	3/22/2010 13:44	959034	VARIOUS	1	LANL	USE	S
per0322013a	1202056699	CWW	3/22/2010 13:56	959034	VARIOUS	1	LANL	USE	S
per0322014a	1202056702	CWW	3/22/2010 14:08	959034	VARIOUS	1	LANL	DUSE-RA	S
per0322015a	248241001	CWW	3/22/2010 14:20	959034	10-2135	1	LANL	USE	S
per0322016a	248241002	CWW	3/22/2010 14:32	959034	10-2135	1	LANL	USE	S
per0322017a	1202056700	CWW	3/22/2010 14:44	959034	10-2135	1	LANL	USE	S
per0322018a	1202056701	CWW	3/22/2010 14:56	959034	10-2135	1	LANL	USE	S
per0322019a	248241003	CWW	3/22/2010 15:08	959034	10-2135	1	LANL	USE	S
per0322020a	248241004	CWW	3/22/2010 15:20	959034	10-2135	1	LANL	USE	S
per0322021a	248241005	CWW	3/22/2010 15:32	959034	10-2135	1	LANL	USE	S
per0322022a	WCLCCV	CWW	3/22/2010 15:44			1		USE	C
per0322023a	IPB004	CWW	3/22/2010 15:56			1		USE	B
per0322024a	WCLCRI	CWW	3/22/2010 16:09			1		USE	C
per0322025a	248241006	CWW	3/22/2010 16:21	959034	10-2135	1	LANL	USE	S
per0322026a	248241007	CWW	3/22/2010 16:33	959034	10-2135	1	LANL	USE	S
per0322027a	248241008	CWW	3/22/2010 16:45	959034	10-2135	1	LANL	USE	S
per0322028a	248241009	CWW	3/22/2010 16:57	959034	10-2135	1	LANL	USE	S
per0322029a	248241010	CWW	3/22/2010 17:09	959034	10-2135	1	LANL	USE	S

per0322030a	248256001	CWW	3/22/2010 17:21	959034	10-2146	1	LANL	USE	S
per0322031a	248256002	CWW	3/22/2010 17:33	959034	10-2146	1	LANL	USE	S
per0322032a	248256003	CWW	3/22/2010 17:45	959034	10-2146	1	LANL	USE	S
per0322033a	248256004	CWW	3/22/2010 17:57	959034	10-2146	1	LANL	USE	S
per0322034a	248256005	CWW	3/22/2010 18:09	959034	10-2146	1	LANL	USE	S
per0322035a	WCLCCV	CWW	3/22/2010 18:21			1		USE	C
per0322036a	IPB005	CWW	3/22/2010 18:34			1		USE	B
per0322037a	WCLCRI	CWW	3/22/2010 18:46			1		USE	C
per0322038a	248256006	CWW	3/22/2010 18:58	959034	10-2146	1	LANL	USE	S
per0322039a	248256007	CWW	3/22/2010 19:10	959034	10-2146	1	LANL	USE	S
per0322040a	IPB006	CWW	3/22/2010 19:22			1		USE	B
per0322041a	1202063742	CWW	3/22/2010 19:34	962127	10-2151	1	LANL	USE	S
per0322042a	1202063743	CWW	3/22/2010 19:47	962127	10-2151	1	LANL	USE	S
per0322043a	1202063746	CWW	3/22/2010 19:59	962127	10-2151	1	LANL	USE	S
per0322044a	248371001	CWW	3/22/2010 20:11	962127	10-2151	1	LANL	USE	S
per0322045a	1202063744	CWW	3/22/2010 20:23	962127	10-2151	1	LANL	USE	S
per0322046a	1202063745	CWW	3/22/2010 20:35	962127	10-2151	1	LANL	USE	S
per0322047a	248371002	CWW	3/22/2010 20:47	962127	10-2151	1	LANL	DUSE-DL	S
per0322048a	WCLCCV	CWW	3/22/2010 20:59			1		USE	C
per0322049a	IPB007	CWW	3/22/2010 21:11			1		USE	B
per0322050a	WCLCRI	CWW	3/22/2010 21:23			1		USE	C
per0322051a	248371003	CWW	3/22/2010 21:35	962127	10-2151	1	LANL	USE	S
per0322052a	248371004	CWW	3/22/2010 21:47	962127	10-2151	1	LANL	USE	S
per0322053a	248371005	CWW	3/22/2010 21:59	962127	10-2151	1	LANL	DUSE-DL	S
per0322054a	248371006	CWW	3/22/2010 22:11	962127	10-2151	1	LANL	DUSE-RA	S
per0322055a	248371007	CWW	3/22/2010 22:23	962127	10-2151	1	LANL	USE	S
per0322056a	248371008	CWW	3/22/2010 22:36	962127	10-2151	1	LANL	USE	S
per0322057a	248371009	CWW	3/22/2010 22:48	962127	10-2151	1	LANL	USE	S
per0322058a	248371010	CWW	3/22/2010 23:00	962127	10-2151	1	LANL	USE	S
per0322059a	248371011	CWW	3/22/2010 23:12	962127	10-2151	1	LANL	USE	S
per0322060a	248371012	CWW	3/22/2010 23:24	962127	10-2151	1	LANL	USE	S
per0322061a	WCLCCV	CWW	3/22/2010 23:36			1		USE	C
per0322062a	IPB008	CWW	3/22/2010 23:48			1		USE	B
per0322063a	WCLCRI	CWW	3/23/2010 0:00			1		USE	C
per0322064a	248371013	CWW	3/23/2010 0:12	962127	10-2151	1	LANL	USE	S
per0322065a	248371014	CWW	3/23/2010 0:24	962127	10-2151	1	LANL	USE	S
per0322066a	248371015	CWW	3/23/2010 0:36	962127	10-2151	1	LANL	USE	S

per0322067a	248371016	CWW	3/23/2010 0:48	962127	10-2151	1	LANL	USE	S
per0322068a	248371017	CWW	3/23/2010 1:00	962127	10-2151	1	LANL	USE	S
per0322069a	248371018	CWW	3/23/2010 1:12	962127	10-2151	1	LANL	USE	S
per0322070a	248371019	CWW	3/23/2010 1:24	962127	10-2151	1	LANL	USE	S
per0322071a	248371020	CWW	3/23/2010 1:36	962127	10-2151	1	LANL	USE	S
per0322072a	WCLCCV	CWW	3/23/2010 1:49			1		USE	C
per0322073a	IPB009	CWW	3/23/2010 2:01			1		USE	B
per0322074a	WCLCRI	CWW	3/23/2010 2:13			1		USE	C
per0322075a	1202067810	CWW	3/23/2010 2:25	963899	VARIOUS	1	LANL	USE	S
per0322076a	1202067811	CWW	3/23/2010 2:37	963899	VARIOUS	1	LANL	USE	S
per0322077a	1202067814	CWW	3/23/2010 2:49	963899	VARIOUS	1	LANL	USE	S
per0322078a	248374001	CWW	3/23/2010 3:01	963899	10-2155	1	LANL	USE	S
per0322079a	248374002	CWW	3/23/2010 3:13	963899	10-2155	1	LANL	USE	S
per0322080a	1202067812	CWW	3/23/2010 3:25	963899	10-2155	1	LANL	USE	S
per0322081a	1202067813	CWW	3/23/2010 3:37	963899	10-2155	1	LANL	USE	S
per0322082a	248374003	CWW	3/23/2010 3:49	963899	10-2155	1	LANL	USE	S
per0322083a	248374004	CWW	3/23/2010 4:01	963899	10-2155	1	LANL	USE	S
per0322084a	248374005	CWW	3/23/2010 4:13	963899	10-2155	1	LANL	USE	S
per0322085a	WCLCCV	CWW	3/23/2010 4:25			1		USE	C
per0322086a	IPB010	CWW	3/23/2010 4:38			1		USE	B
per0322087a	WCLCRI	CWW	3/23/2010 4:50			1		USE	C
per0322088a	248374006	CWW	3/23/2010 5:02	963899	10-2155	1	LANL	USE	S
per0322089a	248374007	CWW	3/23/2010 5:14	963899	10-2155	1	LANL	USE	S
per0322090a	248374008	CWW	3/23/2010 5:26	963899	10-2155	1	LANL	USE	S
per0322091a	248374009	CWW	3/23/2010 5:38	963899	10-2155	1	LANL	USE	S
per0322092a	248374010	CWW	3/23/2010 5:50	963899	10-2155	1	LANL	USE	S
per0322093a	248374011	CWW	3/23/2010 6:02	963899	10-2155	1	LANL	USE	S
per0322094a	248374012	CWW	3/23/2010 6:14	963899	10-2155	1	LANL	USE	S
per0322095a	248374013	CWW	3/23/2010 6:26	963899	10-2155	1	LANL	USE	S
per0322096a	248422001	CWW	3/23/2010 6:38	963899	10-2166	1	LANL	USE	S
per0322097a	248422002	CWW	3/23/2010 6:50	963899	10-2166	1	LANL	USE	S
per0322098a	WCLCCV	CWW	3/23/2010 7:02			1		USE	C
per0322099a	IPB011	CWW	3/23/2010 7:18			1		USE	B
per0322100a	WCLCRI	CWW	3/23/2010 7:30			1		USE	C
per0322101a	248515001	CWW	3/23/2010 7:42	963899	10-2197	1	LANL	USE	S
per0322102a	248515002	CWW	3/23/2010 7:55	963899	10-2197	1	LANL	USE	S
per0322103a	248515003	CWW	3/23/2010 8:07	963899	10-2197	1	LANL	USE	S

per0322104a	248517001	CWW	3/23/2010 8:19	963899	10-2198	1	LANL	USE	S
per0322105a	IPB012	CWW	3/23/2010 8:31			1		USE	B
per0322106a	1202056702	CWW	3/23/2010 8:43	959034	VARIOUS	1	LANL	USE	S
per0322107a	IPB013	CWW	3/23/2010 8:55			1		USE	B
per0322108a	248371002	CWW	3/23/2010 9:07	962127	10-2151	4	LANL	USE	S
per0322109a	248371005	CWW	3/23/2010 9:19	962127	10-2151	4	LANL	USE	S
per0322110a	248371006	CWW	3/23/2010 9:31	962127	10-2151	1	LANL	USE	S
per0322111a	WCLCCV	CWW	3/23/2010 9:43			1		USE	C
per0322112a	IPB014	CWW	3/23/2010 9:55			1		USE	B
per0322113a	WCLCRI	CWW	3/23/2010 10:07			1		USE	C

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
23-MAR-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LC-MS/MS	SW846 6850 Modified	Solid	LANL
Batch ID:	**Sample Numbers:**		
963899	See Below		

Potentially affected work order(s)(SDG): 248374(10-2155),248422(10-2166),248515(10-2197),248517(10-2198)

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements Exception Description:	DER Disposition:
1. Low recovery for Perchlorate-101 was observed in 1202067812 (MS). The recovery was 71% and the acceptance range is 75-125%.	1. The low recovery may be the result of the background concentration present in the parent sample, 248374002, and the non-homogeneity of the sample matrix.

Originator's Name:

Charles Wilson 23-MAR-10

Data Validator/Group Leader:

Herbert Maier 24-MAR-10

LC/MS/MS PERCHLORATE ANALYSIS

Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-2155-1

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:	962136
Prep Batch Number:	962135

Sample Analysis

Sample ID	Client ID
248375001	RE36-10-7535
248375002	RE36-10-7533
1202063761	Interference Check Sample (ICS)
1202063757	Method Blank (MB)
1202063758	Laboratory Control Sample (LCS)
1202063759	248407001(RE11-10-1721) Matrix Spike (MS)
1202063760	248407001(RE11-10-1721) Matrix Spike Duplicate (MSD)

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

Preparation/Analytical Method Verification

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

Calibration Information

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

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

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

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 recovered Perchlorate at 164% and Perchlorate-101 at 166%. The acceptance range is 85-115%. The high recovery may be the result of a spiking error at the preparation step, but note that the recoveries for the ICS and matrix spikes were all acceptable for the batch. Since the detections observed in the associated samples were less than the MDL, samples do not need to be re-extracted. The data is unaffected and is reported. Please see data exception report 805539.

QC Sample Designation
Client sample 248407001 (RE11-10-1721) from SDG 10-2188 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.

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 report 805539 was generated for this SDG.

The LCS recovered Perchlorate at 164% and Perchlorate-101 at 166%. The acceptance range is 85-115%. The high recovery may be the result of a spiking error at the preparation step, but note that the recoveries for the ICS and matrix spikes were all acceptable for the batch. Since the detections observed in the associated samples were less than the MDL, samples do not need to be re-extracted. The data is unaffected and is reported.

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

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

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

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

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

System Configuration

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

Chromatographic Columns

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

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

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

Review Validation:

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

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

Reviewer: Herbert K Maier **Date:** 03/26/10

SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 962135

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE36-10-7535

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155-1

GEL Sample ID: 248375001

Date Filtered: 08-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	17-MAR-10 04:05	per0316091a
	Perchlorate Isotope Ratio						1	17-MAR-10 04:05	per0316091a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	17-MAR-10 04:05	per0316091a
	Perchlorate-O(18)			0.461	ug/L		1	17-MAR-10 04:05	per0316091a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 962135

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE36-10-7533

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155-1

GEL Sample ID: 248375002

Date Filtered: 08-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	17-MAR-10 04:13	per0316092a
	Perchlorate Isotope Ratio						1	17-MAR-10 04:13	per0316092a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	17-MAR-10 04:13	per0316092a
	Perchlorate-O(18)			0.458	ug/L		1	17-MAR-10 04:13	per0316092a

^ 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 =

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

QUALITY CONTROL SUMMARY

Form 5

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-2155-1

Extract Batch Code: 962135

Date Filtered: 08-MAR-10

Matrix: WATER

Sample ID: 1202063758

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.329	ug/L	164	*	85 – 115
Perchlorate Isotope Ratio		2.98				–
Perchlorate-101	0.200	.331	ug/L	166	*	85 – 115
Perchlorate-O(18)		.465	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.

Form 5a

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–2155–1

Extract Batch Code: 962135

Date Filtered: 08–MAR–10

Matrix: WATER

Sample ID: 1202063761

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.212	ug/L	106		70 – 130
Perchlorate Isotope Ratio		3.13				
Perchlorate–101	0.200	.203	ug/L	102		70 – 130
Perchlorate–O(18)		.505	ug/L			

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

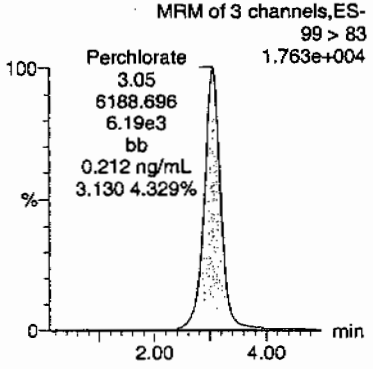
Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

Name: per0316090a
Date: 17-Mar-2010
Time: 03:57:10
ID: 1202063761
Vial: 2:5,C

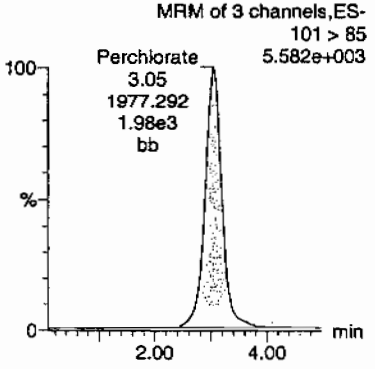
|LANL|962136|LZQ|ICS|1|

WD 031710

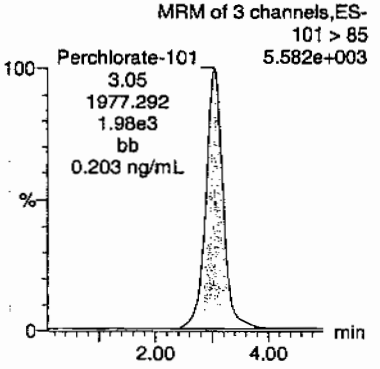
Perchlorate



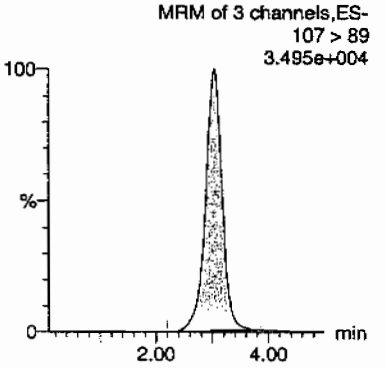
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202063761	Perchlorate	99 > 83	3.05	6188.696	6188.696	bb			0.2119	105.93	5.93	34.417	3.13
1202063761	Perchlorate-101	101 > 85	3.05	1977.292	1977.292	bb			0.2034	101.68	1.68	395.237	
1202063761	Perchlorate-O(18)	107 > 89	3.04	12059.898	12059.898	bb			0.5047	100.94	0.94	4365.4...	

MM 3/18/10

$$\frac{6188.696}{1977.292} = 3.1299$$

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): 10-2155-1

Extract Batch Code: 962135

Date Extracted: 08-MAR-10

GEL MS/PS ID: 1202063759

Client ID: RE11-10-1721

GEL MSD/PSD ID: 1202063760

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	0.00108	ug/L	0.198	98.5	.197	97.9	.596	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		3.12		2.86		0		–
Perchlorate-101	0.200	0.00	ug/L	0.190	95.2	.207	103	8.19	30	75 – 125
Perchlorate-O(18)	0	0.454	ug/L	0.462		.455		1.64		–

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

Comments:

Form 4

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–2155–1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	16–MAR–10	per0316001a	IPB001
Perchlorate–101	0.00	0	NA	16–MAR–10	per0316001a	IPB001
Perchlorate	0.00	0	NA	16–MAR–10	per0316002a	IPB001
Perchlorate–101	0.00	0	NA	16–MAR–10	per0316002a	IPB001

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

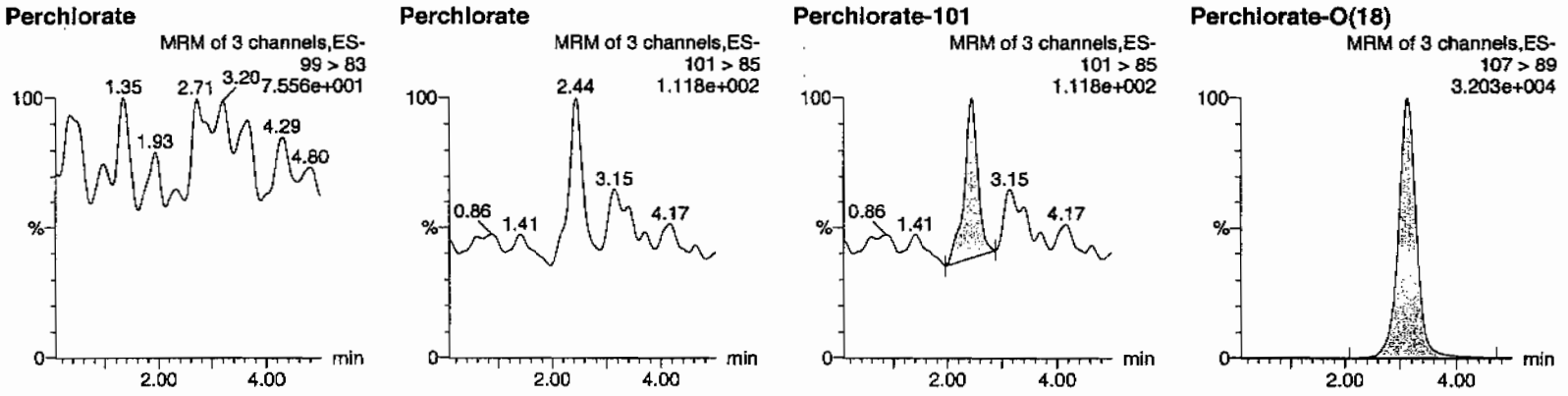
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per031610a.mdb 17 Mar 2010 09:00:50
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per031610a.cdb 17 Mar 2010 09:01:07

Name: per0316001a
Date: 16-Mar-2010
Time: 16:00:32
ID: IPB001
Vial: 1:1,A

CW 03-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85	2.44	20.167	20.167	bb			0.0021			25.880	
IPB001	Perchlorate-O(18)	107 > 89	3.14	11814.019	11814.019	bb			0.4944	98.89	-1.11	1410.2...	

MM 3/18/10

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

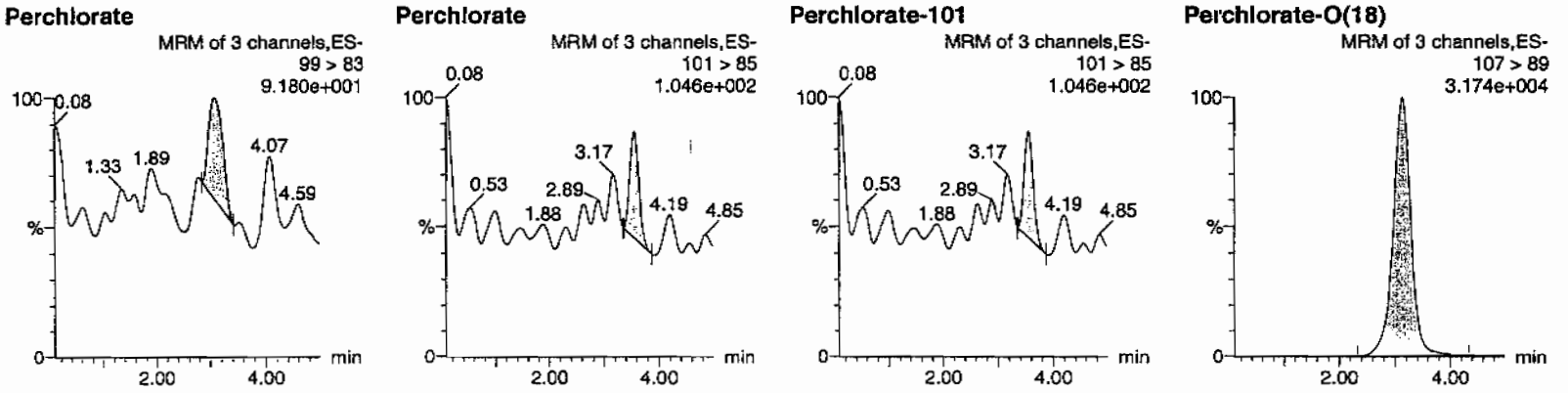
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

Name: per0316002a
Date: 16-Mar-2010
Time: 16:08:34
ID: IPB001
Vial: 1:1,A

CWJ 03-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83	3.07	11.152	11.152	bb			0.0004			4.095	1.32
IPB001	Perchlorate-101	101 > 85	3.56	8.474	8.474	bb			0.0009			17.995	
IPB001	Perchlorate-O(18)	107 > 89	3.14	11719.820	11719.820	bb			0.4905	98.10	-1.90	1197.1...	

CWJ <0.0560

MAP 3/18/10

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

Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–2155–1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	16–MAR–10	per0316008a	IPB002
Perchlorate–101	0.00	0	NA	16–MAR–10	per0316008a	IPB002
Perchlorate	0.00	0	NA	16–MAR–10	per0316010a	IPB003
Perchlorate–101	0.00	0	NA	16–MAR–10	per0316010a	IPB003
Perchlorate	0.00	0	NA	16–MAR–10	per0316015a	IPB004
Perchlorate–101	0.00	0	NA	16–MAR–10	per0316015a	IPB004
Perchlorate	0.00	0	NA	16–MAR–10	per0316023a	IPB005
Perchlorate–101	0.00	0	NA	16–MAR–10	per0316023a	IPB005
Perchlorate	0.00	0	NA	16–MAR–10	per0316027a	IPB006
Perchlorate–101	0.00	0	NA	16–MAR–10	per0316027a	IPB006
Perchlorate	0.00	0	NA	16–MAR–10	per0316036a	IPB007
Perchlorate–101	0.00	0	NA	16–MAR–10	per0316036a	IPB007
Perchlorate	0.00	0	NA	16–MAR–10	per0316049a	IPB008

Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2155-1

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	16-MAR-10	per0316049a	IPB008
Perchlorate	0.00	0	NA	16-MAR-10	per0316060a	IPB009
Perchlorate-101	0.00	0	NA	16-MAR-10	per0316060a	IPB009
Perchlorate	0.00	0	NA	17-MAR-10	per0316073a	IPB010
Perchlorate-101	0.00	0	NA	17-MAR-10	per0316073a	IPB010
Perchlorate	0.00	0	NA	17-MAR-10	per0316086a	IPB011
Perchlorate-101	0.00	0	NA	17-MAR-10	per0316086a	IPB011
Perchlorate	0.00	0	NA	17-MAR-10	per0316099a	IPB012
Perchlorate-101	0.00	0	NA	17-MAR-10	per0316099a	IPB012

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

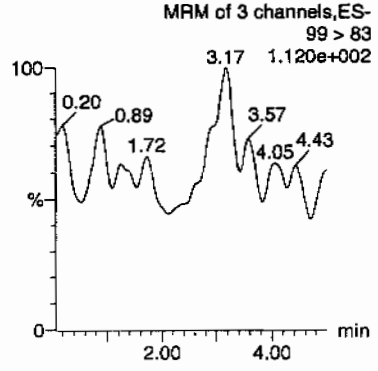
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

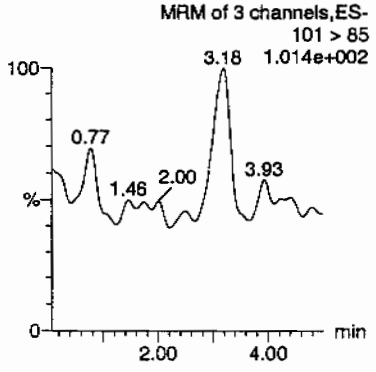
Name: per0316008a
Date: 16-Mar-2010
Time: 16:56:40
ID: IPB002
Vial: 1:1,A

CWW 03-17-10

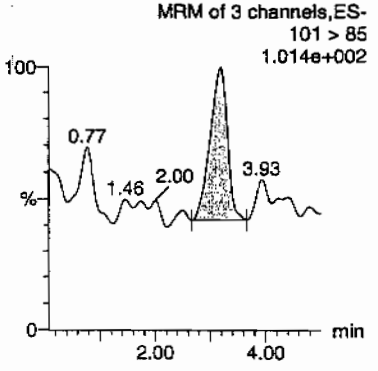
Perchlorate



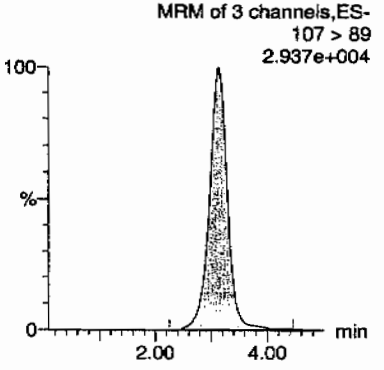
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB002	Perchlorate	99 > 83											0.00
IPB002	Perchlorate-101	101 > 85	3.18	21.675	21.675	bb			0.0022			8.964	
IPB002	Perchlorate-O(18)	107 > 89	3.14	10852.298	10852.298	bb			0.4542	90.84	-9.16	2345.6...	

MMT 3/18/10

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

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

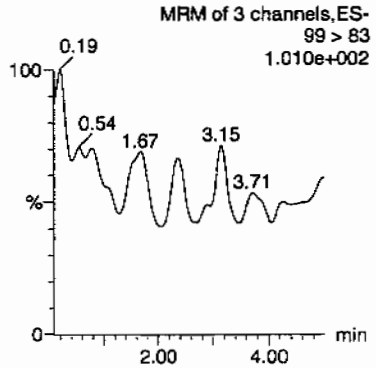
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

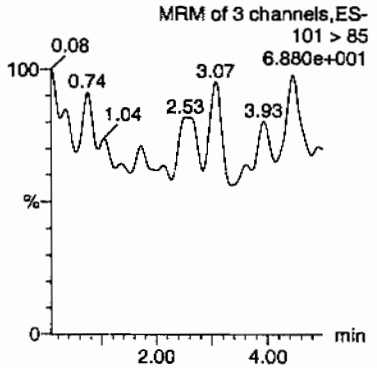
Name: per0316010a
Date: 16-Mar-2010
Time: 17:12:44
ID: IPB003
Vial: 1:1,A

CW 03-17-10

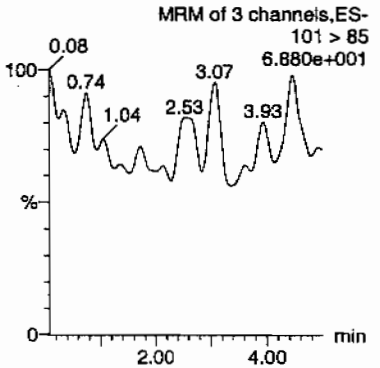
Perchlorate



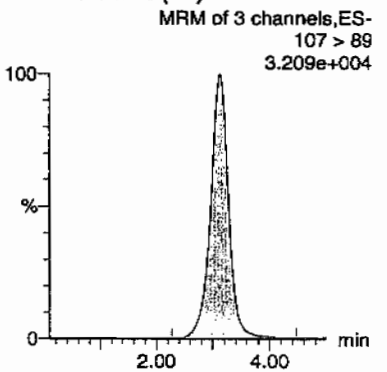
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB003	Perchlorate	99 > 83											0.00
IPB003	Perchlorate-101	101 > 85											
IPB003	Perchlorate-O(18)	107 > 89	3.12	11719.064	11719.064	bb			0.4905	98.09	-1.91	360.980	

MAT 3/18/10

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

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

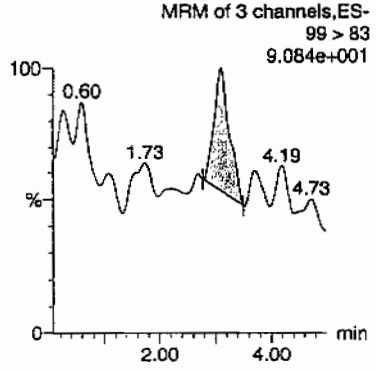
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

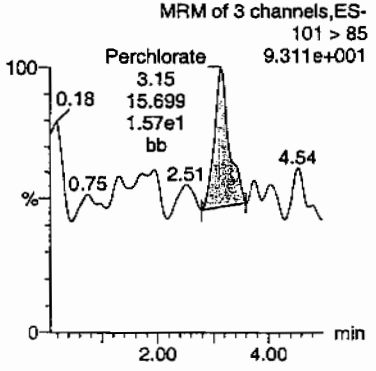
Name: per0316015a
Date: 16-Mar-2010
Time: 17:52:55
ID: IPB004
Vial: 1:1,A

CWO
03-17-10

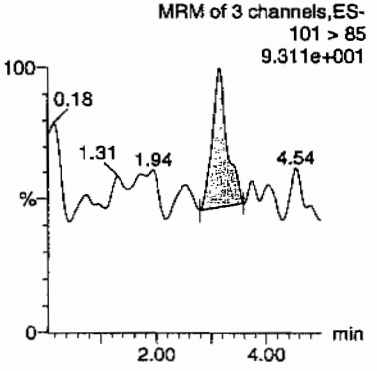
Perchlorate



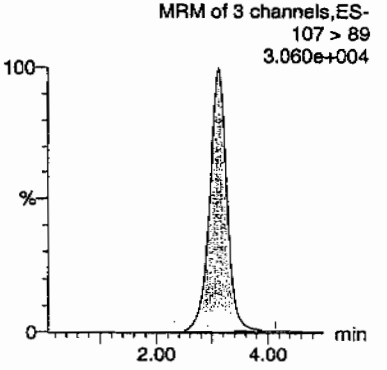
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB004	Perchlorate	99 > 83	3.10	14.013	14.013	bb			0.0005			14.637	0.89
IPB004	Perchlorate-101	101 > 85	3.15	15.699	15.699	bb			0.0016			11.849	
IPB004	Perchlorate-O(18)	107 > 89	3.11	10917.076	10917.076	bb			0.4569	91.38	-8.62	4536.1...	

UCL74
<0.0500

MAT
3/18/10

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

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

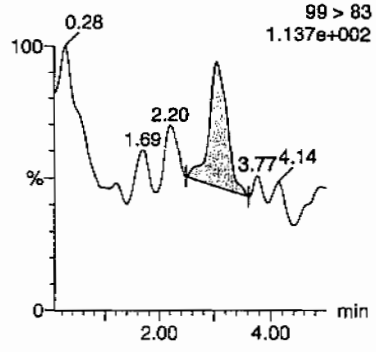
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

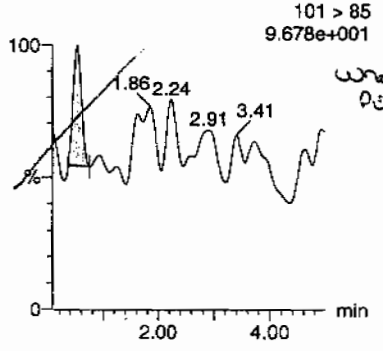
Name: per0316023a
Date: 16-Mar-2010
Time: 18:57:12
ID: IPB005
Vial: 1:1,A

CWW 03-17-10

Perchlorate

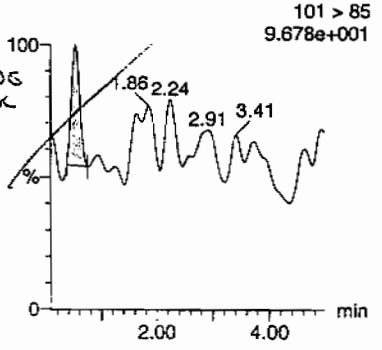


Perchlorate

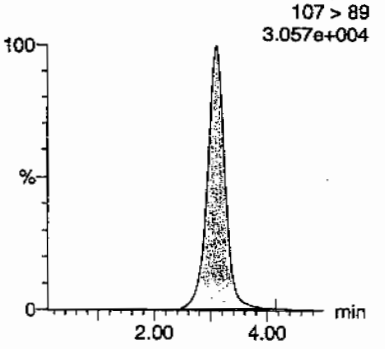


WRONG PEAK

Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB005	Perchlorate	99 > 83	3.05	20.337	20.337	bb			0.0007	<0.0500		38.968	2.53
IPB005	Perchlorate-101	101 > 85	0.53	8.036	8.036	bb			0.0008			12.160	
IPB005	Perchlorate-O(18)	107 > 89	3.10	10865.716	10865.716	bb			0.4547	90.95	-9.05	902.999	

MAT 3/18/10

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

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

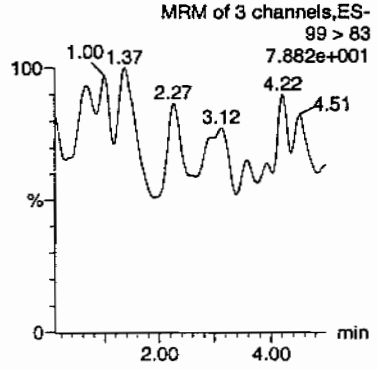
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

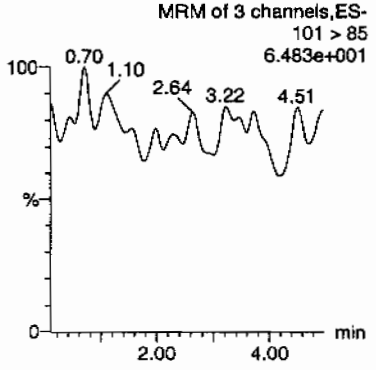
Name: per0316027a
Date: 16-Mar-2010
Time: 19:29:22
ID: IPB006
Vial: 1:1,A

CWW
03-17-10

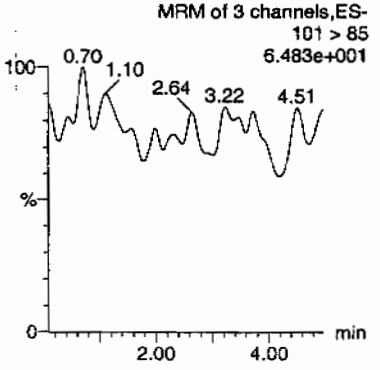
Perchlorate



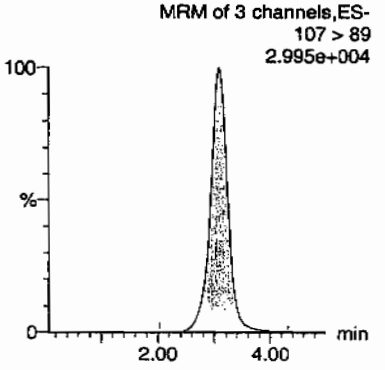
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB006	Perchlorate	99 > 83											0.00
IPB006	Perchlorate-101	101 > 85											
IPB006	Perchlorate-O(18)	107 > 89	3.09	10701.523	10701.523	bb			0.4479	89.57	-10.43	2319.4...	

MWP
3/18/10

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

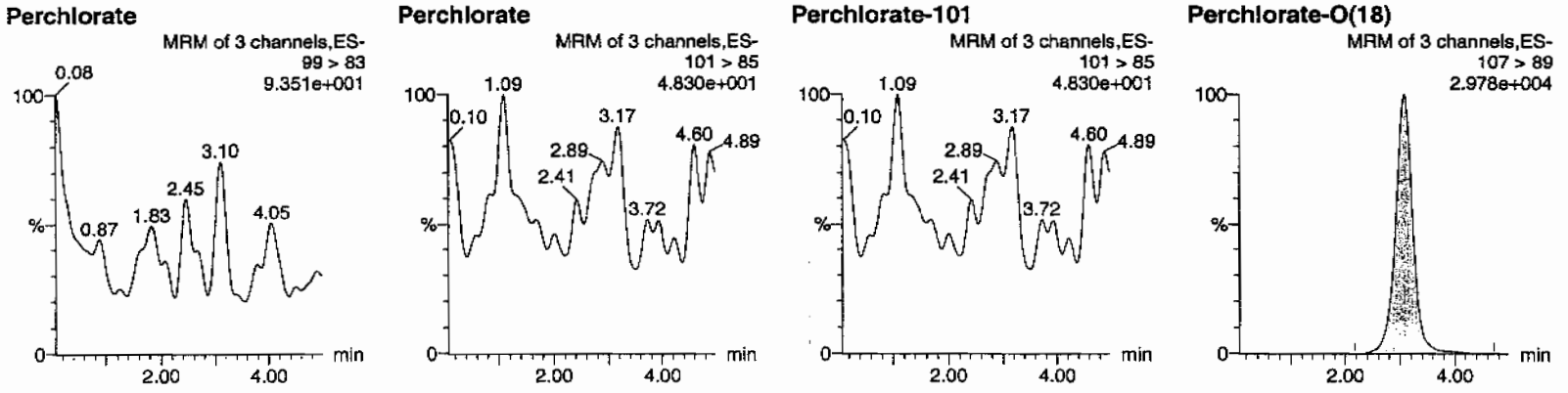
Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

Name: per0316036a
Date: 16-Mar-2010
Time: 20:41:46
ID: IPB007
Vial: 1:1,A

CW 03-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB007	Perchlorate	99 > 83											0.00
IPB007	Perchlorate-101	101 > 85											
IPB007	Perchlorate-O(18)	107 > 89	3.09	10877.410	10877.410	bb			0.4552	91.05	-8.95	933.419	

MAT 3/18/10

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

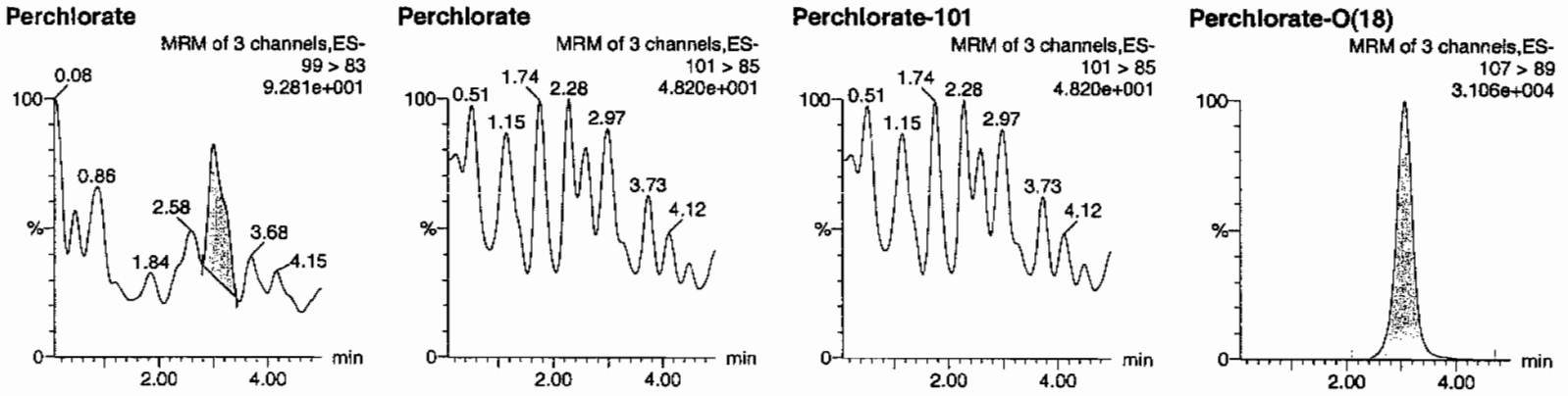
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

Name: per0316049a
Date: 16-Mar-2010
Time: 22:26:24
ID: IPB008
Vial: 1:1,A

CWO 03-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB008	Perchlorate	99 > 83	3.01	16.420	16.420	bb			0.0006			7.784	0.00
IPB008	Perchlorate-101	101 > 85											
IPB008	Perchlorate-O(18)	107 > 89	3.06	11192.282	11192.282	bb			0.4684	93.68	-6.32	3454.6...	

MMT 3/18/10

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

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

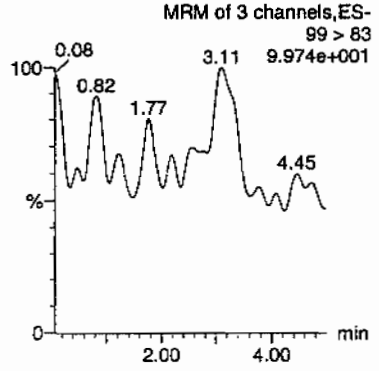
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

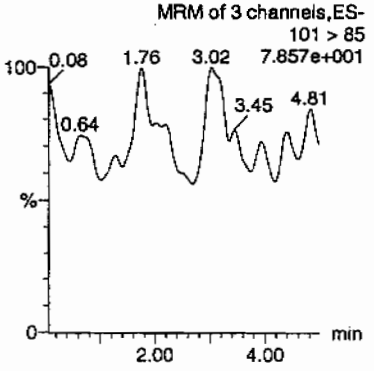
Name: per0316060a
Date: 16-Mar-2010
Time: 23:55:02
ID: IPB009
Vial: 1:1,A

CWB 03-17-10

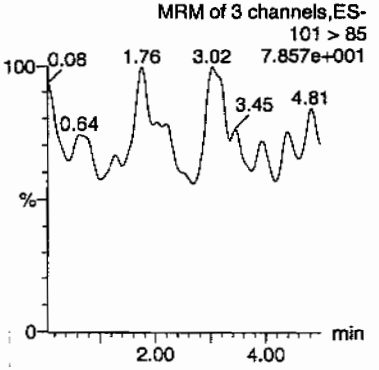
Perchlorate



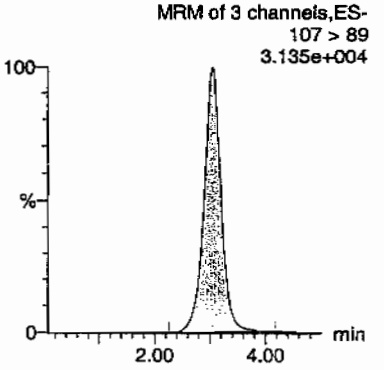
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB009	Perchlorate	99 > 83											0.00
IPB009	Perchlorate-101	101 > 85											
IPB009	Perchlorate-O(18)	107 > 89	3.05	11205.789	11205.789	bb			0.4690	93.79	-6.21	3795.6...	

MTP 3/18/10

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

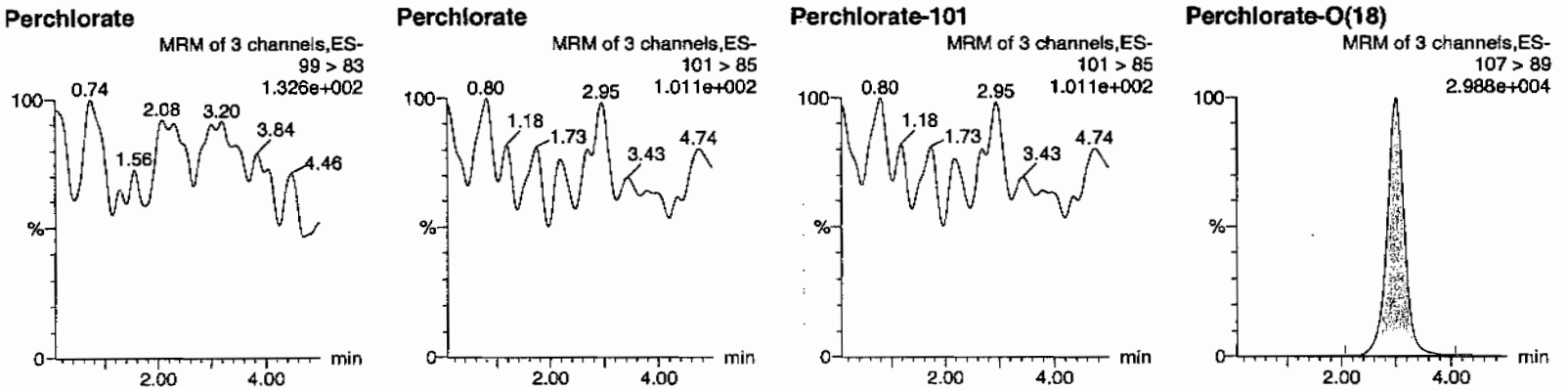
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

Name: per0316073a
Date: 17-Mar-2010
Time: 01:39:53
ID: IPB010
Vial: 1:1,A

Cwo 03-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB010	Perchlorate	99 > 83											0.00
IPB010	Perchlorate-101	101 > 85											
IPB010	Perchlorate-O(18)	107 > 89	3.01	10866.314	10866.314	bb			0.4548	90.95	-9.05	794.125	

MJT 3/18/10

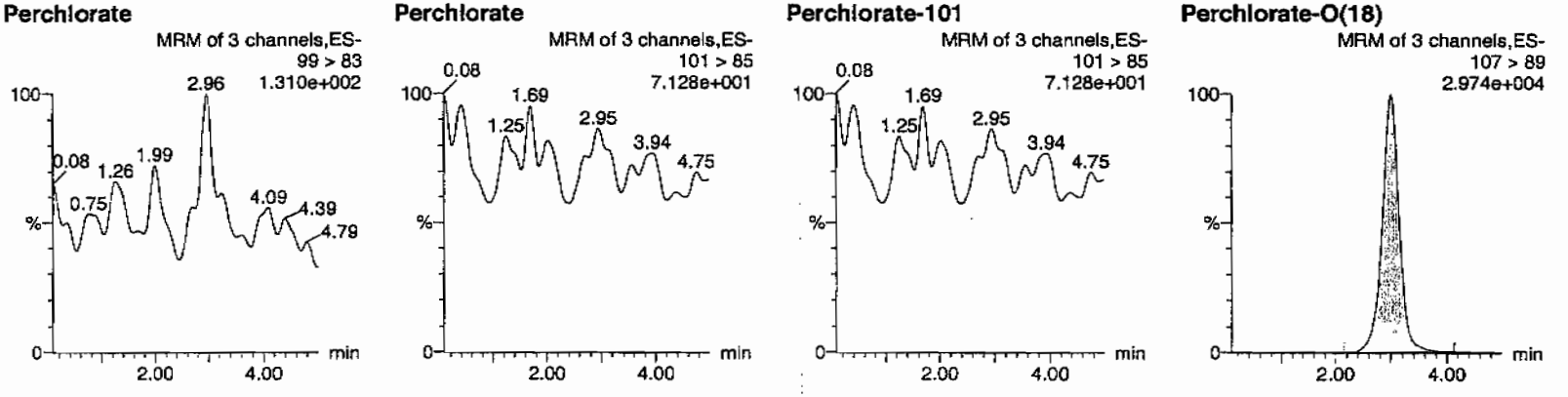
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

Name: per0316086a
Date: 17-Mar-2010
Time: 03:24:46
ID: IPB011
Vial: 1:1,A

03-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB011	Perchlorate	99 > 83											0.00
IPB011	Perchlorate-101	101 > 85											
IPB011	Perchlorate-O(18)	107 > 89	3.00	10489.233	10489.233	bb			0.4390	87.80	-12.20	1245.2...	

MM 3/18/10

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

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

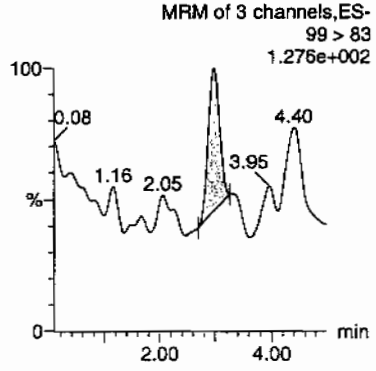
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

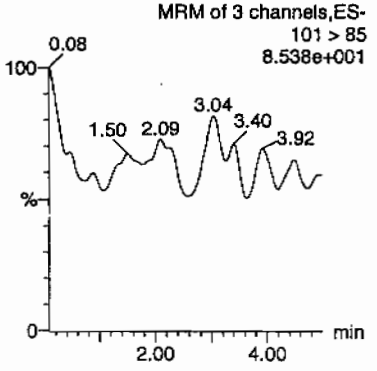
Name: per0316099a
Date: 17-Mar-2010
Time: 05:09:51
ID: IPB012
Vial: 1:1,A

CWJ 03-17-10

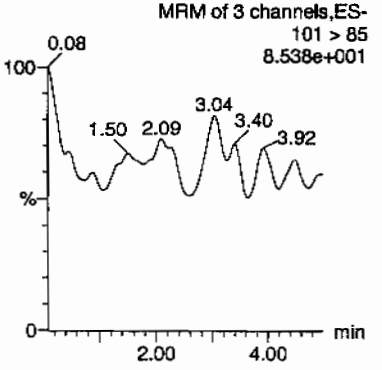
Perchlorate



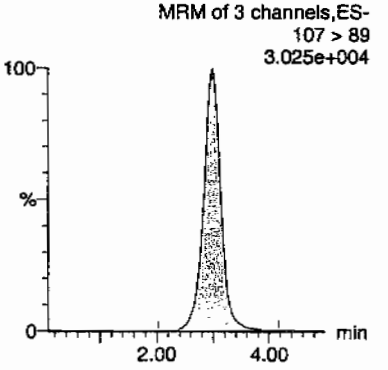
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB012	Perchlorate	99 > 83	2.99	16.577	16.577	bb			0.0006			18.954	0.00
IPB012	Perchlorate-101	101 > 85											
IPB012	Perchlorate-O(18)	107 > 89	2.99	10736.125	10736.125	bb			0.4493	89.86	-10.14	3921.4...	

MAT 3/18/10

Nairb.ref

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

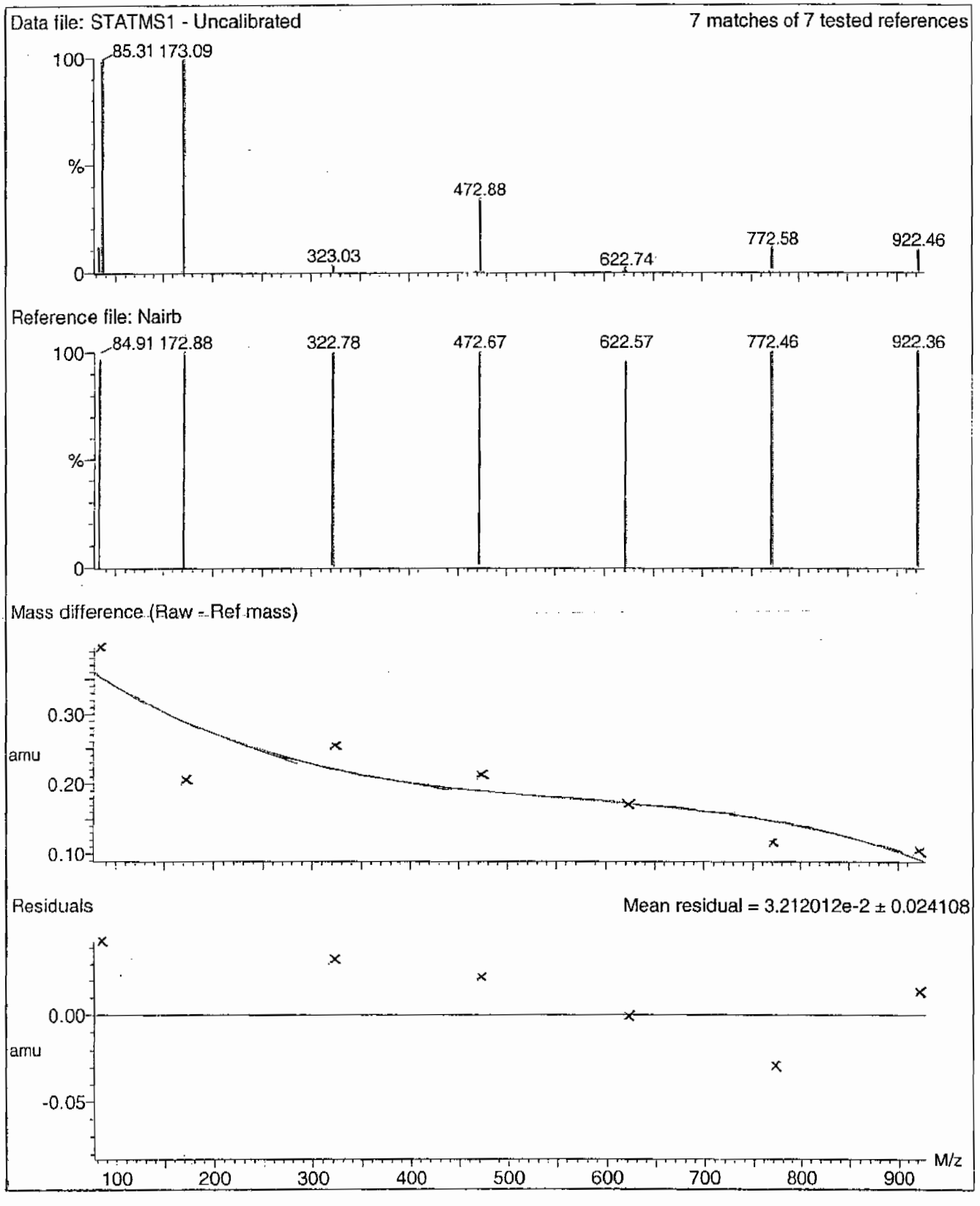
22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803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

QUATTRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

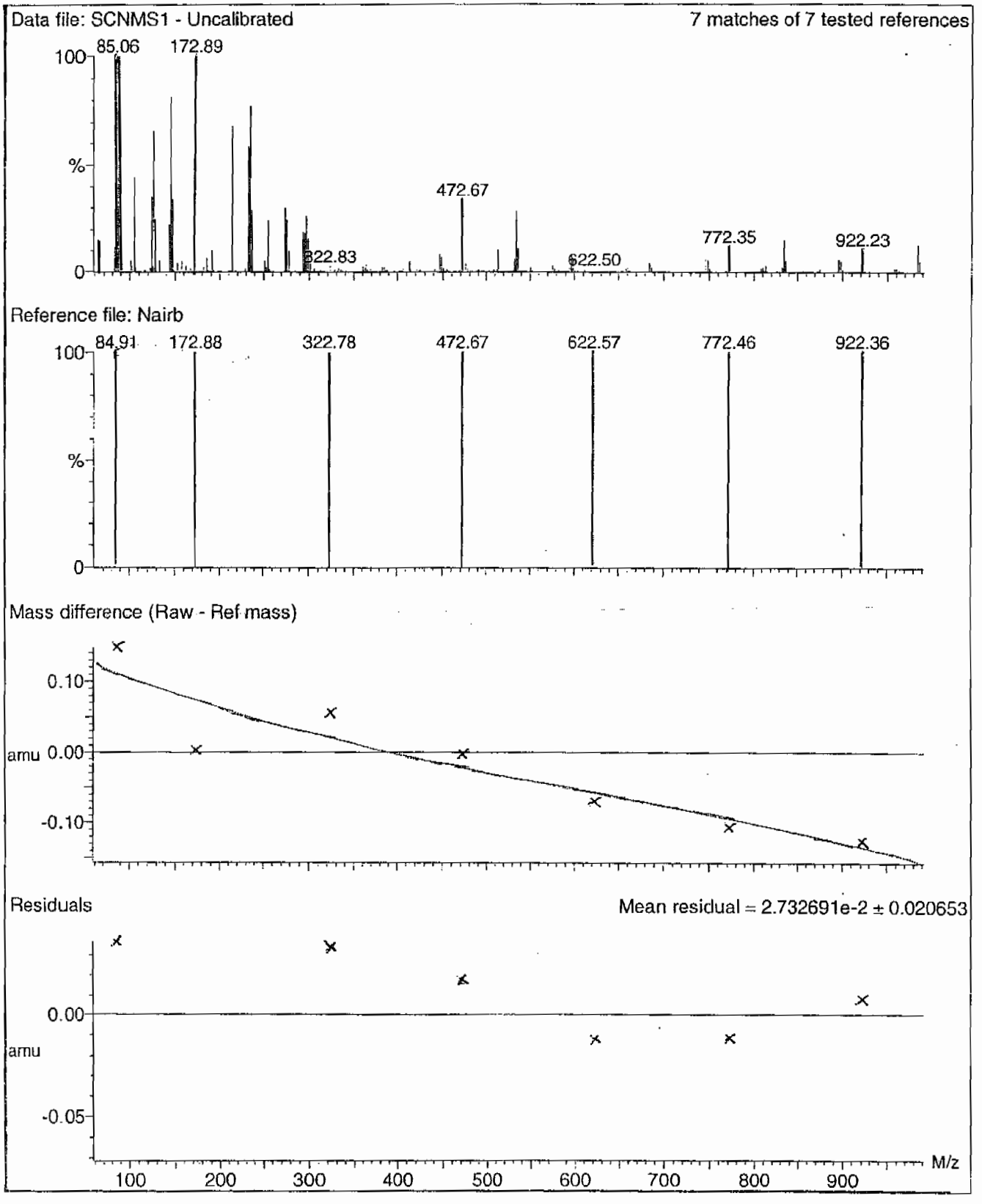
Printed: Tue Jan 08 12:19:12 2008

PEAKS HIGHLIGHTED BY [illegible] 01-09-08



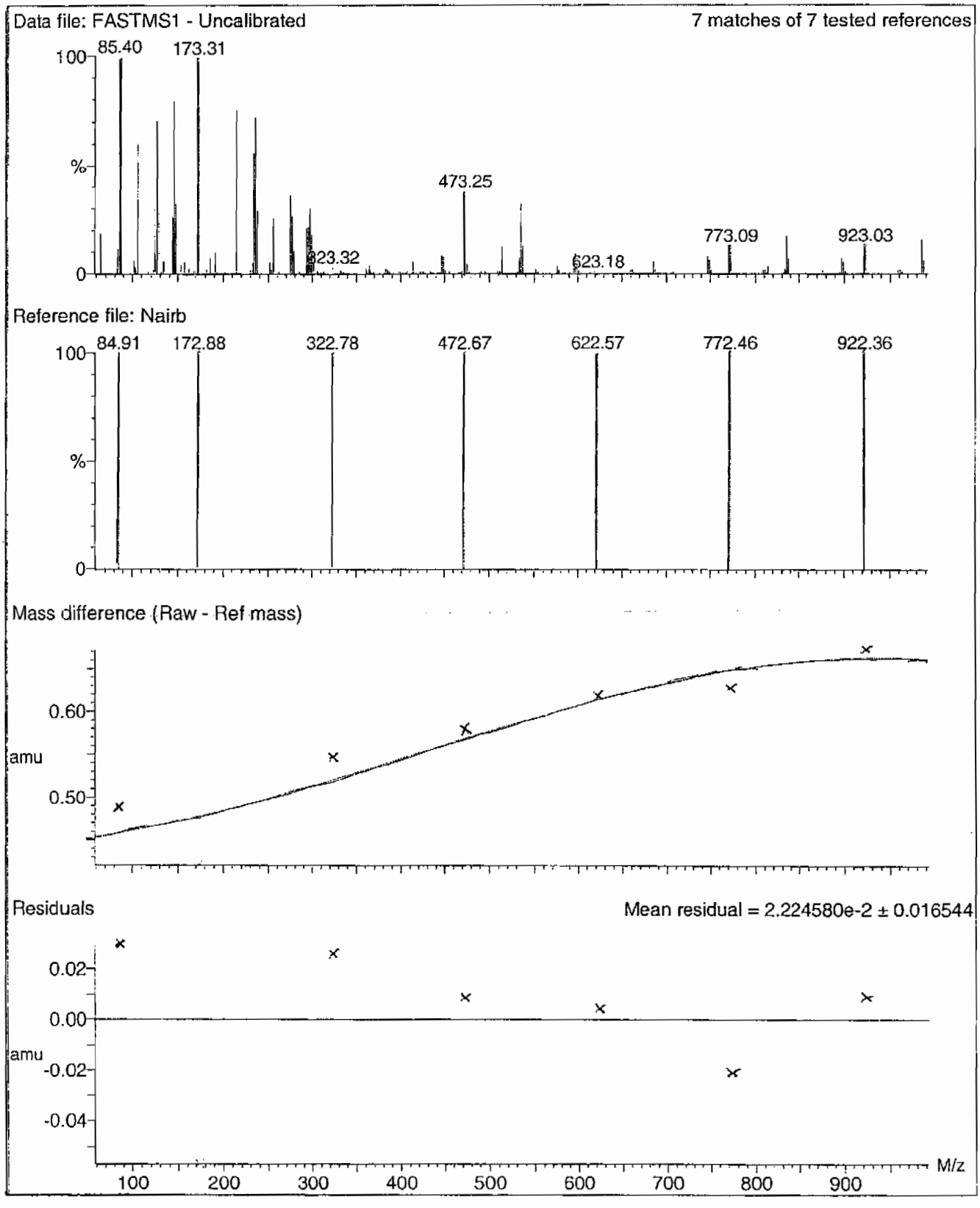
Calibration Report - MS1 Scanning

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



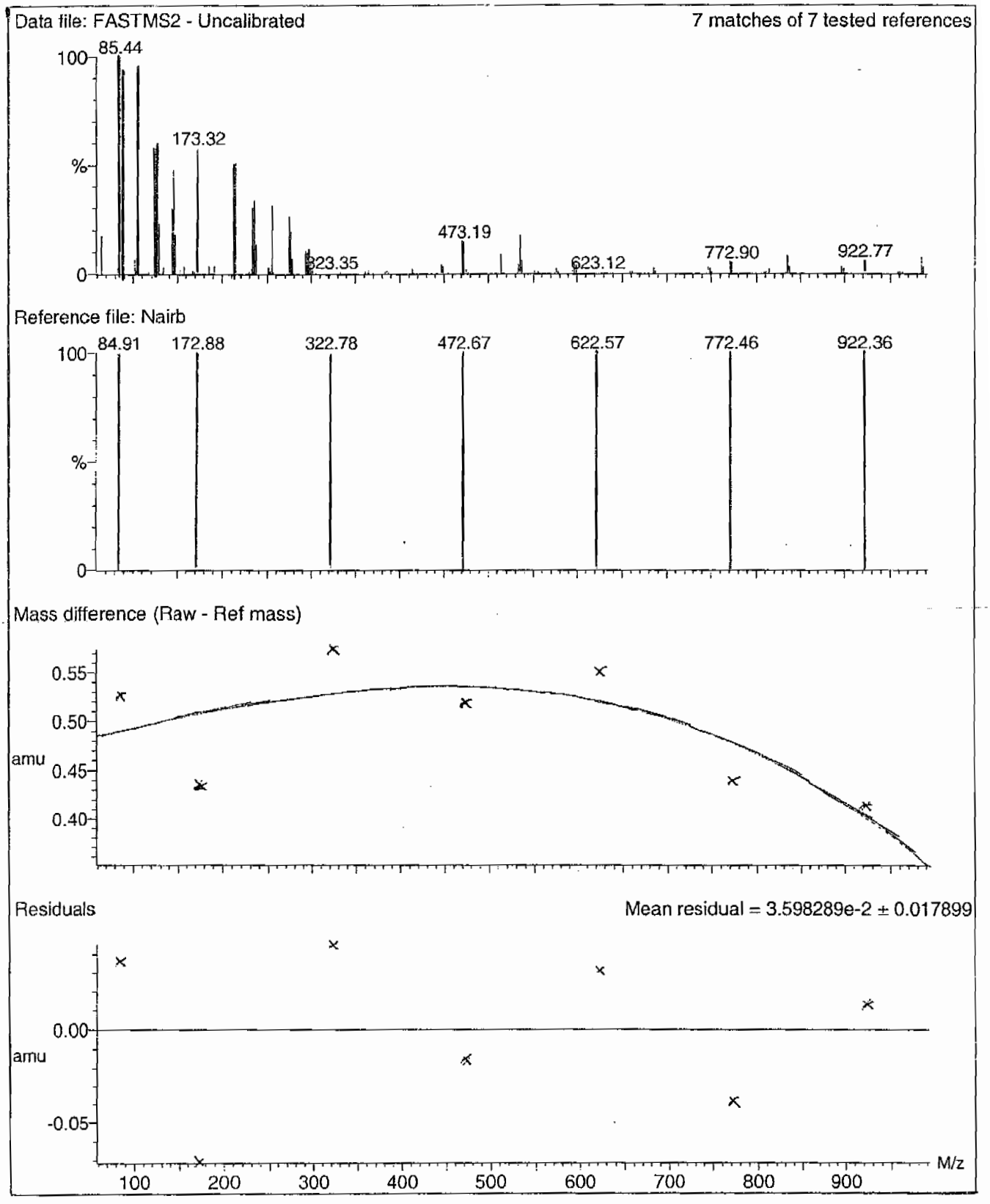
Calibration Report - MS1 Scan Speed Compensation

Printed: **Tue Jan 08 12:21:04 2008**



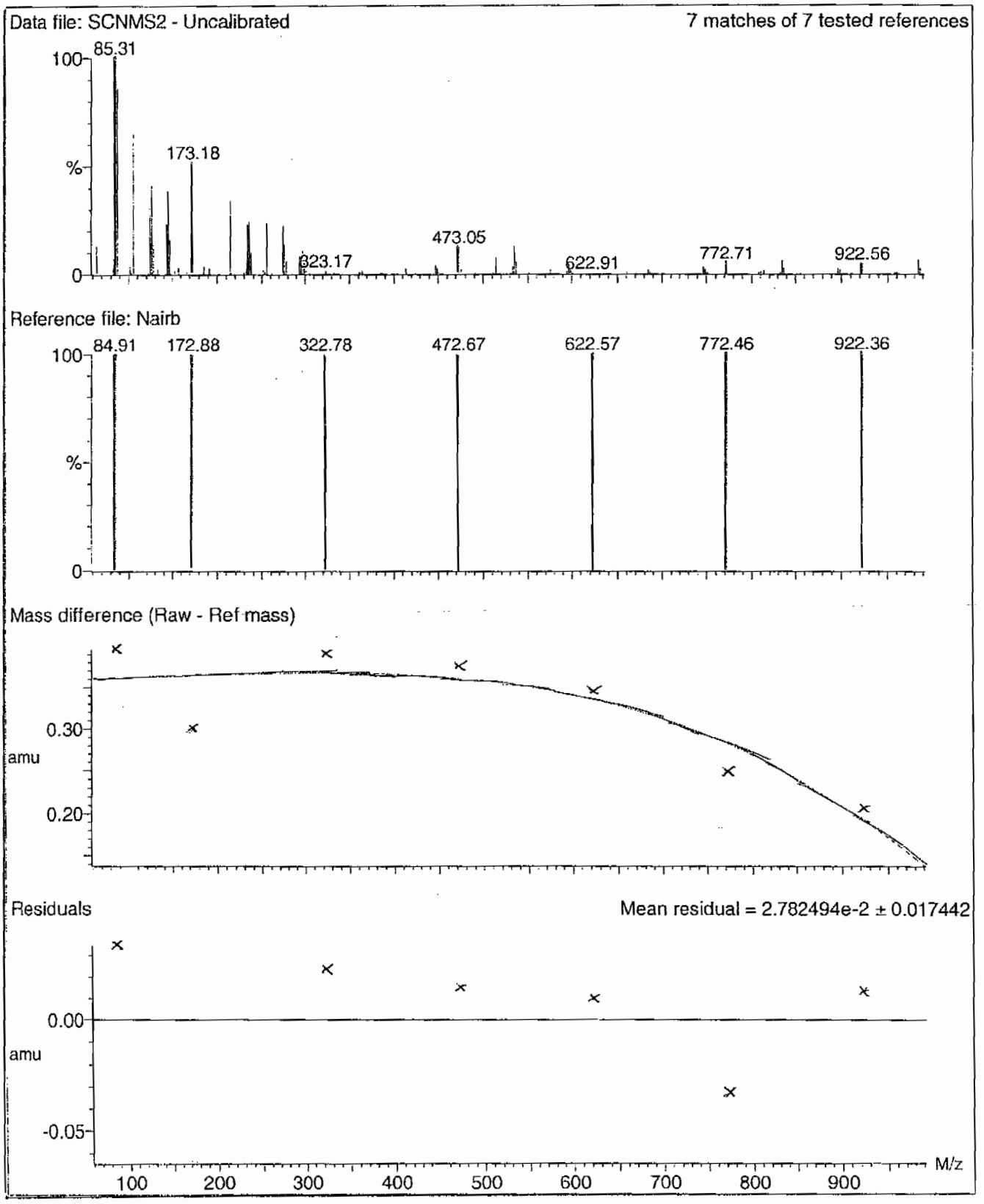
Calibration Report - MS2 Scan Speed Compensation

Printed: **Tue Jan 08 12:23:51 2008**



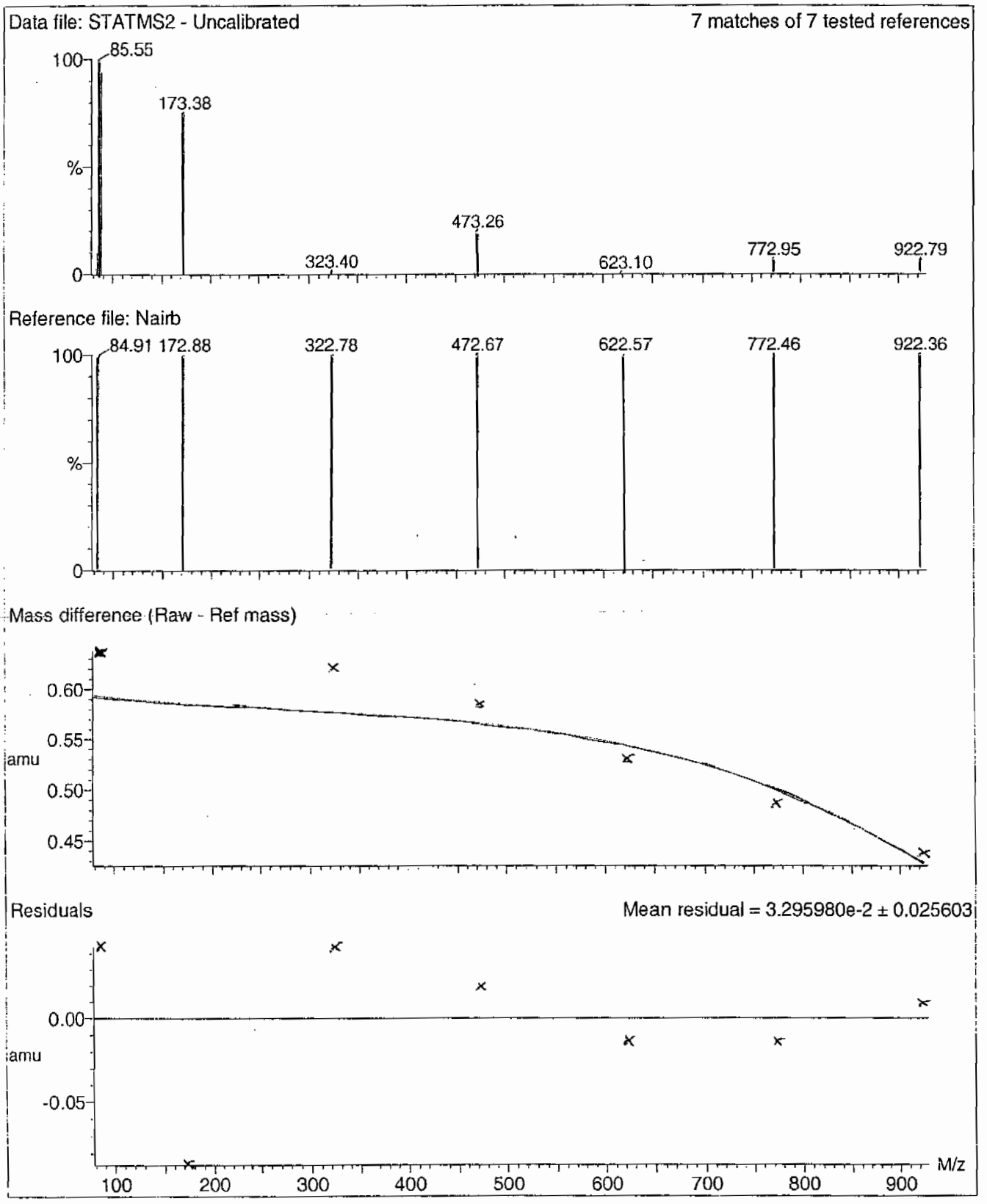
Calibration Report - MS2 Scanning

Printed: Tue Jan 08 12:22:56 2008



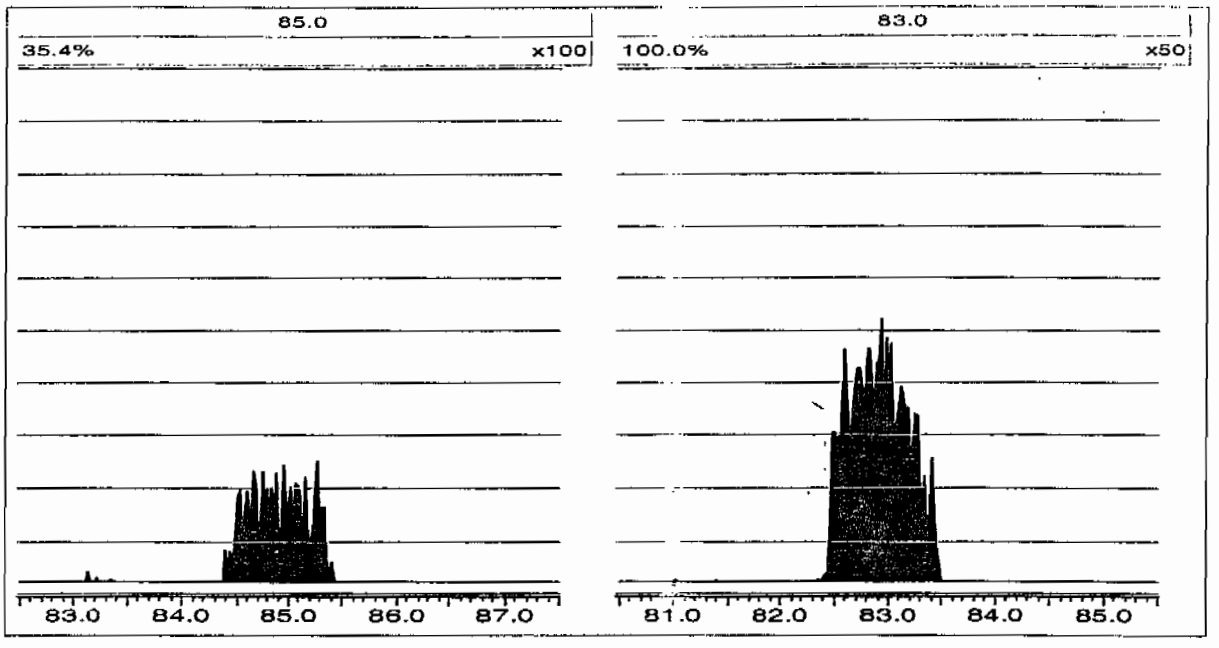
Calibration Report - MS2 Static

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



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

Printed: Tuesday, March 16, 2010 14:13:45 Eastern Standard Time



Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–2155–1

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	**per0316006a**	**16–MAR–10**	**11562.3**				
Lower Area Limit			**5781.15**				
Upper Area Limit			**23124.6**				
1202063757	per0316088a	17–MAR–10 03:40	11417.9	3			
1202063758	per0316089a	17–MAR–10 03:49	11116.2	3	3.01077	1.004	
1202063761	per0316090a	17–MAR–10 03:57	12059.9	3.04	3.048	1.003	
248375001	per0316091a	17–MAR–10 04:05	11020	2.99	2.9983	1.003	
248375002	per0316092a	17–MAR–10 04:13	10947.9	2.99	2.94868	.986	

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: 962135

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE36-10-7535

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155-1

GEL Sample ID: 248375001

Date Filtered: 08-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	17-MAR-10 04:05	per0316091a
	Perchlorate Isotope Ratio						1	17-MAR-10 04:05	per0316091a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	17-MAR-10 04:05	per0316091a
	Perchlorate-O(18)			0.461	ug/L		1	17-MAR-10 04:05	per0316091a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

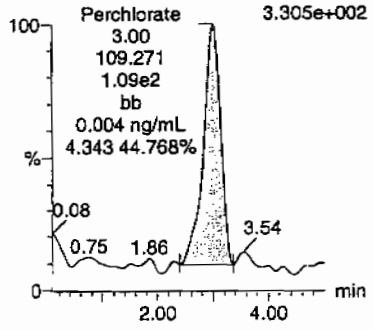
Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

Name: per0316091a
Date: 17-Mar-2010
Time: 04:05:12
ID: 248375001
Vial: 2:5,D

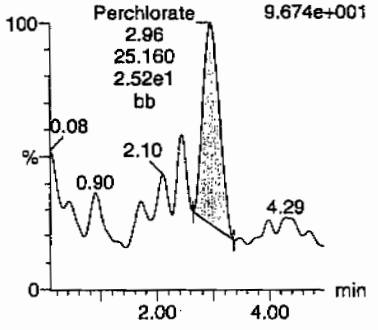
|LANL|962136|LZQ|1|

GW 03-17-10

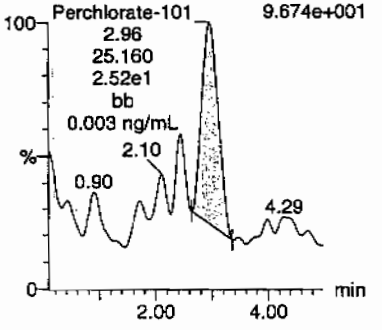
Perchlorate



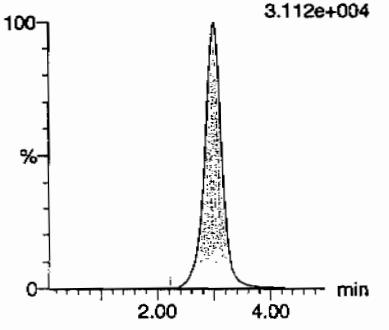
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248375001	Perchlorate	99 > 83	3.00	109.271	109.271	bb			0.0037			19.943	4.34
248375001	Perchlorate-101	101 > 85	2.96	25.160	25.160	bb			0.0026			5.171	
248375001	Perchlorate-O(18)	107 > 89	2.99	11019.975	11019.975	bb			0.4612	92.24	-7.76	1828.8...	

UKA4
<0.0500
MAT
3/18/10

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: WATER

Extraction Batch ID: 962135

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE36-10-7533

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2155-1

GEL Sample ID: 248375002

Date Filtered: 08-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	17-MAR-10 04:13	per0316092a
	Perchlorate Isotope Ratio						1	17-MAR-10 04:13	per0316092a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	17-MAR-10 04:13	per0316092a
	Perchlorate-O(18)			0.458	ug/L		1	17-MAR-10 04:13	per0316092a

^ 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 =

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

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

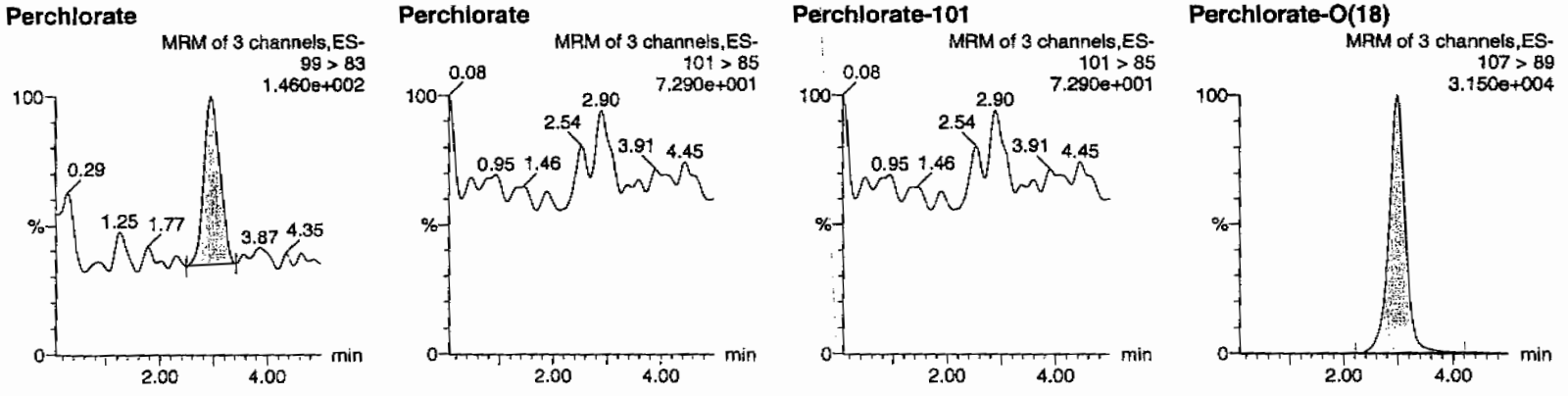
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

Name: per0316092a
Date: 17-Mar-2010
Time: 04:13:16
ID: 248375002
Vial: 2:5,E

|LANL|962136|L2Q|1|

WW 03-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248375002	Perchlorate	99 > 83	2.95	34.080	34.080	bb			0.0012			11.878	0.00
248375002	Perchlorate-101	101 > 85											
248375002	Perchlorate-O(18)	107 > 89	2.99	10947.907	10947.907	bb			0.4582	91.64	-8.36	2398.8...	

MWT 3/18/10

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

STANDARDS DATA

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–2155–1

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 16–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: 29209.88

Response Type: External Standard

Curve Type: RF

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-2155-1

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 16-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: 9722.924

Response Type: External Standard

Curve Type: RF

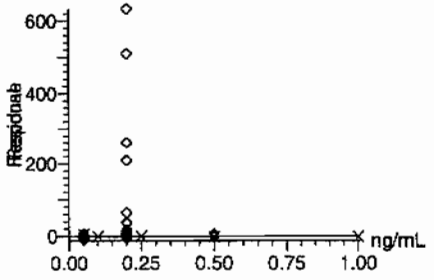
Quantify Calibration Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

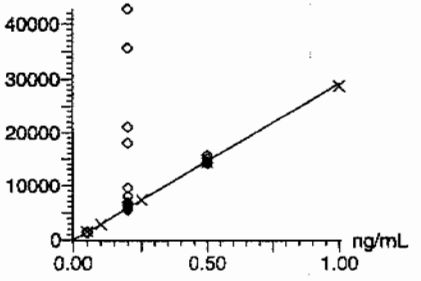
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per031610a.mdb 17 Mar 2010 09:00:50
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per031610a.cdb 17 Mar 2010 09:01:07

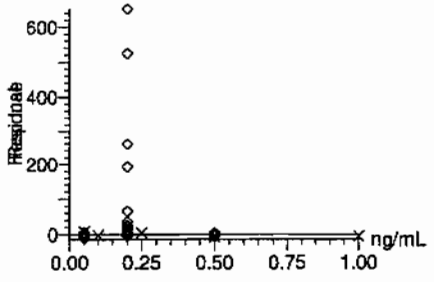
Compound name: Perchlorate
Response Factor: 29209.9
RRF SD: 864.153, % Relative SD: 2.95843
Response type: External Std, Area
Curve type: RF

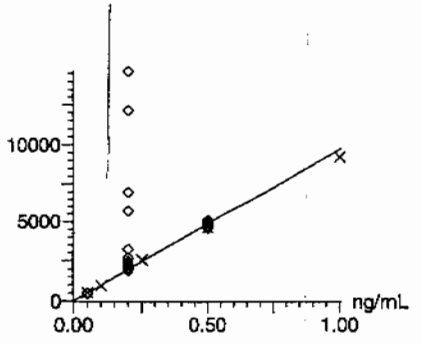




03-17-10

Compound name: Perchlorate-101
Response Factor: 9722.93
RRF SD: 575.815, % Relative SD: 5.92224
Response type: External Std, Area
Curve type: RF





3/18/10

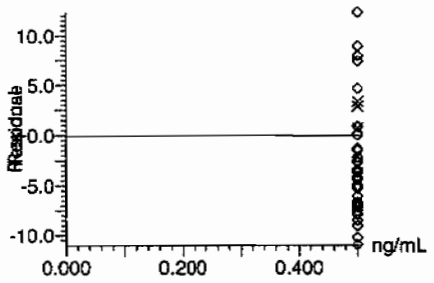
GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

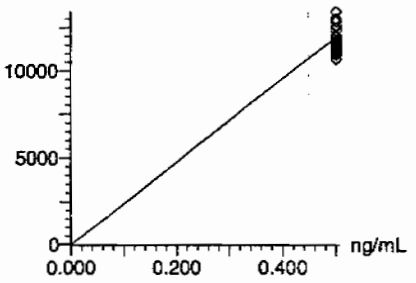
Quantify Calibration Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

Compound name: Perchlorate-O(18)
Response Factor: 23894.4
RRF SD: 799.2, % Relative SD: 3.34471
Response type: External Std, Area
Curve type: RF





03-17-10

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

Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–2155–1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.52	103.03	16–MAR–10 17:04	per0316009a
Perchlorate Isotope Ratio		2.95		16–MAR–10 17:04	per0316009a
Perchlorate–101	.5	.52	104.81	16–MAR–10 17:04	per0316009a

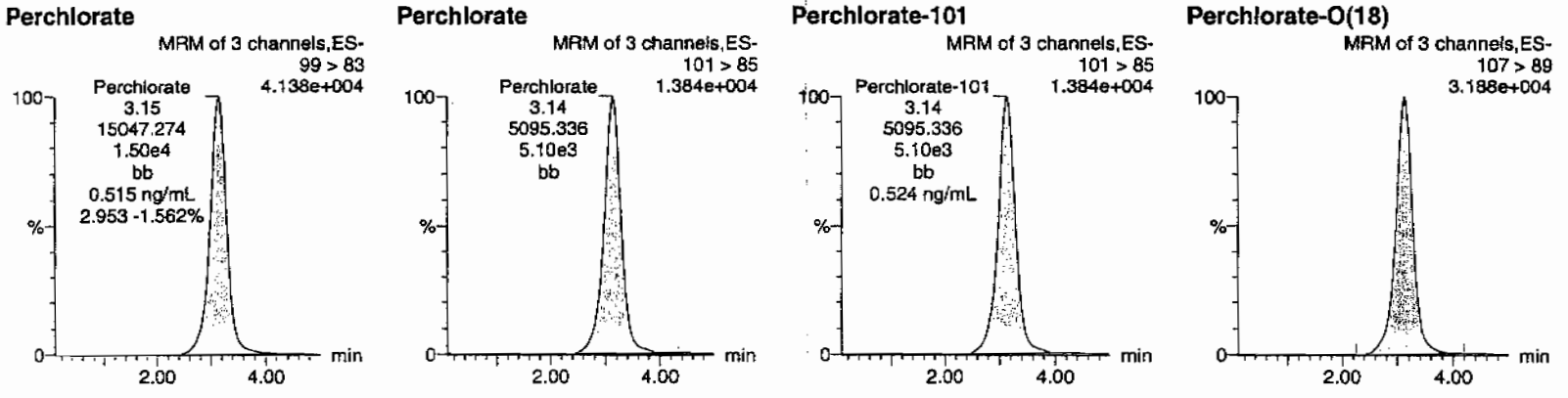
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

Name: per0316009a
Date: 16-Mar-2010
Time: 17:04:42
ID: WCL100309-06ICV
Vial: 1:2,A

Pass
ao
03-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-06ICV	Perchlorate	99 > 83	3.15	15047.274	15047.274	bb			0.5151	103.03	3.03	765.774	2.95
WCL100309-06ICV	Perchlorate-101	101 > 85	3.14	5095.336	5095.336	bb			0.5241	104.81	4.81	6062.4...	
WCL100309-06ICV	Perchlorate-O(18)	107 > 89	3.12	11358.490	11358.490	bb			0.4754	95.07	-4.93	1508.7...	

MM 3/18/10

$$\frac{15047.274}{29209.9} = 0.515$$

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–2155–1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.49	97.88	16–MAR–10 18:49	per0316022a
Perchlorate Isotope Ratio		3.15		16–MAR–10 18:49	per0316022a
Perchlorate–101	.5	.47	93.5	16–MAR–10 18:49	per0316022a
Perchlorate	.5	.49	97.54	16–MAR–10 20:33	per0316035a
Perchlorate Isotope Ratio		3.03		16–MAR–10 20:33	per0316035a
Perchlorate–101	.5	.48	96.86	16–MAR–10 20:33	per0316035a
Perchlorate	.5	.52	103.41	16–MAR–10 22:18	per0316048a
Perchlorate Isotope Ratio		3.07		16–MAR–10 22:18	per0316048a
Perchlorate–101	.5	.51	101.33	16–MAR–10 22:18	per0316048a
Perchlorate	.5	.54	107.21	16–MAR–10 23:47	per0316059a
Perchlorate Isotope Ratio		3.14		16–MAR–10 23:47	per0316059a
Perchlorate–101	.5	.51	102.51	16–MAR–10 23:47	per0316059a
Perchlorate	.5	.5	99.22	17–MAR–10 01:31	per0316072a

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–2155–1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.01		17–MAR–10 01:31	per0316072a
Perchlorate–101	.5	.5	99.19	17–MAR–10 01:31	per0316072a
Perchlorate	.5	.49	97.46	17–MAR–10 03:16	per0316085a
Perchlorate Isotope Ratio		2.95		17–MAR–10 03:16	per0316085a
Perchlorate–101	.5	.5	99.35	17–MAR–10 03:16	per0316085a
Perchlorate	.5	.5	99.24	17–MAR–10 05:01	per0316098a
Perchlorate Isotope Ratio		3.19		17–MAR–10 05:01	per0316098a
Perchlorate–101	.5	.47	93.57	17–MAR–10 05:01	per0316098a

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

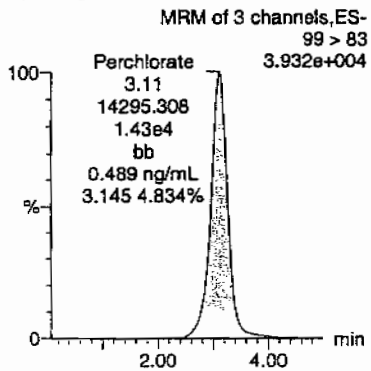
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

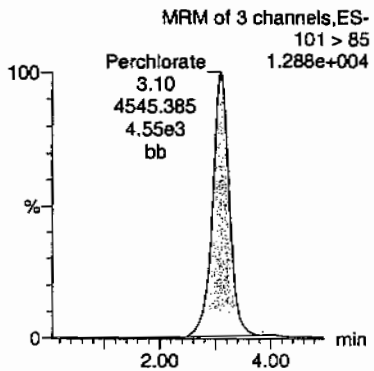
Name: per0316022a
Date: 16-Mar-2010
Time: 18:49:10
ID: WCL100309-06CCV
Vial: 1:2,A

Rev
aw
03-17-10

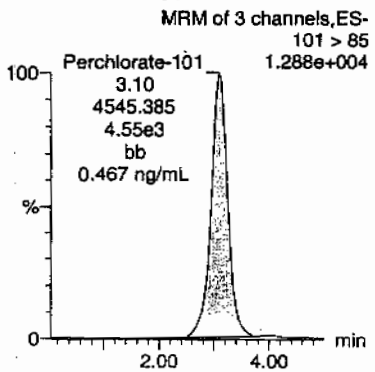
Perchlorate



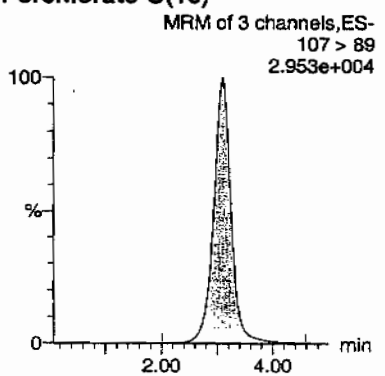
Perchlorate



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	3.11	14295.308	14295.308	bb			0.4894	97.88	-2.12	15740....	3.15
WCL100309-06CCV	Perchlorate-101	101 > 85	3.10	4545.385	4545.385	bb			0.4675	93.50	-6.50	503.156	
WCL100309-06CCV	Perchlorate-O(18)	107 > 89	3.10	10724.596	10724.596	bb			0.4488	89.77	-10.23	985.181	

MAT
3/18/10

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

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

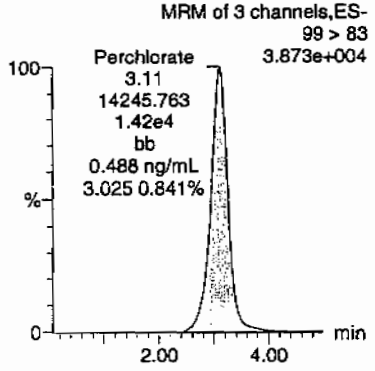
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qid

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

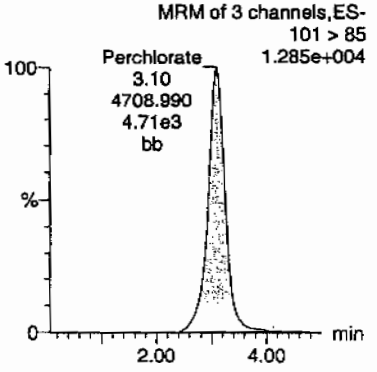
Name: per0316035a
Date: 16-Mar-2010
Time: 20:33:44
ID: WCL100309-06CCV
Vial: 1:2,A

Pass
03.17.10

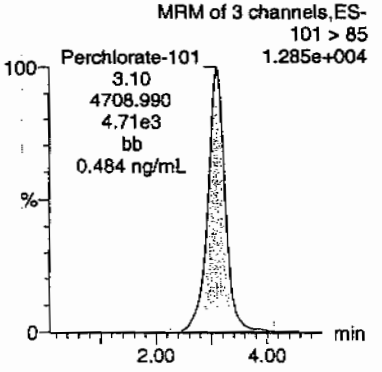
Perchlorate



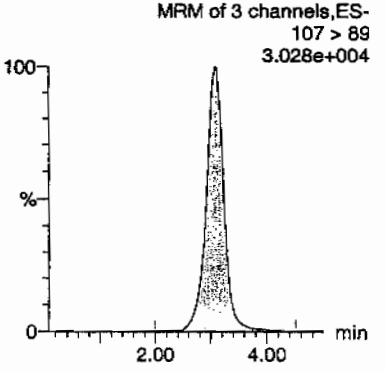
Perchlorate



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	3.11	14245.763	14245.763	bb			0.4877	97.54	-2.46	532.304	3.03
WCL100309-06CCV	Perchlorate-101	101 > 85	3.10	4708.990	4708.990	bb			0.4843	96.86	-3.14	2992.1...	
WCL100309-06CCV	Perchlorate-O(18)	107 > 89	3.09	11023.469	11023.469	bb			0.4613	92.27	-7.73	1891.5...	

MM
3/18/10

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

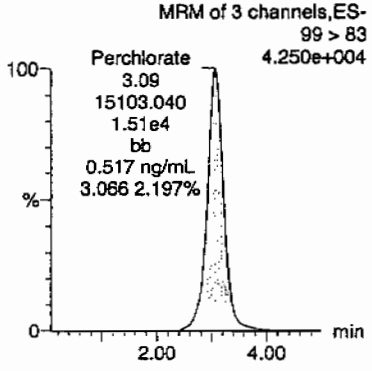
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

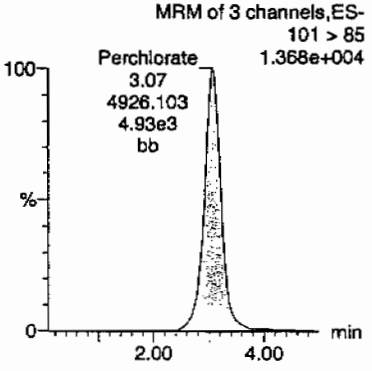
Name: per0316048a
Date: 16-Mar-2010
Time: 22:18:22
ID: WCL100309-06CCV
Vial: 1:2,A

PWD
GWD
03-17-10

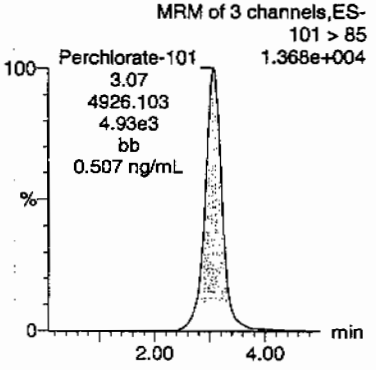
Perchlorate



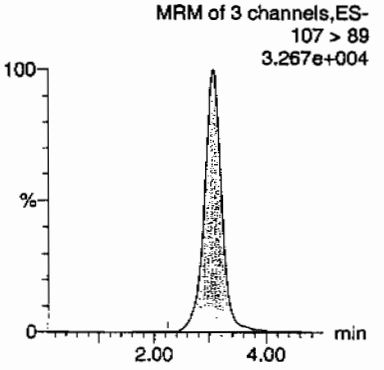
Perchlorate



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	3.09	15103.040	15103.040	bb			0.5171	103.41	3.41	3240.2...	3.07
WCL100309-06CCV	Perchlorate-101	101 > 85	3.07	4926.103	4926.103	bb			0.5066	101.33	1.33	257.517	
WCL100309-06CCV	Perchlorate-O(18)	107 > 89	3.06	11624.273	11624.273	bb			0.4865	97.30	-2.70	2205.1...	

MMP
3/18/10

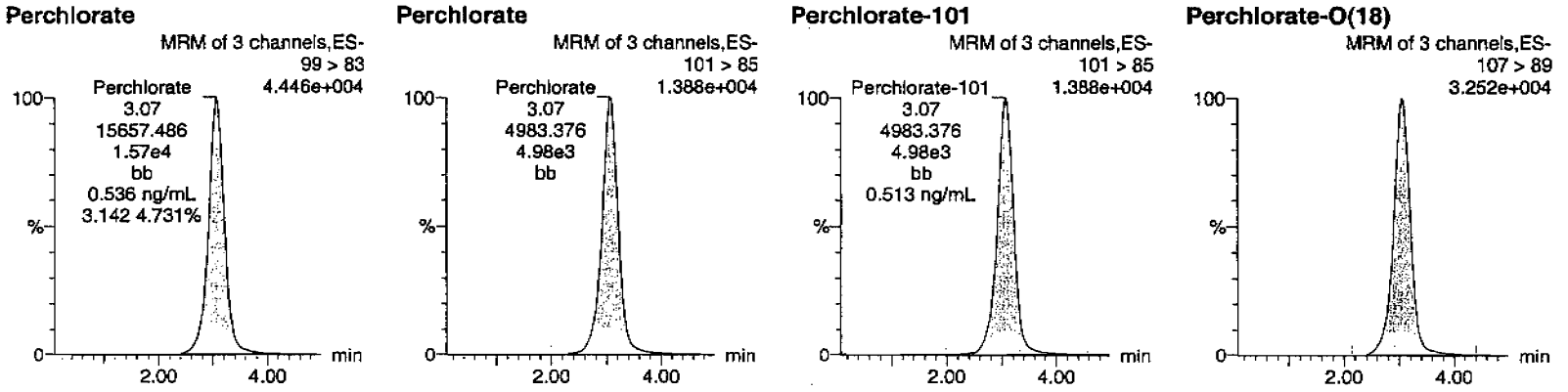
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

Name: per0316059a
Date: 16-Mar-2010
Time: 23:47:00
ID: WCL100309-06CCV
Vial: 1:2,A

CWW 03-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-06CCV	Perchlorate	99 > 83	3.07	15657.486	15657.486	bb			0.5360	107.21	7.21	3252.8...	3.14
WCL100309-06CCV	Perchlorate-101	101 > 85	3.07	4983.376	4983.376	bb			0.5125	102.51	2.51	3152.8...	
WCL100309-06CCV	Perchlorate-O(18)	107 > 89	3.05	11688.516	11688.516	bb			0.4892	97.83	-2.17	3018.0...	

MMT 3/18/10

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

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

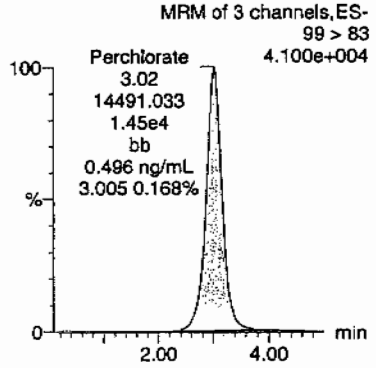
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

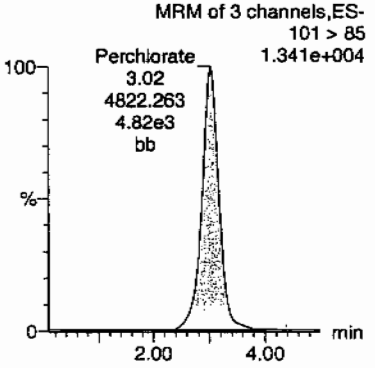
Name: per0316072a
Date: 17-Mar-2010
Time: 01:31:35
ID: WCL100309-06CCV
Vial: 1:2,A

Pass
03-17-10

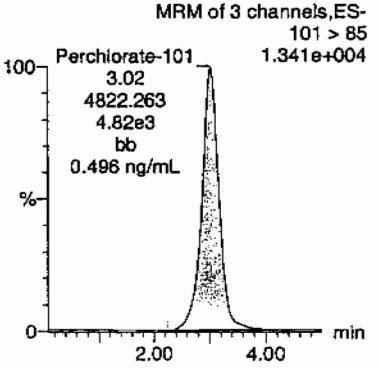
Perchlorate



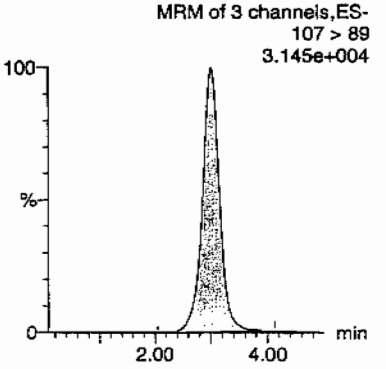
Perchlorate



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	3.02	14491.033	14491.033	bb			0.4961	99.22	-0.78	2217.4...	3.01
WCL100309-06CCV	Perchlorate-101	101 > 85	3.02	4822.263	4822.263	bb			0.4960	99.19	-0.81	897.727	
WCL100309-06CCV	Perchlorate-O(18)	107 > 89	3.01	11153.669	11153.669	bb			0.4668	93.36	-6.64	707.033	

MATT
3/18/10

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

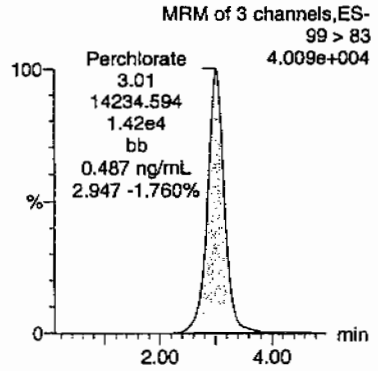
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

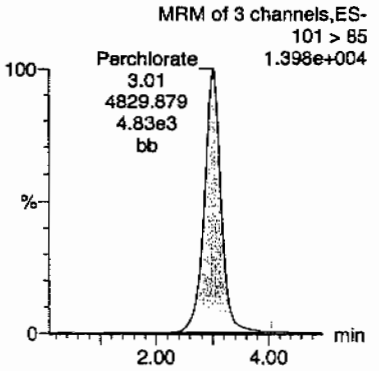
Name: per0316085a
Date: 17-Mar-2010
Time: 03:16:29
ID: WCL100309-06CCV
Vial: 1:2,A

Pass
ana
03-17-10

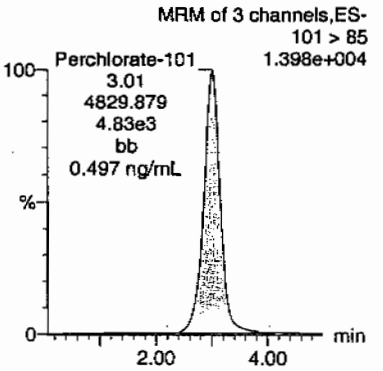
Perchlorate



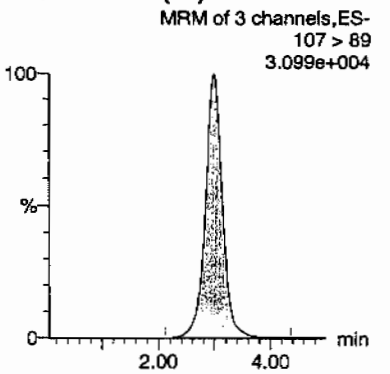
Perchlorate



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	3.01	14234.594	14234.594	bb			0.4873	97.46	-2.54	1070.3...	2.95
WCL100309-06CCV	Perchlorate-101	101 > 85	3.01	4829.879	4829.879	bb			0.4968	99.35	-0.65	3350.8...	
WCL100309-06CCV	Perchlorate-O(18)	107 > 89	3.00	11000.735	11000.735	bb			0.4604	92.08	-7.92	3039.7...	

MMP 3/18/10

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

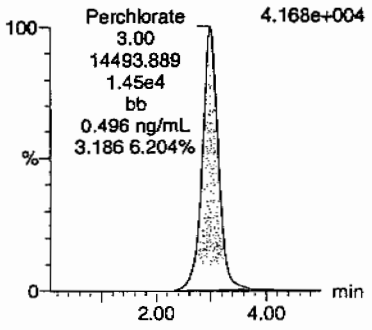
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

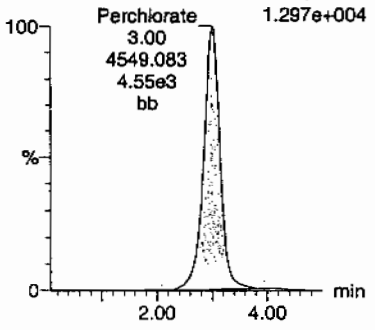
Name: per0316098a
Date: 17-Mar-2010
Time: 05:01:34
ID: WCL100309-06CCV
Vial: 1:2,A

Pass
aw
03-17-10

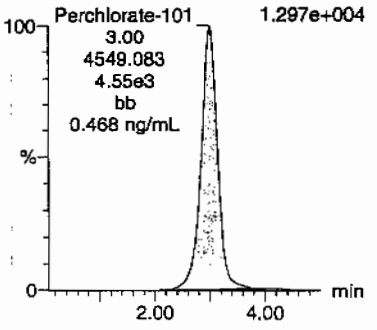
Perchlorate



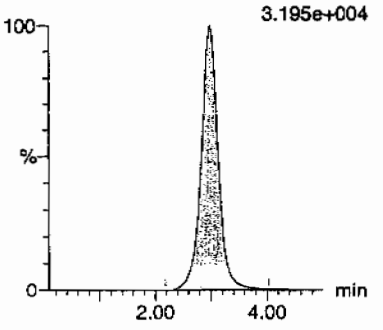
Perchlorate



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	3.00	14493.889	14493.889	bb			0.4962	99.24	-0.76	1776.4...	3.19
WCL100309-06CCV	Perchlorate-101	101 > 85	3.00	4549.083	4549.083	bb			0.4679	93.57	-6.43	751.536	
WCL100309-06CCV	Perchlorate-O(18)	107 > 89	2.99	11228.830	11228.830	bb			0.4699	93.99	-6.01	1405.5...	

MMP
3/18/10

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

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–2155–1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	98.61	16–MAR–10 17:20	per0316011a
Perchlorate Isotope Ratio		2.87		16–MAR–10 17:20	per0316011a
Perchlorate–101	.05	.05	103.28	16–MAR–10 17:20	per0316011a
Perchlorate	.05	.05	93.33	16–MAR–10 19:05	per0316024a
Perchlorate Isotope Ratio		2.62		16–MAR–10 19:05	per0316024a
Perchlorate–101	.05	.05	106.93	16–MAR–10 19:05	per0316024a
Perchlorate	.05	.05	95.82	16–MAR–10 20:49	per0316037a
Perchlorate Isotope Ratio		2.91		16–MAR–10 20:49	per0316037a
Perchlorate–101	.05	.05	98.91	16–MAR–10 20:49	per0316037a
Perchlorate	.05	.05	94.44	16–MAR–10 22:34	per0316050a
Perchlorate Isotope Ratio		2.96		16–MAR–10 22:34	per0316050a

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2155-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.05	.05	95.81	16-MAR-10 22:34	per0316050a
Perchlorate	.05	.05	106.19	17-MAR-10 00:03	per0316061a
Perchlorate Isotope Ratio		3.06		17-MAR-10 00:03	per0316061a
Perchlorate-101	.05	.05	104.38	17-MAR-10 00:03	per0316061a
Perchlorate	.05	.05	102.48	17-MAR-10 01:47	per0316074a
Perchlorate Isotope Ratio		3.21		17-MAR-10 01:47	per0316074a
Perchlorate-101	.05	.05	96.05	17-MAR-10 01:47	per0316074a
Perchlorate	.05	.05	96.19	17-MAR-10 03:32	per0316087a
Perchlorate Isotope Ratio		3.26		17-MAR-10 03:32	per0316087a
Perchlorate-101	.05	.04	88.55	17-MAR-10 03:32	per0316087a
Perchlorate	.05	.04	89.36	17-MAR-10 05:17	per0316100a

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2155-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		2.89		17-MAR-10 05:17	per0316100a
Perchlorate-101	.05	.05	92.99	17-MAR-10 05:17	per0316100a

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

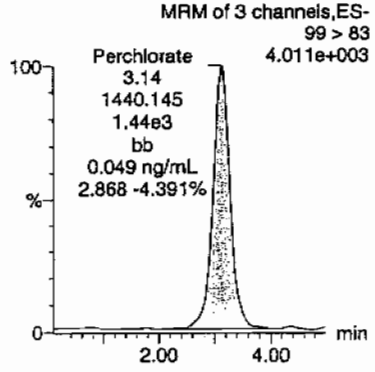
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

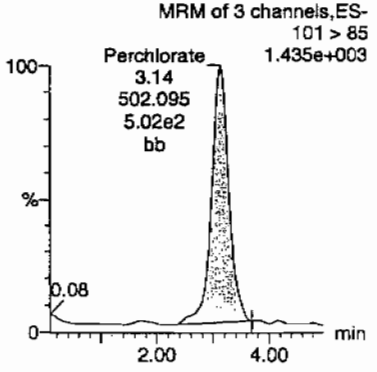
Name: per0316011a
Date: 16-Mar-2010
Time: 17:20:47
ID: WCL100309-07CRI
Vial: 1:2,B

Pass
CWD
03-17-10

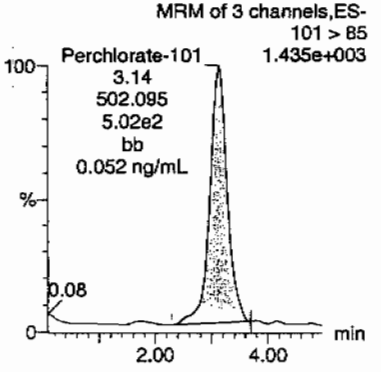
Perchlorate



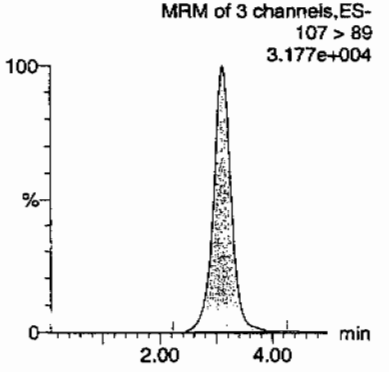
Perchlorate



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	3.14	1440.145	1440.145	bb			0.0493	98.61	-1.39	486.148	2.87
WCL100309-07CRI	Perchlorate-101	101 > 85	3.14	502.095	502.095	bb			0.0516	103.28	3.28	106.460	
WCL100309-07CRI	Perchlorate-O(18)	107 > 89	3.11	11655.735	11655.735	bb			0.4878	97.56	-2.44	2271.4...	

MPT
3/18/10

$$\frac{1440.145}{29209.9} = 0.0493$$

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

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

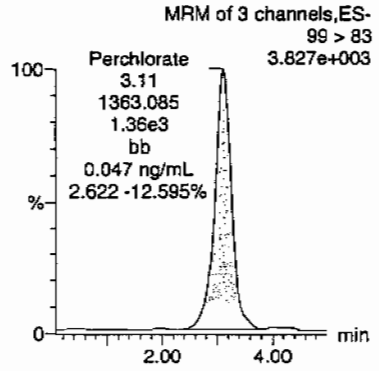
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

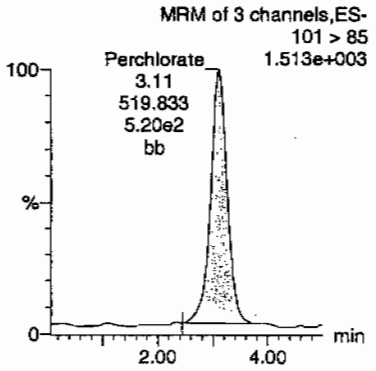
Pass
CWW
03-17-10

Name: per0316024a
Date: 16-Mar-2010
Time: 19:05:15
ID: WCL100309-07CRI
Vial: 1:2,B

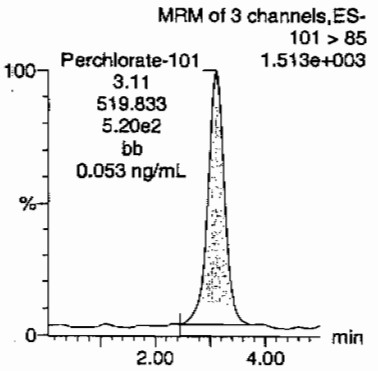
Perchlorate



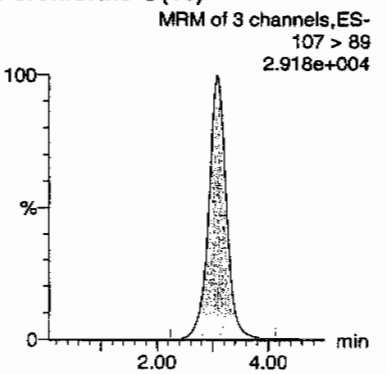
Perchlorate



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	3.11	1363.085	1363.085	bb			0.0467	93.33	-6.67	332.530	2.62
WCL100309-07CRI	Perchlorate-101	101 > 85	3.11	519.833	519.833	bb			0.0535	106.93	6.93	214.332	
WCL100309-07CRI	Perchlorate-O(18)	107 > 89	3.10	10637.331	10637.331	bb			0.4452	89.04	-10.96	2115.3...	

MATT
3/18/10

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

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

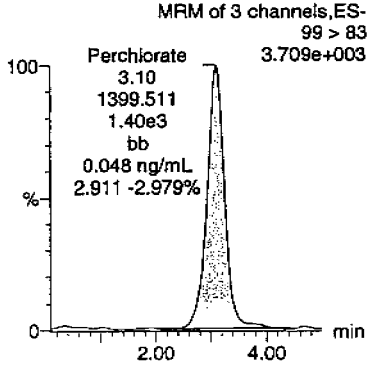
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

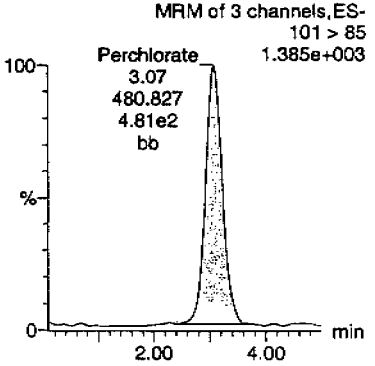
Name: per0316037a
Date: 16-Mar-2010
Time: 20:49:48
ID: WCL100309-07CRI
Vial: 1:2,B

PWB 03-17-10

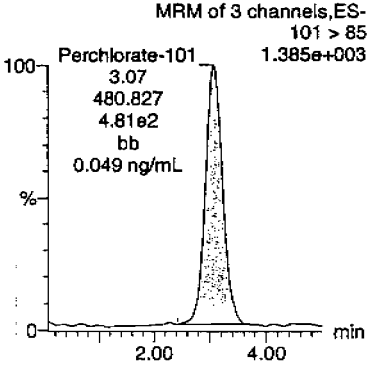
Perchlorate



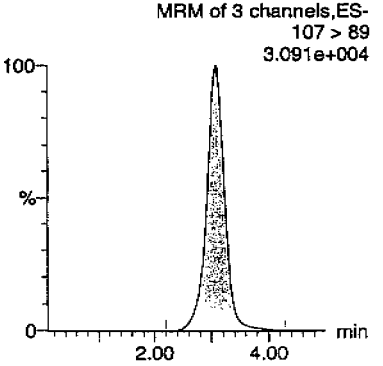
Perchlorate



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	3.10	1399.511	1399.511	bb			0.0479	95.82	-4.18	130.048	2.91
WCL100309-07CRI	Perchlorate-101	101 > 85	3.07	480.827	480.827	bb			0.0495	98.91	-1.09	127.669	
WCL100309-07CRI	Perchlorate-O(18)	107 > 89	3.07	11129.948	11129.948	bb			0.4658	93.16	-6.84	1249.9...	

MATT 3/18/10

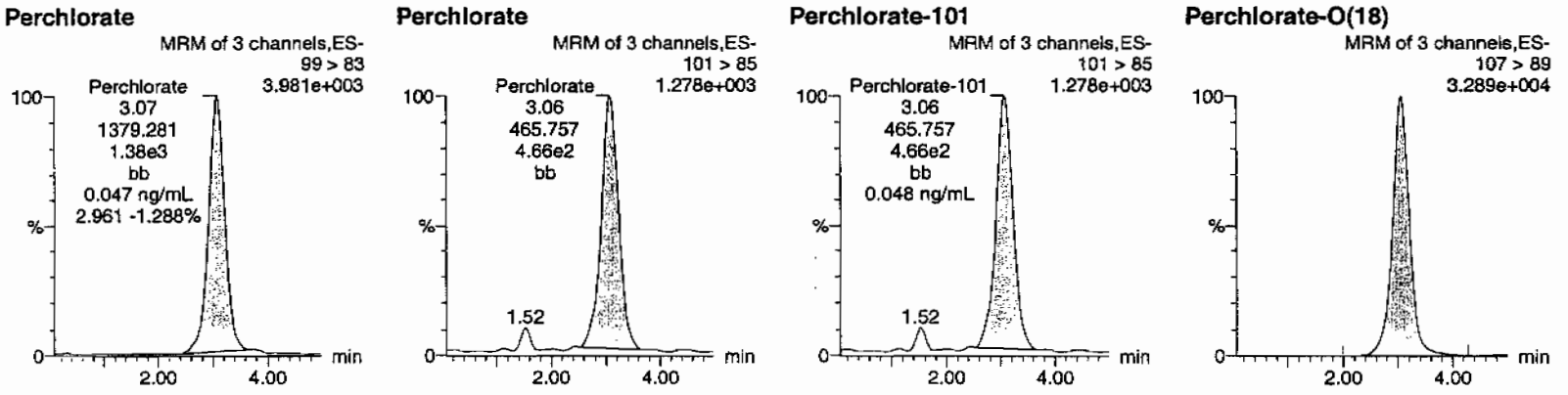
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

Name: per0316050a
Date: 16-Mar-2010
Time: 22:34:27
ID: WCL100309-07CRI
Vial: 1:2,B

PWS
03-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-07CRI	Perchlorate	99 > 83	3.07	1379.281	1379.281	bb			0.0472	94.44	-5.56	338.835	2.96
WCL100309-07CRI	Perchlorate-101	101 > 85	3.06	465.757	465.757	bb			0.0479	95.81	-4.19	84.114	
WCL100309-07CRI	Perchlorate-O(18)	107 > 89	3.06	11766.454	11766.454	bb			0.4924	98.49	-1.51	940.442	

MMT
3/18/10

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

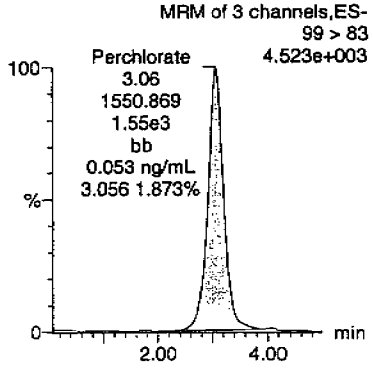
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

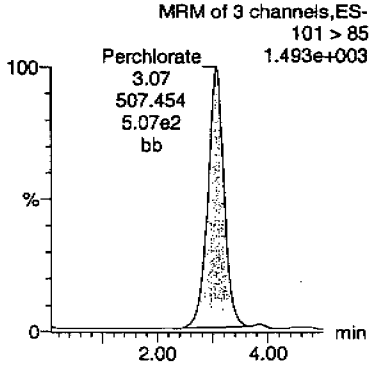
Name: per0316061a
Date: 17-Mar-2010
Time: 00:03:05
ID: WCL100309-07CRI
Vial: 1:2,B

Pass
ad
03.17.10

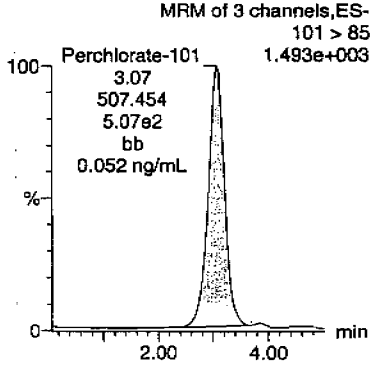
Perchlorate



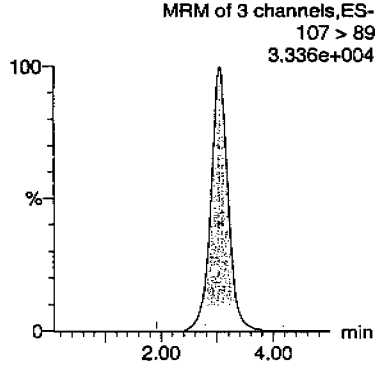
Perchlorate



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	3.06	1550.869	1550.869	bb			0.0531	106.19	6.19	242.285	3.06
WCL100309-07CRI	Perchlorate-101	101 > 85	3.07	507.454	507.454	bb			0.0522	104.38	4.38	54.514	
WCL100309-07CRI	Perchlorate-O(18)	107 > 89	3.05	11953.760	11953.760	bb			0.5003	100.05	0.05	738.699	

MAT
3/18/10

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

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

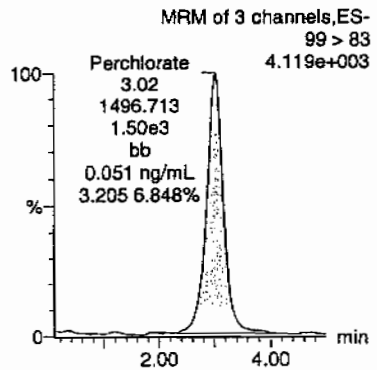
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

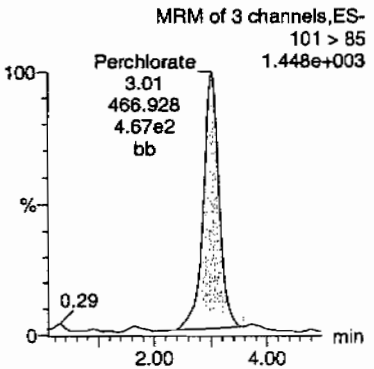
Pers
03-17-10

Name: per0316074a
Date: 17-Mar-2010
Time: 01:47:55
ID: WCL100309-07CRI
Vial: 1:2,B

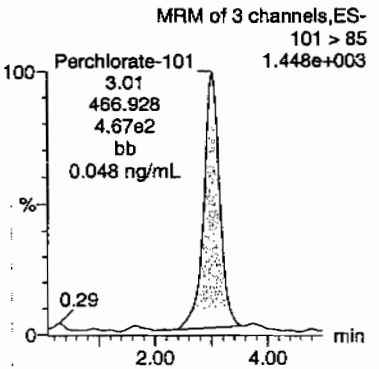
Perchlorate



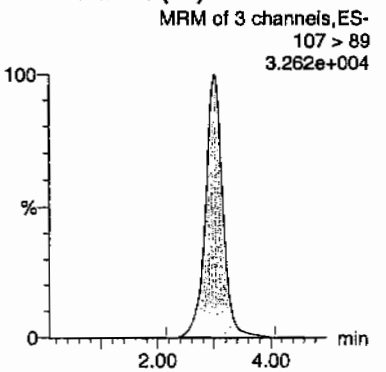
Perchlorate



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	3.02	1496.713	1496.713	bb			0.0512	102.48	2.48	601.276	3.21
WCL100309-07CRI	Perchlorate-101	101 > 85	3.01	466.928	466.928	bb			0.0480	96.05	-3.95	134.539	
WCL100309-07CRI	Perchlorate-O(18)	107 > 89	3.01	11511.645	11511.645	bb			0.4818	96.35	-3.65	2957.1...	

MJT 3/18/10

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

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

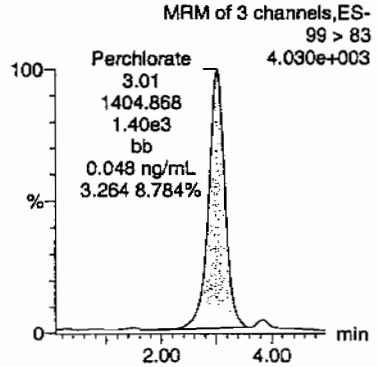
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

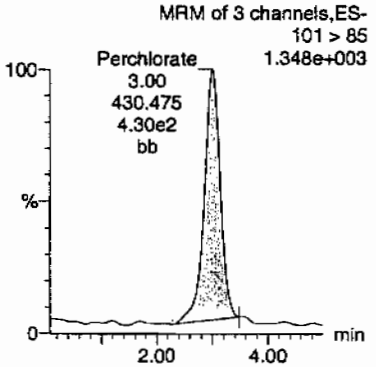
Name: per0316087a
Date: 17-Mar-2010
Time: 03:32:49
ID: WCL100309-07CRI
Vial: 1:2,B

PWP
03-17-10

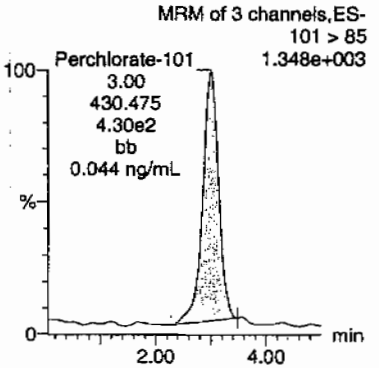
Perchlorate



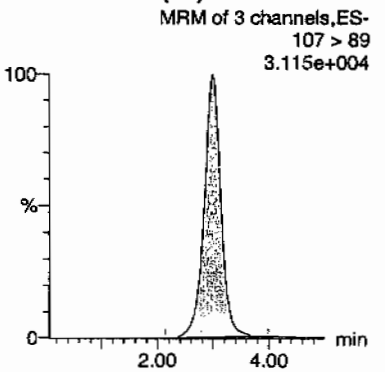
Perchlorate



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	3.01	1404.868	1404.868	bb			0.0481	96.19	-3.81	960.501	3.26
WCL100309-07CRI	Perchlorate-101	101 > 85	3.00	430.475	430.475	bb			0.0443	88.55	-11.45	188.319	
WCL100309-07CRI	Perchlorate-O(18)	107 > 89	3.00	10936.855	10936.855	bb			0.4577	91.54	-8.46	1135.0...	

MPT
3/18/10

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

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

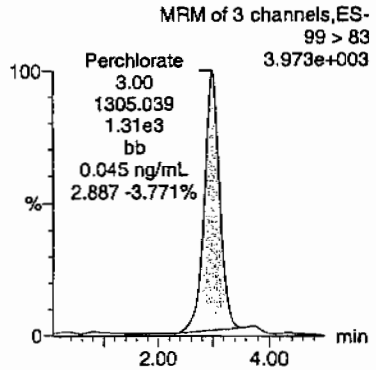
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

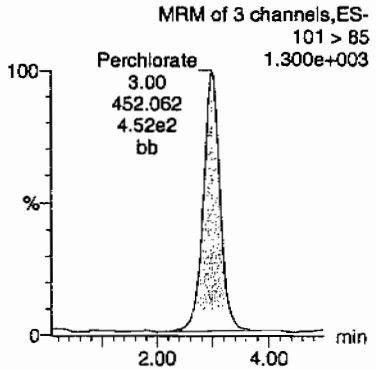
Name: per0316100a
Date: 17-Mar-2010
Time: 05:17:53
ID: WCL100309-07CRI
Vial: 1:2,B

PWD
03-17-10

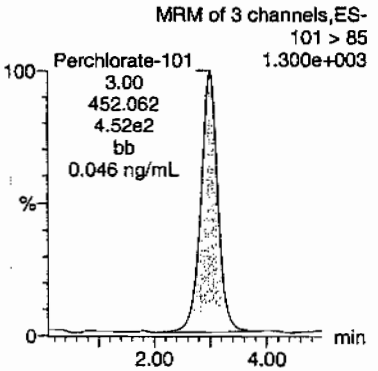
Perchlorate



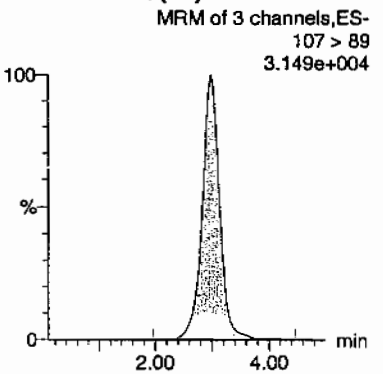
Perchlorate



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	3.00	1305.039	1305.039	bb			0.0447	89.36	-10.64	331.453	2.89
WCL100309-07CRI	Perchlorate-101	101 > 85	3.00	452.062	452.062	bb			0.0465	92.99	-7.01	190.837	
WCL100309-07CRI	Perchlorate-O(18)	107 > 89	2.99	11128.553	11128.553	bb			0.4657	93.15	-6.85	6365.0...	

MMT
3/18/10

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

QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 962135

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
MB

Date Received: 08-MAR-10

GEL Job No (SDG): 10-2155-1

GEL Sample ID: 1202063757

Date Filtered: 08-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	17-MAR-10 03:40	per0316088a
	Perchlorate Isotope Ratio						1	17-MAR-10 03:40	per0316088a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	17-MAR-10 03:40	per0316088a
	Perchlorate-O(18)			0.478	ug/L		1	17-MAR-10 03:40	per0316088a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

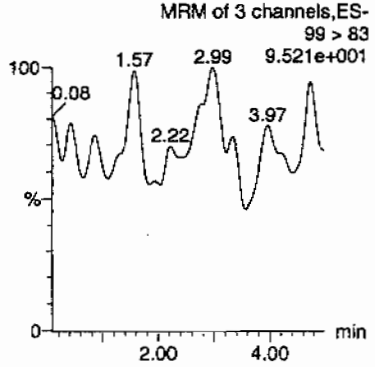
Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

Name: per0316088a
Date: 17-Mar-2010
Time: 03:40:53
ID: 1202063757
Vial: 2:5,A

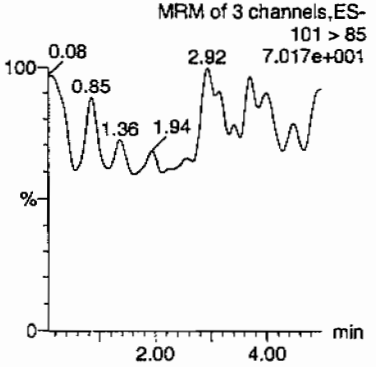
LANL | 962136 | LZQ | MB | 11

WO 20-1710

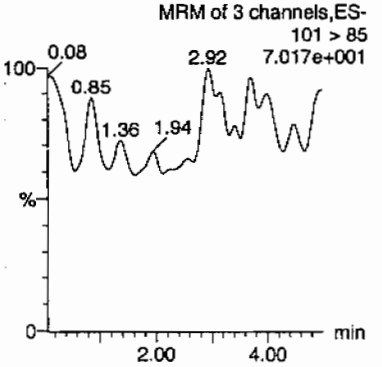
Perchlorate



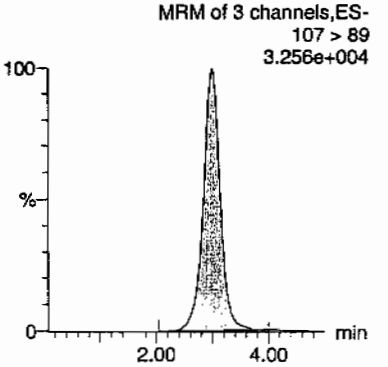
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202063757	Perchlorate	99 > 83											0.00
1202063757	Perchlorate-101	101 > 85											
1202063757	Perchlorate-O(18)	107 > 89	3.00	11417.856	11417.856	bb			0.4778	95.57	-4.43	1583.4...	

MAT 3/18/10

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: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 962135

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
LCS

Date Received: 08-MAR-10

GEL Job No (SDG): 10-2155-1

GEL Sample ID: 1202063758

Date Filtered: 08-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	0.329	ug/L		1	17-MAR-10 03:49	per0316089a
	Perchlorate Isotope Ratio			2.98			1	17-MAR-10 03:49	per0316089a
14797-73-0	Perchlorate-101	.05	.2	0.331	ug/L		1	17-MAR-10 03:49	per0316089a
	Perchlorate-O(18)			0.465	ug/L		1	17-MAR-10 03:49	per0316089a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qid

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

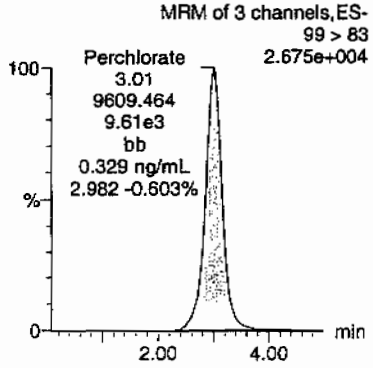
NEED DCR: HIGH LCS BUT ONLY SMALL HITS IN SAMPLES < MDL.

Name: per0316089a
Date: 17-Mar-2010
Time: 03:49:07
ID: 1202063758
Vial: 2:5,B

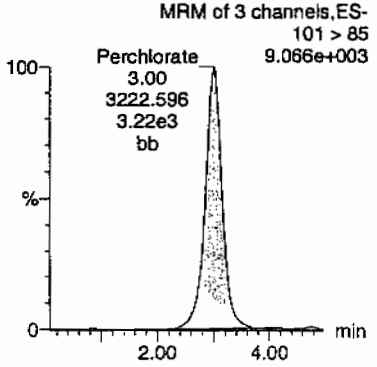
| LANL | 962136 | BLQ | LCS | 1 |

WW 031710

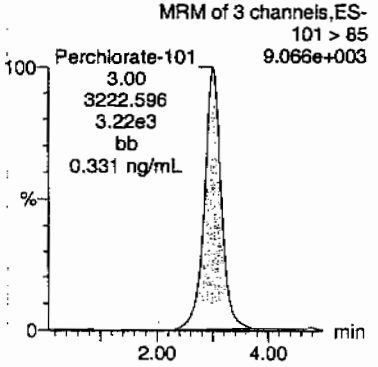
Perchlorate



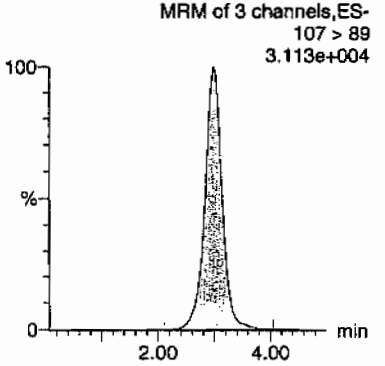
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202063758	Perchlorate	99 > 83	3.01	9609.464	9609.464	bb			0.3290	164.49	64.49	600.875	2.98
1202063758	Perchlorate-101	101 > 85	3.00	3222.596	3222.596	bb			0.3314	165.72	65.72	674.917	
1202063758	Perchlorate-O(18)	107 > 89	3.00	11116.203	11116.203	bb			0.4652	93.04	-6.96	4993.7...	

MM 3/18/10

$$\frac{9609.464}{29209.9} = 0.3290$$

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

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: 962135 Verified by:
Analyst: Jareth Shirley
Method: SW846 6850 Modified

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

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1202063757 MB	08-MAR-2010 14:28:00	10	10	1
1202063758 LCS	08-MAR-2010 14:28:00	10	10	1
248375001	08-MAR-2010 14:28:00	10	10	1
248375002	08-MAR-2010 14:28:00	10	10	1
248407001	08-MAR-2010 14:28:00	10	10	1
1202063759 MS (248407001)	08-MAR-2010 14:28:00	10	10	1
1202063760 MSD (248407001)	08-MAR-2010 14:28:00	10	10	1
248419001	08-MAR-2010 14:28:00	10	10	1
248419002	08-MAR-2010 14:28:00	10	10	1
248516001	08-MAR-2010 14:28:00	10	10	1
248516002	08-MAR-2010 14:28:00	10	10	1
248518001	08-MAR-2010 14:28:00	10	10	1
248523001	08-MAR-2010 14:28:00	10	10	1
248533001	08-MAR-2010 14:28:00	10	10	1
248535001	08-MAR-2010 14:28:00	10	10	1
248535002	08-MAR-2010 14:28:00	10	10	1
248551001	08-MAR-2010 14:28:00	10	10	1
248551002	08-MAR-2010 14:28:00	10	10	1
248638001	08-MAR-2010 14:28:00	10	10	1
248649001	08-MAR-2010 14:28:00	10	10	1
248649002	08-MAR-2010 14:28:00	10	10	1
248685001	08-MAR-2010 14:28:00	10	10	1
248685002	08-MAR-2010 14:28:00	10	10	1
1202063761 ICS	08-MAR-2010 14:28:00	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1202063761	10 ug/L ICV/CCV Second Source	UCL100226-01.1	.2	mL
LCS	1202063758	10 ug/L ICV/CCV Second Source	UCL100226-01.1	.2	mL
MS	1202063759	10 ug/L ICV/CCV Second Source	UCL100226-01.1	.2	mL
MSD	1202063760	10 ug/L ICV/CCV Second Source	UCL100226-01.1	.2	mL
RGNT	All	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1262643	10	mL
RGNT	All	O2SI HPLC Grade Water	1271949	10	mL

Comments:

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

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 03/16/10
Extr. Injection Volume: 20uL
Sequence Number: per031610a
Initial Calibration Date: 03/16/10

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

Reviewed BY: MM
Date: 3/18/10
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100309-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0316001a	IPB001	CWW	3/16/2010 16:00			1		USE	B
per0316002a	IPB001	CWW	3/16/2010 16:08			1		USE	B
per0316003a	WCLICAL-01	CWW	3/16/2010 16:16			1		USE	I
per0316004a	WCLICAL-02	CWW	3/16/2010 16:24			1		USE	I
per0316005a	WCLICAL-03	CWW	3/16/2010 16:32			1		USE	I
per0316006a	WCLICAL-04	CWW	3/16/2010 16:40			1		USE	I
per0316007a	WCLICAL-05	CWW	3/16/2010 16:48			1		USE	I
per0316008a	IPB002	CWW	3/16/2010 16:56			1		USE	B
per0316009a	WCLICV	CWW	3/16/2010 17:04			1		USE	C
per0316010a	IPB003	CWW	3/16/2010 17:12			1		USE	B
per0316011a	WCLCRI	CWW	3/16/2010 17:20			1		USE	C
per0316012a	248633001	CWW	3/16/2010 17:28	962119	LPTP10-S1	5000	PTQA	USE	S
per0316013a	1202063730	CWW	3/16/2010 17:36	962119	LPTP10-S2	5000	PTQA	USE	S
per0316014a	248065008	CWW	3/16/2010 17:44	958968	10-2086	1		USE	S
per0316015a	IPB004	CWW	3/16/2010 17:52			1		USE	B
per0316016a	1202054236	CWW	3/16/2010 18:00	957953	10-1976-1	1	LANL	USE	S
per0316017a	1202054237	CWW	3/16/2010 18:09	957953	10-1976-1	1	LANL	USE	S
per0316018a	1202054240	CWW	3/16/2010 18:17	957953	10-1976-1	1	LANL	USE	S
per0316019a	247781001	CWW	3/16/2010 18:25	957953	10-1976-1	1	LANL	USE	S
per0316020a	1202054238	CWW	3/16/2010 18:33	957953	10-1976-1	1	LANL	USE	S
per0316021a	1202054239	CWW	3/16/2010 18:41	957953	10-1976-1	1	LANL	USE	S
per0316022a	WCLCCV	CWW	3/16/2010 18:49			1		USE	C
per0316023a	IPB005	CWW	3/16/2010 18:57			1		USE	B
per0316024a	WCLCRI	CWW	3/16/2010 19:05			1		USE	C
per0316025a	247781002	CWW	3/16/2010 19:13	957953	10-1976-1	1	LANL	USE	S
per0316026a	247781003	CWW	3/16/2010 19:21	957953	10-1976-1	1	LANL	USE	S
per0316027a	IPB006	CWW	3/16/2010 19:29			1		USE	B
per0316028a	1202063732	CWW	3/16/2010 19:37	962121	10-2256	1	LANL	USE	S
per0316029a	1202063733	CWW	3/16/2010 19:45	962121	10-2256	1	LANL	USE	S

per0316030a	1202063736	CWW	3/16/2010 19:53	962121	10-2256	1	LANL	USE	S
per0316031a	248666001	CWW	3/16/2010 20:01	962121	10-2256	1	LANL	USE	S
per0316032a	1202063734	CWW	3/16/2010 20:09	962121	10-2256	1	LANL	USE	S
per0316033a	1202063735	CWW	3/16/2010 20:17	962121	10-2256	1	LANL	USE	S
per0316034a	248666002	CWW	3/16/2010 20:25	962121	10-2256	1	LANL	USE	S
per0316035a	WCLCCV	CWW	3/16/2010 20:33			1		USE	C
per0316036a	IPB007	CWW	3/16/2010 20:41			1		USE	B
per0316037a	WCLCRI	CWW	3/16/2010 20:49			1		USE	C
per0316038a	248666003	CWW	3/16/2010 20:57	962121	10-2256	1	LANL	USE	S
per0316039a	248666004	CWW	3/16/2010 21:05	962121	10-2256	1	LANL	USE	S
per0316040a	248666005	CWW	3/16/2010 21:13	962121	10-2256	1	LANL	USE	S
per0316041a	248666006	CWW	3/16/2010 21:22	962121	10-2256	1	LANL	USE	S
per0316042a	248666007	CWW	3/16/2010 21:30	962121	10-2256	1	LANL	USE	S
per0316043a	248666008	CWW	3/16/2010 21:38	962121	10-2256	1	LANL	USE	S
per0316044a	248666009	CWW	3/16/2010 21:46	962121	10-2256	1	LANL	USE	S
per0316045a	248666010	CWW	3/16/2010 21:54	962121	10-2256	1	LANL	USE	S
per0316046a	248666011	CWW	3/16/2010 22:02	962121	10-2256	1	LANL	USE	S
per0316047a	248666012	CWW	3/16/2010 22:10	962121	10-2256	1	LANL	USE	S
per0316048a	WCLCCV	CWW	3/16/2010 22:18			1		USE	C
per0316049a	IPB008	CWW	3/16/2010 22:26			1		USE	B
per0316050a	WCLCRI	CWW	3/16/2010 22:34			1		USE	C
per0316051a	248666013	CWW	3/16/2010 22:42	962121	10-2256	1	LANL	USE	S
per0316052a	248666014	CWW	3/16/2010 22:50	962121	10-2256	1	LANL	USE	S
per0316053a	248666015	CWW	3/16/2010 22:58	962121	10-2256	1	LANL	USE	S
per0316054a	248666016	CWW	3/16/2010 23:06	962121	10-2256	1	LANL	USE	S
per0316055a	248666017	CWW	3/16/2010 23:14	962121	10-2256	1	LANL	USE	S
per0316056a	248666018	CWW	3/16/2010 23:22	962121	10-2256	1	LANL	USE	S
per0316057a	248666019	CWW	3/16/2010 23:30	962121	10-2256	1	LANL	USE	S
per0316058a	248666020	CWW	3/16/2010 23:38	962121	10-2256	1	LANL	USE	S
per0316059a	WCLCCV	CWW	3/16/2010 23:47			1		USE	C
per0316060a	IPB009	CWW	3/16/2010 23:55			1		USE	B
per0316061a	WCLCRI	CWW	3/17/2010 0:03			1		USE	C
per0316062a	1202063737	CWW	3/17/2010 0:11	962124	VARIOUS	1	LANL	USE	S
per0316063a	1202063738	CWW	3/17/2010 0:19	962124	VARIOUS	1	LANL	USE	S
per0316064a	1202063741	CWW	3/17/2010 0:27	962124	VARIOUS	1	LANL	USE	S
per0316065a	248250001	CWW	3/17/2010 0:35	962124	10-2141	1	LANL	USE	S
per0316066a	248250002	CWW	3/17/2010 0:43	962124	10-2141	1	LANL	DUSE-DL	S

per0316067a	1202063739	CWW	3/17/2010 0:51	962124	10-2141	1	LANL	DUSE-DL	S
per0316068a	1202063740	CWW	3/17/2010 0:59	962124	10-2141	1	LANL	DUSE-DL	S
per0316069a	248250003	CWW	3/17/2010 1:07	962124	10-2141	1	LANL	DUSE-DL	S
per0316070a	248250004	CWW	3/17/2010 1:15	962124	10-2141	1	LANL	DUSE-DL	S
per0316071a	248386003	CWW	3/17/2010 1:23	962124	10-2164	1	LANL	DUSE-RA	S
per0316072a	WCLCCV	CWW	3/17/2010 1:31			1		USE	C
per0316073a	IPB010	CWW	3/17/2010 1:39			1		USE	B
per0316074a	WCLCRI	CWW	3/17/2010 1:47			1		USE	C
per0316075a	248386004	CWW	3/17/2010 1:55	962124	10-2164	1	LANL	USE	S
per0316076a	248549001	CWW	3/17/2010 2:04	962124	10-2214	1	LANL	USE	S
per0316077a	248549002	CWW	3/17/2010 2:12	962124	10-2214	1	LANL	USE	S
per0316078a	248549003	CWW	3/17/2010 2:20	962124	10-2214	1	LANL	USE	S
per0316079a	248549004	CWW	3/17/2010 2:28	962124	10-2214	1	LANL	USE	S
per0316080a	248549005	CWW	3/17/2010 2:36	962124	10-2214	1	LANL	USE	S
per0316081a	248549006	CWW	3/17/2010 2:44	962124	10-2214	1	LANL	USE	S
per0316082a	248682001	CWW	3/17/2010 2:52	962124	10-2259	1	LANL	USE	S
per0316083a	248682002	CWW	3/17/2010 3:00	962124	10-2259	1	LANL	USE	S
per0316084a	248682003	CWW	3/17/2010 3:08	962124	10-2259	1	LANL	USE	S
per0316085a	WCLCCV	CWW	3/17/2010 3:16			1		USE	C
per0316086a	IPB011	CWW	3/17/2010 3:24			1		USE	B
per0316087a	WCLCRI	CWW	3/17/2010 3:32			1		USE	C
per0316088a	1202063757	CWW	3/17/2010 3:40	962136	VARIOUS	1	LANL	USE	S
per0316089a	1202063758	CWW	3/17/2010 3:49	962136	VARIOUS	1	LANL	USE	S
per0316090a	1202063761	CWW	3/17/2010 3:57	962136	VARIOUS	1	LANL	USE	S
per0316091a	248375001	CWW	3/17/2010 4:05	962136	10-2155-1	1	LANL	USE	S
per0316092a	248375002	CWW	3/17/2010 4:13	962136	10-2155-1	1	LANL	USE	S
per0316093a	248407001	CWW	3/17/2010 4:21	962136	10-2188	1	LANL	USE	S
per0316094a	1202063759	CWW	3/17/2010 4:29	962136	10-2188	1	LANL	USE	S
per0316095a	1202063760	CWW	3/17/2010 4:37	962136	10-2188	1	LANL	USE	S
per0316096a	248419001	CWW	3/17/2010 4:45	962136	10-2191-1	1	LANL	USE	S
per0316097a	248419002	CWW	3/17/2010 4:53	962136	10-2191-1	1	LANL	USE	S
per0316098a	WCLCCV	CWW	3/17/2010 5:01			1		USE	C
per0316099a	IPB012	CWW	3/17/2010 5:09			1		USE	B
per0316100a	WCLCRI	CWW	3/17/2010 5:17			1		USE	C
per0316101a	248516001	CWW	3/17/2010 5:25	962136	10-2197-1	1	LANL	USE	S
per0316102a	248516002	CWW	3/17/2010 5:34	962136	10-2197-1	1	LANL	USE	S
per0316103a	248518001	CWW	3/17/2010 5:42	962136	10-2198-1	1	LANL	USE	S

per0316104a	248523001	CWW	3/17/2010 5:50	962136	10-2203	1	LANL	USE	S
per0316105a	248533001	CWW	3/17/2010 5:58	962136	10-2211-1	1	LANL	USE	S
per0316106a	248535001	CWW	3/17/2010 6:07	962136	10-2208-1	1	LANL	USE	S
per0316107a	248535002	CWW	3/17/2010 6:15	962136	10-2208-1	1	LANL	USE	S
per0316108a	248551001	CWW	3/17/2010 6:23	962136	10-2214-1	1	LANL	USE	S
per0316109a	248551002	CWW	3/17/2010 6:31	962136	10-2214-1	1	LANL	USE	S
per0316110a	248638001	CWW	3/17/2010 6:39	962136	10-2234-1	1	LANL	USE	S
per0316111a	WCLCCV	CWW	3/17/2010 6:47			1		USE	C
per0316112a	IPB013	CWW	3/17/2010 6:55			1		USE	B
per0316113a	WCLCRI	CWW	3/17/2010 7:03			1		USE	C
per0316114a	248649001	CWW	3/17/2010 7:11	962136	10-2240-1	1	LANL	USE	S
per0316115a	248649002	CWW	3/17/2010 7:20	962136	10-2240-1	1	LANL	USE	S
per0316116a	248685001	CWW	3/17/2010 7:28	962136	10-2259-1	1	LANL	USE	S
per0316117a	248685002	CWW	3/17/2010 7:36	962136	10-2259-1	1	LANL	USE	S
per0316118a	248250002	CWW	3/17/2010 7:44	962124	10-2141	2	LANL	USE	S
per0316119a	1202063739	CWW	3/17/2010 7:52	962124	10-2141	2	LANL	USE	S
per0316120a	1202063740	CWW	3/17/2010 8:00	962124	10-2141	2	LANL	USE	S
per0316121a	248250003	CWW	3/17/2010 8:08	962124	10-2141	100	LANL	USE	S
per0316122a	248250004	CWW	3/17/2010 8:16	962124	10-2141	50	LANL	USE	S
per0316123a	248386003	CWW	3/17/2010 8:24	962124	10-2164	1	LANL	USE	S
per0316124a	WCLCCV	CWW	3/17/2010 8:32			1		USE	C
per0316125a	IPB014	CWW	3/17/2010 8:40			1		USE	B
per0316126a	WCLCRI	CWW	3/17/2010 8:48			1		USE	C

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

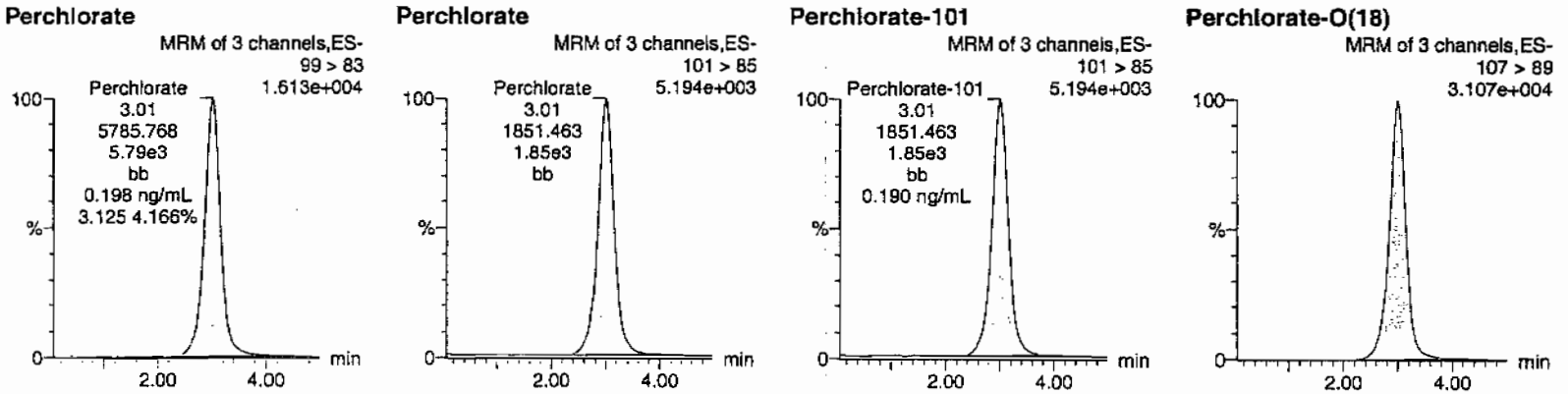
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

Name: per0316094a
Date: 17-Mar-2010
Time: 04:29:20
ID: 1202063759
Vial: 2:6,A

|LANL|962136|LZQ|MS|1|

03-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202063759	Perchlorate	99 > 83	3.01	5785.768	5785.768	bb			0.1981	99.04	-0.96	551.000	3.12
1202063759	Perchlorate-101	101 > 85	3.01	1851.463	1851.463	bb			0.1904	95.21	-4.79	926.372	
1202063759	Perchlorate-O(18)	107 > 89	3.00	11049.848	11049.848	bb			0.4624	92.49	-7.51	2110.9...	

MM 3/18/10

$\frac{5785.768}{29209.9} = 0.1981$

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

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

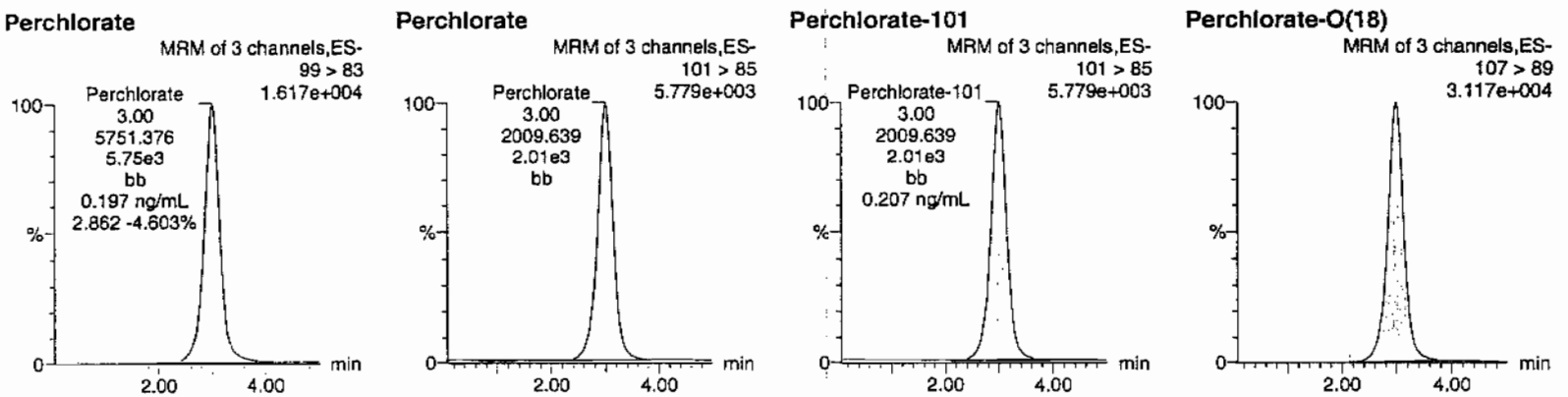
Dataset: C:\MassLynx\Perchlorate.PRO\per031610a.qld

Last Altered: Wednesday, March 17, 2010 9:01:09 AM Eastern Standard Time
Printed: Wednesday, March 17, 2010 9:41:10 AM Eastern Standard Time

Name: per0316095a
Date: 17-Mar-2010
Time: 04:37:24
ID: 1202063760
Vial: 2:6,B

|LANL|962136|L22|MDO|1|

GWJ 03.12.10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion.Ratio
1202063760	Perchlorate	99 > 83	3.00	5751.376	5751.376	bb			0.1969	98.45	-1.55	125.154	2.86
1202063760	Perchlorate-101	101 > 85	3.00	2009.639	2009.639	bb			0.2067	103.35	3.35	743.184	
1202063760	Perchlorate-O(18)	107 > 89	2.99	10870.262	10870.262	bb			0.4549	90.99	-9.01	3201.8...	

LMT 3/18/10

$$\frac{5751.376}{2009.639} = 2.8619$$

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

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
17-MAR-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LC-MS/MS	SW846 6850 Modified	Liquid	LANL
Batch ID:	**Sample Numbers:**		
962136	See Below		

Potentially affected work order(s)(SDG): 248375(10-2155-1),248407(10-2188),248419(10-2191-1),248516(10-2197-1),248518(10-2198-1),248523(10-2203),248533(10-2211-1),248535(10-2208-1),248551(10-2214-1),248638(10-2234-1),248649(10-2240-1),248685(10-2259-1)

Application Issues:

Failed Recovery for LCS/LCSD

Specification and Requirements Exception Description:	DER Disposition:
1. High recoveries were observed for Perchlorate and Perchlorate-101 in 1202063758 (LCS). The recoveries were 164% and 166%, respectively. The acceptance range is 85-115%.	1. The high recovery may be the result of a spiking error at the preparation step. Note the recoveries for the ICS and matrix spikes were all acceptable. Since the detections observed in the associated samples were less than the MDL, samples do not need to be re-extracted. Data will be reported.

Originator's Name:
Charles Wilson 17-MAR-10

Data Validator/Group Leader:
Michael Penny 18-MAR-10

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 10-2155

Sample Analysis

Sample ID	Client ID
248374001	RE36-10-7494
248374002	RE36-10-7493
248374003	RE36-10-7492
248374004	RE36-10-7491
248374005	RE36-10-7496
248374006	RE36-10-7499
248374007	RE36-10-7497
248374008	RE36-10-7495
248374009	RE36-10-7498
248374010	RE36-10-7500
248374011	RE36-10-7523
248374012	RE36-10-7522
248374013	RE36-10-7521
1202060836	Method Blank (MB) **ICP**
1202060837	Laboratory Control Sample (LCS)
1202060840	248374001(RE36-10-7494L) Serial Dilution (SD)
1202060838	248374001(RE36-10-7494D) Sample Duplicate (DUP)
1202060839	248374001(RE36-10-7494S) Matrix Spike (MS)
1202060841	248374001(RE36-10-7494SD) Matrix Spike Duplicate (MSD)
1202060842	Method Blank (MB) **ICP-MS**
1202060843	Laboratory Control Sample (LCS)

1202060846	248374001(RE36-10-7494L) Serial Dilution (SD)
1202060844	248374001(RE36-10-7494D) Sample Duplicate (DUP)
1202060845	248374001(RE36-10-7494S) Matrix Spike (MS)
1202060847	248374001(RE36-10-7494SD) Matrix Spike Duplicate (MSD)
1202069741	Method Blank (MB) **CVAA**
1202069742	Laboratory Control Sample (LCS)
1202069745	248374001(RE36-10-7494L) Serial Dilution (SD)
1202069743	248374001(RE36-10-7494D) Sample Duplicate (DUP)
1202069744	248374001(RE36-10-7494S) Matrix Spike (MS)
1202069746	248374001(RE36-10-7494SD) Matrix Spike Duplicate (MSD)

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

Method/Analysis Information

Analytical Batch:	960819, 960822 and 964730
Prep Batch :	960818, 960821 and 964729
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

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

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

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

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

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

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

Quality Control (QC) Sample Statement
The following sample was selected as the quality control (QC) sample for this SDG: 248374001 (RE36-10-7494).

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 magnesium and potassium, as indicated by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of magnesium and potassium, 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 RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

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

Technical Information

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

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Data Exception (DER) Documentation
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following DER was generated for this SDG: 813720. A copy is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

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

Review Validation:

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

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

Reviewer: Kristen Parson **Date:** 4/15/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374001 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7494 **LEVEL:** Low **DATE RECEIVED** 02-MAR-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	4580000	ug/Kg		7670	22500	22500	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-36-0	Antimony	1130	ug/Kg	U	372	1130	1130	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-38-2	Arsenic	1.22	mg/kg		0.224	1.12	1.12	2	MS	SKJ	04/13/10 21:35	100413-2	960822
7440-39-3	Barium	48500	ug/Kg		113	564	564	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-41-7	Beryllium	0.690	mg/kg		0.0224	0.112	0.112	2	MS	SKJ	04/14/10 13:28	100414-3	960822
7440-43-9	Cadmium	564	ug/Kg	U	113	564	564	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-70-2	Calcium	1520000	ug/Kg		9020	28200	28200	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-47-3	Chromium	10500	ug/Kg		169	564	564	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-48-4	Cobalt	1700	ug/Kg		169	564	564	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-50-8	Copper	4080	ug/Kg		338	1130	1130	1	P	HSC	04/01/10 14:11	040110-1	960819
7439-89-6	Iron	9490000	ug/Kg		9020	28200	28200	1	P	HSC	04/01/10 14:11	040110-1	960819
7439-92-1	Lead	7400	ug/Kg		282	1130	1130	1	P	HSC	04/01/10 14:11	040110-1	960819
7439-95-4	Magnesium	1030000	ug/Kg	N	9580	33800	33800	1	P	HSC	04/01/10 14:11	040110-1	960819
7439-96-5	Manganese	549000	ug/Kg		225	1130	1130	1	P	HSC	04/01/10 14:11	040110-1	960819
7439-97-6	Mercury	32.5	ug/kg		4.43	13	13	1	AV	JXL1	03/17/10 09:26	031710S1-4	964730
7440-02-0	Nickel	5.44	mg/kg		0.112	0.448	0.448	2	MS	SKJ	04/13/10 21:35	100413-2	960822
7440-09-7	Potassium	921000	ug/Kg	N	7210	28200	28200	1	P	HSC	04/01/10 14:11	040110-1	960819
7782-49-2	Selenium	1.12	mg/kg	U	0.56	1.12	1.12	2	MS	SKJ	04/13/10 21:35	100413-2	960822
7440-22-4	Silver	564	ug/Kg	U	113	564	564	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-23-5	Sodium	86200	ug/Kg		7890	28200	28200	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-28-0	Thallium	0.224	mg/kg	U	0.0672	0.224	0.224	2	MS	SKJ	04/13/10 21:35	100413-2	960822
7440-61-1	Uranium	0.587	mg/kg		0.0148	0.0448	0.0448	2	MS	SKJ	04/13/10 21:35	100413-2	960822
7440-62-2	Vanadium	10000	ug/Kg		113	564	564	1	P	HSC	04/01/10 14:11	040110-1	960819
7440-66-6	Zinc	51500	ug/Kg		372	1130	1130	1	P	HSC	04/01/10 14:11	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.506	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.509	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.525	g	30	mL	03/16/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374002 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7493 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 75

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4370000	ug/Kg		8810	25900	25900	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-36-0	Antimony	1300	ug/Kg	U	428	1300	1300	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-38-2	Arsenic	1.72	mg/kg		0.268	1.34	1.34	2	MS	SKJ	04/13/10 21:56	100413-2	960822
7440-39-3	Barium	70000	ug/Kg		130	648	648	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-41-7	Beryllium	0.834	mg/kg		0.0268	0.134	0.134	2	MS	SKJ	04/14/10 13:37	100414-3	960822
7440-43-9	Cadmium	648	ug/Kg	U	130	648	648	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-70-2	Calcium	2870000	ug/Kg		10400	32400	32400	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-47-3	Chromium	5660	ug/Kg		194	648	648	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-48-4	Cobalt	1550	ug/Kg		194	648	648	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-50-8	Copper	5750	ug/Kg		389	1300	1300	1	P	HSC	04/01/10 15:01	040110-1	960819
7439-89-6	Iron	8960000	ug/Kg		10400	32400	32400	1	P	HSC	04/01/10 15:01	040110-1	960819
7439-92-1	Lead	10100	ug/Kg		324	1300	1300	1	P	HSC	04/01/10 15:01	040110-1	960819
7439-95-4	Magnesium	1170000	ug/Kg	N	11000	38900	38900	1	P	HSC	04/01/10 15:01	040110-1	960819
7439-96-5	Manganese	893000	ug/Kg		259	1300	1300	1	P	HSC	04/01/10 15:01	040110-1	960819
7439-97-6	Mercury	186	ug/kg		5.48	16.1	16.1	1	AV	JXL1	03/17/10 09:36	031710S1-4	964730
7440-02-0	Nickel	8.35	mg/kg		0.134	0.537	0.537	2	MS	SKJ	04/13/10 21:56	100413-2	960822
7440-09-7	Potassium	993000	ug/Kg	N	8290	32400	32400	1	P	HSC	04/01/10 15:01	040110-1	960819
7782-49-2	Selenium	1.34	mg/kg	U	0.671	1.34	1.34	2	MS	SKJ	04/13/10 21:56	100413-2	960822
7440-22-4	Silver	349	ug/Kg	J	130	648	648	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-23-5	Sodium	66300	ug/Kg		9070	32400	32400	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-28-0	Thallium	0.268	mg/kg	U	0.0805	0.268	0.268	2	MS	SKJ	04/13/10 21:56	100413-2	960822
7440-61-1	Uranium	1.25	mg/kg		0.0177	0.0537	0.0537	2	MS	SKJ	04/13/10 21:56	100413-2	960822
7440-62-2	Vanadium	8440	ug/Kg		130	648	648	1	P	HSC	04/01/10 15:01	040110-1	960819
7440-66-6	Zinc	46700	ug/Kg		428	1300	1300	1	P	HSC	04/01/10 15:01	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.518	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.5	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.5	g	30	mL	03/16/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374003 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7492 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 79

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12600000	ug/Kg		8130	23900	23900	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-36-0	Antimony	1200	ug/Kg	U	395	1200	1200	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-38-2	Arsenic	2.29	mg/kg		0.245	1.23	1.23	2	MS	SKJ	04/13/10 22:08	100413-2	960822
7440-39-3	Barium	139000	ug/Kg		120	598	598	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-41-7	Beryllium	0.699	mg/kg		0.0245	0.123	0.123	2	MS	SKJ	04/14/10 13:42	100414-3	960822
7440-43-9	Cadmium	598	ug/Kg	U	120	598	598	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-70-2	Calcium	3690000	ug/Kg		9570	29900	29900	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-47-3	Chromium	12900	ug/Kg		179	598	598	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-48-4	Cobalt	3280	ug/Kg		179	598	598	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-50-8	Copper	5990	ug/Kg		359	1200	1200	1	P	HSC	04/01/10 15:08	040110-1	960819
7439-89-6	Iron	11000000	ug/Kg		9570	29900	29900	1	P	HSC	04/01/10 15:08	040110-1	960819
7439-92-1	Lead	8700	ug/Kg		299	1200	1200	1	P	HSC	04/01/10 15:08	040110-1	960819
7439-95-4	Magnesium	1610000	ug/Kg	N	10200	35900	35900	1	P	HSC	04/01/10 15:08	040110-1	960819
7439-96-5	Manganese	220000	ug/Kg		239	1200	1200	1	P	HSC	04/01/10 15:08	040110-1	960819
7439-97-6	Mercury	38.3	ug/kg		4.86	14.3	14.3	1	AV	JXL1	03/17/10 09:38	031710S1-4	964730
7440-02-0	Nickel	6.26	mg/kg		0.123	0.491	0.491	2	MS	SKJ	04/13/10 22:08	100413-2	960822
7440-09-7	Potassium	1560000	ug/Kg	N	7660	29900	29900	1	P	HSC	04/01/10 15:08	040110-1	960819
7782-49-2	Selenium	1.23	mg/kg	U	0.613	1.23	1.23	2	MS	SKJ	04/13/10 22:08	100413-2	960822
7440-22-4	Silver	188	ug/Kg	J	120	598	598	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-23-5	Sodium	121000	ug/Kg		8370	29900	29900	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-28-0	Thallium	0.0912	mg/kg	J	0.0736	0.245	0.245	2	MS	SKJ	04/13/10 22:08	100413-2	960822
7440-61-1	Uranium	1.35	mg/kg		0.0162	0.0491	0.0491	2	MS	SKJ	04/13/10 22:08	100413-2	960822
7440-62-2	Vanadium	21400	ug/Kg		120	598	598	1	P	HSC	04/01/10 15:08	040110-1	960819
7440-66-6	Zinc	25500	ug/Kg		395	1200	1200	1	P	HSC	04/01/10 15:08	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.53	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.517	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.532	g	30	mL	03/16/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374004 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7491 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 65

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7410000	ug/Kg		10400	30600	30600	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-36-0	Antimony	1530	ug/Kg	U	504	1530	1530	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-38-2	Arsenic	2.62	mg/kg		0.309	1.54	1.54	2	MS	SKJ	04/13/10 22:12	100413-2	960822
7440-39-3	Barium	91900	ug/Kg		153	764	764	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-41-7	Beryllium	0.819	mg/kg		0.0309	0.154	0.154	2	MS	SKJ	04/14/10 13:43	100414-3	960822
7440-43-9	Cadmium	764	ug/Kg	U	153	764	764	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-70-2	Calcium	3780000	ug/Kg		12200	38200	38200	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-47-3	Chromium	8700	ug/Kg		229	764	764	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-48-4	Cobalt	2410	ug/Kg		229	764	764	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-50-8	Copper	5980	ug/Kg		459	1530	1530	1	P	HSC	04/01/10 15:15	040110-1	960819
7439-89-6	Iron	8100000	ug/Kg		12200	38200	38200	1	P	HSC	04/01/10 15:15	040110-1	960819
7439-92-1	Lead	9570	ug/Kg		382	1530	1530	1	P	HSC	04/01/10 15:15	040110-1	960819
7439-95-4	Magnesium	1220000	ug/Kg	N	13000	45900	45900	1	P	HSC	04/01/10 15:15	040110-1	960819
7439-96-5	Manganese	283000	ug/Kg		306	1530	1530	1	P	HSC	04/01/10 15:15	040110-1	960819
7439-97-6	Mercury	65.8	ug/kg		6.21	18.3	18.3	1	AV	JXL1	03/17/10 09:40	031710S1-4	964730
7440-02-0	Nickel	7.6	mg/kg		0.154	0.618	0.618	2	MS	SKJ	04/13/10 22:12	100413-2	960822
7440-09-7	Potassium	1210000	ug/Kg	N	9780	38200	38200	1	P	HSC	04/01/10 15:15	040110-1	960819
7782-49-2	Selenium	1.54	mg/kg	U	0.772	1.54	1.54	2	MS	SKJ	04/13/10 22:12	100413-2	960822
7440-22-4	Silver	764	ug/Kg	U	153	764	764	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-23-5	Sodium	101000	ug/Kg		10700	38200	38200	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-28-0	Thallium	0.102	mg/kg	J	0.0926	0.309	0.309	2	MS	SKJ	04/13/10 22:12	100413-2	960822
7440-61-1	Uranium	4.12	mg/kg		0.0204	0.0618	0.0618	2	MS	SKJ	04/13/10 22:12	100413-2	960822
7440-62-2	Vanadium	15000	ug/Kg		153	764	764	1	P	HSC	04/01/10 15:15	040110-1	960819
7440-66-6	Zinc	29300	ug/Kg		504	1530	1530	1	P	HSC	04/01/10 15:15	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.505	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.5	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.507	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374005 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7496 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5350000	ug/Kg		6970	20500	20500	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-36-0	Antimony	1020	ug/Kg	U	338	1020	1020	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-38-2	Arsenic	1.48	mg/kg		0.2	0.999	0.999	2	MS	SKJ	04/13/10 22:16	100413-2	960822
7440-39-3	Barium	58600	ug/Kg		102	512	512	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-41-7	Beryllium	0.617	mg/kg		0.02	0.0999	0.0999	2	MS	SKJ	04/14/10 13:45	100414-3	960822
7440-43-9	Cadmium	512	ug/Kg	U	102	512	512	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-70-2	Calcium	2070000	ug/Kg		8200	25600	25600	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-47-3	Chromium	8900	ug/Kg		154	512	512	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-48-4	Cobalt	2340	ug/Kg		154	512	512	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-50-8	Copper	4900	ug/Kg		307	1020	1020	1	P	HSC	04/01/10 15:22	040110-1	960819
7439-89-6	Iron	9810000	ug/Kg		8200	25600	25600	1	P	HSC	04/01/10 15:22	040110-1	960819
7439-92-1	Lead	9780	ug/Kg		256	1020	1020	1	P	HSC	04/01/10 15:22	040110-1	960819
7439-95-4	Magnesium	1090000	ug/Kg	N	8710	30700	30700	1	P	HSC	04/01/10 15:22	040110-1	960819
7439-96-5	Manganese	378000	ug/Kg		205	1020	1020	1	P	HSC	04/01/10 15:22	040110-1	960819
7439-97-6	Mercury	65.7	ug/kg		4.12	12.1	12.1	1	AV	JXL1	03/17/10 09:46	031710S1-4	964730
7440-02-0	Nickel	4.38	mg/kg		0.0999	0.4	0.4	2	MS	SKJ	04/13/10 22:16	100413-2	960822
7440-09-7	Potassium	1020000	ug/Kg	N	6560	25600	25600	1	P	HSC	04/01/10 15:22	040110-1	960819
7782-49-2	Selenium	0.999	mg/kg	U	0.5	0.999	0.999	2	MS	SKJ	04/13/10 22:16	100413-2	960822
7440-22-4	Silver	644	ug/Kg		102	512	512	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-23-5	Sodium	67800	ug/Kg		7170	25600	25600	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-28-0	Thallium	0.20	mg/kg	U	0.06	0.2	0.2	2	MS	SKJ	04/13/10 22:16	100413-2	960822
7440-61-1	Uranium	0.972	mg/kg		0.0132	0.04	0.04	2	MS	SKJ	04/13/10 22:16	100413-2	960822
7440-62-2	Vanadium	11600	ug/Kg		102	512	512	1	P	HSC	04/01/10 15:22	040110-1	960819
7440-66-6	Zinc	44200	ug/Kg		338	1020	1020	1	P	HSC	04/01/10 15:22	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.551	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.565	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.559	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374006 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7499 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 73

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6900000	ug/Kg		8000	23500	23500	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-36-0	Antimony	1180	ug/Kg	U	388	1180	1180	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-38-2	Arsenic	1.53	mg/kg		0.266	1.33	1.33	2	MS	SKJ	04/13/10 22:20	100413-2	960822
7440-39-3	Barium	93600	ug/Kg		118	588	588	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-41-7	Beryllium	0.593	mg/kg		0.0266	0.133	0.133	2	MS	SKJ	04/14/10 13:47	100414-3	960822
7440-43-9	Cadmium	588	ug/Kg	U	118	588	588	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-70-2	Calcium	2900000	ug/Kg		9410	29400	29400	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-47-3	Chromium	9200	ug/Kg		177	588	588	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-48-4	Cobalt	3600	ug/Kg		177	588	588	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-50-8	Copper	5720	ug/Kg		353	1180	1180	1	P	HSC	04/01/10 15:29	040110-1	960819
7439-89-6	Iron	9800000	ug/Kg		9410	29400	29400	1	P	HSC	04/01/10 15:29	040110-1	960819
7439-92-1	Lead	10300	ug/Kg		294	1180	1180	1	P	HSC	04/01/10 15:29	040110-1	960819
7439-95-4	Magnesium	1280000	ug/Kg	N	10000	35300	35300	1	P	HSC	04/01/10 15:29	040110-1	960819
7439-96-5	Manganese	326000	ug/Kg		235	1180	1180	1	P	HSC	04/01/10 15:29	040110-1	960819
7439-97-6	Mercury	21.2	ug/kg		5.24	15.4	15.4	1	AV	JXL1	03/17/10 09:48	031710S1-4	964730
7440-02-0	Nickel	5.06	mg/kg		0.133	0.532	0.532	2	MS	SKJ	04/13/10 22:20	100413-2	960822
7440-09-7	Potassium	1430000	ug/Kg	N	7530	29400	29400	1	P	HSC	04/01/10 15:29	040110-1	960819
7782-49-2	Selenium	1.33	mg/kg	U	0.665	1.33	1.33	2	MS	SKJ	04/13/10 22:20	100413-2	960822
7440-22-4	Silver	588	ug/Kg	U	118	588	588	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-23-5	Sodium	64700	ug/Kg		8240	29400	29400	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-28-0	Thallium	0.266	mg/kg	U	0.0798	0.266	0.266	2	MS	SKJ	04/13/10 22:20	100413-2	960822
7440-61-1	Uranium	3.09	mg/kg		0.0176	0.0532	0.0532	2	MS	SKJ	04/13/10 22:20	100413-2	960822
7440-62-2	Vanadium	17000	ug/Kg		118	588	588	1	P	HSC	04/01/10 15:29	040110-1	960819
7440-66-6	Zinc	32800	ug/Kg		388	1180	1180	1	P	HSC	04/01/10 15:29	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.582	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.515	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.533	g	30	mL	03/16/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374007 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7497 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 68

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7150000	ug/Kg		9930	29200	29200	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-36-0	Antimony	1460	ug/Kg	U	482	1460	1460	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-38-2	Arsenic	1.63	mg/kg		0.268	1.34	1.34	2	MS	SKJ	04/13/10 22:24	100413-2	960822
7440-39-3	Barium	111000	ug/Kg		146	730	730	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-41-7	Beryllium	0.647	mg/kg		0.0268	0.134	0.134	2	MS	SKJ	04/14/10 13:48	100414-3	960822
7440-43-9	Cadmium	730	ug/Kg	U	146	730	730	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-70-2	Calcium	2440000	ug/Kg		11700	36500	36500	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-47-3	Chromium	16600	ug/Kg		219	730	730	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-48-4	Cobalt	3620	ug/Kg		219	730	730	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-50-8	Copper	6020	ug/Kg		438	1460	1460	1	P	HSC	04/01/10 15:36	040110-1	960819
7439-89-6	Iron	10400000	ug/Kg		11700	36500	36500	1	P	HSC	04/01/10 15:36	040110-1	960819
7439-92-1	Lead	9330	ug/Kg		365	1460	1460	1	P	HSC	04/01/10 15:36	040110-1	960819
7439-95-4	Magnesium	1440000	ug/Kg	N	12400	43800	43800	1	P	HSC	04/01/10 15:36	040110-1	960819
7439-96-5	Manganese	361000	ug/Kg		292	1460	1460	1	P	HSC	04/01/10 15:36	040110-1	960819
7439-97-6	Mercury	13.5	ug/kg	J	5.4	15.9	15.9	1	AV	JXL1	03/17/10 09:50	031710S1-4	964730
7440-02-0	Nickel	6.62	mg/kg		0.134	0.537	0.537	2	MS	SKJ	04/13/10 22:24	100413-2	960822
7440-09-7	Potassium	1510000	ug/Kg	N	9350	36500	36500	1	P	HSC	04/01/10 15:36	040110-1	960819
7782-49-2	Selenium	1.34	mg/kg	U	0.671	1.34	1.34	2	MS	SKJ	04/13/10 22:24	100413-2	960822
7440-22-4	Silver	152	ug/Kg	J	146	730	730	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-23-5	Sodium	85500	ug/Kg		10200	36500	36500	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-28-0	Thallium	0.268	mg/kg	U	0.0805	0.268	0.268	2	MS	SKJ	04/13/10 22:24	100413-2	960822
7440-61-1	Uranium	2.43	mg/kg		0.0177	0.0537	0.0537	2	MS	SKJ	04/13/10 22:24	100413-2	960822
7440-62-2	Vanadium	17100	ug/Kg		146	730	730	1	P	HSC	04/01/10 15:36	040110-1	960819
7440-66-6	Zinc	35300	ug/Kg		482	1460	1460	1	P	HSC	04/01/10 15:36	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.507	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.552	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.56	g	30	mL	03/16/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374008 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7495 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 73

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5310000	ug/Kg		8560	25200	25200	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-36-0	Antimony	1260	ug/Kg	U	416	1260	1260	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-38-2	Arsenic	1.53	mg/kg		0.253	1.26	1.26	2	MS	SKJ	04/13/10 22:28	100413-2	960822
7440-39-3	Barium	80700	ug/Kg		126	630	630	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-41-7	Beryllium	0.561	mg/kg		0.0253	0.126	0.126	2	MS	SKJ	04/14/10 13:50	100414-3	960822
7440-43-9	Cadmium	160	ug/Kg	J	126	630	630	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-70-2	Calcium	3450000	ug/Kg		10100	31500	31500	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-47-3	Chromium	7810	ug/Kg		189	630	630	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-48-4	Cobalt	2110	ug/Kg		189	630	630	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-50-8	Copper	6880	ug/Kg		378	1260	1260	1	P	HSC	04/01/10 15:57	040110-1	960819
7439-89-6	Iron	9350000	ug/Kg		10100	31500	31500	1	P	HSC	04/01/10 15:57	040110-1	960819
7439-92-1	Lead	11700	ug/Kg		315	1260	1260	1	P	HSC	04/01/10 15:57	040110-1	960819
7439-95-4	Magnesium	1190000	ug/Kg	N	10700	37800	37800	1	P	HSC	04/01/10 15:57	040110-1	960819
7439-96-5	Manganese	477000	ug/Kg		252	1260	1260	1	P	HSC	04/01/10 15:57	040110-1	960819
7439-97-6	Mercury	135	ug/kg		5.04	14.8	14.8	1	AV	JXLI	03/17/10 09:52	031710S1-4	964730
7440-02-0	Nickel	5.01	mg/kg		0.126	0.506	0.506	2	MS	SKJ	04/13/10 22:28	100413-2	960822
7440-09-7	Potassium	1170000	ug/Kg	N	8060	31500	31500	1	P	HSC	04/01/10 15:57	040110-1	960819
7782-49-2	Selenium	1.26	mg/kg	U	0.632	1.26	1.26	2	MS	SKJ	04/13/10 22:28	100413-2	960822
7440-22-4	Silver	791	ug/Kg		126	630	630	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-23-5	Sodium	67600	ug/Kg		8810	31500	31500	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-28-0	Thallium	0.253	mg/kg	U	0.0758	0.253	0.253	2	MS	SKJ	04/13/10 22:28	100413-2	960822
7440-61-1	Uranium	1.88	mg/kg		0.0167	0.0506	0.0506	2	MS	SKJ	04/13/10 22:28	100413-2	960822
7440-62-2	Vanadium	11600	ug/Kg		126	630	630	1	P	HSC	04/01/10 15:57	040110-1	960819
7440-66-6	Zinc	47900	ug/Kg		416	1260	1260	1	P	HSC	04/01/10 15:57	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.546	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.544	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.557	g	30	mL	03/16/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374009 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7498 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 77

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7340000	ug/Kg		8430	24800	24800	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-36-0	Antimony	1240	ug/Kg	U	409	1240	1240	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-38-2	Arsenic	1.41	mg/kg		0.227	1.14	1.14	2	MS	SKJ	04/13/10 22:41	100413-2	960822
7440-39-3	Barium	106000	ug/Kg		124	620	620	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-41-7	Beryllium	0.581	mg/kg		0.0227	0.114	0.114	2	MS	SKJ	04/14/10 13:55	100414-3	960822
7440-43-9	Cadmium	124	ug/Kg	J	124	620	620	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-70-2	Calcium	2520000	ug/Kg		9910	31000	31000	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-47-3	Chromium	16800	ug/Kg		186	620	620	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-48-4	Cobalt	4550	ug/Kg		186	620	620	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-50-8	Copper	5680	ug/Kg		372	1240	1240	1	P	HSC	04/01/10 16:04	040110-1	960819
7439-89-6	Iron	11200000	ug/Kg		9910	31000	31000	1	P	HSC	04/01/10 16:04	040110-1	960819
7439-92-1	Lead	9590	ug/Kg		310	1240	1240	1	P	HSC	04/01/10 16:04	040110-1	960819
7439-95-4	Magnesium	1370000	ug/Kg	N	10500	37200	37200	1	P	HSC	04/01/10 16:04	040110-1	960819
7439-96-5	Manganese	398000	ug/Kg		248	1240	1240	1	P	HSC	04/01/10 16:04	040110-1	960819
7439-97-6	Mercury	11.8	ug/kg	J	4.61	13.5	13.5	1	AV	JXL1	03/17/10 09:54	031710S1-4	964730
7440-02-0	Nickel	5.83	mg/kg		0.114	0.455	0.455	2	MS	SKJ	04/13/10 22:41	100413-2	960822
7440-09-7	Potassium	1380000	ug/Kg	N	7930	31000	31000	1	P	HSC	04/01/10 16:04	040110-1	960819
7782-49-2	Selenium	1.14	mg/kg	U	0.568	1.14	1.14	2	MS	SKJ	04/13/10 22:41	100413-2	960822
7440-22-4	Silver	620	ug/Kg	U	124	620	620	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-23-5	Sodium	79600	ug/Kg		8670	31000	31000	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-28-0	Thallium	0.0916	mg/kg	J	0.0682	0.227	0.227	2	MS	SKJ	04/13/10 22:41	100413-2	960822
7440-61-1	Uranium	1.79	mg/kg		0.015	0.0455	0.0455	2	MS	SKJ	04/13/10 22:41	100413-2	960822
7440-62-2	Vanadium	20100	ug/Kg		124	620	620	1	P	HSC	04/01/10 16:04	040110-1	960819
7440-66-6	Zinc	36900	ug/Kg		409	1240	1240	1	P	HSC	04/01/10 16:04	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.522	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.569	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.573	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374010 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7500 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 78

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7400000	ug/Kg		8000	23500	23500	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-36-0	Antimony	1180	ug/Kg	U	388	1180	1180	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-38-2	Arsenic	1.37	mg/kg		0.247	1.23	1.23	2	MS	SKJ	04/13/10 22:45	100413-2	960822
7440-39-3	Barium	98600	ug/Kg		118	588	588	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-41-7	Beryllium	0.589	mg/kg		0.0247	0.123	0.123	2	MS	SKJ	04/14/10 13:57	100414-3	960822
7440-43-9	Cadmium	588	ug/Kg	U	118	588	588	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-70-2	Calcium	2710000	ug/Kg		9410	29400	29400	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-47-3	Chromium	15700	ug/Kg		176	588	588	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-48-4	Cobalt	4310	ug/Kg		176	588	588	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-50-8	Copper	5830	ug/Kg		353	1180	1180	1	P	HSC	04/01/10 16:11	040110-1	960819
7439-89-6	Iron	11900000	ug/Kg		9410	29400	29400	1	P	HSC	04/01/10 16:11	040110-1	960819
7439-92-1	Lead	10500	ug/Kg		294	1180	1180	1	P	HSC	04/01/10 16:11	040110-1	960819
7439-95-4	Magnesium	1390000	ug/Kg	N	10000	35300	35300	1	P	HSC	04/01/10 16:11	040110-1	960819
7439-96-5	Manganese	362000	ug/Kg		235	1180	1180	1	P	HSC	04/01/10 16:11	040110-1	960819
7439-97-6	Mercury	13.8	ug/kg	J	4.88	14.3	14.3	1	AV	JXL1	03/17/10 09:56	031710S1-4	964730
7440-02-0	Nickel	5.33	mg/kg		0.123	0.493	0.493	2	MS	SKJ	04/13/10 22:45	100413-2	960822
7440-09-7	Potassium	1490000	ug/Kg	N	7530	29400	29400	1	P	HSC	04/01/10 16:11	040110-1	960819
7782-49-2	Selenium	1.23	mg/kg	U	0.616	1.23	1.23	2	MS	SKJ	04/13/10 22:45	100413-2	960822
7440-22-4	Silver	588	ug/Kg	U	118	588	588	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-23-5	Sodium	75300	ug/Kg		8230	29400	29400	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-28-0	Thallium	0.0796	mg/kg	J	0.074	0.247	0.247	2	MS	SKJ	04/13/10 22:45	100413-2	960822
7440-61-1	Uranium	1.35	mg/kg		0.0163	0.0493	0.0493	2	MS	SKJ	04/13/10 22:45	100413-2	960822
7440-62-2	Vanadium	20500	ug/Kg		118	588	588	1	P	HSC	04/01/10 16:11	040110-1	960819
7440-66-6	Zinc	38600	ug/Kg		388	1180	1180	1	P	HSC	04/01/10 16:11	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.544	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.519	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.535	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374011 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7523 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13100000	ug/Kg		7700	22600	22600	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-36-0	Antimony	1130	ug/Kg	U	373	1130	1130	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-38-2	Arsenic	2.24	mg/kg		0.225	1.13	1.13	2	MS	SKJ	04/13/10 22:49	100413-2	960822
7440-39-3	Barium	120000	ug/Kg		113	566	566	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-41-7	Beryllium	0.742	mg/kg		0.0225	0.113	0.113	2	MS	SKJ	04/14/10 13:58	100414-3	960822
7440-43-9	Cadmium	566	ug/Kg	U	113	566	566	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-70-2	Calcium	2690000	ug/Kg		9050	28300	28300	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-47-3	Chromium	11100	ug/Kg		170	566	566	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-48-4	Cobalt	3080	ug/Kg		170	566	566	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-50-8	Copper	4690	ug/Kg		339	1130	1130	1	P	HSC	04/01/10 16:18	040110-1	960819
7439-89-6	Iron	9610000	ug/Kg		9050	28300	28300	1	P	HSC	04/01/10 16:18	040110-1	960819
7439-92-1	Lead	7360	ug/Kg		283	1130	1130	1	P	HSC	04/01/10 16:18	040110-1	960819
7439-95-4	Magnesium	1570000	ug/Kg	N	9620	33900	33900	1	P	HSC	04/01/10 16:18	040110-1	960819
7439-96-5	Manganese	143000	ug/Kg		226	1130	1130	1	P	HSC	04/01/10 16:18	040110-1	960819
7439-97-6	Mercury	28.8	ug/kg		4.2	12.4	12.4	1	AV	JXL1	03/17/10 09:58	031710S1-4	964730
7440-02-0	Nickel	5.52	mg/kg		0.113	0.451	0.451	2	MS	SKJ	04/13/10 22:49	100413-2	960822
7440-09-7	Potassium	1480000	ug/Kg	N	7240	28300	28300	1	P	HSC	04/01/10 16:18	040110-1	960819
7782-49-2	Selenium	1.13	mg/kg	U	0.564	1.13	1.13	2	MS	SKJ	04/13/10 22:49	100413-2	960822
7440-22-4	Silver	566	ug/Kg	U	113	566	566	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-23-5	Sodium	131000	ug/Kg		7920	28300	28300	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-28-0	Thallium	0.225	mg/kg	U	0.0676	0.225	0.225	2	MS	SKJ	04/13/10 22:49	100413-2	960822
7440-61-1	Uranium	0.722	mg/kg		0.0149	0.0451	0.0451	2	MS	SKJ	04/13/10 22:49	100413-2	960822
7440-62-2	Vanadium	18300	ug/Kg		113	566	566	1	P	HSC	04/01/10 16:18	040110-1	960819
7440-66-6	Zinc	19600	ug/Kg		373	1130	1130	1	P	HSC	04/01/10 16:18	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.525	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.527	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.577	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374012 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7522 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11800000	ug/Kg		7280	21400	21400	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-36-0	Antimony	1070	ug/Kg	U	353	1070	1070	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-38-2	Arsenic	2.43	mg/kg		0.204	1.02	1.02	2	MS	SKJ	04/13/10 22:53	100413-2	960822
7440-39-3	Barium	105000	ug/Kg		107	536	536	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-41-7	Beryllium	0.876	mg/kg		0.0204	0.102	0.102	2	MS	SKJ	04/14/10 14:00	100414-3	960822
7440-43-9	Cadmium	536	ug/Kg	U	107	536	536	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-70-2	Calcium	2420000	ug/Kg		8570	26800	26800	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-47-3	Chromium	17500	ug/Kg		161	536	536	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-48-4	Cobalt	4090	ug/Kg		161	536	536	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-50-8	Copper	7010	ug/Kg		321	1070	1070	1	P	HSC	04/01/10 16:25	040110-1	960819
7439-89-6	Iron	12300000	ug/Kg		8570	26800	26800	1	P	HSC	04/01/10 16:25	040110-1	960819
7439-92-1	Lead	9010	ug/Kg		268	1070	1070	1	P	HSC	04/01/10 16:25	040110-1	960819
7439-95-4	Magnesium	2000000	ug/Kg	N	9100	32100	32100	1	P	HSC	04/01/10 16:25	040110-1	960819
7439-96-5	Manganese	173000	ug/Kg		214	1070	1070	1	P	HSC	04/01/10 16:25	040110-1	960819
7439-97-6	Mercury	17.4	ug/kg		4.39	12.9	12.9	1	AV	JXL1	03/17/10 10:00	031710S1-4	964730
7440-02-0	Nickel	7.38	mg/kg		0.102	0.408	0.408	2	MS	SKJ	04/13/10 22:53	100413-2	960822
7440-09-7	Potassium	1480000	ug/Kg	N	6860	26800	26800	1	P	HSC	04/01/10 16:25	040110-1	960819
7782-49-2	Selenium	1.02	mg/kg	U	0.509	1.02	1.02	2	MS	SKJ	04/13/10 22:53	100413-2	960822
7440-22-4	Silver	536	ug/Kg	U	107	536	536	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-23-5	Sodium	185000	ug/Kg		7500	26800	26800	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-28-0	Thallium	0.130	mg/kg	J	0.0611	0.204	0.204	2	MS	SKJ	04/13/10 22:53	100413-2	960822
7440-61-1	Uranium	1.09	mg/kg		0.0134	0.0408	0.0408	2	MS	SKJ	04/13/10 22:53	100413-2	960822
7440-62-2	Vanadium	22700	ug/Kg		107	536	536	1	P	HSC	04/01/10 16:25	040110-1	960819
7440-66-6	Zinc	27600	ug/Kg		353	1070	1070	1	P	HSC	04/01/10 16:25	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.526	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.553	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.524	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248374013 **BASIS:** Dry Weight **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7521 **LEVEL:** Low **DATE RECEIVED** 02-MAR-10

MATRIX: SOIL **%SOLIDS:** 77

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6840000	ug/Kg		8340	24500	24500	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-36-0	Antimony	1230	ug/Kg	U	405	1230	1230	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-38-2	Arsenic	1.89	mg/kg		0.229	1.15	1.15	2	MS	SKJ	04/13/10 22:57	100413-2	960822
7440-39-3	Barium	74000	ug/Kg		123	613	613	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-41-7	Beryllium	0.675	mg/kg		0.0229	0.115	0.115	2	MS	SKJ	04/14/10 14:02	100414-3	960822
7440-43-9	Cadmium	185	ug/Kg	J	123	613	613	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-70-2	Calcium	4910000	ug/Kg		9810	30700	30700	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-47-3	Chromium	7520	ug/Kg		184	613	613	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-48-4	Cobalt	1890	ug/Kg		184	613	613	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-50-8	Copper	7240	ug/Kg		368	1230	1230	1	P	HSC	04/01/10 16:33	040110-1	960819
7439-89-6	Iron	8680000	ug/Kg		9810	30700	30700	1	P	HSC	04/01/10 16:33	040110-1	960819
7439-92-1	Lead	10900	ug/Kg		307	1230	1230	1	P	HSC	04/01/10 16:33	040110-1	960819
7439-95-4	Magnesium	1550000	ug/Kg	N	10400	36800	36800	1	P	HSC	04/01/10 16:33	040110-1	960819
7439-96-5	Manganese	444000	ug/Kg		245	1230	1230	1	P	HSC	04/01/10 16:33	040110-1	960819
7439-97-6	Mercury	43.1	ug/kg		4.46	13.1	13.1	1	AV	JXL1	03/17/10 10:02	031710S1-4	964730
7440-02-0	Nickel	4.67	mg/kg		0.115	0.458	0.458	2	MS	SKJ	04/13/10 22:57	100413-2	960822
7440-09-7	Potassium	1540000	ug/Kg	N	7850	30700	30700	1	P	HSC	04/01/10 16:33	040110-1	960819
7782-49-2	Selenium	1.15	mg/kg	U	0.573	1.15	1.15	2	MS	SKJ	04/13/10 22:57	100413-2	960822
7440-22-4	Silver	613	ug/Kg	U	123	613	613	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-23-5	Sodium	70100	ug/Kg		8580	30700	30700	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-28-0	Thallium	0.229	mg/kg	U	0.0688	0.229	0.229	2	MS	SKJ	04/13/10 22:57	100413-2	960822
7440-61-1	Uranium	2.15	mg/kg		0.0151	0.0458	0.0458	2	MS	SKJ	04/13/10 22:57	100413-2	960822
7440-62-2	Vanadium	12500	ug/Kg		123	613	613	1	P	HSC	04/01/10 16:33	040110-1	960819
7440-66-6	Zinc	42900	ug/Kg		405	1230	1230	1	P	HSC	04/01/10 16:33	040110-1	960819

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960819	960818	SW846 3050B	0.529	g	50	mL	03/12/10	LYH1
960822	960821	SW846 3050B	0.566	g	50	mL	03/12/10	LYH1
964730	964729	SW846 7471A Prep	0.593	g	30	mL	03/16/10	TXB3

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–2155

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Mercury	5.21	ug/L	5	ug/L	104.2	90.0 – 110.0	AV	17–MAR–10 09:12	031710S1–4
	Aluminum	5080	ug/L	5000	ug/L	101.6	90.0 – 110.0	P	01–APR–10 07:59	040110–1
	Antimony	522	ug/L	500	ug/L	104.5	90.0 – 110.0	P	01–APR–10 07:59	040110–1
	Barium	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	01–APR–10 07:59	040110–1
	Cadmium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	01–APR–10 07:59	040110–1
	Calcium	5080	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	01–APR–10 07:59	040110–1
	Chromium	480	ug/L	500	ug/L	96	90.0 – 110.0	P	01–APR–10 07:59	040110–1
	Cobalt	510	ug/L	500	ug/L	102	90.0 – 110.0	P	01–APR–10 07:59	040110–1
	Copper	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	01–APR–10 07:59	040110–1
	Iron	5120	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	01–APR–10 07:59	040110–1
	Lead	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	01–APR–10 07:59	040110–1
	Magnesium	5250	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	01–APR–10 07:59	040110–1
	Manganese	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	01–APR–10 07:59	040110–1
	Potassium	2430	ug/L	2500	ug/L	97.1	90.0 – 110.0	P	01–APR–10 07:59	040110–1
	Silver	255	ug/L	250	ug/L	102	90.0 – 110.0	P	01–APR–10 07:59	040110–1
	Sodium	2400	ug/L	2500	ug/L	96.1	90.0 – 110.0	P	01–APR–10 07:59	040110–1
	Vanadium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	01–APR–10 07:59	040110–1
	Zinc	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	01–APR–10 07:59	040110–1
	Arsenic	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	13–APR–10 19:08	100413–2
	Nickel	51.4	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	13–APR–10 19:08	100413–2
	Selenium	50.4	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	13–APR–10 19:08	100413–2
	Thallium	50.7	ug/L	50	ug/L	101.4	90.0 – 110.0	MS	13–APR–10 19:08	100413–2
	Uranium	49.8	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	13–APR–10 19:08	100413–2
	Beryllium	51.6	ug/L	50	ug/L	103.2	90.0 – 110.0	MS	14–APR–10 13:13	100414–3
CCV01										
	Mercury	5.16	ug/L	5	ug/L	103.1	80.0 – 120.0	AV	17–MAR–10 09:18	031710S1–4
	Aluminum	4980	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	01–APR–10 08:47	040110–1
	Antimony	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	01–APR–10 08:47	040110–1
	Barium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	01–APR–10 08:47	040110–1
	Cadmium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	01–APR–10 08:47	040110–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–2155

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Calcium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	01–APR–10 08:47	040110–1
	Chromium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	01–APR–10 08:47	040110–1
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	01–APR–10 08:47	040110–1
	Copper	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	01–APR–10 08:47	040110–1
	Iron	5110	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	01–APR–10 08:47	040110–1
	Lead	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	01–APR–10 08:47	040110–1
	Magnesium	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	01–APR–10 08:47	040110–1
	Manganese	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	01–APR–10 08:47	040110–1
	Potassium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	01–APR–10 08:47	040110–1
	Silver	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	01–APR–10 08:47	040110–1
	Sodium	10200	ug/L	10000	ug/L	102.2	90.0 – 110.0	P	01–APR–10 08:47	040110–1
	Vanadium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	01–APR–10 08:47	040110–1
	Zinc	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	01–APR–10 08:47	040110–1
	Arsenic	50.7	ug/L	50	ug/L	101.4	90.0 – 110.0	MS	13–APR–10 19:28	100413–2
	Nickel	50.1	ug/L	50	ug/L	100.2	90.0 – 110.0	MS	13–APR–10 19:28	100413–2
	Selenium	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	13–APR–10 19:28	100413–2
	Thallium	49.4	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	13–APR–10 19:28	100413–2
	Uranium	50	ug/L	50	ug/L	100	90.0 – 110.0	MS	13–APR–10 19:28	100413–2
	Beryllium	49.8	ug/L	50	ug/L	99.6	90.0 – 110.0	MS	14–APR–10 13:22	100414–3
CCV02										
	Mercury	5.17	ug/L	5	ug/L	103.4	80.0 – 120.0	AV	17–MAR–10 09:42	031710S1–4
	Aluminum	4980	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	01–APR–10 09:08	040110–1
	Antimony	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	01–APR–10 09:08	040110–1
	Barium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	01–APR–10 09:08	040110–1
	Cadmium	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	01–APR–10 09:08	040110–1
	Calcium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	01–APR–10 09:08	040110–1
	Chromium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	01–APR–10 09:08	040110–1
	Cobalt	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	01–APR–10 09:08	040110–1
	Copper	476	ug/L	500	ug/L	95.2	90.0 – 110.0	P	01–APR–10 09:08	040110–1
	Iron	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	01–APR–10 09:08	040110–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2155

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Lead	486	ug/L	500	ug/L	97.2	90.0 - 110.0	P	01-APR-10 09:08	040110-1
	Magnesium	5180	ug/L	5000	ug/L	103.6	90.0 - 110.0	P	01-APR-10 09:08	040110-1
	Manganese	479	ug/L	500	ug/L	95.9	90.0 - 110.0	P	01-APR-10 09:08	040110-1
	Potassium	5020	ug/L	5000	ug/L	100.5	90.0 - 110.0	P	01-APR-10 09:08	040110-1
	Silver	485	ug/L	500	ug/L	97	90.0 - 110.0	P	01-APR-10 09:08	040110-1
	Sodium	10200	ug/L	10000	ug/L	101.6	90.0 - 110.0	P	01-APR-10 09:08	040110-1
	Vanadium	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	01-APR-10 09:08	040110-1
	Zinc	477	ug/L	500	ug/L	95.4	90.0 - 110.0	P	01-APR-10 09:08	040110-1
	Arsenic	51.7	ug/L	50	ug/L	103.3	90.0 - 110.0	MS	13-APR-10 20:09	100413-2
	Nickel	49.9	ug/L	50	ug/L	99.7	90.0 - 110.0	MS	13-APR-10 20:09	100413-2
	Selenium	51	ug/L	50	ug/L	102	90.0 - 110.0	MS	13-APR-10 20:09	100413-2
	Thallium	50.1	ug/L	50	ug/L	100.2	90.0 - 110.0	MS	13-APR-10 20:09	100413-2
	Uranium	50.7	ug/L	50	ug/L	101.3	90.0 - 110.0	MS	13-APR-10 20:09	100413-2
	Beryllium	49.8	ug/L	50	ug/L	99.6	90.0 - 110.0	MS	14-APR-10 13:38	100414-3
CCV03										
	Mercury	5.14	ug/L	5	ug/L	102.8	80.0 - 120.0	AV	17-MAR-10 10:06	031710S1-4
	Aluminum	4930	ug/L	5000	ug/L	98.6	90.0 - 110.0	P	01-APR-10 09:49	040110-1
	Antimony	508	ug/L	500	ug/L	101.7	90.0 - 110.0	P	01-APR-10 09:49	040110-1
	Barium	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	01-APR-10 09:49	040110-1
	Cadmium	489	ug/L	500	ug/L	97.7	90.0 - 110.0	P	01-APR-10 09:49	040110-1
	Calcium	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	01-APR-10 09:49	040110-1
	Chromium	491	ug/L	500	ug/L	98.1	90.0 - 110.0	P	01-APR-10 09:49	040110-1
	Cobalt	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	01-APR-10 09:49	040110-1
	Copper	483	ug/L	500	ug/L	96.7	90.0 - 110.0	P	01-APR-10 09:49	040110-1
	Iron	5100	ug/L	5000	ug/L	102	90.0 - 110.0	P	01-APR-10 09:49	040110-1
	Lead	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	01-APR-10 09:49	040110-1
	Magnesium	5200	ug/L	5000	ug/L	104	90.0 - 110.0	P	01-APR-10 09:49	040110-1
	Manganese	492	ug/L	500	ug/L	98.5	90.0 - 110.0	P	01-APR-10 09:49	040110-1
	Potassium	4960	ug/L	5000	ug/L	99.1	90.0 - 110.0	P	01-APR-10 09:49	040110-1
	Silver	492	ug/L	500	ug/L	98.5	90.0 - 110.0	P	01-APR-10 09:49	040110-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2155

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Sodium	10100	ug/L	10000	ug/L	100.9	90.0 - 110.0	P	01-APR-10 09:49	040110-1
	Vanadium	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	01-APR-10 09:49	040110-1
	Zinc	482	ug/L	500	ug/L	96.5	90.0 - 110.0	P	01-APR-10 09:49	040110-1
	Arsenic	51.3	ug/L	50	ug/L	102.5	90.0 - 110.0	MS	13-APR-10 20:42	100413-2
	Nickel	48.6	ug/L	50	ug/L	97.3	90.0 - 110.0	MS	13-APR-10 20:42	100413-2
	Selenium	53.3	ug/L	50	ug/L	106.6	90.0 - 110.0	MS	13-APR-10 20:42	100413-2
	Thallium	49.6	ug/L	50	ug/L	99.3	90.0 - 110.0	MS	13-APR-10 20:42	100413-2
	Uranium	50.5	ug/L	50	ug/L	101	90.0 - 110.0	MS	13-APR-10 20:42	100413-2
	Beryllium	54.3	ug/L	50	ug/L	108.5	90.0 - 110.0	MS	14-APR-10 13:52	100414-3
CCV04										
	Aluminum	4880	ug/L	5000	ug/L	97.5	90.0 - 110.0	P	01-APR-10 10:49	040110-1
	Antimony	504	ug/L	500	ug/L	100.9	90.0 - 110.0	P	01-APR-10 10:49	040110-1
	Barium	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	01-APR-10 10:49	040110-1
	Cadmium	489	ug/L	500	ug/L	97.7	90.0 - 110.0	P	01-APR-10 10:49	040110-1
	Calcium	5110	ug/L	5000	ug/L	102.3	90.0 - 110.0	P	01-APR-10 10:49	040110-1
	Chromium	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	01-APR-10 10:49	040110-1
	Cobalt	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	01-APR-10 10:49	040110-1
	Copper	489	ug/L	500	ug/L	97.7	90.0 - 110.0	P	01-APR-10 10:49	040110-1
	Iron	5030	ug/L	5000	ug/L	100.6	90.0 - 110.0	P	01-APR-10 10:49	040110-1
	Lead	492	ug/L	500	ug/L	98.3	90.0 - 110.0	P	01-APR-10 10:49	040110-1
	Magnesium	5100	ug/L	5000	ug/L	102	90.0 - 110.0	P	01-APR-10 10:49	040110-1
	Manganese	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	01-APR-10 10:49	040110-1
	Potassium	4920	ug/L	5000	ug/L	98.4	90.0 - 110.0	P	01-APR-10 10:49	040110-1
	Silver	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	01-APR-10 10:49	040110-1
	Sodium	9870	ug/L	10000	ug/L	98.7	90.0 - 110.0	P	01-APR-10 10:49	040110-1
	Vanadium	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	01-APR-10 10:49	040110-1
	Zinc	484	ug/L	500	ug/L	96.9	90.0 - 110.0	P	01-APR-10 10:49	040110-1
	Arsenic	50.5	ug/L	50	ug/L	100.9	90.0 - 110.0	MS	13-APR-10 21:19	100413-2
	Nickel	48.7	ug/L	50	ug/L	97.3	90.0 - 110.0	MS	13-APR-10 21:19	100413-2
	Selenium	51.1	ug/L	50	ug/L	102.2	90.0 - 110.0	MS	13-APR-10 21:19	100413-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–2155

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Thallium	50.5	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	13–APR–10 21:19	100413–2
	Uranium	51	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	13–APR–10 21:19	100413–2
	Beryllium	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	14–APR–10 14:03	100414–3
CCV05										
	Aluminum	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Antimony	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Barium	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Cadmium	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Calcium	5150	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Chromium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Cobalt	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Copper	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Iron	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Lead	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Magnesium	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Manganese	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Potassium	5050	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Silver	495	ug/L	500	ug/L	99	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Sodium	10400	ug/L	10000	ug/L	103.9	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Zinc	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Arsenic	49.9	ug/L	50	ug/L	99.8	90.0 – 110.0	MS	13–APR–10 22:00	100413–2
	Nickel	49.1	ug/L	50	ug/L	98.3	90.0 – 110.0	MS	13–APR–10 22:00	100413–2
	Selenium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	13–APR–10 22:00	100413–2
	Thallium	50.4	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	13–APR–10 22:00	100413–2
	Uranium	50.9	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	13–APR–10 22:00	100413–2
CCV06										
	Aluminum	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	01–APR–10 13:09	040110–1
	Antimony	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	01–APR–10 13:09	040110–1
	Barium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	01–APR–10 13:09	040110–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–2155

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cadmium	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	01–APR–10 13:09	040110–1
	Calcium	5180	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	01–APR–10 13:09	040110–1
	Chromium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	01–APR–10 13:09	040110–1
	Cobalt	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	01–APR–10 13:09	040110–1
	Copper	485	ug/L	500	ug/L	97	90.0 – 110.0	P	01–APR–10 13:09	040110–1
	Iron	5120	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	01–APR–10 13:09	040110–1
	Lead	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	01–APR–10 13:09	040110–1
	Magnesium	5250	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	01–APR–10 13:09	040110–1
	Manganese	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	01–APR–10 13:09	040110–1
	Potassium	5050	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	01–APR–10 13:09	040110–1
	Silver	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	01–APR–10 13:09	040110–1
	Sodium	10100	ug/L	10000	ug/L	101.4	90.0 – 110.0	P	01–APR–10 13:09	040110–1
	Vanadium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	01–APR–10 13:09	040110–1
	Zinc	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	01–APR–10 13:09	040110–1
	Arsenic	51.1	ug/L	50	ug/L	102.3	90.0 – 110.0	MS	13–APR–10 22:33	100413–2
	Nickel	48.3	ug/L	50	ug/L	96.6	90.0 – 110.0	MS	13–APR–10 22:33	100413–2
	Selenium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	13–APR–10 22:33	100413–2
	Thallium	49.9	ug/L	50	ug/L	99.8	90.0 – 110.0	MS	13–APR–10 22:33	100413–2
	Uranium	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	13–APR–10 22:33	100413–2
CCV07										
	Aluminum	4750	ug/L	5000	ug/L	95	90.0 – 110.0	P	01–APR–10 13:44	040110–1
	Antimony	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	01–APR–10 13:44	040110–1
	Barium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	01–APR–10 13:44	040110–1
	Cadmium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	01–APR–10 13:44	040110–1
	Calcium	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	01–APR–10 13:44	040110–1
	Chromium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	01–APR–10 13:44	040110–1
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	01–APR–10 13:44	040110–1
	Copper	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	01–APR–10 13:44	040110–1
	Iron	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	01–APR–10 13:44	040110–1
	Lead	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	01–APR–10 13:44	040110–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–2155

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Magnesium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	01–APR–10 13:44	040110–1
	Manganese	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	01–APR–10 13:44	040110–1
	Potassium	4760	ug/L	5000	ug/L	95.1	90.0 – 110.0	P	01–APR–10 13:44	040110–1
	Silver	495	ug/L	500	ug/L	99	90.0 – 110.0	P	01–APR–10 13:44	040110–1
	Sodium	9600	ug/L	10000	ug/L	96	90.0 – 110.0	P	01–APR–10 13:44	040110–1
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	01–APR–10 13:44	040110–1
	Zinc	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	01–APR–10 13:44	040110–1
	Arsenic	50.8	ug/L	50	ug/L	101.7	90.0 – 110.0	MS	13–APR–10 23:01	100413–2
	Nickel	48.4	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	13–APR–10 23:01	100413–2
	Selenium	50.5	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	13–APR–10 23:01	100413–2
	Thallium	49.7	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	13–APR–10 23:01	100413–2
	Uranium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	13–APR–10 23:01	100413–2
CCV08										
	Aluminum	4770	ug/L	5000	ug/L	95.4	90.0 – 110.0	P	01–APR–10 14:47	040110–1
	Antimony	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	01–APR–10 14:47	040110–1
	Barium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	01–APR–10 14:47	040110–1
	Cadmium	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	01–APR–10 14:47	040110–1
	Calcium	4960	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	01–APR–10 14:47	040110–1
	Chromium	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	01–APR–10 14:47	040110–1
	Cobalt	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	01–APR–10 14:47	040110–1
	Copper	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	01–APR–10 14:47	040110–1
	Iron	4830	ug/L	5000	ug/L	96.5	90.0 – 110.0	P	01–APR–10 14:47	040110–1
	Lead	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	01–APR–10 14:47	040110–1
	Magnesium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	01–APR–10 14:47	040110–1
	Manganese	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	01–APR–10 14:47	040110–1
	Potassium	4820	ug/L	5000	ug/L	96.3	90.0 – 110.0	P	01–APR–10 14:47	040110–1
	Silver	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	01–APR–10 14:47	040110–1
	Sodium	9390	ug/L	10000	ug/L	93.9	90.0 – 110.0	P	01–APR–10 14:47	040110–1
	Vanadium	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	01–APR–10 14:47	040110–1
	Zinc	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	01–APR–10 14:47	040110–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–2155

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV09										
	Aluminum	4970	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	01–APR–10 15:43	040110–1
	Antimony	517	ug/L	500	ug/L	103.5	90.0 – 110.0	P	01–APR–10 15:43	040110–1
	Barium	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	01–APR–10 15:43	040110–1
	Cadmium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	01–APR–10 15:43	040110–1
	Calcium	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	01–APR–10 15:43	040110–1
	Chromium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	01–APR–10 15:43	040110–1
	Cobalt	511	ug/L	500	ug/L	102.1	90.0 – 110.0	P	01–APR–10 15:43	040110–1
	Copper	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	01–APR–10 15:43	040110–1
	Iron	5010	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	01–APR–10 15:43	040110–1
	Lead	495	ug/L	500	ug/L	99	90.0 – 110.0	P	01–APR–10 15:43	040110–1
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	01–APR–10 15:43	040110–1
	Manganese	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	01–APR–10 15:43	040110–1
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	01–APR–10 15:43	040110–1
	Silver	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	01–APR–10 15:43	040110–1
	Sodium	9500	ug/L	10000	ug/L	95	90.0 – 110.0	P	01–APR–10 15:43	040110–1
	Vanadium	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	01–APR–10 15:43	040110–1
	Zinc	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	01–APR–10 15:43	040110–1
CCV10										
	Aluminum	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	01–APR–10 16:40	040110–1
	Antimony	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	01–APR–10 16:40	040110–1
	Barium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	01–APR–10 16:40	040110–1
	Cadmium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	01–APR–10 16:40	040110–1
	Calcium	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	01–APR–10 16:40	040110–1
	Chromium	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	01–APR–10 16:40	040110–1
	Cobalt	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	01–APR–10 16:40	040110–1
	Copper	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	01–APR–10 16:40	040110–1
	Iron	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	01–APR–10 16:40	040110–1
	Lead	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	01–APR–10 16:40	040110–1
	Magnesium	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	01–APR–10 16:40	040110–1
	Manganese	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	01–APR–10 16:40	040110–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–2155

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	01–APR–10 16:40	040110–1
	Silver	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	01–APR–10 16:40	040110–1
	Sodium	9510	ug/L	10000	ug/L	95.1	90.0 – 110.0	P	01–APR–10 16:40	040110–1
	Vanadium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	01–APR–10 16:40	040110–1
	Zinc	485	ug/L	500	ug/L	97	90.0 – 110.0	P	01–APR–10 16:40	040110–1

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–2155

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.252	ug/L	.2	ug/L	126	70.0 – 130.0	AV	17–MAR–10 09:16	031710S1–4
	Arsenic	6.05	ug/L	5	ug/L	121	70.0 – 130.0	MS	13–APR–10 19:16	100413–2
	Selenium	5.77	ug/L	5	ug/L	115.4	70.0 – 130.0	MS	13–APR–10 19:16	100413–2
	Nickel	2.28	ug/L	2	ug/L	114.1	70.0 – 130.0	MS	13–APR–10 19:16	100413–2
	Uranium	.292	ug/L	.2	ug/L	146	70.0 – 130.0	MS	13–APR–10 19:16	100413–2
	Thallium	1.22	ug/L	1	ug/L	121.8	70.0 – 130.0	MS	13–APR–10 19:16	100413–2
	Beryllium	.582	ug/L	.5	ug/L	116.4	70.0 – 130.0	MS	14–APR–10 13:17	100414–3
PQL01										
	Aluminum	195	ug/L	200	ug/L	97.3	70.0 – 130.0	P	01–APR–10 08:13	040110–1
	Iron	142	ug/L	100	ug/L	142.2	70.0 – 130.0	P	01–APR–10 08:13	040110–1
	Lead	9.42	ug/L	10	ug/L	94.2	70.0 – 130.0	P	01–APR–10 08:13	040110–1
	Magnesium	266	ug/L	300	ug/L	88.8	70.0 – 130.0	P	01–APR–10 08:13	040110–1
	Manganese	10.3	ug/L	10	ug/L	103.4	70.0 – 130.0	P	01–APR–10 08:13	040110–1
	Potassium	130	ug/L	150	ug/L	86.5	70.0 – 130.0	P	01–APR–10 08:13	040110–1
	Silver	5.2	ug/L	5	ug/L	104.1	70.0 – 130.0	P	01–APR–10 08:13	040110–1
	Sodium	264	ug/L	300	ug/L	88.2	70.0 – 130.0	P	01–APR–10 08:13	040110–1
	Antimony	9.03	ug/L	10	ug/L	90.3	70.0 – 130.0	P	01–APR–10 08:13	040110–1
	Barium	5.12	ug/L	5	ug/L	102.3	70.0 – 130.0	P	01–APR–10 08:13	040110–1
	Cadmium	4.96	ug/L	5	ug/L	99.2	70.0 – 130.0	P	01–APR–10 08:13	040110–1
	Chromium	4.75	ug/L	5	ug/L	95	70.0 – 130.0	P	01–APR–10 08:13	040110–1
	Cobalt	5.04	ug/L	5	ug/L	100.7	70.0 – 130.0	P	01–APR–10 08:13	040110–1
	Copper	9.92	ug/L	10	ug/L	99.2	70.0 – 130.0	P	01–APR–10 08:13	040110–1
	Vanadium	4.69	ug/L	5	ug/L	93.8	70.0 – 130.0	P	01–APR–10 08:13	040110–1
	Zinc	9.72	ug/L	10	ug/L	97.2	70.0 – 130.0	P	01–APR–10 08:13	040110–1
	Calcium	196	ug/L	200	ug/L	98	70.0 – 130.0	P	01–APR–10 08:13	040110–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–2155

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	17–MAR–10 09:14	031710S1–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	01–APR–10 08:06	040110–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	01–APR–10 08:06	040110–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 08:06	040110–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 08:06	040110–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 08:06	040110–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	01–APR–10 08:06	040110–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	01–APR–10 08:06	040110–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	01–APR–10 08:06	040110–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 08:06	040110–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	01–APR–10 08:06	040110–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	01–APR–10 08:06	040110–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	01–APR–10 08:06	040110–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	01–APR–10 08:06	040110–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 08:06	040110–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	01–APR–10 08:06	040110–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 08:06	040110–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	01–APR–10 08:06	040110–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–APR–10 19:12	100413–2
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	13–APR–10 19:12	100413–2
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	13–APR–10 19:12	100413–2
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	13–APR–10 19:12	100413–2
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	13–APR–10 19:12	100413–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	14–APR–10 13:15	100414–3
CCB01										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	17–MAR–10 09:20	031710S1–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	01–APR–10 08:54	040110–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	01–APR–10 08:54	040110–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 08:54	040110–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 08:54	040110–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 08:54	040110–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–2155

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	01–APR–10 08:54	040110–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	01–APR–10 08:54	040110–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	01–APR–10 08:54	040110–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 08:54	040110–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	01–APR–10 08:54	040110–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	01–APR–10 08:54	040110–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	01–APR–10 08:54	040110–1
	Potassium	133.51	+/–250	J	64.0	250	SOL	P	01–APR–10 08:54	040110–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 08:54	040110–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	01–APR–10 08:54	040110–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 08:54	040110–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	01–APR–10 08:54	040110–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–APR–10 19:32	100413–2
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	13–APR–10 19:32	100413–2
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	13–APR–10 19:32	100413–2
	Thallium	0.324	+/–1	J	0.3	1.0	SOL	MS	13–APR–10 19:32	100413–2
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	13–APR–10 19:32	100413–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	14–APR–10 13:23	100414–3
CCB02										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	17–MAR–10 09:44	031710S1–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	01–APR–10 09:15	040110–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	01–APR–10 09:15	040110–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 09:15	040110–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 09:15	040110–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 09:15	040110–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	01–APR–10 09:15	040110–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	01–APR–10 09:15	040110–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	01–APR–10 09:15	040110–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 09:15	040110–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	01–APR–10 09:15	040110–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	01–APR–10 09:15	040110–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–2155

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	01–APR–10 09:15	040110–1
	Potassium	65.6	+/–250	J	64.0	250	SOL	P	01–APR–10 09:15	040110–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 09:15	040110–1
	Sodium	–73.57	+/–250	J	70.0	250	SOL	P	01–APR–10 09:15	040110–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 09:15	040110–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	01–APR–10 09:15	040110–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–APR–10 20:13	100413–2
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	13–APR–10 20:13	100413–2
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	13–APR–10 20:13	100413–2
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	13–APR–10 20:13	100413–2
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	13–APR–10 20:13	100413–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	14–APR–10 13:40	100414–3
CCB03										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	17–MAR–10 10:08	031710S1–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	01–APR–10 09:56	040110–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	01–APR–10 09:56	040110–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 09:56	040110–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 09:56	040110–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 09:56	040110–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	01–APR–10 09:56	040110–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	01–APR–10 09:56	040110–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	01–APR–10 09:56	040110–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 09:56	040110–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	01–APR–10 09:56	040110–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	01–APR–10 09:56	040110–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	01–APR–10 09:56	040110–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	01–APR–10 09:56	040110–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 09:56	040110–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	01–APR–10 09:56	040110–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 09:56	040110–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	01–APR–10 09:56	040110–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–2155

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–APR–10 20:46	100413–2
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	13–APR–10 20:46	100413–2
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	13–APR–10 20:46	100413–2
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	13–APR–10 20:46	100413–2
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	13–APR–10 20:46	100413–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	14–APR–10 13:53	100414–3
CCB04										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	01–APR–10 10:56	040110–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	01–APR–10 10:56	040110–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 10:56	040110–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 10:56	040110–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 10:56	040110–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	01–APR–10 10:56	040110–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	01–APR–10 10:56	040110–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	01–APR–10 10:56	040110–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 10:56	040110–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	01–APR–10 10:56	040110–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	01–APR–10 10:56	040110–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	01–APR–10 10:56	040110–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	01–APR–10 10:56	040110–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 10:56	040110–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	01–APR–10 10:56	040110–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 10:56	040110–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	01–APR–10 10:56	040110–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–APR–10 21:23	100413–2
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	13–APR–10 21:23	100413–2
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	13–APR–10 21:23	100413–2
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	13–APR–10 21:23	100413–2
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	13–APR–10 21:23	100413–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	14–APR–10 14:05	100414–3

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2155

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB05										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	01-APR-10 12:06	040110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	01-APR-10 12:06	040110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	01-APR-10 12:06	040110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	01-APR-10 12:06	040110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	01-APR-10 12:06	040110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	01-APR-10 12:06	040110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	01-APR-10 12:06	040110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	01-APR-10 12:06	040110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	01-APR-10 12:06	040110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	01-APR-10 12:06	040110-1
	Magnesium	-100.06	+/-300	J	85.0	300	SOL	P	01-APR-10 12:06	040110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	01-APR-10 12:06	040110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	01-APR-10 12:06	040110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	01-APR-10 12:06	040110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	01-APR-10 12:06	040110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	01-APR-10 12:06	040110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	01-APR-10 12:06	040110-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	13-APR-10 22:04	100413-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	13-APR-10 22:04	100413-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	13-APR-10 22:04	100413-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	13-APR-10 22:04	100413-2
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	13-APR-10 22:04	100413-2
CCB06										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	01-APR-10 13:16	040110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	01-APR-10 13:16	040110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	01-APR-10 13:16	040110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	01-APR-10 13:16	040110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	01-APR-10 13:16	040110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	01-APR-10 13:16	040110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	01-APR-10 13:16	040110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	01-APR-10 13:16	040110-1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–2155

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Iron	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 13:16	040110–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	01–APR–10 13:16	040110–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	01–APR–10 13:16	040110–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	01–APR–10 13:16	040110–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	01–APR–10 13:16	040110–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 13:16	040110–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	01–APR–10 13:16	040110–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 13:16	040110–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	01–APR–10 13:16	040110–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–APR–10 22:37	100413–2
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	13–APR–10 22:37	100413–2
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	13–APR–10 22:37	100413–2
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	13–APR–10 22:37	100413–2
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	13–APR–10 22:37	100413–2
CCB07										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	01–APR–10 13:51	040110–1
	Antimony	5.42	+/–10	J	3.3	10.0	SOL	P	01–APR–10 13:51	040110–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 13:51	040110–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 13:51	040110–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 13:51	040110–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	01–APR–10 13:51	040110–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	01–APR–10 13:51	040110–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	01–APR–10 13:51	040110–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 13:51	040110–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	01–APR–10 13:51	040110–1
	Magnesium	–95.97	+/–300	J	85.0	300	SOL	P	01–APR–10 13:51	040110–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	01–APR–10 13:51	040110–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	01–APR–10 13:51	040110–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 13:51	040110–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	01–APR–10 13:51	040110–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 13:51	040110–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–2155

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	01–APR–10 13:51	040110–1
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–APR–10 23:05	100413–2
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	13–APR–10 23:05	100413–2
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	13–APR–10 23:05	100413–2
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	13–APR–10 23:05	100413–2
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	13–APR–10 23:05	100413–2
CCB08										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	01–APR–10 14:54	040110–1
	Antimony	3.52	+/–10	J	3.3	10.0	SOL	P	01–APR–10 14:54	040110–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 14:54	040110–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 14:54	040110–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 14:54	040110–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	01–APR–10 14:54	040110–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	01–APR–10 14:54	040110–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	01–APR–10 14:54	040110–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 14:54	040110–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	01–APR–10 14:54	040110–1
	Magnesium	–87.84	+/–300	J	85.0	300	SOL	P	01–APR–10 14:54	040110–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	01–APR–10 14:54	040110–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	01–APR–10 14:54	040110–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 14:54	040110–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	01–APR–10 14:54	040110–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 14:54	040110–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	01–APR–10 14:54	040110–1
CCB09										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	01–APR–10 15:50	040110–1
	Antimony	4.91	+/–10	J	3.3	10.0	SOL	P	01–APR–10 15:50	040110–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 15:50	040110–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 15:50	040110–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 15:50	040110–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	01–APR–10 15:50	040110–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–2155

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	01–APR–10 15:50	040110–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	01–APR–10 15:50	040110–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 15:50	040110–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	01–APR–10 15:50	040110–1
	Magnesium	–123.78	+/–300	J	85.0	300	SOL	P	01–APR–10 15:50	040110–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	01–APR–10 15:50	040110–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	01–APR–10 15:50	040110–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 15:50	040110–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	01–APR–10 15:50	040110–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 15:50	040110–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	01–APR–10 15:50	040110–1
CCB10										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	01–APR–10 16:47	040110–1
	Antimony	3.36	+/–10	J	3.3	10.0	SOL	P	01–APR–10 16:47	040110–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 16:47	040110–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 16:47	040110–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 16:47	040110–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	01–APR–10 16:47	040110–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	01–APR–10 16:47	040110–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	01–APR–10 16:47	040110–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	01–APR–10 16:47	040110–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	01–APR–10 16:47	040110–1
	Magnesium	–102.2	+/–300	J	85.0	300	SOL	P	01–APR–10 16:47	040110–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	01–APR–10 16:47	040110–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	01–APR–10 16:47	040110–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 16:47	040110–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	01–APR–10 16:47	040110–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	01–APR–10 16:47	040110–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	01–APR–10 16:47	040110–1

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–2155

Contract: LANL01004

Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1202060836								
	Aluminum	6000	ug/Kg	+/–17600	U	P	6000	17600
	Antimony	291	ug/Kg	+/–882	U	P	291	882
	Barium	88.2	ug/Kg	+/–441	U	P	88.2	441
	Cadmium	88.2	ug/Kg	+/–441	U	P	88.2	441
	Calcium	7050	ug/Kg	+/–22000	U	P	7050	22000
	Chromium	132	ug/Kg	+/–441	U	P	132	441
	Cobalt	132	ug/Kg	+/–441	U	P	132	441
	Copper	265	ug/Kg	+/–882	U	P	265	882
	Iron	9070	ug/Kg	+/–22000	J	P	7050	22000
	Lead	220	ug/Kg	+/–882	U	P	220	882
	Magnesium	7500	ug/Kg	+/–26500	U	P	7500	26500
	Manganese	176	ug/Kg	+/–882	U	P	176	882
	Potassium	5640	ug/Kg	+/–22000	U	P	5640	22000
	Silver	88.2	ug/Kg	+/–441	U	P	88.2	441
	Sodium	6170	ug/Kg	+/–22000	U	P	6170	22000
	Vanadium	88.2	ug/Kg	+/–441	U	P	88.2	441
	Zinc	291	ug/Kg	+/–882	U	P	291	882
1202060842								
	Arsenic	0.19	mg/kg	+/–0.952	U	MS	0.19	0.952
	Beryllium	0.0191	mg/kg	+/–0.0952	U	MS	0.0191	0.0952
	Nickel	0.0952	mg/kg	+/–0.381	U	MS	0.0952	0.381
	Selenium	0.476	mg/kg	+/–0.952	U	MS	0.476	0.952
	Thallium	0.0571	mg/kg	+/–0.19	U	MS	0.0571	0.19
	Uranium	0.0126	mg/kg	+/–0.0381	U	MS	0.0126	0.0381
1202069741								
	Mercury	–4.12	ug/kg	+/–10.2	J	AV	3.45	10.2

METALS
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Interference Check Sample

SDG No: 10–2155

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	517000	ug/L	500000	ug/L	103	80.0 – 120.0	01–APR–10 08:20	040110–1
	Antimony	–1.83	ug/L					01–APR–10 08:20	040110–1
	Barium	4.85	ug/L					01–APR–10 08:20	040110–1
	Cadmium	–1.27	ug/L					01–APR–10 08:20	040110–1
	Calcium	481000	ug/L	500000	ug/L	96.1	80.0 – 120.0	01–APR–10 08:20	040110–1
	Chromium	–6.14	ug/L					01–APR–10 08:20	040110–1
	Cobalt	–1.12	ug/L					01–APR–10 08:20	040110–1
	Copper	1.99	ug/L					01–APR–10 08:20	040110–1
	Iron	186000	ug/L	200000	ug/L	93	80.0 – 120.0	01–APR–10 08:20	040110–1
	Lead	–3.74	ug/L					01–APR–10 08:20	040110–1
	Magnesium	490000	ug/L	500000	ug/L	97.9	80.0 – 120.0	01–APR–10 08:20	040110–1
	Manganese	–1.7	ug/L					01–APR–10 08:20	040110–1
	Potassium	–182.0	ug/L					01–APR–10 08:20	040110–1
	Silver	–3.08	ug/L					01–APR–10 08:20	040110–1
	Sodium	19.5	ug/L					01–APR–10 08:20	040110–1
	Vanadium	–1.47	ug/L					01–APR–10 08:20	040110–1
	Zinc	–0.523	ug/L					01–APR–10 08:20	040110–1
ICSAB01									
	Aluminum	516000	ug/L	500000	ug/L	103	80.0 – 120.0	01–APR–10 08:27	040110–1
	Antimony	535	ug/L	500	ug/L	107	80.0 – 120.0	01–APR–10 08:27	040110–1
	Barium	489	ug/L	500	ug/L	97.8	80.0 – 120.0	01–APR–10 08:27	040110–1
	Cadmium	477	ug/L	500	ug/L	95.4	80.0 – 120.0	01–APR–10 08:27	040110–1
	Calcium	480000	ug/L	500000	ug/L	96.1	80.0 – 120.0	01–APR–10 08:27	040110–1
	Chromium	486	ug/L	500	ug/L	97.2	80.0 – 120.0	01–APR–10 08:27	040110–1
	Cobalt	458	ug/L	500	ug/L	91.7	80.0 – 120.0	01–APR–10 08:27	040110–1
	Copper	547	ug/L	500	ug/L	109	80.0 – 120.0	01–APR–10 08:27	040110–1
	Iron	185000	ug/L	200000	ug/L	92.7	80.0 – 120.0	01–APR–10 08:27	040110–1
	Lead	475	ug/L	500	ug/L	95.1	80.0 – 120.0	01–APR–10 08:27	040110–1
	Magnesium	494000	ug/L	500000	ug/L	98.7	80.0 – 120.0	01–APR–10 08:27	040110–1

METALS
–4–
Interference Check Sample

SDG No: 10–2155

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Manganese	481	ug/L	500	ug/L	96.1	80.0 – 120.0	01–APR–10 08:27	040110–1
	Potassium	5180	ug/L	5000	ug/L	104	80.0 – 120.0	01–APR–10 08:27	040110–1
	Silver	275	ug/L	250	ug/L	110	80.0 – 120.0	01–APR–10 08:27	040110–1
	Sodium	5270	ug/L	5000	ug/L	105	80.0 – 120.0	01–APR–10 08:27	040110–1
	Vanadium	511	ug/L	500	ug/L	102	80.0 – 120.0	01–APR–10 08:27	040110–1
	Zinc	495	ug/L	500	ug/L	99.1	80.0 – 120.0	01–APR–10 08:27	040110–1

METALS
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Interference Check Sample

SDG No: 10–2155

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									
	Arsenic	–0.361	ug/L					13–APR–10 19:20	100413–2
	Nickel	2.78	ug/L					13–APR–10 19:20	100413–2
	Selenium	–1.05	ug/L					13–APR–10 19:20	100413–2
	Thallium	–0.004	ug/L					13–APR–10 19:20	100413–2
	Uranium	–0.012	ug/L					13–APR–10 19:20	100413–2
ICSAB01									
	Arsenic	20.6	ug/L	20	ug/L	103	80.0 – 120.0	13–APR–10 19:24	100413–2
	Nickel	21.7	ug/L	23.31	ug/L	93	80.0 – 120.0	13–APR–10 19:24	100413–2
	Selenium	20.9	ug/L	20	ug/L	104	80.0 – 120.0	13–APR–10 19:24	100413–2
	Thallium	19.3	ug/L	20	ug/L	96.7	80.0 – 120.0	13–APR–10 19:24	100413–2
	Uranium	21.4	ug/L	20	ug/L	107	80.0 – 120.0	13–APR–10 19:24	100413–2

METALS
–4–
Interference Check Sample

SDG No: 10–2155

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.07	ug/L					14–APR–10 13:18	100414–3
ICSAB01									
	Beryllium	19.8	ug/L	20	ug/L	99	80.0 – 120.0	14–APR–10 13:20	100414–3

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–2155 **Client ID** RE36–10–7494S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 88

Sample ID: 248374001 **Spike ID:** 1202060839

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		7980000		4580000		542000	627	N/A	P
Antimony	ug/Kg	75–125	49000		372	U	54200	90.4		P
Barium	ug/Kg	75–125	104000		48500		54200	103		P
Cadmium	ug/Kg	75–125	52500		113	U	54200	96.7		P
Calcium	ug/Kg	75–125	2130000		1520000		542000	111		P
Chromium	ug/Kg	75–125	64300		10500		54200	99.2		P
Cobalt	ug/Kg	75–125	54900		1700		54200	98.1		P
Copper	ug/Kg	75–125	62000		4080		54200	107		P
Iron	ug/Kg		10300000		9490000		542000	145	N/A	P
Lead	ug/Kg	75–125	60900		7400		54200	98.7		P
Magnesium	ug/Kg	75–125	1810000		1030000		542000	145	N	P
Manganese	ug/Kg		573000		549000		54200	44.8	N/A	P
Potassium	ug/Kg	75–125	1750000		921000		542000	154	N	P
Silver	ug/Kg	75–125	55100		113	U	54200	102		P
Sodium	ug/Kg	75–125	615000		86200		542000	97.5		P
Vanadium	ug/Kg	75–125	66300		10000		54200	104		P
Zinc	ug/Kg	75–125	102000		51500		54200	93.6		P

METALS
-5a-
Matrix Spike Duplicate Summary

SDG NO. 10-2155 **Client ID** RE36-10-7494SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 88

Sample ID: 248374001 **Spike ID:** 1202060841

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		7700000		4580000		560000	558	N/A	P
Antimony	ug/Kg	75-125	52000		372	U	56000	92.8		P
Barium	ug/Kg	75-125	106000		48500		56000	103		P
Cadmium	ug/Kg	75-125	54800		113	U	56000	97.8		P
Calcium	ug/Kg	75-125	2180000		1520000		560000	116		P
Chromium	ug/Kg	75-125	69100		10500		56000	105		P
Cobalt	ug/Kg	75-125	57300		1700		56000	99.2		P
Copper	ug/Kg	75-125	64900		4080		56000	108		P
Iron	ug/Kg		11000000		9490000		560000	274	N/A	P
Lead	ug/Kg	75-125	63400		7400		56000	99.9		P
Magnesium	ug/Kg	75-125	1800000		1030000		560000	139	N	P
Manganese	ug/Kg		579000		549000		56000	53.9	N/A	P
Potassium	ug/Kg	75-125	1740000		921000		560000	146	N	P
Silver	ug/Kg	75-125	58400		113	U	56000	104		P
Sodium	ug/Kg	75-125	660000		86200		560000	102		P
Vanadium	ug/Kg	75-125	69000		10000		56000	105		P
Zinc	ug/Kg	75-125	109000		51500		56000	103		P

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-2155 **Client ID** RE36-10-7494S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 88

Sample ID: 248374001 **Spike ID:** 1202060845

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Beryllium	mg/kg	75-125	5.63		0.69		5.7	86.6		MS
Nickel	mg/kg	75-125	10.7		5.44		5.7	92.3		MS
Selenium	mg/kg	75-125	2.19		0.56	U	2.28	90.2		MS
Thallium	mg/kg	75-125	10.5		0.0672	U	11.4	91.8		MS
Uranium	mg/kg	75-125	6.22		0.587		5.7	98.8		MS
Arsenic	mg/kg	75-125	9.91		1.22		9.13	95.2		MS

METALS
-5a-
Matrix Spike Duplicate Summary

SDG NO. 10-2155 **Client ID** RE36-10-7494SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 88

Sample ID: 248374001 **Spike ID:** 1202060847

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	9.43		1.22		8.98	91.4		MS
Nickel	mg/kg	75-125	10.8		5.44		5.61	95.9		MS
Selenium	mg/kg	75-125	1.99		0.56	U	2.25	82.7		MS
Thallium	mg/kg	75-125	9.88		0.0672	U	11.2	87.6		MS
Uranium	mg/kg	75-125	5.97		0.587		5.61	95.8		MS
Beryllium	mg/kg	75-125	5.71		0.69		5.61	89.4		MS

METALS
–5a–
Matrix Spike Summary

SDG NO. 10–2155 **Client ID** RE36–10–7494S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 88

Sample ID: 248374001 **Spike ID:** 1202069744

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	169		32.5		129	105		AV

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO.	10–2155	**Client ID**	RE36–10–7494SD
Contract:	LANL01004	**Level:**	Low
Matrix:	SOIL	**% Solids:**	88
Sample ID:	248374001	**Spike ID:**	1202069746

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	165		32.5		127	104		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–2155

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE36–10–7494D

Sample ID: 248374001 **Duplicate ID:** 1202060838 **Percent Solids for Dup:** 88

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20%	4580000		4590000		.286		P
Antimony	ug/Kg		372	U	371	U			P
Barium	ug/Kg	+/–20%	48500		50200		3.32		P
Cadmium	ug/Kg		113	U	112	U			P
Calcium	ug/Kg	+/–20%	1520000		1620000		5.82		P
Chromium	ug/Kg	+/–20%	10500		12400		16.1		P
Cobalt	ug/Kg	+/–561	1700		1780		4.84		P
Copper	ug/Kg	+/–1120	4080		4140		1.55		P
Iron	ug/Kg	+/–20%	9490000		9240000		2.64		P
Lead	ug/Kg	+/–20%	7400		7490		1.22		P
Magnesium	ug/Kg	+/–20%	1030000		1030000		.115		P
Manganese	ug/Kg	+/–20%	549000		563000		2.47		P
Potassium	ug/Kg	+/–20%	921000		916000		.516		P
Silver	ug/Kg		113	U	159	J	200		P
Sodium	ug/Kg	+/–28100	86200		79800		7.62		P
Vanadium	ug/Kg	+/–20%	10000		9750		2.63		P
Zinc	ug/Kg	+/–20%	51500		45300		12.8		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–2155

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE36–10–7494SD

Sample ID: 1202060839 **Duplicate ID:** 1202060841 **Percent Solids for Dup:** 88

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20	7980000		7700000		3.5		P
Antimony	ug/Kg	+/–20	49000		52000		5.87		P
Barium	ug/Kg	+/–20	104000		106000		1.6		P
Cadmium	ug/Kg	+/–20	52500		54800		4.39		P
Calcium	ug/Kg	+/–20	2130000		2180000		2.34		P
Chromium	ug/Kg	+/–20	64300		69100		7.12		P
Cobalt	ug/Kg	+/–20	54900		57300		4.33		P
Copper	ug/Kg	+/–20	62000		64900		4.45		P
Iron	ug/Kg	+/–20	10300000		11000000		7.04		P
Lead	ug/Kg	+/–20	60900		63400		3.97		P
Magnesium	ug/Kg	+/–20	1810000		1800000		.421		P
Manganese	ug/Kg	+/–20	573000		579000		1.02		P
Potassium	ug/Kg	+/–20	1750000		1740000		.808		P
Silver	ug/Kg	+/–20	55100		58400		5.67		P
Sodium	ug/Kg	+/–20	615000		660000		7.09		P
Vanadium	ug/Kg	+/–20	66300		69000		4.06		P
Zinc	ug/Kg	+/–20	102000		109000		6.6		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–2155

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE36–10–7494D

Sample ID: 248374001 **Duplicate ID:** 1202060844 **Percent Solids for Dup:** 88

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–1.08	1.22		1.13		7.77		MS
Beryllium	mg/kg	+/–20%	0.69		0.675		2.21		MS
Nickel	mg/kg	+/–20%	5.44		5.52		1.52		MS
Selenium	mg/kg		0.56	U	0.539	U			MS
Thallium	mg/kg		0.0672	U	0.0647	U			MS
Uranium	mg/kg	+/–20%	0.587		0.598		1.97		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–2155

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE36–10–7494SD

Sample ID: 1202060845 **Duplicate ID:** 1202060847 **Percent Solids for Dup:** 88

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–20	9.91		9.43		5		MS
Beryllium	mg/kg	+/–20	5.63		5.71		1.41		MS
Nickel	mg/kg	+/–20	10.7		10.8		1.14		MS
Selenium	mg/kg	+/–20	2.19		1.99		9.63		MS
Thallium	mg/kg	+/–20	10.5		9.88		6.25		MS
Uranium	mg/kg	+/–20	6.22		5.97		4.18		MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-2155

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE36-10-7494D

Sample ID: 248374001 **Duplicate ID:** 1202069743 **Percent Solids for Dup:** 88

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-12.6	32.5		34.7		6.44		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–2155

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE36–10–7494SD

Sample ID: 1202069744 **Duplicate ID:** 1202069746 **Percent Solids for Dup:** 88

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20	169		165		2.23		AV

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–2155

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202060837								
	Aluminum	ug/Kg	10500000	10300000		97.9	56–144	P
	Antimony	ug/Kg	173000	137000		79.1	71–130	P
	Barium	ug/Kg	198000	196000		98.9	80–120	P
	Cadmium	ug/Kg	60700	62500		103	81–120	P
	Calcium	ug/Kg	9870000	10200000		104	83–117	P
	Chromium	ug/Kg	236000	256000		109	80–120	P
	Cobalt	ug/Kg	91200	97500		107	81–120	P
	Copper	ug/Kg	174000	195000		112	81–118	P
	Iron	ug/Kg	18000000	18800000		104	51–149	P
	Lead	ug/Kg	86000	83600		97.2	79–121	P
	Magnesium	ug/Kg	4000000	4040000		101	79–122	P
	Manganese	ug/Kg	558000	553000		99	81–119	P
	Potassium	ug/Kg	4300000	4440000		103	74–127	P
	Silver	ug/Kg	30100	32500		108	66–134	P
	Sodium	ug/Kg	1020000	1090000		107	74–127	P
	Vanadium	ug/Kg	115000	128000		111	79–121	P
	Zinc	ug/Kg	594000	611000		103	80–121	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-2155

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202060843								
	Beryllium	mg/kg	77.6	88.5		114	84-116	MS
	Nickel	mg/kg	134	148		110	78-123	MS
	Selenium	mg/kg	286	328		115	77-123	MS
	Thallium	mg/kg	121	145		120	78-122	MS
	Uranium	mg/kg	2.13	2.17		102	73-127	MS
	Arsenic	mg/kg	104	116		112	78-123	MS

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–2155

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202069742								
	Mercury	ug/kg	5150	5500		107	71.6–128.3	AV

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–2155 **Client ID** RE36–10–7494L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 248374001 **Serial Dilution ID:** 1202060840

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	40600		40500		.246		10	P
Antimony	3.3	U	16.5	U				P
Barium	430		435		1.05		10	P
Cadmium	1	U	5	U				P
Calcium	13500		13800		2.22		10	P
Chromium	93.4		97		3.85		10	P
Cobalt	15.1		14.9	J	1.66			P
Copper	36.2		34.5	J	4.7			P
Iron	84200		88500		5.11		10	P
Lead	65.7		47.6	J	27.6			P
Magnesium	9100		9350		2.75		10	P
Manganese	4870		4940		1.44		10	P
Potassium	8170		8050		1.47		10	P
Silver	1	U	5	U				P
Sodium	764		755	J	1.18			P
Vanadium	88.8		87		2.03		10	P
Zinc	457		455		.547		10	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-2155 **Client ID** RE36-10-7494L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 248374001 **Serial Dilution ID:** 1202060846

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	5.46		5	U	100			MS
Beryllium	3.08		3.56		15.6			MS
Nickel	24.3		27.6		13.6			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.3	U	1.5	U				MS
Uranium	2.62		2.85		8.78			MS

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–2155 **Client ID** RE36–10–7494L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 248374001 **Serial Dilution ID:** 1202069745

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.499		.34	U	100			AV

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–2155 **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	960818						
1202060836	MB for batch 960818	MB	S	12–MAR–10	.567g	50mL	
1202060837	LCS for batch 960818	LCS	S	12–MAR–10	.521g	50mL	
1202060839	RE36–10–7494S	MS	S	12–MAR–10	.526g	50mL	
1202060841	RE36–10–7494SD	MSD	S	12–MAR–10	.509g	50mL	
1202060838	RE36–10–7494D	DUP	S	12–MAR–10	.508g	50mL	
248374001	RE36–10–7494	SAMPLE	S	12–MAR–10	.506g	50mL	
248374002	RE36–10–7493	SAMPLE	S	12–MAR–10	.518g	50mL	
248374003	RE36–10–7492	SAMPLE	S	12–MAR–10	.53g	50mL	
248374004	RE36–10–7491	SAMPLE	S	12–MAR–10	.505g	50mL	
248374005	RE36–10–7496	SAMPLE	S	12–MAR–10	.551g	50mL	
248374006	RE36–10–7499	SAMPLE	S	12–MAR–10	.582g	50mL	
248374007	RE36–10–7497	SAMPLE	S	12–MAR–10	.507g	50mL	
248374008	RE36–10–7495	SAMPLE	S	12–MAR–10	.546g	50mL	
248374009	RE36–10–7498	SAMPLE	S	12–MAR–10	.522g	50mL	
248374010	RE36–10–7500	SAMPLE	S	12–MAR–10	.544g	50mL	
248374011	RE36–10–7523	SAMPLE	S	12–MAR–10	.525g	50mL	
248374012	RE36–10–7522	SAMPLE	S	12–MAR–10	.526g	50mL	
248374013	RE36–10–7521	SAMPLE	S	12–MAR–10	.529g	50mL	

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–2155 **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	960821						
1202060842	MB for batch 960821	MB	S	12–MAR–10	.525g	50mL	
1202060843	LCS for batch 960821	LCS	S	12–MAR–10	.505g	50mL	
1202060845	RE36–10–7494S	MS	S	12–MAR–10	.5g	50mL	
1202060847	RE36–10–7494SD	MSD	S	12–MAR–10	.508g	50mL	
1202060844	RE36–10–7494D	DUP	S	12–MAR–10	.529g	50mL	
248374001	RE36–10–7494	SAMPLE	S	12–MAR–10	.509g	50mL	
248374002	RE36–10–7493	SAMPLE	S	12–MAR–10	.5g	50mL	
248374003	RE36–10–7492	SAMPLE	S	12–MAR–10	.517g	50mL	
248374004	RE36–10–7491	SAMPLE	S	12–MAR–10	.5g	50mL	
248374005	RE36–10–7496	SAMPLE	S	12–MAR–10	.565g	50mL	
248374006	RE36–10–7499	SAMPLE	S	12–MAR–10	.515g	50mL	
248374007	RE36–10–7497	SAMPLE	S	12–MAR–10	.552g	50mL	
248374008	RE36–10–7495	SAMPLE	S	12–MAR–10	.544g	50mL	
248374009	RE36–10–7498	SAMPLE	S	12–MAR–10	.569g	50mL	
248374010	RE36–10–7500	SAMPLE	S	12–MAR–10	.519g	50mL	
248374011	RE36–10–7523	SAMPLE	S	12–MAR–10	.527g	50mL	
248374012	RE36–10–7522	SAMPLE	S	12–MAR–10	.553g	50mL	
248374013	RE36–10–7521	SAMPLE	S	12–MAR–10	.566g	50mL	

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–2155 **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	964729						
1202069741	MB for batch 964729	MB	S	16–MAR–10	.591g	30mL	
1202069742	LCS for batch 964729	LCS	S	16–MAR–10	.204g	30mL	
1202069744	RE36–10–7494S	MS	S	16–MAR–10	.53g	30mL	
1202069746	RE36–10–7494SD	MSD	S	16–MAR–10	.54g	30mL	
1202069743	RE36–10–7494D	DUP	S	16–MAR–10	.545g	30mL	
248374001	RE36–10–7494	SAMPLE	S	16–MAR–10	.525g	30mL	
248374002	RE36–10–7493	SAMPLE	S	16–MAR–10	.5g	30mL	
248374003	RE36–10–7492	SAMPLE	S	16–MAR–10	.532g	30mL	
248374004	RE36–10–7491	SAMPLE	S	16–MAR–10	.507g	30mL	
248374005	RE36–10–7496	SAMPLE	S	16–MAR–10	.559g	30mL	
248374006	RE36–10–7499	SAMPLE	S	16–MAR–10	.533g	30mL	
248374007	RE36–10–7497	SAMPLE	S	16–MAR–10	.56g	30mL	
248374008	RE36–10–7495	SAMPLE	S	16–MAR–10	.557g	30mL	
248374009	RE36–10–7498	SAMPLE	S	16–MAR–10	.573g	30mL	
248374010	RE36–10–7500	SAMPLE	S	16–MAR–10	.535g	30mL	
248374011	RE36–10–7523	SAMPLE	S	16–MAR–10	.577g	30mL	
248374012	RE36–10–7522	SAMPLE	S	16–MAR–10	.524g	30mL	
248374013	RE36–10–7521	SAMPLE	S	16–MAR–10	.593g	30mL	

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: 10–2155
Method MS
Data File: 100413–2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	18:56:00			X													X		X			X	X		
S10	1	19:00:00			X													X		X			X	X		
S100	1	19:04:00			X													X		X			X	X		
ICV01	1	19:08:00			X													X		X			X	X		
ICB01	1	19:12:00			X													X		X			X	X		
CRDL01	1	19:16:00			X													X		X			X	X		
ICSA01	1	19:20:00			X													X		X			X	X		
ICSAB01	1	19:24:00			X													X		X			X	X		
CCV01	1	19:28:00			X													X		X			X	X		
CCB01	1	19:32:00			X													X		X			X	X		
ZZZZZZ	2	19:37:00																								
ZZZZZZ	40	19:41:00																								
ZZZZZZ	2	19:45:00																								
ZZZZZZ	2	19:49:00																								
ZZZZZZ	2	19:53:00																								
ZZZZZZ	2	19:57:00																								
ZZZZZZ	10	20:01:00																								
ZZZZZZ	2	20:05:00																								
CCV02	1	20:09:00			X													X		X			X	X		
CCB02	1	20:13:00			X													X		X			X	X		
ZZZZZZ	2	20:17:00																								
ZZZZZZ	2	20:21:00																								
ZZZZZZ	2	20:26:00																								
ZZZZZZ	2	20:30:00																								
ZZZZZZ	2	20:34:00																								
ZZZZZZ	2	20:38:00																								
CCV03	1	20:42:00			X													X		X			X	X		
CCB03	1	20:46:00			X													X		X			X	X		
ZZZZZZ	2	20:50:00																								
ZZZZZZ	2	20:54:00																								
ZZZZZZ	2	20:58:00																								
ZZZZZZ	2	21:02:00																								
ZZZZZZ	2	21:06:00																								
ZZZZZZ	2	21:11:00																								
ZZZZZZ	2	21:15:00																								
CCV04	1	21:19:00			X													X		X			X	X		
CCB04	1	21:23:00			X													X		X			X	X		
1202060842	2	21:27:00			X													X		X			X	X		
1202060843	40	21:31:00			X													X		X			X	X		
248374001	2	21:35:00			X													X		X			X	X		

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																							
1202060844	2	21:39:00			X												X		X			X	X		
1202060845	2	21:43:00			X												X		X			X	X		
1202060847	2	21:47:00			X												X		X			X	X		
1202060846	10	21:51:00			X												X		X			X	X		
248374002	2	21:56:00			X												X		X			X	X		
CCV05	1	22:00:00			X												X		X			X	X		
CCB05	1	22:04:00			X												X		X			X	X		
248374003	2	22:08:00			X												X		X			X	X		
248374004	2	22:12:00			X												X		X			X	X		
248374005	2	22:16:00			X												X		X			X	X		
248374006	2	22:20:00			X												X		X			X	X		
248374007	2	22:24:00			X												X		X			X	X		
248374008	2	22:28:00			X												X		X			X	X		
CCV06	1	22:33:00			X												X		X			X	X		
CCB06	1	22:37:00			X												X		X			X	X		
248374009	2	22:41:00			X												X		X			X	X		
248374010	2	22:45:00			X												X		X			X	X		
248374011	2	22:49:00			X												X		X			X	X		
248374012	2	22:53:00			X												X		X			X	X		
248374013	2	22:57:00			X												X		X			X	X		
CCV07	1	23:01:00			X												X		X			X	X		
CCB07	1	23:05:00			X												X		X			X	X		

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 14-APR-10 **End Date:** 14-APR-10

Client Sdg: 10-2155
Method MS
Data File: 100414-3

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	13:08:00					X																			
S10	1	13:10:00					X																			
S100	1	13:12:00					X																			
ICV01	1	13:13:00					X																			
ICB01	1	13:15:00					X																			
CRDL01	1	13:17:00					X																			
ICSA01	1	13:18:00					X																			
ICSAB01	1	13:20:00					X																			
CCV01	1	13:22:00					X																			
CCB01	1	13:23:00					X																			
1202060842	2	13:25:00					X																			
1202060843	40	13:27:00					X																			
248374001	2	13:28:00					X																			
1202060844	2	13:30:00					X																			
1202060845	2	13:32:00					X																			
1202060847	2	13:33:00					X																			
1202060846	10	13:35:00					X																			
248374002	2	13:37:00					X																			
CCV02	1	13:38:00					X																			
CCB02	1	13:40:00					X																			
248374003	2	13:42:00					X																			
248374004	2	13:43:00					X																			
248374005	2	13:45:00					X																			
248374006	2	13:47:00					X																			
248374007	2	13:48:00					X																			
248374008	2	13:50:00					X																			
CCV03	1	13:52:00					X																			
CCB03	1	13:53:00					X																			
248374009	2	13:55:00					X																			
248374010	2	13:57:00					X																			
248374011	2	13:58:00					X																			
248374012	2	14:00:00					X																			
248374013	2	14:02:00					X																			
CCV04	1	14:03:00					X																			
CCB04	1	14:05:00					X																			

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 01–APR–10 **End Date:** 01–APR–10

Client Sdg: 10–2155
Method P
Data File: 040110–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	07:26:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S0.1	1	07:33:00		X		X		X		X	X	X		X		X			X		X				X	X
S0.5	1	07:40:00	X	X		X		X	X	X	X	X		X	X	X			X		X				X	X
SCAL	1	07:47:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S10	1	07:54:00	X						X				X		X							X				
ICV01	1	07:59:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICB01	1	08:06:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
PQL01	1	08:13:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSA01	1	08:20:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSAB01	1	08:27:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR01	1	08:33:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR02	1	08:40:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV01	1	08:47:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB01	1	08:54:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR03	1	09:01:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV02	1	09:08:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB02	1	09:15:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	10	09:22:00																								
ZZZZZZ	10	09:29:00																								
ZZZZZZ	10	09:35:00																								
ZZZZZZ	10	09:42:00																								
CCV03	1	09:49:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB03	1	09:56:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	10:01:00																								
ZZZZZZ	1	10:08:00																								
ZZZZZZ	1	10:15:00																								
ZZZZZZ	1	10:22:00																								
ZZZZZZ	1	10:29:00																								
ZZZZZZ	1	10:36:00																								
ZZZZZZ	5	10:43:00																								
CCV04	1	10:49:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB04	1	10:56:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	11:03:00																								
ZZZZZZ	1	11:10:00																								
ZZZZZZ	1	11:17:00																								
ZZZZZZ	1	11:24:00																								
ZZZZZZ	1	11:31:00																								
ZZZZZZ	1	11:39:00																								
ZZZZZZ	1	11:46:00																								
ZZZZZZ	1	11:52:00																								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																								
CCV05	1	11:59:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB05	1	12:06:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	12:13:00																								
ZZZZZZ	1	12:20:00																								
ZZZZZZ	1	12:27:00																								
ZZZZZZ	1	12:34:00																								
ZZZZZZ	1	12:41:00																								
ZZZZZZ	1	12:48:00																								
ZZZZZZ	1	12:55:00																								
ZZZZZZ	1	13:02:00																								
CCV06	1	13:09:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB06	1	13:16:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV07	1	13:44:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB07	1	13:51:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202060836	1	13:58:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202060837	1	14:05:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248374001	1	14:11:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202060838	1	14:18:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202060839	1	14:25:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202060841	1	14:33:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202060840	5	14:40:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV08	1	14:47:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB08	1	14:54:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248374002	1	15:01:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248374003	1	15:08:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248374004	1	15:15:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248374005	1	15:22:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248374006	1	15:29:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248374007	1	15:36:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV09	1	15:43:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB09	1	15:50:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248374008	1	15:57:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248374009	1	16:04:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248374010	1	16:11:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248374011	1	16:18:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248374012	1	16:25:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248374013	1	16:33:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV10	1	16:40:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB10	1	16:47:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: MER536
Start Date: 17–MAR–10 **End Date:** 17–MAR–10

Client Sdg: 10–2155
Method AV
Data File: 031710S1–4

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	09:00:00															X									
S0.2	1	09:02:00															X									
S0.5	1	09:04:00															X									
S2.0	1	09:06:00															X									
S5.0	1	09:08:00															X									
S10	1	09:10:00															X									
ICV01	1	09:12:00															X									
ICB01	1	09:14:00															X									
CRDL01	1	09:16:00															X									
CCV01	1	09:18:00															X									
CCB01	1	09:20:00															X									
1202069741	1	09:22:00															X									
1202069742	10	09:24:00															X									
248374001	1	09:26:00															X									
1202069743	1	09:28:00															X									
1202069744	1	09:30:00															X									
1202069746	1	09:32:00															X									
1202069745	5	09:34:00															X									
248374002	1	09:36:00															X									
248374003	1	09:38:00															X									
248374004	1	09:40:00															X									
CCV02	1	09:42:00															X									
CCB02	1	09:44:00															X									
248374005	1	09:46:00															X									
248374006	1	09:48:00															X									
248374007	1	09:50:00															X									
248374008	1	09:52:00															X									
248374009	1	09:54:00															X									
248374010	1	09:56:00															X									
248374011	1	09:58:00															X									
248374012	1	10:00:00															X									
248374013	1	10:02:00															X									
ZZZZZZ	1	10:04:00																								
CCV03	1	10:06:00															X									
CCB03	1	10:08:00															X									

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10--2155

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-2155

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15-JUN-09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Mercury		0.068	.2

METALS
–10–
Instrument Detection Limits

SDG NO. 10–2155

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-2155
Effective Dates: 01-FEB-10

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02697	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.48147	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.21356	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05186	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.18741	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-2155
Effective Dates: 01-FEB-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	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.85580	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.44491	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-29.9151	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.57616
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.60374	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	198.62
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.37985	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.36147	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	2.23785	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.36818	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.35273

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-2155
Effective Dates: 01-FEB-10

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	48.4946
Antimony	206.836	-0.02515	0.00000	0.00000	0.00000	-20.5057
Arsenic	188.979	-0.23424	0.00000	0.00000	0.00000	2.41902
Barium	233.527	-0.03042	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.16240	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.10329	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01944	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01444	0.00000	0.00000	0.00000	-2.33100
Copper	324.752	-0.05293	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09554	0.00000	0.00000	0.00000	-2.48774
Magnesium	279.077	1.04597	0.00000	0.00000	0.00000	-10.4683
Manganese	257.61	-0.09877	0.00000	0.04089	0.00000	0.00000
Molybdenum	202.031	-0.07763	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80543	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.39429	1.18725
Selenium	196.026	-3.27508	0.00000	0.00000	0.00000	-3.07287
Silica	251.611	0.00000	0.00000	0.00000	0.00000	27.2377
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	12.3082
Silver	328.068	-0.32385	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.77918	0.00000
Tin	189.927	-0.01682	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.08168	0.00000	0.00000
Uranium	409.014	0.11400	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.14564	0.00000	-0.01931	0.00000	-14.1293
Zinc	213.857	0.09701	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-2155
Effective Dates: 01-FEB-10

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silica
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-0.84443	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.63547	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.37026	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-2155
Effective Dates: 01-FEB-10

Parmname	Wavelength	Silicon	Silver	Strontium	Sulfur	Thallium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-2155
Effective Dates: 01-FEB-10

Parmname	Wavelength	Tin	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-15.4932	3.30431	0.00000	-2.81282	0.00000
Arsenic	188.979	0.00000	-8.66313	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	-2.20293	0.00000
Beryllium	313.107	0.00000	-2.27027	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	-0.19473	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.39645	-1.41250	0.00000
Cobalt	228.616	0.00000	2.09497	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.55360	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-9.37529	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.81635	-4.04400	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	-8.29801	0.00000	1.88584	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.43915	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	1.05947	-1.91382	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
–12–
Linear Ranges

SDG NO. 10–2155

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
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
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

METALS
–12–
Linear Ranges

SDG NO. 10–2155

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

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

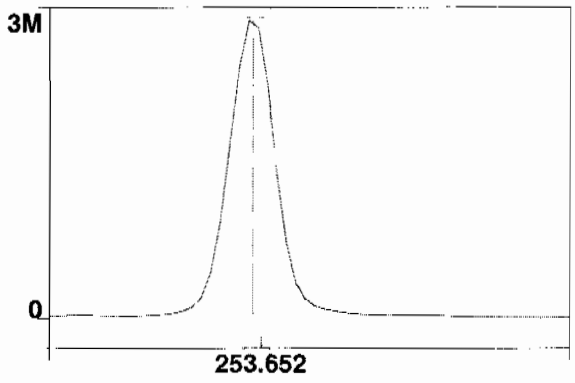
Raw Data

Method: Hg_ReAlign
Result: 041510

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



Intensity: 2898464.1 cps
Conc:

1

4/1/2010 07:23:14 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): 0.001 Slit adjustment: 3

Analysis Begun

Start Time: 4/1/2010 07:26:39 **Plasma On Time: 3/30/2010 17:10:22**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\040110.sif
Batch ID:
Results Data Set: 040110
Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 3/31/2010 08:16:02**
IEC File: 011110.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 4/1/2010 07:26:41**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

	Net	Corrected	Calib.	Analysis

Repl#	Analyte	Intensity	Intensity	Conc.	Units	Time
1	Sc Radial	3803.0	3803.0	0.000	%	07:28:53
1	Y RADIAL	4323.7	4323.7	0.000	%	07:28:33
1	Al 396.153Radial†	-97.7	-98.6	[0.00]	ug/L	07:28:33
1	Ca 317.933Radial†	19.4	19.6	[0.00]	ug/L	07:28:53
1	Fe 238.204 Radial†	3.8	3.8	[0.00]	ug/L	07:28:53
1	K 766.490 Radial†	2959.4	2987.1	[0.00]	ug/L	07:28:33
1	Mg 279.077 IEC†	3.0	3.0	[0.00]	ug/L	07:28:53
1	Na 589.592 Radial†	-1107.3	-1117.6	[0.00]	ug/L	07:28:33
1	Sr 421.552†	23.8	24.0	[0.00]	ug/L	07:28:33
1	Sc 361.383	689962.9	689962.9	0.0000	%	07:29:50
1	Y 371.029	543188.3	543188.3	0.0000	%	07:29:50
1	Ag 328.068†	95.4	95.3	[0.00]	ug/L	07:29:50
1	As 188.979†	-20.8	-20.8	[0.00]	ug/L	07:30:10
1	B 249.677†	-560.1	-559.8	[0.00]	ug/L	07:30:10
1	Ba 233.527†	8.6	8.6	[0.00]	ug/L	07:30:10
1	Be 313.107†	-4490.1	-4487.6	[0.00]	ug/L	07:29:50
1	Cd 226.502†	-219.3	-219.2	[0.00]	ug/L	07:30:10
1	Co 228.616†	-60.1	-60.1	[0.00]	ug/L	07:30:10
1	Cr 267.716†	96.6	96.5	[0.00]	ug/L	07:30:10
1	Cu 324.752†	5638.4	5635.4	[0.00]	ug/L	07:29:50
1	Mn 257.610†	460.8	460.6	[0.00]	ug/L	07:30:10
1	Mo 202.031†	7.9	7.9	[0.00]	ug/L	07:30:10
1	Ni 231.604†	76.8	76.8	[0.00]	ug/L	07:30:10
1	P 214.914†	213.4	213.3	[0.00]	ug/L	07:30:10
1	Pb 220.353†	-67.6	-67.6	[0.00]	ug/L	07:30:10
1	S 181.975 Axial†	40.4	40.3	[0.00]	ug/L	07:30:10
1	Sb 206.836†	29.0	29.0	[0.00]	ug/L	07:30:10
1	Se 196.026†	-30.1	-30.1	[0.00]	ug/L	07:30:10
1	Si 251.611†	497.0	496.8	[0.00]	ug/L	07:30:10
1	Sn 189.927†	2.0	2.0	[0.00]	ug/L	07:30:10
1	Ti 334.940†	-1414.7	-1413.9	[0.00]	ug/L	07:29:50
1	Tl 190.801†	-34.9	-34.9	[0.00]	ug/L	07:30:10
1	U 409.014†	-2398.6	-2397.3	[0.00]	ug/L	07:29:50
1	V 292.402†	-1715.4	-1714.5	[0.00]	ug/L	07:29:50
1	Zn 213.857†	673.0	672.6	[0.00]	ug/L	07:30:10
1	SiO2†	521.3	521.0	[0.00]	ug/L	07:31:06
2	Sc Radial	3847.1	3847.1	0.000	%	07:29:18
2	Y RADIAL	4320.2	4320.2	0.000	%	07:28:58
2	Al 396.153Radial†	-86.1	-85.9	[0.00]	ug/L	07:28:58
2	Ca 317.933Radial†	20.6	20.6	[0.00]	ug/L	07:29:18
2	Fe 238.204 Radial†	7.8	7.8	[0.00]	ug/L	07:29:18
2	K 766.490 Radial†	3070.9	3064.1	[0.00]	ug/L	07:28:58
2	Mg 279.077 IEC†	1.5	1.5	[0.00]	ug/L	07:29:18
2	Na 589.592 Radial†	-1029.2	-1026.9	[0.00]	ug/L	07:28:58
2	Sr 421.552†	13.2	13.2	[0.00]	ug/L	07:28:58
2	Sc 361.383	686890.2	686890.2	0.0000	%	07:30:15
2	Y 371.029	539232.9	539232.9	0.0000	%	07:30:15
2	Ag 328.068†	97.2	97.6	[0.00]	ug/L	07:30:15
2	As 188.979†	-24.2	-24.3	[0.00]	ug/L	07:30:35
2	B 249.677†	-604.4	-606.8	[0.00]	ug/L	07:30:35
2	Ba 233.527†	-4.2	-4.2	[0.00]	ug/L	07:30:35
2	Be 313.107†	-4466.3	-4483.8	[0.00]	ug/L	07:30:15
2	Cd 226.502†	-208.2	-209.0	[0.00]	ug/L	07:30:35
2	Co 228.616†	-52.7	-52.9	[0.00]	ug/L	07:30:35
2	Cr 267.716†	75.4	75.7	[0.00]	ug/L	07:30:35
2	Cu 324.752†	5681.1	5703.4	[0.00]	ug/L	07:30:15
2	Mn 257.610†	434.4	436.1	[0.00]	ug/L	07:30:35
2	Mo 202.031†	19.9	20.0	[0.00]	ug/L	07:30:35
2	Ni 231.604†	70.2	70.5	[0.00]	ug/L	07:30:35
2	P 214.914†	220.6	221.4	[0.00]	ug/L	07:30:35
2	Pb 220.353†	-79.7	-80.1	[0.00]	ug/L	07:30:35
2	S 181.975 Axial†	39.2	39.3	[0.00]	ug/L	07:30:35
2	Sb 206.836†	32.7	32.8	[0.00]	ug/L	07:30:35
2	Se 196.026†	-15.6	-15.6	[0.00]	ug/L	07:30:35
2	Si 251.611†	499.0	501.0	[0.00]	ug/L	07:30:35
2	Sn 189.927†	4.7	4.8	[0.00]	ug/L	07:30:35
2	Ti 334.940†	-1436.4	-1442.1	[0.00]	ug/L	07:30:15
2	Tl 190.801†	-39.8	-39.9	[0.00]	ug/L	07:30:35
2	U 409.014†	-2533.4	-2543.3	[0.00]	ug/L	07:30:15
2	V 292.402†	-1707.7	-1714.4	[0.00]	ug/L	07:30:15

2	Zn 213.857†	662.7	665.3	[0.00] ug/L	07:30:35
2	SiO2†	525.6	527.7	[0.00] ug/L	07:31:11
3	Sc Radial	3865.7	3865.7	0.000 %	07:29:43
3	Y RADIAL	4351.6	4351.6	0.000 %	07:29:23
3	Al 396.153Radial†	-92.9	-92.2	[0.00] ug/L	07:29:23
3	Ca 317.933Radial†	15.9	15.8	[0.00] ug/L	07:29:43
3	Fe 238.204 Radial†	7.0	7.0	[0.00] ug/L	07:29:43
3	K 766.490 Radial†	2957.1	2936.4	[0.00] ug/L	07:29:23
3	Mg 279.077 IEC†	4.5	4.5	[0.00] ug/L	07:29:43
3	Na 589.592 Radial†	-1096.6	-1088.9	[0.00] ug/L	07:29:23
3	Sr 421.552†	4.4	4.4	[0.00] ug/L	07:29:23
3	Sc 361.383	691910.0	691910.0	0.0000 %	07:30:41
3	Y 371.029	543045.6	543045.6	0.0000 %	07:30:41
3	Ag 328.068†	107.1	106.8	[0.00] ug/L	07:30:41
3	As 188.979†	-23.3	-23.3	[0.00] ug/L	07:31:01
3	B 249.677†	-584.5	-582.5	[0.00] ug/L	07:31:01
3	Ba 233.527†	-2.0	-2.0	[0.00] ug/L	07:31:01
3	Be 313.107†	-4613.8	-4598.3	[0.00] ug/L	07:30:41
3	Cd 226.502†	-212.8	-212.1	[0.00] ug/L	07:31:01
3	Co 228.616†	-66.2	-66.0	[0.00] ug/L	07:31:01
3	Cr 267.716†	102.1	101.7	[0.00] ug/L	07:31:01
3	Cu 324.752†	5744.4	5725.1	[0.00] ug/L	07:30:41
3	Mn 257.610†	439.8	438.3	[0.00] ug/L	07:31:01
3	Mo 202.031†	9.5	9.5	[0.00] ug/L	07:31:01
3	Ni 231.604†	77.0	76.7	[0.00] ug/L	07:31:01
3	P 214.914†	221.5	220.8	[0.00] ug/L	07:31:01
3	Pb 220.353†	-53.6	-53.4	[0.00] ug/L	07:31:01
3	S 181.975 Axial†	41.2	41.0	[0.00] ug/L	07:31:01
3	Sb 206.836†	33.5	33.4	[0.00] ug/L	07:31:01
3	Se 196.026†	-20.6	-20.6	[0.00] ug/L	07:31:01
3	Si 251.611†	493.8	492.1	[0.00] ug/L	07:31:01
3	Sn 189.927†	5.6	5.6	[0.00] ug/L	07:31:01
3	Ti 334.940†	-1413.2	-1408.5	[0.00] ug/L	07:30:41
3	Tl 190.801†	-39.2	-39.0	[0.00] ug/L	07:31:01
3	U 409.014†	-2286.6	-2278.9	[0.00] ug/L	07:30:41
3	V 292.402†	-1726.1	-1720.3	[0.00] ug/L	07:30:41
3	Zn 213.857†	658.1	655.9	[0.00] ug/L	07:31:01
3	SiO2†	570.7	568.8	[0.00] ug/L	07:31:16

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	689587.7	2530.82	0.37%	0.0000	%
Sc Radial	3838.6	32.20	0.84%	0.000	%
Y 371.029	541822.3	2243.56	0.41%	0.0000	%
Y RADIAL	4331.8	17.23	0.40%	0.000	%
Ag 328.068†	99.9	6.05	6.06%	[0.00]	ug/L
Al 396.153Radial†	-92.3	6.33	6.86%	[0.00]	ug/L
As 188.979†	-22.8	1.82	7.98%	[0.00]	ug/L
B 249.677†	-583.0	23.53	4.04%	[0.00]	ug/L
Ba 233.527†	0.8	6.84	875.05%	[0.00]	ug/L
Be 313.107†	-4523.3	65.05	1.44%	[0.00]	ug/L
Ca 317.933Radial†	18.7	2.51	13.46%	[0.00]	ug/L
Cd 226.502†	-213.5	5.24	2.45%	[0.00]	ug/L
Co 228.616†	-59.7	6.57	11.01%	[0.00]	ug/L
Cr 267.716†	91.3	13.80	15.11%	[0.00]	ug/L
Cu 324.752†	5688.0	46.83	0.82%	[0.00]	ug/L
Fe 238.204 Radial†	6.2	2.07	33.50%	[0.00]	ug/L
K 766.490 Radial†	2995.9	64.29	2.15%	[0.00]	ug/L
Mg 279.077 IEC†	3.0	1.47	48.66%	[0.00]	ug/L
Mn 257.610†	445.0	13.53	3.04%	[0.00]	ug/L
Mo 202.031†	12.5	6.59	52.82%	[0.00]	ug/L
Na 589.592 Radial†	-1077.8	46.37	4.30%	[0.00]	ug/L
Ni 231.604†	74.7	3.62	4.84%	[0.00]	ug/L
P 214.914†	218.5	4.52	2.07%	[0.00]	ug/L
Pb 220.353†	-67.0	13.34	19.90%	[0.00]	ug/L
S 181.975 Axial†	40.2	0.84	2.10%	[0.00]	ug/L
Sb 206.836†	31.7	2.41	7.59%	[0.00]	ug/L
Se 196.026†	-22.1	7.34	33.24%	[0.00]	ug/L
Si 251.611†	496.6	4.42	0.89%	[0.00]	ug/L

Sn 189.927†	4.1	1.88	45.56%	[0.00] ug/L
Sr 421.552†	13.9	9.84	70.95%	[0.00] ug/L
Ti 334.940†	-1421.5	18.03	1.27%	[0.00] ug/L
Tl 190.801†	-37.9	2.71	7.13%	[0.00] ug/L
U 409.014†	-2406.5	132.43	5.50%	[0.00] ug/L
V 292.402†	-1716.4	3.37	0.20%	[0.00] ug/L
Zn 213.857†	664.6	8.36	1.26%	[0.00] ug/L
SiO2†	539.2	25.90	4.80%	[0.00] ug/L

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

Autosampler Location: 2
Date Collected: 4/1/2010 07:33:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	3951.2	3951.2	103	%	07:35:40
1	Y RADIAL	4319.1	4319.1	99.71	%	07:35:40
1	K 766.490 Radial†	8313.5	5080.9	[1000]	ug/L	07:35:20
1	Sr 421.552†	10736.2	10416.6	[100]	ug/L	07:35:40
1	Sc 361.383	678854.2	678854.2	98.443	%	07:36:37
1	Y 371.029	532635.2	532635.2	98.304	%	07:36:37
1	Ag 328.068†	17924.2	18107.7	[100]	ug/L	07:36:37
1	As 188.979†	173.6	199.1	[100]	ug/L	07:36:57
1	B 249.677†	3161.5	3794.5	[100]	ug/L	07:36:37
1	Ba 233.527†	10470.3	10635.0	[100]	ug/L	07:36:37
1	Be 313.107†	242161.7	250513.8	[100]	ug/L	07:36:37
1	Cd 226.502†	6638.3	6956.7	[100]	ug/L	07:36:37
1	Co 228.616†	4075.8	4200.0	[100]	ug/L	07:36:57
1	Cr 267.716†	6869.6	6886.9	[100]	ug/L	07:36:37
1	Cu 324.752†	35131.3	29998.8	[100]	ug/L	07:36:37
1	Mn 257.610†	79423.8	80234.6	[100]	ug/L	07:36:37
1	Mo 202.031†	1073.9	1078.4	[100]	ug/L	07:36:57
1	Ni 231.604†	3172.4	3147.9	[100]	ug/L	07:36:57
1	P 214.914†	1014.5	812.0	[500]	ug/L	07:36:57
1	Pb 220.353†	560.2	636.0	[100]	ug/L	07:36:57
1	S 181.975 Axial†	175.4	137.9	[200]	ug/L	07:36:57
1	Sb 206.836†	282.5	255.2	[100]	ug/L	07:36:57
1	Se 196.026†	111.0	134.9	[100]	ug/L	07:36:57
1	Si 251.611†	14006.3	13731.2	[500]	ug/L	07:36:37
1	Sn 189.927†	449.3	452.2	[100]	ug/L	07:36:57
1	Ti 334.940†	54139.5	56417.0	[100]	ug/L	07:36:37
1	Tl 190.801†	231.9	273.5	[100]	ug/L	07:36:57
1	U 409.014†	327.4	2739.1	[100]	ug/L	07:36:37
1	V 292.402†	9466.5	11332.5	[100]	ug/L	07:36:37
1	Zn 213.857†	9371.6	8855.2	[100]	ug/L	07:36:37
1	SiO2†	13809.1	13488.3	[1069.5]	ug/L	07:37:53
2	Sc Radial	3987.0	3987.0	104	%	07:36:05
2	Y RADIAL	4349.1	4349.1	100.4	%	07:36:05
2	K 766.490 Radial†	8604.4	5288.4	[1000]	ug/L	07:35:45
2	Sr 421.552†	10805.9	10389.9	[100]	ug/L	07:36:05
2	Sc 361.383	691193.9	691193.9	100.23	%	07:37:02
2	Y 371.029	540889.2	540889.2	99.828	%	07:37:02
2	Ag 328.068†	18340.1	18197.5	[100]	ug/L	07:37:02
2	As 188.979†	171.3	193.7	[100]	ug/L	07:37:22
2	B 249.677†	3308.1	3883.4	[100]	ug/L	07:37:02
2	Ba 233.527†	10633.6	10608.1	[100]	ug/L	07:37:02
2	Be 313.107†	247195.2	251144.0	[100]	ug/L	07:37:02
2	Cd 226.502†	6729.2	6927.1	[100]	ug/L	07:37:02
2	Co 228.616†	4013.3	4063.7	[100]	ug/L	07:37:22
2	Cr 267.716†	6957.7	6850.2	[100]	ug/L	07:37:02
2	Cu 324.752†	35859.2	30087.9	[100]	ug/L	07:37:02
2	Mn 257.610†	80838.7	80205.9	[100]	ug/L	07:37:02
2	Mo 202.031†	1059.5	1044.6	[100]	ug/L	07:37:22
2	Ni 231.604†	3111.5	3029.6	[100]	ug/L	07:37:22
2	P 214.914†	993.3	772.4	[500]	ug/L	07:37:22
2	Pb 220.353†	579.7	645.4	[100]	ug/L	07:37:22
2	S 181.975 Axial†	171.2	130.6	[200]	ug/L	07:37:22
2	Sb 206.836†	280.4	248.0	[100]	ug/L	07:37:22
2	Se 196.026†	105.7	127.6	[100]	ug/L	07:37:22
2	Si 251.611†	14265.9	13736.2	[500]	ug/L	07:37:02
2	Sn 189.927†	433.5	428.3	[100]	ug/L	07:37:22
2	Ti 334.940†	55283.9	56576.9	[100]	ug/L	07:37:02
2	Tl 190.801†	233.6	271.0	[100]	ug/L	07:37:22
2	U 409.014†	303.6	2709.4	[100]	ug/L	07:37:02

2	V 292.402†	9585.8	11280.0	[100]	ug/L	07:37:02
2	Zn 213.857†	9566.0	8879.2	[100]	ug/L	07:37:02
2	SiO2†	13882.5	13311.0	[1069.5]	ug/L	07:37:58
3	Sc Radial	3982.1	3982.1	104	%	07:36:30
3	Y RADIAL	4336.8	4336.8	100.1	%	07:36:30
3	K 766.490 Radial†	8345.3	5048.8	[1000]	ug/L	07:36:10
3	Sr 421.552†	10790.7	10388.0	[100]	ug/L	07:36:30
3	Sc 361.383	679932.0	679932.0	98.600	%	07:37:28
3	Y 371.029	532580.6	532580.6	98.294	%	07:37:28
3	Ag 328.068†	18123.8	18281.3	[100]	ug/L	07:37:28
3	As 188.979†	178.1	203.5	[100]	ug/L	07:37:48
3	B 249.677†	3189.1	3817.4	[100]	ug/L	07:37:28
3	Ba 233.527†	10527.5	10676.2	[100]	ug/L	07:37:28
3	Be 313.107†	243139.5	251115.6	[100]	ug/L	07:37:28
3	Cd 226.502†	6653.8	6961.7	[100]	ug/L	07:37:28
3	Co 228.616†	4054.6	4171.8	[100]	ug/L	07:37:48
3	Cr 267.716†	6847.0	6852.9	[100]	ug/L	07:37:28
3	Cu 324.752†	35361.1	30175.3	[100]	ug/L	07:37:28
3	Mn 257.610†	79975.7	80666.5	[100]	ug/L	07:37:28
3	Mo 202.031†	1054.8	1057.3	[100]	ug/L	07:37:48
3	Ni 231.604†	3142.1	3112.1	[100]	ug/L	07:37:48
3	P 214.914†	997.3	793.0	[500]	ug/L	07:37:48
3	Pb 220.353†	571.9	647.1	[100]	ug/L	07:37:48
3	S 181.975 Axial†	167.8	130.0	[200]	ug/L	07:37:48
3	Sb 206.836†	284.1	256.4	[100]	ug/L	07:37:48
3	Se 196.026†	116.6	140.4	[100]	ug/L	07:37:48
3	Si 251.611†	14050.7	13753.7	[500]	ug/L	07:37:28
3	Sn 189.927†	449.2	451.5	[100]	ug/L	07:37:48
3	Ti 334.940†	54453.0	56647.8	[100]	ug/L	07:37:28
3	Tl 190.801†	228.3	269.5	[100]	ug/L	07:37:48
3	U 409.014†	-17.5	2388.8	[100]	ug/L	07:37:28
3	V 292.402†	9523.2	11374.8	[100]	ug/L	07:37:28
3	Zn 213.857†	9418.1	8887.2	[100]	ug/L	07:37:28
3	SiO2†	13994.1	13653.7	[1069.5]	ug/L	07:38:03

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	683326.7	6834.51	1.00%	99.092	%
Sc Radial	3973.4	19.44	0.49%	104	%
Y 371.029	535368.3	4781.30	0.89%	98.809	%
Y RADIAL	4335.0	15.05	0.35%	100.1	%
Ag 328.068†	18195.5	86.80	0.48%	[100]	ug/L
As 188.979†	198.8	4.87	2.45%	[100]	ug/L
B 249.677†	3831.8	46.13	1.20%	[100]	ug/L
Ba 233.527†	10639.8	34.31	0.32%	[100]	ug/L
Be 313.107†	250924.4	355.90	0.14%	[100]	ug/L
Cd 226.502†	6948.5	18.73	0.27%	[100]	ug/L
Co 228.616†	4145.2	71.95	1.74%	[100]	ug/L
Cr 267.716†	6863.3	20.45	0.30%	[100]	ug/L
Cu 324.752†	30087.3	88.28	0.29%	[100]	ug/L
K 766.490 Radial†	5139.3	130.08	2.53%	[1000]	ug/L
Mn 257.610†	80369.0	258.04	0.32%	[100]	ug/L
Mo 202.031†	1060.1	17.06	1.61%	[100]	ug/L
Ni 231.604†	3096.5	60.66	1.96%	[100]	ug/L
P 214.914†	792.5	19.80	2.50%	[500]	ug/L
Pb 220.353†	642.8	5.95	0.93%	[100]	ug/L
S 181.975 Axial†	132.8	4.41	3.32%	[200]	ug/L
Sb 206.836†	253.2	4.56	1.80%	[100]	ug/L
Se 196.026†	134.3	6.44	4.79%	[100]	ug/L
Si 251.611†	13740.3	11.81	0.09%	[500]	ug/L
Sn 189.927†	444.0	13.58	3.06%	[100]	ug/L
Sr 421.552†	10398.2	15.97	0.15%	[100]	ug/L
Ti 334.940†	56547.2	118.25	0.21%	[100]	ug/L
Tl 190.801†	271.3	2.02	0.74%	[100]	ug/L
U 409.014†	2612.4	194.25	7.44%	[100]	ug/L
V 292.402†	11329.1	47.51	0.42%	[100]	ug/L
Zn 213.857†	8873.9	16.70	0.19%	[100]	ug/L
SiO2†	13484.3	171.34	1.27%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 4/1/2010 07:40:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	3804.2	3804.2	99.1	%	07:42:27
1	Y RADIAL	4303.5	4303.5	99.35	%	07:42:07
1	Al 396.153Radial†	4713.5	4848.3	[5000]	ug/L	07:42:07
1	Ca 317.933Radial†	2579.6	2584.3	[5000]	ug/L	07:42:27
1	K 766.490 Radial†	29237.8	26506.2	[5000]	ug/L	07:42:07
1	Mg 279.077 IEC†	128.4	126.5	[5000]	ug/L	07:42:27
1	Sr 421.552†	50993.1	51440.2	[500]	ug/L	07:42:07
1	Sc 361.383	682923.3	682923.3	99.034	%	07:43:24
1	Y 371.029	465548.5	465548.5	85.923	%	07:43:29
1	Ag 328.068†	89139.8	89909.8	[500]	ug/L	07:43:29
1	As 188.979†	946.4	978.4	[500]	ug/L	07:43:49
1	B 249.677†	18544.1	19308.1	[500]	ug/L	07:43:29
1	Ba 233.527†	51067.3	51564.8	[500]	ug/L	07:43:29
1	Be 313.107†	1214307.4	1230680.7	[500]	ug/L	07:43:24
1	Cd 226.502†	33502.5	34042.9	[500]	ug/L	07:43:29
1	Co 228.616†	20348.6	20606.8	[500]	ug/L	07:43:29
1	Cr 267.716†	33366.9	33601.2	[500]	ug/L	07:43:29
1	Cu 324.752†	151202.8	146990.3	[500]	ug/L	07:43:29
1	Mn 257.610†	383249.8	386544.8	[500]	ug/L	07:43:24
1	Mo 202.031†	5127.0	5164.5	[500]	ug/L	07:43:49
1	Ni 231.604†	15502.3	15579.0	[500]	ug/L	07:43:29
1	P 214.914†	3985.6	3806.0	[2500]	ug/L	07:43:49
1	Pb 220.353†	3031.0	3127.5	[500]	ug/L	07:43:49
1	S 181.975 Axial†	690.8	657.3	[1000]	ug/L	07:43:49
1	Sb 206.836†	1253.0	1233.5	[500]	ug/L	07:43:49
1	Se 196.026†	627.5	655.8	[500]	ug/L	07:43:49
1	Si 251.611†	67837.3	68002.7	[2500]	ug/L	07:43:29
1	Sn 189.927†	2139.5	2156.2	[500]	ug/L	07:43:49
1	Ti 334.940†	270171.6	274229.6	[500]	ug/L	07:43:29
1	Tl 190.801†	1237.7	1287.7	[500]	ug/L	07:43:49
1	U 409.014†	10016.3	12520.5	[500]	ug/L	07:43:29
1	V 292.402†	53725.5	55966.2	[500]	ug/L	07:43:29
1	Zn 213.857†	43577.5	43338.2	[500]	ug/L	07:43:29
1	SiO2†	68347.5	68475.3	[5347.5]	ug/L	07:44:56
2	Sc Radial	3706.1	3706.1	96.5	%	07:42:52
2	Y RADIAL	4194.1	4194.1	96.82	%	07:42:32
2	Al 396.153Radial†	4669.1	4928.3	[5000]	ug/L	07:42:32
2	Ca 317.933Radial†	2563.6	2636.6	[5000]	ug/L	07:42:52
2	K 766.490 Radial†	29486.7	27545.3	[5000]	ug/L	07:42:32
2	Mg 279.077 IEC†	127.7	129.2	[5000]	ug/L	07:42:52
2	Sr 421.552†	50490.5	52282.1	[500]	ug/L	07:42:32
2	Sc 361.383	693170.4	693170.4	100.52	%	07:43:55
2	Y 371.029	471422.9	471422.9	87.007	%	07:44:00
2	Ag 328.068†	91642.5	91069.0	[500]	ug/L	07:44:00
2	As 188.979†	983.6	1001.3	[500]	ug/L	07:44:20
2	B 249.677†	19212.9	19696.6	[500]	ug/L	07:44:00
2	Ba 233.527†	52109.4	51839.2	[500]	ug/L	07:44:00
2	Be 313.107†	1230692.8	1228855.1	[500]	ug/L	07:43:55
2	Cd 226.502†	34016.5	34054.1	[500]	ug/L	07:44:00
2	Co 228.616†	20676.8	20629.6	[500]	ug/L	07:44:00
2	Cr 267.716†	34026.2	33759.0	[500]	ug/L	07:44:00
2	Cu 324.752†	156660.7	150163.0	[500]	ug/L	07:44:00
2	Mn 257.610†	387546.7	385098.6	[500]	ug/L	07:43:55
2	Mo 202.031†	5244.4	5204.8	[500]	ug/L	07:44:20
2	Ni 231.604†	15742.7	15586.7	[500]	ug/L	07:44:00
2	P 214.914†	4123.3	3883.5	[2500]	ug/L	07:44:20
2	Pb 220.353†	3112.1	3163.0	[500]	ug/L	07:44:20
2	S 181.975 Axial†	711.9	668.0	[1000]	ug/L	07:44:20
2	Sb 206.836†	1295.6	1257.2	[500]	ug/L	07:44:20

2	Se 196.026†	649.0	667.7	[500]	ug/L	07:44:20
2	Si 251.611†	69778.0	68920.8	[2500]	ug/L	07:44:00
2	Sn 189.927†	2194.0	2178.5	[500]	ug/L	07:44:20
2	Ti 334.940†	277195.5	277184.2	[500]	ug/L	07:44:00
2	Tl 190.801†	1260.1	1291.5	[500]	ug/L	07:44:20
2	U 409.014†	10748.3	13099.2	[500]	ug/L	07:44:00
2	V 292.402†	55164.2	56595.5	[500]	ug/L	07:44:00
2	Zn 213.857†	44481.2	43586.7	[500]	ug/L	07:44:00
2	SiO2†	68221.7	67329.9	[5347.5]	ug/L	07:45:01
3	Sc Radial	3785.3	3785.3	98.6	%	07:43:17
3	Y RADIAL	4215.2	4215.2	97.31	%	07:42:57
3	Al 396.153Radial†	4653.2	4811.0	[5000]	ug/L	07:42:57
3	Ca 317.933Radial†	2607.9	2625.9	[5000]	ug/L	07:43:17
3	K 766.490 Radial†	29397.7	26815.7	[5000]	ug/L	07:42:57
3	Mg 279.077 IEC†	127.5	126.3	[5000]	ug/L	07:43:17
3	Sr 421.552†	50457.8	51154.2	[500]	ug/L	07:42:57
3	Sc 361.383	692185.4	692185.4	100.38	%	07:44:25
3	Y 371.029	470890.1	470890.1	86.909	%	07:44:31
3	Ag 328.068†	91277.7	90835.2	[500]	ug/L	07:44:31
3	As 188.979†	985.7	1004.8	[500]	ug/L	07:44:51
3	B 249.677†	19150.0	19661.2	[500]	ug/L	07:44:31
3	Ba 233.527†	51826.4	51631.1	[500]	ug/L	07:44:31
3	Be 313.107†	1231035.1	1230938.4	[500]	ug/L	07:44:25
3	Cd 226.502†	34035.6	34121.4	[500]	ug/L	07:44:31
3	Co 228.616†	20655.5	20637.7	[500]	ug/L	07:44:31
3	Cr 267.716†	34025.5	33806.5	[500]	ug/L	07:44:31
3	Cu 324.752†	155511.1	149239.6	[500]	ug/L	07:44:31
3	Mn 257.610†	387298.8	385400.3	[500]	ug/L	07:44:25
3	Mo 202.031†	5248.3	5216.1	[500]	ug/L	07:44:51
3	Ni 231.604†	15722.4	15588.8	[500]	ug/L	07:44:31
3	P 214.914†	4100.7	3866.8	[2500]	ug/L	07:44:51
3	Pb 220.353†	3091.3	3146.7	[500]	ug/L	07:44:51
3	S 181.975 Axial†	710.9	668.0	[1000]	ug/L	07:44:51
3	Sb 206.836†	1289.3	1252.7	[500]	ug/L	07:44:51
3	Se 196.026†	654.3	673.9	[500]	ug/L	07:44:51
3	Si 251.611†	69298.0	68541.3	[2500]	ug/L	07:44:31
3	Sn 189.927†	2193.6	2181.2	[500]	ug/L	07:44:51
3	Ti 334.940†	275714.2	276100.9	[500]	ug/L	07:44:31
3	Tl 190.801†	1263.5	1296.7	[500]	ug/L	07:44:51
3	U 409.014†	10632.2	12998.8	[500]	ug/L	07:44:31
3	V 292.402†	54906.4	56416.8	[500]	ug/L	07:44:31
3	Zn 213.857†	44374.9	43543.7	[500]	ug/L	07:44:31
3	SiO2†	68204.9	67409.8	[5347.5]	ug/L	07:45:06

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	689426.4	5653.33	0.82%	99.977	%
Sc Radial	3765.2	52.07	1.38%	98.1	%
Y 371.029	469287.2	3248.73	0.69%	86.613	%
Y RADIAL	4237.6	58.03	1.37%	97.82	%
Ag 328.068†	90604.7	613.01	0.68%	[500]	ug/L
Al 396.153Radial†	4862.6	59.96	1.23%	[5000]	ug/L
As 188.979†	994.9	14.32	1.44%	[500]	ug/L
B 249.677†	19555.3	214.82	1.10%	[500]	ug/L
Ba 233.527†	51678.4	143.18	0.28%	[500]	ug/L
Be 313.107†	1230158.0	1135.74	0.09%	[500]	ug/L
Ca 317.933Radial†	2615.6	27.65	1.06%	[5000]	ug/L
Cd 226.502†	34072.8	42.43	0.12%	[500]	ug/L
Co 228.616†	20624.7	15.99	0.08%	[500]	ug/L
Cr 267.716†	33722.2	107.48	0.32%	[500]	ug/L
Cu 324.752†	148797.6	1631.86	1.10%	[500]	ug/L
K 766.490 Radial†	26955.7	533.50	1.98%	[5000]	ug/L
Mg 279.077 IEC†	127.3	1.62	1.27%	[5000]	ug/L
Mn 257.610†	385681.2	762.91	0.20%	[500]	ug/L
Mo 202.031†	5195.1	27.10	0.52%	[500]	ug/L
Ni 231.604†	15584.8	5.16	0.03%	[500]	ug/L
P 214.914†	3852.1	40.79	1.06%	[2500]	ug/L
Pb 220.353†	3145.8	17.77	0.56%	[500]	ug/L
S 181.975 Axial†	664.4	6.18	0.93%	[1000]	ug/L

Sb 206.836†	1247.8	12.59	1.01%	[500]	ug/L
Se 196.026†	665.8	9.22	1.39%	[500]	ug/L
Si 251.611†	68488.3	461.32	0.67%	[2500]	ug/L
Sn 189.927†	2172.0	13.71	0.63%	[500]	ug/L
Sr 421.552†	51625.5	586.32	1.14%	[500]	ug/L
Ti 334.940†	275838.3	1494.72	0.54%	[500]	ug/L
Tl 190.801†	1292.0	4.51	0.35%	[500]	ug/L
U 409.014†	12872.9	309.23	2.40%	[500]	ug/L
V 292.402†	56326.2	324.28	0.58%	[500]	ug/L
Zn 213.857†	43489.5	132.85	0.31%	[500]	ug/L
SiO2†	67738.3	639.52	0.94%	[5347.5]	ug/L

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

Autosampler Location: 4
Date Collected: 4/1/2010 07:47:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	3817.3	3817.3	99.4	%	07:49:31
1	Y RADIAL	4303.6	4303.6	99.35	%	07:49:11
1	Al 396.153Radial†	9705.6	9852.1	[10000]	ug/L	07:49:11
1	Ca 317.933Radial†	5394.8	5406.3	[10000]	ug/L	07:49:11
1	Fe 238.204 Radial†	816.7	815.1	[10000]	ug/L	07:49:31
1	K 766.490 Radial†	57250.9	54574.9	[10000]	ug/L	07:49:11
1	Mg 279.077 IEC†	255.4	253.8	[10000]	ug/L	07:49:31
1	Na 589.592 Radial†	21889.0	23089.1	[10000]	ug/L	07:49:11
1	Sr 421.552†	105637.9	106214.3	[1000]	ug/L	07:49:11
1	Sc 361.383	688201.7	688201.7	99.799	%	07:50:34
1	Y 371.029	536988.6	536988.6	99.108	%	07:50:34
1	Ag 328.068†	180436.1	180699.6	[1000]	ug/L	07:50:34
1	As 188.979†	1997.8	2024.6	[1000]	ug/L	07:50:54
1	B 249.677†	39026.1	39687.7	[1000]	ug/L	07:50:34
1	Ba 233.527†	102647.1	102853.0	[1000]	ug/L	07:50:34
1	Be 313.107†	2449494.4	2458950.7	[1000]	ug/L	07:50:29
1	Cd 226.502†	67631.4	67981.0	[1000]	ug/L	07:50:34
1	Co 228.616†	39783.8	39923.6	[1000]	ug/L	07:50:54
1	Cr 267.716†	67316.6	67360.9	[1000]	ug/L	07:50:34
1	Cu 324.752†	304602.8	299528.3	[1000]	ug/L	07:50:34
1	Mn 257.610†	766179.9	767277.9	[1000]	ug/L	07:50:29
1	Mo 202.031†	10368.3	10376.7	[1000]	ug/L	07:50:54
1	Ni 231.604†	30372.8	30359.3	[1000]	ug/L	07:50:54
1	P 214.914†	8008.8	7806.5	[5000]	ug/L	07:50:54
1	Pb 220.353†	6257.8	6337.4	[1000]	ug/L	07:50:54
1	S 181.975 Axial†	1369.1	1331.6	[2000]	ug/L	07:50:54
1	Sb 206.836†	2520.4	2493.7	[1000]	ug/L	07:50:54
1	Se 196.026†	1323.5	1348.3	[1000]	ug/L	07:50:54
1	Si 251.611†	135891.8	135668.9	[5000]	ug/L	07:50:34
1	Sn 189.927†	4327.3	4331.8	[1000]	ug/L	07:50:54
1	Ti 334.940†	545223.8	547743.3	[1000]	ug/L	07:50:34
1	Tl 190.801†	2558.8	2601.9	[1000]	ug/L	07:50:54
1	U 409.014†	23612.7	26066.8	[1000]	ug/L	07:50:34
1	V 292.402†	111113.4	113053.5	[1000]	ug/L	07:50:34
1	Zn 213.857†	87367.5	86878.8	[1000]	ug/L	07:50:34
1	SiO2†	134999.1	134731.9	[10695]	ug/L	07:52:03
2	Sc Radial	3782.3	3782.3	98.5	%	07:49:56
2	Y RADIAL	4270.3	4270.3	98.58	%	07:49:36
2	Al 396.153Radial†	9662.7	9898.9	[10000]	ug/L	07:49:36
2	Ca 317.933Radial†	5346.2	5407.2	[10000]	ug/L	07:49:36
2	Fe 238.204 Radial†	804.4	810.2	[10000]	ug/L	07:49:56
2	K 766.490 Radial†	56862.3	54713.7	[10000]	ug/L	07:49:36
2	Mg 279.077 IEC†	253.9	254.7	[10000]	ug/L	07:49:56
2	Na 589.592 Radial†	21730.5	23132.1	[10000]	ug/L	07:49:36
2	Sr 421.552†	104564.0	106108.2	[1000]	ug/L	07:49:36
2	Sc 361.383	676877.1	676877.1	98.157	%	07:51:06
2	Y 371.029	528277.4	528277.4	97.500	%	07:51:06
2	Ag 328.068†	178040.5	181283.9	[1000]	ug/L	07:51:06
2	As 188.979†	1943.8	2003.1	[1000]	ug/L	07:51:26
2	B 249.677†	38456.2	39761.4	[1000]	ug/L	07:51:06
2	Ba 233.527†	101598.1	103505.1	[1000]	ug/L	07:51:06
2	Be 313.107†	2450457.3	2500995.8	[1000]	ug/L	07:51:00
2	Cd 226.502†	66961.9	68432.8	[1000]	ug/L	07:51:06
2	Co 228.616†	39242.0	40038.5	[1000]	ug/L	07:51:26
2	Cr 267.716†	66761.3	67923.6	[1000]	ug/L	07:51:06
2	Cu 324.752†	300241.4	300191.4	[1000]	ug/L	07:51:06
2	Mn 257.610†	765541.3	779471.8	[1000]	ug/L	07:51:00
2	Mo 202.031†	10201.4	10380.5	[1000]	ug/L	07:51:26
2	Ni 231.604†	29993.1	30481.7	[1000]	ug/L	07:51:26

2	P 214.914†	7868.4	7797.7	[5000]	ug/L	07:51:26
2	Pb 220.353†	6173.6	6356.6	[1000]	ug/L	07:51:26
2	S 181.975 Axial†	1329.5	1314.2	[2000]	ug/L	07:51:26
2	Sb 206.836†	2476.2	2490.9	[1000]	ug/L	07:51:26
2	Se 196.026†	1300.8	1347.3	[1000]	ug/L	07:51:26
2	Si 251.611†	134213.5	136237.2	[5000]	ug/L	07:51:06
2	Sn 189.927†	4274.1	4350.2	[1000]	ug/L	07:51:26
2	Ti 334.940†	538432.0	549964.2	[1000]	ug/L	07:51:06
2	Tl 190.801†	2505.5	2590.5	[1000]	ug/L	07:51:26
2	U 409.014†	23110.4	25950.9	[1000]	ug/L	07:51:06
2	V 292.402†	109807.7	113586.1	[1000]	ug/L	07:51:06
2	Zn 213.857†	86480.3	87439.6	[1000]	ug/L	07:51:06
2	SiO2†	134373.1	136357.2	[10695]	ug/L	07:52:08
3	Sc Radial	3848.5	3848.5	100	%	07:50:21
3	Y RADIAL	4159.1	4159.1	96.01	%	07:50:01
3	Al 396.153Radial†	9328.7	9397.1	[10000]	ug/L	07:50:01
3	Ca 317.933Radial†	5215.7	5183.7	[10000]	ug/L	07:50:01
3	Fe 238.204 Radial†	809.5	801.2	[10000]	ug/L	07:50:21
3	K 766.490 Radial†	55133.3	51996.1	[10000]	ug/L	07:50:01
3	Mg 279.077 IEC†	255.9	252.2	[10000]	ug/L	07:50:21
3	Na 589.592 Radial†	20876.6	21901.0	[10000]	ug/L	07:50:01
3	Sr 421.552†	101079.1	100806.2	[1000]	ug/L	07:50:01
3	Sc 361.383	685426.9	685426.9	99.397	%	07:51:37
3	Y 371.029	534740.6	534740.6	98.693	%	07:51:37
3	Ag 328.068†	181754.7	182758.1	[1000]	ug/L	07:51:37
3	As 188.979†	2019.8	2054.8	[1000]	ug/L	07:51:57
3	B 249.677†	39488.5	40311.2	[1000]	ug/L	07:51:37
3	Ba 233.527†	103406.5	104033.4	[1000]	ug/L	07:51:37
3	Be 313.107†	2459556.7	2479010.3	[1000]	ug/L	07:51:32
3	Cd 226.502†	68322.1	68950.3	[1000]	ug/L	07:51:37
3	Co 228.616†	40155.4	40458.9	[1000]	ug/L	07:51:57
3	Cr 267.716†	67993.3	68314.8	[1000]	ug/L	07:51:37
3	Cu 324.752†	306787.0	302961.3	[1000]	ug/L	07:51:37
3	Mn 257.610†	767730.3	771945.7	[1000]	ug/L	07:51:32
3	Mo 202.031†	10432.7	10483.5	[1000]	ug/L	07:51:57
3	Ni 231.604†	30661.6	30773.1	[1000]	ug/L	07:51:57
3	P 214.914†	8115.7	7946.4	[5000]	ug/L	07:51:57
3	Pb 220.353†	6320.3	6425.7	[1000]	ug/L	07:51:57
3	S 181.975 Axial†	1381.2	1349.3	[2000]	ug/L	07:51:57
3	Sb 206.836†	2532.8	2516.4	[1000]	ug/L	07:51:57
3	Se 196.026†	1331.6	1361.8	[1000]	ug/L	07:51:57
3	Si 251.611†	137171.9	137507.9	[5000]	ug/L	07:51:37
3	Sn 189.927†	4359.3	4381.6	[1000]	ug/L	07:51:57
3	Ti 334.940†	549563.5	554321.0	[1000]	ug/L	07:51:37
3	Tl 190.801†	2560.8	2614.3	[1000]	ug/L	07:51:57
3	U 409.014†	23472.5	26021.5	[1000]	ug/L	07:51:37
3	V 292.402†	111867.9	114263.4	[1000]	ug/L	07:51:37
3	Zn 213.857†	88380.7	88252.6	[1000]	ug/L	07:51:37
3	SiO2†	134999.9	135280.2	[10695]	ug/L	07:52:13

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Sc 361.383	683501.9	5902.59	0.86%	99.117	%
Sc Radial	3816.0	33.13	0.87%	99.4	%
Y 371.029	533335.5	4522.43	0.85%	98.434	%
Y RADIAL	4244.3	75.69	1.78%	97.98	%
Ag 328.068†	181580.5	1060.84	0.58%	[1000]	ug/L
Al 396.153Radial†	9716.0	277.20	2.85%	[10000]	ug/L
As 188.979†	2027.5	26.00	1.28%	[1000]	ug/L
B 249.677†	39920.1	340.71	0.85%	[1000]	ug/L
Ba 233.527†	103463.8	591.27	0.57%	[1000]	ug/L
Be 313.107†	2479652.3	21029.87	0.85%	[1000]	ug/L
Ca 317.933Radial†	5332.4	128.78	2.42%	[10000]	ug/L
Cd 226.502†	68454.7	485.00	0.71%	[1000]	ug/L
Co 228.616†	40140.3	281.76	0.70%	[1000]	ug/L
Cr 267.716†	67866.4	479.50	0.71%	[1000]	ug/L
Cu 324.752†	300893.7	1821.10	0.61%	[1000]	ug/L
Fe 238.204 Radial†	808.9	7.03	0.87%	[10000]	ug/L
K 766.490 Radial†	53761.6	1530.50	2.85%	[10000]	ug/L

Mg 279.077 IEC†	253.6	1.24	0.49%	[10000]	ug/L
Mn 257.610†	772898.5	6152.50	0.80%	[1000]	ug/L
Mo 202.031†	10413.6	60.60	0.58%	[1000]	ug/L
Na 589.592 Radial†	22707.4	698.73	3.08%	[10000]	ug/L
Ni 231.604†	30538.0	212.54	0.70%	[1000]	ug/L
P 214.914†	7850.2	83.46	1.06%	[5000]	ug/L
Pb 220.353†	6373.2	46.46	0.73%	[1000]	ug/L
S 181.975 Axial†	1331.7	17.56	1.32%	[2000]	ug/L
Sb 206.836†	2500.4	13.98	0.56%	[1000]	ug/L
Se 196.026†	1352.5	8.09	0.60%	[1000]	ug/L
Si 251.611†	136471.3	941.61	0.69%	[5000]	ug/L
Sn 189.927†	4354.6	25.18	0.58%	[1000]	ug/L
Sr 421.552†	104376.2	3092.17	2.96%	[1000]	ug/L
Ti 334.940†	550676.2	3346.15	0.61%	[1000]	ug/L
Tl 190.801†	2602.2	11.92	0.46%	[1000]	ug/L
U 409.014†	26013.1	58.40	0.22%	[1000]	ug/L
V 292.402†	113634.3	606.36	0.53%	[1000]	ug/L
Zn 213.857†	87523.7	690.76	0.79%	[1000]	ug/L
SiO2†	135456.4	826.89	0.61%	[10695]	ug/L

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

Autosampler Location: 5
Date Collected: 4/1/2010 07:54:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	3770.3	3770.3	98.2	%	07:56:38
1	Y RADIAL	4104.7	4104.7	94.76	%	07:56:38
1	Al 396.153Radial†	46848.1	47789.6	[50000]	ug/L	07:56:18
1	Ca 317.933Radial†	25201.9	25640.1	[50000]	ug/L	07:56:18
1	Fe 238.204 Radial†	1541.7	1563.5	[20000]	ug/L	07:56:38
1	Mg 279.077 IEC†	1197.0	1215.6	[50000]	ug/L	07:56:38
1	Na 589.592 Radial†	44179.1	46057.8	[20000]	ug/L	07:56:18
1	Sc 361.383	663441.9	663441.9	96.208	%	07:57:35
1	Y 371.029	515232.3	515232.3	95.092	%	07:57:35
2	Sc Radial	3870.3	3870.3	101	%	07:57:03
2	Y RADIAL	4219.7	4219.7	97.41	%	07:57:03
2	Al 396.153Radial†	47395.7	47099.5	[50000]	ug/L	07:56:43
2	Ca 317.933Radial†	25388.9	25162.2	[50000]	ug/L	07:56:43
2	Fe 238.204 Radial†	1578.7	1559.5	[20000]	ug/L	07:57:03
2	Mg 279.077 IEC†	1217.8	1204.8	[50000]	ug/L	07:57:03
2	Na 589.592 Radial†	44234.9	44950.2	[20000]	ug/L	07:56:43
2	Sc 361.383	664895.2	664895.2	96.419	%	07:57:41
2	Y 371.029	515942.9	515942.9	95.224	%	07:57:41
3	Sc Radial	3865.1	3865.1	101	%	07:57:28
3	Y RADIAL	4190.7	4190.7	96.74	%	07:57:28
3	Al 396.153Radial†	47673.9	47439.3	[50000]	ug/L	07:57:08
3	Ca 317.933Radial†	25620.0	25425.7	[50000]	ug/L	07:57:08
3	Fe 238.204 Radial†	1581.8	1564.8	[20000]	ug/L	07:57:28
3	Mg 279.077 IEC†	1224.4	1213.0	[50000]	ug/L	07:57:28
3	Na 589.592 Radial†	44560.7	45333.0	[20000]	ug/L	07:57:08
3	Sc 361.383	665276.1	665276.1	96.474	%	07:57:46
3	Y 371.029	517114.3	517114.3	95.440	%	07:57:46

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	664537.7	967.97	0.15%	96.367	%
Sc Radial	3835.3	56.33	1.47%	99.9	%
Y 371.029	516096.5	950.36	0.18%	95.252	%
Y RADIAL	4171.7	59.80	1.43%	96.30	%
Al 396.153Radial†	47442.8	345.05	0.73%	[50000]	ug/L
Ca 317.933Radial†	25409.3	239.37	0.94%	[50000]	ug/L
Fe 238.204 Radial†	1562.6	2.73	0.17%	[20000]	ug/L
Mg 279.077 IEC†	1211.1	5.62	0.46%	[50000]	ug/L
Na 589.592 Radial†	45447.0	562.54	1.24%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	181.5	0.00000	1.000000	
Al 396.153Radial	3	Lin Thru 0	0.0	0.9499	0.00000	0.999987	
As 188.979	3	Lin Thru 0	0.0	2.020	0.00000	0.999971	
B 249.677	3	Lin Thru 0	0.0	39.75	0.00000	0.999962	
Ba 233.527	3	Lin Thru 0	0.0	103.5	0.00000	0.999997	
Be 313.107	3	Lin Thru 0	0.0	2476	0.00000	0.999994	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5093	0.00000	0.999952	
Cd 226.502	3	Lin Thru 0	0.0	68.40	0.00000	0.999997	
Co 228.616	3	Lin Thru 0	0.0	40.37	0.00000	0.999937	
Cr 267.716	3	Lin Thru 0	0.0	67.79	0.00000	0.999996	
Cu 324.752	3	Lin Thru 0	0.0	300.2	0.00000	0.999990	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0787	0.00000	0.999902	
K 766.490 Radial	3	Lin Thru 0	0.0	5.377	0.00000	0.999992	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0243	0.00000	0.999948
Mn 257.610	3	Lin Thru 0	0.0	772.8	0.00000	0.999993
Mo 202.031	3	Lin Thru 0	0.0	10.41	0.00000	0.999998
Na 589.592 Radia	2	Lin Thru 0	0.0	2.272	0.00000	1.000000
Ni 231.604	3	Lin Thru 0	0.0	30.67	0.00000	0.999966
P 214.914	3	Lin Thru 0	0.0	1.564	0.00000	0.999972
Pb 220.353	3	Lin Thru 0	0.0	6.357	0.00000	0.999986
S 181.975 Axial	3	Lin Thru 0	0.0	0.6655	0.00000	1.000000
Sb 206.836	3	Lin Thru 0	0.0	2.500	0.00000	0.999999
Se 196.026	3	Lin Thru 0	0.0	1.348	0.00000	0.999981
Si 251.611	3	Lin Thru 0	0.0	27.32	0.00000	0.999999
Sn 189.927	3	Lin Thru 0	0.0	4.353	0.00000	0.999998
Sr 421.552	3	Lin Thru 0	0.0	104.1	0.00000	0.999991
Ti 334.940	3	Lin Thru 0	0.0	551.0	0.00000	0.999997
Tl 190.801	3	Lin Thru 0	0.0	2.600	0.00000	0.999988
U 409.014	3	Lin Thru 0	0.0	25.96	0.00000	0.999991
V 292.402	3	Lin Thru 0	0.0	113.4	0.00000	0.999994
Zn 213.857	3	Lin Thru 0	0.0	87.43	0.00000	0.999996
SiO2	3	Lin Thru 0	0.0	12.67	0.00000	1.000000

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 4/1/2010 07:59:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3913.5	3913.5	102	%			08:02:11
1	Y RADIAL	4303.9	4303.9	99.35	%			08:01:51
1	Al 396.153Radial†	4791.6	4792.2	5018.9	ug/L	5018.9	ppb	08:01:51
1	Ca 317.933Radial†	2655.1	2585.7	5077.1	ug/L	5077.1	ppb	08:02:11
1	Fe 238.204 Radial†	413.7	399.6	5094.0	ug/L	5094.0	ppb	08:02:11
1	K 766.490 Radial†	16242.4	12935.8	2402.2	ug/L	2402.2	ppb	08:01:51
1	Mg 279.077 IEC†	134.7	129.1	5318.4	ug/L	5318.4	ppb	08:02:11
1	Na 589.592 Radial†	4444.0	5436.8	2392.9	ug/L	2392.9	ppb	08:01:51
1	Sr 421.552†	54347.7	53294.3	511.67	ug/L	511.67	ppb	08:01:51
1	Sc 361.383	683250.3	683250.3	99.081	%			08:03:08
1	Y 371.029	532648.7	532648.7	98.307	%			08:03:08
1	Ag 328.068†	45371.6	45692.5	254.86	ug/L	254.86	ppb	08:03:08
1	As 188.979†	912.7	943.9	471.58	ug/L	471.58	ppb	08:03:28
1	B 249.677†	19297.2	20059.2	502.40	ug/L	502.40	ppb	08:03:08
1	Ba 233.527†	51468.0	51944.6	503.30	ug/L	503.30	ppb	08:03:08
1	Be 313.107†	627392.4	637735.0	258.69	ug/L	258.69	ppb	08:03:08
1	Cd 226.502†	32480.6	32995.3	482.26	ug/L	482.26	ppb	08:03:28
1	Co 228.616†	20214.3	20461.4	506.99	ug/L	506.99	ppb	08:03:28
1	Cr 267.716†	32246.4	32454.2	479.81	ug/L	479.81	ppb	08:03:08
1	Cu 324.752†	152577.3	148304.5	493.96	ug/L	493.96	ppb	08:03:08
1	Mn 257.610†	390557.3	393734.8	509.75	ug/L	509.75	ppb	08:03:08
1	Mo 202.031†	5505.6	5544.2	533.02	ug/L	533.02	ppb	08:03:28
1	Ni 231.604†	15258.0	15324.8	499.42	ug/L	499.42	ppb	08:03:28
1	P 214.914†	4056.9	3876.0	2381.7	ug/L	2381.7	ppb	08:03:28
1	Pb 220.353†	3046.3	3141.5	496.04	ug/L	496.04	ppb	08:03:28
1	S 181.975 Axial†	1655.9	1631.0	2449.7	ug/L	2449.7	ppb	08:03:28
1	Sb 206.836†	1256.1	1236.0	513.65	ug/L	513.65	ppb	08:03:28
1	Se 196.026†	3374.0	3427.4	2558.6	ug/L	2558.6	ppb	08:03:28
1	Si 251.611†	134051.0	134797.8	4928.2	ug/L	4928.2	ppb	08:03:08
1	Sn 189.927†	2309.7	2327.0	535.49	ug/L	535.49	ppb	08:03:28
1	Ti 334.940†	270828.4	274761.9	498.53	ug/L	498.53	ppb	08:03:08
1	Tl 190.801†	1319.6	1369.8	530.37	ug/L	530.37	ppb	08:03:28
1	U 409.014†	10056.2	12556.0	482.00	ug/L	482.00	ppb	08:03:08
1	V 292.402†	54342.7	56563.2	505.74	ug/L	505.74	ppb	08:03:08
1	Zn 213.857†	44203.2	43948.6	498.09	ug/L	498.09	ppb	08:03:08
1	SiO2†	136717.3	137446.2	10838	ug/L	10838	ppb	08:04:26
2	Sc Radial	3859.8	3859.8	101	%			08:02:36
2	Y RADIAL	4335.4	4335.4	100.1	%			08:02:16
2	Al 396.153Radial†	4824.9	4890.6	5122.0	ug/L	5122.0	ppb	08:02:16
2	Ca 317.933Radial†	2618.3	2585.2	5076.2	ug/L	5076.2	ppb	08:02:36
2	Fe 238.204 Radial†	411.2	402.8	5134.8	ug/L	5134.8	ppb	08:02:36
2	K 766.490 Radial†	16296.3	13211.0	2453.3	ug/L	2453.3	ppb	08:02:16
2	Mg 279.077 IEC†	128.7	125.0	5150.1	ug/L	5150.1	ppb	08:02:36
2	Na 589.592 Radial†	4471.8	5525.1	2431.8	ug/L	2431.8	ppb	08:02:16
2	Sr 421.552†	54985.8	54670.0	524.88	ug/L	524.88	ppb	08:02:16
2	Sc 361.383	684067.1	684067.1	99.199	%			08:03:34
2	Y 371.029	532832.2	532832.2	98.341	%			08:03:34
2	Ag 328.068†	45366.1	45632.4	254.53	ug/L	254.53	ppb	08:03:34
2	As 188.979†	933.3	963.6	481.33	ug/L	481.33	ppb	08:03:54
2	B 249.677†	19333.4	20072.4	502.70	ug/L	502.70	ppb	08:03:34
2	Ba 233.527†	51399.4	51813.5	502.03	ug/L	502.03	ppb	08:03:34
2	Be 313.107†	624738.8	634303.8	257.31	ug/L	257.31	ppb	08:03:34
2	Cd 226.502†	33064.5	33544.8	490.30	ug/L	490.30	ppb	08:03:54
2	Co 228.616†	20594.8	20820.7	515.91	ug/L	515.91	ppb	08:03:54
2	Cr 267.716†	32299.7	32469.0	480.03	ug/L	480.03	ppb	08:03:34
2	Cu 324.752†	153109.3	148656.9	495.13	ug/L	495.13	ppb	08:03:34
2	Mn 257.610†	390520.2	393226.8	509.10	ug/L	509.10	ppb	08:03:34
2	Mo 202.031†	5615.5	5648.3	543.02	ug/L	543.02	ppb	08:03:54
2	Ni 231.604†	15549.0	15599.8	508.38	ug/L	508.38	ppb	08:03:54

2	P 214.914†	4160.2	3975.3	2445.1 ug/L	2445.1 ppb	08:03:54
2	Pb 220.353†	3087.4	3179.3	502.03 ug/L	502.03 ppb	08:03:54
2	S 181.975 Axial†	1702.7	1676.2	2517.6 ug/L	2517.6 ppb	08:03:54
2	Sb 206.836†	1305.8	1284.6	533.45 ug/L	533.45 ppb	08:03:54
2	Se 196.026†	3483.8	3534.0	2637.9 ug/L	2637.9 ppb	08:03:54
2	Si 251.611†	134129.4	134715.2	4925.1 ug/L	4925.1 ppb	08:03:34
2	Sn 189.927†	2352.9	2367.8	544.86 ug/L	544.86 ppb	08:03:54
2	Ti 334.940†	271154.5	274764.3	498.55 ug/L	498.55 ppb	08:03:34
2	Tl 190.801†	1345.7	1394.6	539.84 ug/L	539.84 ppb	08:03:54
2	U 409.014†	10049.6	12537.2	481.27 ug/L	481.27 ppb	08:03:34
2	V 292.402†	54213.3	56367.2	504.14 ug/L	504.14 ppb	08:03:34
2	Zn 213.857†	44330.8	44024.0	498.88 ug/L	498.88 ppb	08:03:34
2	SiO2†	136881.8	137447.3	10837 ug/L	10837 ppb	08:04:31
3	Sc Radial	3836.3	3836.3	99.9 %		08:03:01
3	Y RADIAL	4305.5	4305.5	99.39 %		08:02:41
3	Al 396.153Radial†	4773.3	4868.5	5099.2 ug/L	5099.2 ppb	08:02:41
3	Ca 317.933Radial†	2603.0	2586.0	5077.7 ug/L	5077.7 ppb	08:03:01
3	Fe 238.204 Radial†	407.4	401.4	5117.4 ug/L	5117.4 ppb	08:03:01
3	K 766.490 Radial†	16065.6	13079.6	2428.9 ug/L	2428.9 ppb	08:02:41
3	Mg 279.077 IEC†	131.4	128.5	5292.7 ug/L	5292.7 ppb	08:03:01
3	Na 589.592 Radial†	4337.3	5417.8	2384.6 ug/L	2384.6 ppb	08:02:41
3	Sr 421.552†	54165.1	54184.4	520.22 ug/L	520.22 ppb	08:02:41
3	Sc 361.383	696613.6	696613.6	101.02 %		08:04:00
3	Y 371.029	542348.1	542348.1	100.10 %		08:04:00
3	Ag 328.068†	46386.8	45819.1	255.56 ug/L	255.56 ppb	08:04:00
3	As 188.979†	938.8	952.1	475.67 ug/L	475.67 ppb	08:04:20
3	B 249.677†	19811.7	20194.9	505.81 ug/L	505.81 ppb	08:04:00
3	Ba 233.527†	52294.9	51766.6	501.58 ug/L	501.58 ppb	08:04:00
3	Be 313.107†	638695.6	636777.2	258.31 ug/L	258.31 ppb	08:04:00
3	Cd 226.502†	33111.4	32990.9	482.20 ug/L	482.20 ppb	08:04:20
3	Co 228.616†	20596.9	20448.8	506.68 ug/L	506.68 ppb	08:04:20
3	Cr 267.716†	32880.8	32457.8	479.86 ug/L	479.86 ppb	08:04:00
3	Cu 324.752†	156445.4	149179.5	496.87 ug/L	496.87 ppb	08:04:00
3	Mn 257.610†	397497.2	393043.2	508.86 ug/L	508.86 ppb	08:04:00
3	Mo 202.031†	5611.1	5542.0	532.81 ug/L	532.81 ppb	08:04:20
3	Ni 231.604†	15537.6	15306.2	498.81 ug/L	498.81 ppb	08:04:20
3	P 214.914†	4139.9	3879.7	2383.5 ug/L	2383.5 ppb	08:04:20
3	Pb 220.353†	3090.5	3126.3	493.66 ug/L	493.66 ppb	08:04:20
3	S 181.975 Axial†	1706.4	1648.9	2476.6 ug/L	2476.6 ppb	08:04:20
3	Sb 206.836†	1296.2	1251.4	519.78 ug/L	519.78 ppb	08:04:20
3	Se 196.026†	3466.0	3453.1	2577.8 ug/L	2577.8 ppb	08:04:20
3	Si 251.611†	137146.6	135266.8	4945.4 ug/L	4945.4 ppb	08:04:00
3	Sn 189.927†	2347.0	2319.2	533.70 ug/L	533.70 ppb	08:04:20
3	Ti 334.940†	276309.9	274944.6	498.86 ug/L	498.86 ppb	08:04:00
3	Tl 190.801†	1350.6	1374.9	532.33 ug/L	532.33 ppb	08:04:20
3	U 409.014†	10330.5	12632.8	484.96 ug/L	484.96 ppb	08:04:00
3	V 292.402†	55348.1	56506.3	505.24 ug/L	505.24 ppb	08:04:00
3	Zn 213.857†	45167.5	44047.3	499.21 ug/L	499.21 ppb	08:04:00
3	SiO2†	135525.3	133619.2	10536 ug/L	10536 ppb	08:04:36

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	687977.0	99.766	%	1.0862				1.09%
Sc Radial	3869.9	101	%	1.0				1.02%
Y 371.029	535943.0	98.915	%	1.0239				1.04%
Y RADIAL	4314.9	99.61	%	0.410				0.41%
Ag 328.068†	45714.7	254.98	ug/L	0.524	254.98	ppb	0.524	0.21%
QC value within limits for Ag 328.068 Recovery = 101.99%								
Al 396.153Radial†	4850.5	5080.0	ug/L	54.16	5080.0	ppb	54.16	1.07%
QC value within limits for Al 396.153Radial Recovery = 101.60%								
As 188.979†	953.2	476.19	ug/L	4.896	476.19	ppb	4.896	1.03%
QC value within limits for As 188.979 Recovery = 95.24%								
B 249.677†	20108.8	503.64	ug/L	1.888	503.64	ppb	1.888	0.37%
QC value within limits for B 249.677 Recovery = 100.73%								
Ba 233.527†	51841.6	502.30	ug/L	0.892	502.30	ppb	0.892	0.18%
QC value within limits for Ba 233.527 Recovery = 100.46%								
Be 313.107†	636272.0	258.10	ug/L	0.715	258.10	ppb	0.715	0.28%
QC value within limits for Be 313.107 Recovery = 103.24%								
Ca 317.933Radial†	2585.6	5077.0	ug/L	0.73	5077.0	ppb	0.73	0.01%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.54%
Cd 226.502†            33177.0      484.92 ug/L         4.658      484.92 ppb          4.658   0.96%
   QC value within limits for Cd 226.502  Recovery = 96.98%
Co 228.616†            20577.0      509.86 ug/L         5.244      509.86 ppb          5.244   1.03%
   QC value within limits for Co 228.616  Recovery = 101.97%
Cr 267.716†            32460.3      479.90 ug/L         0.115      479.90 ppb          0.115   0.02%
   QC value within limits for Cr 267.716  Recovery = 95.98%
Cu 324.752†           148713.7      495.32 ug/L         1.466      495.32 ppb          1.466   0.30%
   QC value within limits for Cu 324.752  Recovery = 99.06%
Fe 238.204 Radial†       401.3      5115.4 ug/L        20.48      5115.4 ppb         20.48   0.40%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.31%
K 766.490 Radial†      13075.5      2428.2 ug/L        25.58      2428.2 ppb         25.58   1.05%
   QC value within limits for K 766.490 Radial  Recovery = 97.13%
Mg 279.077 IEC†          127.5      5253.8 ug/L        90.65      5253.8 ppb         90.65   1.73%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.08%
Mn 257.610†           393334.9      509.24 ug/L         0.461      509.24 ppb          0.461   0.09%
   QC value within limits for Mn 257.610  Recovery = 101.85%
Mo 202.031†             5578.2      536.28 ug/L         5.839      536.28 ppb          5.839   1.09%
   QC value within limits for Mo 202.031  Recovery = 107.26%
Na 589.592 Radial†      5459.9      2403.1 ug/L        25.19      2403.1 ppb         25.19   1.05%
   QC value within limits for Na 589.592 Radial  Recovery = 96.12%
Ni 231.604†            15410.3      502.20 ug/L         5.357      502.20 ppb          5.357   1.07%
   QC value within limits for Ni 231.604  Recovery = 100.44%
P 214.914†              3910.3      2403.4 ug/L        36.06      2403.4 ppb         36.06   1.50%
   QC value within limits for P 214.914  Recovery = 96.14%
Pb 220.353†             3149.1      497.24 ug/L         4.312      497.24 ppb          4.312   0.87%
   QC value within limits for Pb 220.353  Recovery = 99.45%
S 181.975 Axial†        1652.1      2481.3 ug/L        34.21      2481.3 ppb         34.21   1.38%
   QC value within limits for S 181.975 Axial  Recovery = 99.25%
Sb 206.836†             1257.3      522.29 ug/L        10.136      522.29 ppb         10.136   1.94%
   QC value within limits for Sb 206.836  Recovery = 104.46%
Se 196.026†             3471.5      2591.5 ug/L        41.36      2591.5 ppb         41.36   1.60%
   QC value within limits for Se 196.026  Recovery = 103.66%
Si 251.611†           134926.6      4932.9 ug/L        10.94      4932.9 ppb         10.94   0.22%
   QC value within limits for Si 251.611  Recovery = 98.66%
Sn 189.927†             2338.0      538.02 ug/L         5.990      538.02 ppb          5.990   1.11%
   QC value within limits for Sn 189.927  Recovery = 107.60%
Sr 421.552†            54049.6      518.92 ug/L         6.699      518.92 ppb          6.699   1.29%
   QC value within limits for Sr 421.552  Recovery = 103.78%
Ti 334.940†           274823.6      498.65 ug/L         0.187      498.65 ppb          0.187   0.04%
   QC value within limits for Ti 334.940  Recovery = 99.73%
Tl 190.801†             1379.8      534.18 ug/L         5.003      534.18 ppb          5.003   0.94%
   QC value within limits for Tl 190.801  Recovery = 106.84%
U 409.014†             12575.3      482.74 ug/L         1.953      482.74 ppb          1.953   0.40%
   QC value within limits for U 409.014  Recovery = 96.55%
V 292.402†             56478.9      505.04 ug/L         0.816      505.04 ppb          0.816   0.16%
   QC value within limits for V 292.402  Recovery = 101.01%
Zn 213.857†            44006.6      498.73 ug/L         0.579      498.73 ppb          0.579   0.12%
   QC value within limits for Zn 213.857  Recovery = 99.75%
SiO2†                 136170.9       10737 ug/L         174.4       10737 ppb         174.4   1.62%
   QC value within limits for SiO2  Recovery = 100.39%
All analyte(s) passed QC.
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Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 4/1/2010 08:06:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3683.5	3683.5	96.0	%			08:09:01
1	Y RADIAL	4183.3	4183.3	96.57	%			08:08:41
1	Al 396.153Radial†	-83.3	5.5	5.7353	ug/L	5.7353	ppb	08:08:41
1	Ca 317.933Radial†	11.9	-6.2	-12.197	ug/L	-12.197	ppb	08:09:01
1	Fe 238.204 Radial†	9.1	3.3	41.576	ug/L	41.576	ppb	08:09:01
1	K 766.490 Radial†	3039.8	172.0	32.004	ug/L	32.004	ppb	08:08:41
1	Mg 279.077 IEC†	2.6	-0.3	-11.227	ug/L	-11.227	ppb	08:09:01
1	Na 589.592 Radial†	-1138.2	-108.3	-47.663	ug/L	-47.663	ppb	08:08:41
1	Sr 421.552†	26.7	14.0	0.1341	ug/L	0.1341	ppb	08:08:41
1	Sc 361.383	681539.1	681539.1	98.833	%			08:09:57
1	Y 371.029	536223.3	536223.3	98.967	%			08:09:57
1	Ag 328.068†	126.4	28.0	0.1709	ug/L	0.1709	ppb	08:09:57
1	As 188.979†	-16.5	6.1	3.0096	ug/L	3.0096	ppb	08:10:17
1	B 249.677†	-217.5	362.9	9.1235	ug/L	9.1235	ppb	08:10:17
1	Ba 233.527†	-11.6	-12.6	-0.1211	ug/L	-0.1211	ppb	08:10:17
1	Be 313.107†	-4393.1	78.3	0.0315	ug/L	0.0315	ppb	08:09:57
1	Cd 226.502†	-201.2	9.8	0.1383	ug/L	0.1383	ppb	08:10:17
1	Co 228.616†	-56.7	2.3	0.0578	ug/L	0.0578	ppb	08:10:17
1	Cr 267.716†	80.5	-9.9	-0.1396	ug/L	-0.1396	ppb	08:10:17
1	Cu 324.752†	5548.2	-74.3	-0.2418	ug/L	-0.2418	ppb	08:09:57
1	Mn 257.610†	447.5	7.7	0.0146	ug/L	0.0146	ppb	08:10:17
1	Mo 202.031†	13.9	1.6	0.1559	ug/L	0.1559	ppb	08:10:17
1	Ni 231.604†	75.0	1.2	0.0392	ug/L	0.0392	ppb	08:10:17
1	P 214.914†	216.5	0.6	0.4063	ug/L	0.4063	ppb	08:10:17
1	Pb 220.353†	-80.2	-14.2	-2.2301	ug/L	-2.2301	ppb	08:10:17
1	S 181.975 Axial†	37.2	-2.6	-3.8934	ug/L	-3.8934	ppb	08:10:17
1	Sb 206.836†	32.6	1.3	0.5384	ug/L	0.5384	ppb	08:10:17
1	Se 196.026†	-17.6	4.3	3.3275	ug/L	3.3275	ppb	08:10:17
1	Si 251.611†	503.3	12.7	0.4621	ug/L	0.4621	ppb	08:10:17
1	Sn 189.927†	13.4	9.5	2.1753	ug/L	2.1753	ppb	08:10:17
1	Ti 334.940†	-1435.8	-31.3	-0.0547	ug/L	-0.0547	ppb	08:09:57
1	Tl 190.801†	-20.8	16.9	6.5109	ug/L	6.5109	ppb	08:10:17
1	U 409.014†	-2536.0	-159.4	-6.1463	ug/L	-6.1463	ppb	08:09:57
1	V 292.402†	-1741.8	-46.0	-0.4209	ug/L	-0.4209	ppb	08:09:57
1	Zn 213.857†	621.9	-35.3	-0.4103	ug/L	-0.4103	ppb	08:10:17
1	SiO2†	515.0	-18.1	-1.4351	ug/L	-1.4351	ppb	08:11:13
2	Sc Radial	3855.5	3855.5	100	%			08:09:26
2	Y RADIAL	4113.8	4113.8	94.97	%			08:09:06
2	Al 396.153Radial†	-69.6	23.0	24.199	ug/L	24.199	ppb	08:09:06
2	Ca 317.933Radial†	13.6	-5.1	-10.015	ug/L	-10.015	ppb	08:09:26
2	Fe 238.204 Radial†	7.7	1.4	18.145	ug/L	18.145	ppb	08:09:26
2	K 766.490 Radial†	2944.9	-63.8	-11.850	ug/L	-11.850	ppb	08:09:06
2	Mg 279.077 IEC†	3.9	0.8	34.390	ug/L	34.390	ppb	08:09:26
2	Na 589.592 Radial†	-1197.6	-114.5	-50.417	ug/L	-50.417	ppb	08:09:06
2	Sr 421.552†	41.4	27.3	0.2621	ug/L	0.2621	ppb	08:09:06
2	Sc 361.383	684098.7	684098.7	99.204	%			08:10:23
2	Y 371.029	538356.7	538356.7	99.360	%			08:10:23
2	Ag 328.068†	68.3	-31.0	-0.1643	ug/L	-0.1643	ppb	08:10:23
2	As 188.979†	-30.6	-8.1	-4.0048	ug/L	-4.0048	ppb	08:10:43
2	B 249.677†	-212.6	368.7	9.2736	ug/L	9.2736	ppb	08:10:43
2	Ba 233.527†	-9.9	-10.8	-0.1056	ug/L	-0.1056	ppb	08:10:43
2	Be 313.107†	-4407.1	80.8	0.0322	ug/L	0.0322	ppb	08:10:23
2	Cd 226.502†	-214.3	-2.5	-0.0399	ug/L	-0.0399	ppb	08:10:43
2	Co 228.616†	-67.3	-8.2	-0.2011	ug/L	-0.2011	ppb	08:10:43
2	Cr 267.716†	97.7	7.2	0.1091	ug/L	0.1091	ppb	08:10:43
2	Cu 324.752†	5574.2	-69.0	-0.2263	ug/L	-0.2263	ppb	08:10:23
2	Mn 257.610†	447.4	5.9	0.0081	ug/L	0.0081	ppb	08:10:43
2	Mo 202.031†	16.3	4.0	0.3824	ug/L	0.3824	ppb	08:10:43
2	Ni 231.604†	72.8	-1.3	-0.0428	ug/L	-0.0428	ppb	08:10:43

2	P 214.914†	214.0	-2.8	-1.7171 ug/L	-1.7171 ppb	08:10:43
2	Pb 220.353†	-78.0	-11.6	-1.8146 ug/L	-1.8146 ppb	08:10:43
2	S 181.975 Axial†	38.6	-1.3	-1.9362 ug/L	-1.9362 ppb	08:10:43
2	Sb 206.836†	38.4	6.9	2.8176 ug/L	2.8176 ppb	08:10:43
2	Se 196.026†	-31.8	-10.0	-7.3513 ug/L	-7.3513 ppb	08:10:43
2	Si 251.611†	486.8	-5.9	-0.2191 ug/L	-0.2191 ppb	08:10:43
2	Sn 189.927†	14.3	10.3	2.3689 ug/L	2.3689 ppb	08:10:43
2	Ti 334.940†	-1518.8	-109.5	-0.2007 ug/L	-0.2007 ppb	08:10:23
2	Tl 190.801†	-36.1	1.6	0.6060 ug/L	0.6060 ppb	08:10:43
2	U 409.014†	-2513.3	-127.0	-4.8932 ug/L	-4.8932 ppb	08:10:23
2	V 292.402†	-1790.1	-88.1	-0.7820 ug/L	-0.7820 ppb	08:10:23
2	Zn 213.857†	630.1	-29.4	-0.3385 ug/L	-0.3385 ppb	08:10:43
2	SiO2†	502.3	-32.9	-2.6053 ug/L	-2.6053 ppb	08:11:18
3	Sc Radial	3920.1	3920.1	102 %		08:09:51
3	Y RADIAL	4338.1	4338.1	100.1 %		08:09:31
3	Al 396.153Radial†	-87.1	7.0	7.3491 ug/L	7.3491 ppb	08:09:31
3	Ca 317.933Radial†	14.0	-4.9	-9.6932 ug/L	-9.6932 ppb	08:09:51
3	Fe 238.204 Radial†	7.1	0.8	9.9517 ug/L	9.9517 ppb	08:09:51
3	K 766.490 Radial†	2976.3	-81.4	-15.124 ug/L	-15.124 ppb	08:09:31
3	Mg 279.077 IEC†	2.1	-1.0	-40.339 ug/L	-40.339 ppb	08:09:51
3	Na 589.592 Radial†	-1132.8	-31.5	-13.862 ug/L	-13.862 ppb	08:09:31
3	Sr 421.552†	31.6	17.1	0.1643 ug/L	0.1643 ppb	08:09:31
3	Sc 361.383	689607.2	689607.2	100.00 %		08:10:48
3	Y 371.029	542431.1	542431.1	100.11 %		08:10:48
3	Ag 328.068†	148.7	48.8	0.2785 ug/L	0.2785 ppb	08:10:48
3	As 188.979†	-21.6	1.2	0.5933 ug/L	0.5933 ppb	08:11:08
3	B 249.677†	-219.7	363.4	9.1394 ug/L	9.1394 ppb	08:11:08
3	Ba 233.527†	-1.2	-2.0	-0.0204 ug/L	-0.0204 ppb	08:11:08
3	Be 313.107†	-4458.7	64.7	0.0262 ug/L	0.0262 ppb	08:10:48
3	Cd 226.502†	-204.3	9.2	0.1313 ug/L	0.1313 ppb	08:11:08
3	Co 228.616†	-48.0	11.7	0.2889 ug/L	0.2889 ppb	08:11:08
3	Cr 267.716†	80.6	-10.7	-0.1531 ug/L	-0.1531 ppb	08:11:08
3	Cu 324.752†	5597.4	-90.7	-0.2955 ug/L	-0.2955 ppb	08:10:48
3	Mn 257.610†	444.8	-0.2	0.0023 ug/L	0.0023 ppb	08:11:08
3	Mo 202.031†	11.4	-1.1	-0.1052 ug/L	-0.1052 ppb	08:11:08
3	Ni 231.604†	73.2	-1.5	-0.0478 ug/L	-0.0478 ppb	08:11:08
3	P 214.914†	215.4	-3.1	-1.9431 ug/L	-1.9431 ppb	08:11:08
3	Pb 220.353†	-67.1	-0.1	-0.0155 ug/L	-0.0155 ppb	08:11:08
3	S 181.975 Axial†	33.9	-6.3	-9.4953 ug/L	-9.4953 ppb	08:11:08
3	Sb 206.836†	45.9	14.2	5.6845 ug/L	5.6845 ppb	08:11:08
3	Se 196.026†	-28.8	-6.7	-4.9355 ug/L	-4.9355 ppb	08:11:08
3	Si 251.611†	493.0	-3.7	-0.1331 ug/L	-0.1331 ppb	08:11:08
3	Sn 189.927†	9.1	4.9	1.1319 ug/L	1.1319 ppb	08:11:08
3	Ti 334.940†	-1396.5	25.0	0.0523 ug/L	0.0523 ppb	08:10:48
3	Tl 190.801†	-39.4	-1.4	-0.5477 ug/L	-0.5477 ppb	08:11:08
3	U 409.014†	-2695.1	-288.5	-11.115 ug/L	-11.115 ppb	08:10:48
3	V 292.402†	-1792.7	-76.2	-0.6967 ug/L	-0.6967 ppb	08:10:48
3	Zn 213.857†	635.6	-29.1	-0.3333 ug/L	-0.3333 ppb	08:11:08
3	SiO2†	491.1	-48.1	-3.7943 ug/L	-3.7943 ppb	08:11:24

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	685081.7	99.347	%	0.5979				0.60%
Sc Radial	3819.7	99.5	%	3.19				3.20%
Y 371.029	539003.7	99.480	%	0.5821				0.59%
Y RADIAL	4211.8	97.23	%	2.651				2.73%
Ag 328.068†	15.3	0.0950	ug/L	0.23094	0.0950	ppb	0.23094	243.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.8	12.428	ug/L	10.2263	12.428	ppb	10.2263	82.28%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.3	-0.1340	ug/L	3.56332	-0.1340	ppb	3.56332	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	365.0	9.1788	ug/L	0.08246	9.1788	ppb	0.08246	0.90%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-8.5	-0.0824	ug/L	0.05421	-0.0824	ppb	0.05421	65.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	74.6	0.0300	ug/L	0.00324	0.0300	ppb	0.00324	10.81%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-5.4	-10.635	ug/L	1.3621	-10.635	ppb	1.3621	12.81%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 5.5      0.0766 ug/L       0.10091      0.0766 ppb        0.10091 131.76%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 2.0      0.0485 ug/L       0.24510      0.0485 ppb        0.24510 505.02%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -4.5     -0.0612 ug/L       0.14765     -0.0612 ppb        0.14765 241.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -78.0     -0.2545 ug/L       0.03633     -0.2545 ppb        0.03633  14.27%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.8      23.224 ug/L      16.4127      23.224 ppb        16.4127  70.67%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†           8.9      1.6768 ug/L      26.31515      1.6768 ppb       26.31515 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.1     -5.7252 ug/L      37.66701     -5.7252 ppb       37.66701 657.91%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 4.5      0.0083 ug/L       0.00613      0.0083 ppb        0.00613  73.52%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.5      0.1444 ug/L       0.24401      0.1444 ppb        0.24401 168.98%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -84.8     -37.314 ug/L      20.3569     -37.314 ppb        20.3569  54.56%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -0.5     -0.0171 ug/L       0.04885     -0.0171 ppb        0.04885 284.95%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -1.8     -1.0847 ug/L       1.29613     -1.0847 ppb        1.29613 119.50%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -8.6     -1.3534 ug/L       1.17717     -1.3534 ppb        1.17717  86.98%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.4     -5.1083 ug/L       3.92328     -5.1083 ppb        3.92328  76.80%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.5      3.0135 ug/L       2.57866      3.0135 ppb        2.57866  85.57%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.1     -2.9864 ug/L       5.59983     -2.9864 ppb        5.59983 187.51%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                 1.0      0.0366 ug/L       0.37097      0.0366 ppb        0.37097 >999.9%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 8.2      1.8920 ug/L       0.66536      1.8920 ppb        0.66536  35.17%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                19.5      0.1868 ug/L       0.06693      0.1868 ppb        0.06693  35.82%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -38.6     -0.0677 ug/L       0.12702     -0.0677 ppb        0.12702 187.62%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 5.7      2.1897 ug/L       3.78644      2.1897 ppb        3.78644 172.92%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -191.6     -7.3847 ug/L       3.29050     -7.3847 ppb        3.29050  44.56%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -70.1     -0.6332 ug/L       0.18873     -0.6332 ppb        0.18873  29.81%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -31.3     -0.3607 ug/L       0.04307     -0.3607 ppb        0.04307  11.94%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -33.0     -2.6116 ug/L       1.17961     -2.6116 ppb        1.17961  45.17%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 4/1/2010 08:13:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4011.5	4011.5	105	%			08:15:47
1	Y RADIAL	4410.9	4410.9	101.8	%			08:15:27
1	Al 396.153Radial†	93.6	181.8	190.92	ug/L	190.92	ppb	08:15:27
1	Ca 317.933Radial†	120.2	96.4	189.23	ug/L	189.23	ppb	08:15:47
1	Fe 238.204 Radial†	17.8	10.8	137.85	ug/L	137.85	ppb	08:15:47
1	K 766.490 Radial†	3736.1	579.3	107.54	ug/L	107.54	ppb	08:15:27
1	Mg 279.077 IEC†	7.7	4.4	179.25	ug/L	179.25	ppb	08:15:47
1	Na 589.592 Radial†	-499.2	600.1	264.12	ug/L	264.12	ppb	08:15:27
1	Sr 421.552†	543.0	505.7	4.8545	ug/L	4.8545	ppb	08:15:27
1	Sc 361.383	687043.5	687043.5	99.631	%			08:16:44
1	Y 371.029	540360.7	540360.7	99.730	%			08:16:44
1	Ag 328.068†	1055.1	959.2	5.2986	ug/L	5.2986	ppb	08:16:44
1	As 188.979†	42.7	65.6	32.549	ug/L	32.549	ppb	08:17:04
1	B 249.677†	1469.6	2058.1	51.744	ug/L	51.744	ppb	08:16:44
1	Ba 233.527†	518.4	519.6	5.0339	ug/L	5.0339	ppb	08:17:04
1	Be 313.107†	7804.9	12357.1	5.0023	ug/L	5.0023	ppb	08:16:44
1	Cd 226.502†	143.5	357.4	5.2242	ug/L	5.2242	ppb	08:17:04
1	Co 228.616†	147.0	207.2	5.1429	ug/L	5.1429	ppb	08:17:04
1	Cr 267.716†	408.2	318.4	4.6964	ug/L	4.6964	ppb	08:17:04
1	Cu 324.752†	8679.1	3023.3	10.049	ug/L	10.049	ppb	08:16:44
1	Mn 257.610†	8372.7	7958.7	10.304	ug/L	10.304	ppb	08:16:44
1	Mo 202.031†	110.3	98.3	9.4533	ug/L	9.4533	ppb	08:17:04
1	Ni 231.604†	229.6	155.8	5.0771	ug/L	5.0771	ppb	08:17:04
1	P 214.914†	440.3	223.4	140.83	ug/L	140.83	ppb	08:17:04
1	Pb 220.353†	-3.6	63.4	10.026	ug/L	10.026	ppb	08:17:04
1	S 181.975 Axial†	99.4	59.5	89.396	ug/L	89.396	ppb	08:17:04
1	Sb 206.836†	47.8	16.2	6.8345	ug/L	6.8345	ppb	08:17:04
1	Se 196.026†	13.7	35.8	27.003	ug/L	27.003	ppb	08:17:04
1	Si 251.611†	3235.1	2750.5	100.58	ug/L	100.58	ppb	08:17:04
1	Sn 189.927†	49.0	45.0	10.374	ug/L	10.374	ppb	08:17:04
1	Ti 334.940†	1411.5	2838.2	5.1382	ug/L	5.1382	ppb	08:16:44
1	Tl 190.801†	23.5	61.5	23.723	ug/L	23.723	ppb	08:17:04
1	U 409.014†	-1109.9	1292.5	49.761	ug/L	49.761	ppb	08:16:44
1	V 292.402†	-1295.1	416.5	3.8769	ug/L	3.8769	ppb	08:16:44
1	Zn 213.857†	1510.7	851.7	9.6754	ug/L	9.6754	ppb	08:17:04
1	SiO2†	3379.0	2852.4	224.96	ug/L	224.96	ppb	08:18:01
2	Sc Radial	3859.5	3859.5	101	%			08:16:13
2	Y RADIAL	4267.7	4267.7	98.52	%			08:15:52
2	Al 396.153Radial†	95.6	187.3	196.75	ug/L	196.75	ppb	08:15:52
2	Ca 317.933Radial†	121.9	102.6	201.47	ug/L	201.47	ppb	08:16:13
2	Fe 238.204 Radial†	18.5	12.2	155.67	ug/L	155.67	ppb	08:16:13
2	K 766.490 Radial†	3813.4	797.0	148.02	ug/L	148.02	ppb	08:15:52
2	Mg 279.077 IEC†	11.1	8.0	331.41	ug/L	331.41	ppb	08:16:13
2	Na 589.592 Radial†	-477.6	602.8	265.32	ug/L	265.32	ppb	08:15:52
2	Sr 421.552†	528.9	512.2	4.9162	ug/L	4.9162	ppb	08:15:52
2	Sc 361.383	688773.4	688773.4	99.882	%			08:17:10
2	Y 371.029	541148.4	541148.4	99.876	%			08:17:10
2	Ag 328.068†	1011.1	912.4	5.0559	ug/L	5.0559	ppb	08:17:10
2	As 188.979†	40.4	63.3	31.389	ug/L	31.389	ppb	08:17:30
2	B 249.677†	1558.8	2143.6	53.893	ug/L	53.893	ppb	08:17:10
2	Ba 233.527†	533.5	533.4	5.1714	ug/L	5.1714	ppb	08:17:30
2	Be 313.107†	7733.3	12265.8	4.9652	ug/L	4.9652	ppb	08:17:10
2	Cd 226.502†	113.8	327.4	4.7825	ug/L	4.7825	ppb	08:17:30
2	Co 228.616†	138.2	198.1	4.9145	ug/L	4.9145	ppb	08:17:30
2	Cr 267.716†	405.3	314.4	4.6440	ug/L	4.6440	ppb	08:17:30
2	Cu 324.752†	8665.2	2987.5	9.9331	ug/L	9.9331	ppb	08:17:10
2	Mn 257.610†	8404.7	7969.6	10.314	ug/L	10.314	ppb	08:17:10
2	Mo 202.031†	105.2	92.9	8.9368	ug/L	8.9368	ppb	08:17:30
2	Ni 231.604†	227.5	153.1	4.9889	ug/L	4.9889	ppb	08:17:30

2	P 214.914†	455.0	237.0	149.55 ug/L	149.55 ppb	08:17:30
2	Pb 220.353†	-17.9	49.1	7.7746 ug/L	7.7746 ppb	08:17:30
2	S 181.975 Axial†	107.4	67.2	101.00 ug/L	101.00 ppb	08:17:30
2	Sb 206.836†	61.1	29.5	12.149 ug/L	12.149 ppb	08:17:30
2	Se 196.026†	21.9	44.0	33.144 ug/L	33.144 ppb	08:17:30
2	Si 251.611†	3216.4	2723.6	99.600 ug/L	99.600 ppb	08:17:30
2	Sn 189.927†	55.4	51.3	11.823 ug/L	11.823 ppb	08:17:30
2	Ti 334.940†	1347.8	2770.8	5.0068 ug/L	5.0068 ppb	08:17:10
2	Tl 190.801†	22.4	60.3	23.269 ug/L	23.269 ppb	08:17:30
2	U 409.014†	-1206.8	1198.3	46.130 ug/L	46.130 ppb	08:17:10
2	V 292.402†	-1117.2	597.9	5.4618 ug/L	5.4618 ppb	08:17:10
2	Zn 213.857†	1513.2	850.4	9.6582 ug/L	9.6582 ppb	08:17:30
2	SiO2†	3384.0	2848.8	224.69 ug/L	224.69 ppb	08:18:06
3	Sc Radial	3809.7	3809.7	99.2 %		08:16:38
3	Y RADIAL	4337.5	4337.5	100.1 %		08:16:18
3	Al 396.153Radial†	93.6	186.6	195.95 ug/L	195.95 ppb	08:16:18
3	Ca 317.933Radial†	118.1	100.4	197.07 ug/L	197.07 ppb	08:16:38
3	Fe 238.204 Radial†	16.5	10.5	133.07 ug/L	133.07 ppb	08:16:38
3	K 766.490 Radial†	3687.8	719.9	133.70 ug/L	133.70 ppb	08:16:18
3	Mg 279.077 IEC†	9.9	7.0	288.06 ug/L	288.06 ppb	08:16:38
3	Na 589.592 Radial†	-474.4	599.8	264.01 ug/L	264.01 ppb	08:16:18
3	Sr 421.552†	523.5	513.5	4.9294 ug/L	4.9294 ppb	08:16:18
3	Sc 361.383	668953.4	668953.4	97.008 %		08:17:35
3	Y 371.029	526207.8	526207.8	97.118 %		08:17:35
3	Ag 328.068†	1018.8	950.3	5.2551 ug/L	5.2551 ppb	08:17:35
3	As 188.979†	38.4	62.4	30.954 ug/L	30.954 ppb	08:17:55
3	B 249.677†	1460.4	2088.4	52.508 ug/L	52.508 ppb	08:17:35
3	Ba 233.527†	515.8	530.9	5.1456 ug/L	5.1456 ppb	08:17:55
3	Be 313.107†	7538.6	12294.4	4.9764 ug/L	4.9764 ppb	08:17:35
3	Cd 226.502†	116.7	333.8	4.8783 ug/L	4.8783 ppb	08:17:55
3	Co 228.616†	139.5	203.5	5.0517 ug/L	5.0517 ppb	08:17:55
3	Cr 267.716†	411.6	333.0	4.9142 ug/L	4.9142 ppb	08:17:55
3	Cu 324.752†	8369.3	2939.4	9.7721 ug/L	9.7721 ppb	08:17:35
3	Mn 257.610†	8225.2	8034.0	10.397 ug/L	10.397 ppb	08:17:35
3	Mo 202.031†	108.9	99.7	9.5932 ug/L	9.5932 ppb	08:17:55
3	Ni 231.604†	224.1	156.4	5.0957 ug/L	5.0957 ppb	08:17:55
3	P 214.914†	439.3	234.4	147.92 ug/L	147.92 ppb	08:17:55
3	Pb 220.353†	-0.9	66.1	10.450 ug/L	10.450 ppb	08:17:55
3	S 181.975 Axial†	102.0	64.9	97.475 ug/L	97.475 ppb	08:17:55
3	Sb 206.836†	49.6	19.4	8.1181 ug/L	8.1181 ppb	08:17:55
3	Se 196.026†	18.5	41.2	30.980 ug/L	30.980 ppb	08:17:55
3	Si 251.611†	3166.0	2767.0	101.18 ug/L	101.18 ppb	08:17:55
3	Sn 189.927†	49.8	47.2	10.876 ug/L	10.876 ppb	08:17:55
3	Ti 334.940†	1238.2	2697.9	4.8775 ug/L	4.8775 ppb	08:17:35
3	Tl 190.801†	19.8	58.4	22.530 ug/L	22.530 ppb	08:17:55
3	U 409.014†	-1185.2	1184.7	45.608 ug/L	45.608 ppb	08:17:35
3	V 292.402†	-1166.6	513.8	4.7317 ug/L	4.7317 ppb	08:17:35
3	Zn 213.857†	1483.9	865.1	9.8293 ug/L	9.8293 ppb	08:17:55
3	SiO2†	3358.7	2923.1	230.54 ug/L	230.54 ppb	08:18:11

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	681590.1	98.840	%	1.5919				1.61%
Sc Radial	3893.6	101	%	2.7				2.70%
Y 371.029	535905.6	98.908	%	1.5518				1.57%
Y RADIAL	4338.7	100.2	%	1.65				1.65%
Ag 328.068†	940.6	5.2032	ug/L	0.12939	5.2032	ppb	0.12939	2.49%
QC value within limits for Ag 328.068 Recovery = 104.06%								
Al 396.153Radial†	185.2	194.54	ug/L	3.159	194.54	ppb	3.159	1.62%
QC value within limits for Al 396.153Radial Recovery = 97.27%								
As 188.979†	63.8	31.631	ug/L	0.8242	31.631	ppb	0.8242	2.61%
QC value within limits for As 188.979 Recovery = 105.44%								
B 249.677†	2096.7	52.715	ug/L	1.0895	52.715	ppb	1.0895	2.07%
QC value within limits for B 249.677 Recovery = 105.43%								
Ba 233.527†	528.0	5.1170	ug/L	0.07307	5.1170	ppb	0.07307	1.43%
QC value within limits for Ba 233.527 Recovery = 102.34%								
Be 313.107†	12305.7	4.9813	ug/L	0.01905	4.9813	ppb	0.01905	0.38%
QC value within limits for Be 313.107 Recovery = 99.63%								
Ca 317.933Radial†	99.8	195.92	ug/L	6.199	195.92	ppb	6.199	3.16%

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   QC value within limits for Ca 317.933Radial  Recovery = 97.96%
Cd 226.502†              339.5      4.9617 ug/L       0.23237      4.9617 ppb        0.23237   4.68%
   QC value within limits for Cd 226.502  Recovery = 99.23%
Co 228.616†              202.9      5.0364 ug/L       0.11497      5.0364 ppb        0.11497   2.28%
   QC value within limits for Co 228.616  Recovery = 100.73%
Cr 267.716†              321.9      4.7515 ug/L       0.14330      4.7515 ppb        0.14330   3.02%
   QC value within limits for Cr 267.716  Recovery = 95.03%
Cu 324.752†             2983.4      9.9182 ug/L       0.13926      9.9182 ppb        0.13926   1.40%
   QC value within limits for Cu 324.752  Recovery = 99.18%
Fe 238.204 Radial†        11.2      142.20 ug/L        11.910      142.20 ppb         11.910   8.38%
   QC value greater than the upper limit for Fe 238.204 Radial  Recovery = 142.20%
K 766.490 Radial†        698.7      129.75 ug/L        20.526      129.75 ppb         20.526  15.82%
   QC value within limits for K 766.490 Radial  Recovery = 86.50%
Mg 279.077 IEC†            6.5      266.24 ug/L        78.388      266.24 ppb         78.388  29.44%
   QC value within limits for Mg 279.077 IEC  Recovery = 88.75%
Mn 257.610†             7987.4      10.338 ug/L        0.0508      10.338 ppb         0.0508   0.49%
   QC value within limits for Mn 257.610  Recovery = 103.38%
Mo 202.031†              97.0       9.3278 ug/L       0.34571      9.3278 ppb        0.34571   3.71%
   QC value within limits for Mo 202.031  Recovery = 93.28%
Na 589.592 Radial†       600.9      264.48 ug/L         0.729      264.48 ppb          0.729   0.28%
   QC value within limits for Na 589.592 Radial  Recovery = 88.16%
Ni 231.604†              155.1       5.0539 ug/L       0.05707      5.0539 ppb        0.05707   1.13%
   QC value within limits for Ni 231.604  Recovery = 101.08%
P 214.914†               231.6      146.10 ug/L         4.636      146.10 ppb          4.636   3.17%
   QC value within limits for P 214.914  Recovery = 97.40%
Pb 220.353†               59.5       9.4168 ug/L       1.43784      9.4168 ppb        1.43784  15.27%
   QC value within limits for Pb 220.353  Recovery = 94.17%
S 181.975 Axial†          63.9      95.956 ug/L        5.9479      95.956 ppb         5.9479   6.20%
   QC value within limits for S 181.975 Axial  Recovery = 95.96%
Sb 206.836†               21.7       9.0340 ug/L       2.77335      9.0340 ppb        2.77335  30.70%
   QC value within limits for Sb 206.836  Recovery = 90.34%
Se 196.026†               40.3      30.376 ug/L        3.1146      30.376 ppb         3.1146  10.25%
   QC value within limits for Se 196.026  Recovery = 101.25%
Si 251.611†             2747.0      100.45 ug/L         0.797      100.45 ppb          0.797   0.79%
   QC value within limits for Si 251.611  Recovery = 100.45%
Sn 189.927†               47.8      11.025 ug/L        0.7358      11.025 ppb         0.7358   6.67%
   QC value within limits for Sn 189.927  Recovery = 110.25%
Sr 421.552†              510.5       4.9001 ug/L       0.03998      4.9001 ppb        0.03998   0.82%
   QC value within limits for Sr 421.552  Recovery = 98.00%
Ti 334.940†             2769.0       5.0075 ug/L       0.13037      5.0075 ppb        0.13037   2.60%
   QC value within limits for Ti 334.940  Recovery = 100.15%
Tl 190.801†               60.1      23.174 ug/L        0.6020      23.174 ppb         0.6020   2.60%
   QC value within limits for Tl 190.801  Recovery = 115.87%
U 409.014†              1225.2      47.167 ug/L        2.2621      47.167 ppb         2.2621   4.80%
   QC value within limits for U 409.014  Recovery = 94.33%
V 292.402†               509.4       4.6901 ug/L       0.79326      4.6901 ppb        0.79326  16.91%
   QC value within limits for V 292.402  Recovery = 93.80%
Zn 213.857†              855.7       9.7210 ug/L       0.09422      9.7210 ppb        0.09422   0.97%
   QC value within limits for Zn 213.857  Recovery = 97.21%
SiO2†                   2874.8      226.73 ug/L         3.302      226.73 ppb          3.302   1.46%
   QC value within limits for SiO2  Recovery = 106.44%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 4/1/2010 08:20:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3724.9	3724.9	97.0	%			08:22:36
1	Y RADIAL	4072.0	4072.0	94.00	%			08:22:36
1	Al 396.153Radial†	468134.5	482523.2	507950	ug/L	507950	ppb	08:22:15
1	Ca 317.933Radial†	234012.2	241140.1	473490	ug/L	473490	ppb	08:22:15
1	Fe 238.204 Radial†	13911.6	14330.3	182130	ug/L	182130	ppb	08:22:36
1	K 766.490 Radial†	2858.2	-50.3	-167.73	ug/L	-167.73	ppb	08:22:15
1	Mg 279.077 IEC†	11280.4	11621.9	478510	ug/L	478510	ppb	08:22:36
1	Na 589.592 Radial†	-1005.3	41.8	18.396	ug/L	18.396	ppb	08:22:36
1	Sr 421.552†	407.0	405.6	0.3584	ug/L	0.3584	ppb	08:22:36
1	Sc 361.383	592755.3	592755.3	85.958	%			08:23:33
1	Y 371.029	462058.5	462058.5	85.279	%			08:23:33
1	Ag 328.068†	-8358.5	-9823.9	-4.2053	ug/L	-4.2053	ppb	08:23:33
1	As 188.979†	-83.9	-74.8	5.4738	ug/L	5.4738	ppb	08:23:53
1	B 249.677†	73.8	668.9	-12.752	ug/L	-12.752	ppb	08:23:33
1	Ba 233.527†	-30.2	-35.9	5.2300	ug/L	5.2300	ppb	08:23:53
1	Be 313.107†	-4511.1	-724.8	-0.3382	ug/L	-0.3382	ppb	08:23:33
1	Cd 226.502†	866.5	1221.5	-0.9444	ug/L	-0.9444	ppb	08:23:53
1	Co 228.616†	-2.0	57.3	-1.1931	ug/L	-1.1931	ppb	08:23:53
1	Cr 267.716†	-1454.9	-1783.9	-7.0129	ug/L	-7.0129	ppb	08:23:53
1	Cu 324.752†	2840.6	-2383.3	1.6788	ug/L	1.6788	ppb	08:23:33
1	Mn 257.610†	273.7	-126.5	-1.7479	ug/L	-1.7479	ppb	08:23:33
1	Mo 202.031†	-128.0	-161.4	4.2680	ug/L	4.2680	ppb	08:23:53
1	Ni 231.604†	189.0	145.2	4.7327	ug/L	4.7327	ppb	08:23:53
1	P 214.914†	214.3	30.9	0.4311	ug/L	0.4311	ppb	08:23:53
1	Pb 220.353†	-738.8	-792.5	-8.1148	ug/L	-8.1148	ppb	08:23:53
1	S 181.975 Axial†	44.6	11.7	-77.691	ug/L	-77.691	ppb	08:23:53
1	Sb 206.836†	70.4	50.2	2.7915	ug/L	2.7915	ppb	08:23:53
1	Se 196.026†	-743.5	-842.9	-0.6501	ug/L	-0.6501	ppb	08:23:53
1	Si 251.611†	510.6	97.3	3.7546	ug/L	3.7546	ppb	08:23:53
1	Sn 189.927†	-323.6	-380.6	-2.3735	ug/L	-2.3735	ppb	08:23:53
1	Ti 334.940†	-10704.8	-11032.1	4.3767	ug/L	4.3767	ppb	08:23:33
1	Tl 190.801†	-80.3	-55.5	-21.562	ug/L	-21.562	ppb	08:23:53
1	U 409.014†	-1128.0	1094.2	21.444	ug/L	21.444	ppb	08:23:33
1	V 292.402†	100.7	1833.5	-1.2250	ug/L	-1.2250	ppb	08:23:53
1	Zn 213.857†	2645.9	2413.5	0.3312	ug/L	0.3312	ppb	08:23:53
1	SiO2†	538.2	86.9	7.2872	ug/L	7.2872	ppb	08:24:49
2	Sc Radial	3660.5	3660.5	95.4	%			08:23:01
2	Y RADIAL	4019.6	4019.6	92.79	%			08:23:01
2	Al 396.153Radial†	465348.2	488081.7	513800	ug/L	513800	ppb	08:22:41
2	Ca 317.933Radial†	231856.9	243119.1	477380	ug/L	477380	ppb	08:22:41
2	Fe 238.204 Radial†	14057.1	14734.8	187270	ug/L	187270	ppb	08:23:01
2	K 766.490 Radial†	2694.5	-170.3	-191.35	ug/L	-191.35	ppb	08:22:41
2	Mg 279.077 IEC†	11418.5	11971.1	492890	ug/L	492890	ppb	08:23:01
2	Na 589.592 Radial†	-962.5	68.5	30.135	ug/L	30.135	ppb	08:23:01
2	Sr 421.552†	414.8	421.1	0.4785	ug/L	0.4785	ppb	08:23:01
2	Sc 361.383	591980.3	591980.3	85.846	%			08:23:58
2	Y 371.029	461552.8	461552.8	85.185	%			08:23:58
2	Ag 328.068†	-8304.3	-9773.4	-2.3864	ug/L	-2.3864	ppb	08:23:58
2	As 188.979†	-74.2	-63.7	12.202	ug/L	12.202	ppb	08:24:18
2	B 249.677†	102.9	702.9	-12.733	ug/L	-12.733	ppb	08:23:58
2	Ba 233.527†	-73.4	-86.3	4.8992	ug/L	4.8992	ppb	08:24:18
2	Be 313.107†	-4567.0	-796.8	-0.3668	ug/L	-0.3668	ppb	08:23:58
2	Cd 226.502†	861.3	1216.7	-1.5453	ug/L	-1.5453	ppb	08:24:18
2	Co 228.616†	-2.1	57.3	-1.2724	ug/L	-1.2724	ppb	08:24:18
2	Cr 267.716†	-1406.2	-1729.4	-5.6629	ug/L	-5.6629	ppb	08:24:18
2	Cu 324.752†	2838.1	-2381.9	1.9586	ug/L	1.9586	ppb	08:23:58
2	Mn 257.610†	400.9	22.1	-1.6359	ug/L	-1.6359	ppb	08:23:58
2	Mo 202.031†	-137.8	-173.0	3.6002	ug/L	3.6002	ppb	08:24:18
2	Ni 231.604†	197.6	155.6	5.0716	ug/L	5.0716	ppb	08:24:18

2	P 214.914†	202.6	17.5	-10.818	ug/L	-10.818 ppb	08:24:18
2	Pb 220.353†	-713.6	-764.2	-2.6461	ug/L	-2.6461 ppb	08:24:18
2	S 181.975 Axial†	44.6	11.7	-78.700	ug/L	-78.700 ppb	08:24:18
2	Sb 206.836†	61.0	39.3	-1.8387	ug/L	-1.8387 ppb	08:24:18
2	Se 196.026†	-728.4	-826.4	26.860	ug/L	26.860 ppb	08:24:18
2	Si 251.611†	483.0	66.1	2.6228	ug/L	2.6228 ppb	08:24:18
2	Sn 189.927†	-331.3	-390.1	-3.8459	ug/L	-3.8459 ppb	08:24:18
2	Ti 334.940†	-10603.9	-10930.8	3.9090	ug/L	3.9090 ppb	08:23:58
2	Tl 190.801†	-79.4	-54.6	-21.191	ug/L	-21.191 ppb	08:24:18
2	U 409.014†	-1242.0	959.7	15.674	ug/L	15.674 ppb	08:23:58
2	V 292.402†	92.7	1824.4	-1.8032	ug/L	-1.8032 ppb	08:24:18
2	Zn 213.857†	2614.7	2381.3	-0.8093	ug/L	-0.8093 ppb	08:24:18
2	SiO2†	474.6	13.7	1.5379	ug/L	1.5379 ppb	08:24:54
3	Sc Radial	3608.7	3608.7	94.0	%		08:23:26
3	Y RADIAL	3966.7	3966.7	91.57	%		08:23:26
3	Al 396.153Radial†	472234.6	502419.5	528890	ug/L	528890 ppb	08:23:06
3	Ca 317.933Radial†	235177.5	250145.2	491170	ug/L	491170 ppb	08:23:06
3	Fe 238.204 Radial†	13950.5	14833.3	188530	ug/L	188530 ppb	08:23:26
3	K 766.490 Radial†	2700.1	-123.7	-187.30	ug/L	-187.30 ppb	08:23:06
3	Mg 279.077 IEC†	11360.4	12081.4	497430	ug/L	497430 ppb	08:23:26
3	Na 589.592 Radial†	-992.1	22.5	9.9175	ug/L	9.9175 ppb	08:23:26
3	Sr 421.552†	402.9	414.7	0.3140	ug/L	0.3140 ppb	08:23:26
3	Sc 361.383	589395.9	589395.9	85.471	%		08:24:24
3	Y 371.029	459829.4	459829.4	84.867	%		08:24:24
3	Ag 328.068†	-8338.1	-9855.3	-2.6450	ug/L	-2.6450 ppb	08:24:24
3	As 188.979†	-80.5	-71.4	8.6736	ug/L	8.6736 ppb	08:24:44
3	B 249.677†	99.5	699.4	-13.024	ug/L	-13.024 ppb	08:24:24
3	Ba 233.527†	-119.4	-140.5	4.4147	ug/L	4.4147 ppb	08:24:44
3	Be 313.107†	-4518.1	-762.9	-0.3525	ug/L	-0.3525 ppb	08:24:24
3	Cd 226.502†	877.6	1240.2	-1.3300	ug/L	-1.3300 ppb	08:24:44
3	Co 228.616†	11.8	73.5	-0.8892	ug/L	-0.8892 ppb	08:24:44
3	Cr 267.716†	-1411.6	-1742.9	-5.7326	ug/L	-5.7326 ppb	08:24:44
3	Cu 324.752†	2903.7	-2290.7	2.3226	ug/L	2.3226 ppb	08:24:24
3	Mn 257.610†	393.6	15.5	-1.7065	ug/L	-1.7065 ppb	08:24:24
3	Mo 202.031†	-140.4	-176.7	3.5055	ug/L	3.5055 ppb	08:24:44
3	Ni 231.604†	179.9	135.8	4.4266	ug/L	4.4266 ppb	08:24:44
3	P 214.914†	181.0	-6.7	-23.600	ug/L	-23.600 ppb	08:24:44
3	Pb 220.353†	-719.5	-774.8	-0.4543	ug/L	-0.4543 ppb	08:24:44
3	S 181.975 Axial†	55.8	25.1	-61.471	ug/L	-61.471 ppb	08:24:44
3	Sb 206.836†	51.8	28.8	-6.4491	ug/L	-6.4491 ppb	08:24:44
3	Se 196.026†	-740.9	-844.7	20.771	ug/L	20.771 ppb	08:24:44
3	Si 251.611†	514.2	105.0	4.0529	ug/L	4.0529 ppb	08:24:44
3	Sn 189.927†	-329.5	-389.6	-1.2749	ug/L	-1.2749 ppb	08:24:44
3	Ti 334.940†	-10421.0	-10771.0	5.6737	ug/L	5.6737 ppb	08:24:24
3	Tl 190.801†	-75.0	-49.9	-19.379	ug/L	-19.379 ppb	08:24:44
3	U 409.014†	-991.8	1246.1	26.563	ug/L	26.563 ppb	08:24:24
3	V 292.402†	141.7	1882.2	-1.3719	ug/L	-1.3719 ppb	08:24:44
3	Zn 213.857†	2596.1	2372.9	-1.0892	ug/L	-1.0892 ppb	08:24:44
3	SiO2†	566.7	123.8	10.241	ug/L	10.241 ppb	08:24:59

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	591377.2	85.758	%	0.2551				0.30%
Sc Radial	3664.7	95.5	%	1.52				1.59%
Y 371.029	461146.9	85.110	%	0.2157				0.25%
Y RADIAL	4019.4	92.79	%	1.215				1.31%
Ag 328.068†	-9817.5	-3.0789	ug/L	0.98402	-3.0789	ppb	0.98402	31.96%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	491008.1	516880	ug/L	10806.8	516880	ppb	10806.8	2.09%
QC value within limits for Al 396.153Radial Recovery = 103.38%								
As 188.979†	-70.0	8.7830	ug/L	3.36531	8.7830	ppb	3.36531	38.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	690.4	-12.836	ug/L	0.1629	-12.836	ppb	0.1629	1.27%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-87.6	4.8480	ug/L	0.41007	4.8480	ppb	0.41007	8.46%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-761.5	-0.3525	ug/L	0.01434	-0.3525	ppb	0.01434	4.07%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	244801.5	480680	ug/L	9292.3	480680	ppb	9292.3	1.93%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.14%
Cd 226.502†            1226.1     -1.2733 ug/L      0.30442     -1.2733 ppb      0.30442  23.91%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              62.7     -1.1182 ug/L      0.20225     -1.1182 ppb      0.20225  18.09%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†           -1752.1     -6.1361 ug/L      0.76013     -6.1361 ppb      0.76013  12.39%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -2352.0      1.9867 ug/L      0.32279      1.9867 ppb      0.32279  16.25%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    14632.8      185980 ug/L       3388.2      185980 ppb       3388.2   1.82%
   QC value within limits for Fe 238.204 Radial  Recovery = 92.99%
K 766.490 Radial†      -114.8     -182.13 ug/L       12.628     -182.13 ppb       12.628   6.93%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       11891.4      489610 ug/L       9876.1      489610 ppb       9876.1   2.02%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.92%
Mn 257.610†             -29.7     -1.6967 ug/L      0.05663     -1.6967 ppb      0.05663   3.34%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -170.4      3.7912 ug/L      0.41560      3.7912 ppb      0.41560  10.96%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      44.3      19.483 ug/L      10.1522      19.483 ppb      10.1522  52.11%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†            145.5      4.7436 ug/L      0.32262      4.7436 ppb      0.32262   6.80%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              13.9     -11.329 ug/L      12.0238     -11.329 ppb      12.0238 106.13%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -777.2     -3.7384 ug/L      3.94532     -3.7384 ppb      3.94532 105.54%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†        16.1     -72.621 ug/L       9.6692     -72.621 ppb       9.6692  13.31%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†             39.4     -1.8321 ug/L      4.62033     -1.8321 ppb      4.62033 252.19%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -838.0      15.660 ug/L      14.4495      15.660 ppb      14.4495  92.27%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             89.5      3.4768 ug/L      0.75447      3.4768 ppb      0.75447  21.70%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -386.7     -2.4981 ug/L      1.29001     -2.4981 ppb      1.29001  51.64%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†            413.8      0.3836 ug/L      0.08508      0.3836 ppb      0.08508  22.18%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†          -10911.3      4.6531 ug/L      0.91423      4.6531 ppb      0.91423  19.65%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -53.3     -20.710 ug/L       1.1679     -20.710 ppb       1.1679   5.64%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             1100.0      21.227 ug/L       5.4480      21.227 ppb       5.4480  25.67%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             1846.7     -1.4667 ug/L      0.30054     -1.4667 ppb      0.30054  20.49%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            2389.2     -0.5225 ug/L      0.75240     -0.5225 ppb      0.75240 144.01%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   74.8      6.3553 ug/L      4.42559      6.3553 ppb      4.42559  69.64%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 4/1/2010 08:27:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3573.1	3573.1	93.1	%			08:29:24
1	Y RADIAL	3942.3	3942.3	91.01	%			08:29:24
1	Al 396.153Radial†	453414.3	487195.0	512840	ug/L	512840	ppb	08:29:04
1	Ca 317.933Radial†	226697.0	243521.8	478170	ug/L	478170	ppb	08:29:04
1	Fe 238.204 Radial†	13612.5	14617.8	185800	ug/L	185800	ppb	08:29:24
1	K 766.490 Radial†	29374.1	28560.7	5148.6	ug/L	5148.6	ppb	08:29:04
1	Mg 279.077 IEC†	11185.7	12013.7	494650	ug/L	494650	ppb	08:29:24
1	Na 589.592 Radial†	10174.9	12008.7	5285.4	ug/L	5285.4	ppb	08:29:24
1	Sr 421.552†	47346.5	50850.5	484.67	ug/L	484.67	ppb	08:29:04
1	Sc 361.383	614044.0	614044.0	89.045	%			08:30:22
1	Y 371.029	476817.2	476817.2	88.003	%			08:30:22
1	Ag 328.068†	36120.9	40464.9	275.53	ug/L	275.53	ppb	08:30:22
1	As 188.979†	835.9	961.5	522.67	ug/L	522.67	ppb	08:30:42
1	B 249.677†	18387.6	21232.8	502.72	ug/L	502.72	ppb	08:30:22
1	Ba 233.527†	44288.4	49736.3	487.50	ug/L	487.50	ppb	08:30:22
1	Be 313.107†	541143.1	612241.3	248.37	ug/L	248.37	ppb	08:30:22
1	Cd 226.502†	29776.1	33652.8	473.21	ug/L	473.21	ppb	08:30:42
1	Co 228.616†	16393.4	18469.9	454.92	ug/L	454.92	ppb	08:30:42
1	Cr 267.716†	28171.1	31545.6	485.55	ug/L	485.55	ppb	08:30:22
1	Cu 324.752†	149339.5	162024.3	549.17	ug/L	549.17	ppb	08:30:22
1	Mn 257.610†	331492.3	371829.6	479.24	ug/L	479.24	ppb	08:30:22
1	Mo 202.031†	4360.2	4884.2	489.27	ug/L	489.27	ppb	08:30:42
1	Ni 231.604†	13031.3	14559.8	474.50	ug/L	474.50	ppb	08:30:42
1	P 214.914†	3731.1	3971.6	2413.7	ug/L	2413.7	ppb	08:30:42
1	Pb 220.353†	1933.4	2238.2	470.44	ug/L	470.44	ppb	08:30:42
1	S 181.975 Axial†	1626.3	1786.1	2587.6	ug/L	2587.6	ppb	08:30:42
1	Sb 206.836†	1200.8	1316.8	527.24	ug/L	527.24	ppb	08:30:42
1	Se 196.026†	2363.3	2676.1	2622.0	ug/L	2622.0	ppb	08:30:42
1	Si 251.611†	126961.2	142084.1	5195.8	ug/L	5195.8	ppb	08:30:22
1	Sn 189.927†	1618.1	1813.1	502.40	ug/L	502.40	ppb	08:30:42
1	Ti 334.940†	237234.0	267841.6	509.41	ug/L	509.41	ppb	08:30:22
1	Tl 190.801†	993.5	1153.7	447.15	ug/L	447.15	ppb	08:30:42
1	U 409.014†	10823.7	14561.8	538.69	ug/L	538.69	ppb	08:30:22
1	V 292.402†	50968.3	58955.2	509.23	ug/L	509.23	ppb	08:30:22
1	Zn 213.857†	41552.1	45999.5	494.60	ug/L	494.60	ppb	08:30:22
1	SiO2†	127289.8	142410.6	11231	ug/L	11231	ppb	08:31:39
2	Sc Radial	3581.0	3581.0	93.3	%			08:29:49
2	Y RADIAL	3936.1	3936.1	90.86	%			08:29:49
2	Al 396.153Radial†	467596.5	501335.2	527730	ug/L	527730	ppb	08:29:29
2	Ca 317.933Radial†	232284.4	248980.1	488880	ug/L	488880	ppb	08:29:29
2	Fe 238.204 Radial†	13599.7	14572.1	185220	ug/L	185220	ppb	08:29:49
2	K 766.490 Radial†	30092.4	29261.8	5275.4	ug/L	5275.4	ppb	08:29:29
2	Mg 279.077 IEC†	11159.6	11959.6	492420	ug/L	492420	ppb	08:29:49
2	Na 589.592 Radial†	10163.9	11973.0	5269.8	ug/L	5269.8	ppb	08:29:49
2	Sr 421.552†	48446.6	51918.8	494.85	ug/L	494.85	ppb	08:29:29
2	Sc 361.383	604054.6	604054.6	87.596	%			08:30:48
2	Y 371.029	468752.7	468752.7	86.514	%			08:30:48
2	Ag 328.068†	35380.7	40290.7	274.26	ug/L	274.26	ppb	08:30:48
2	As 188.979†	825.6	965.3	524.44	ug/L	524.44	ppb	08:31:08
2	B 249.677†	18017.9	21152.2	500.79	ug/L	500.79	ppb	08:30:48
2	Ba 233.527†	43681.2	49865.6	488.74	ug/L	488.74	ppb	08:30:48
2	Be 313.107†	533415.1	613469.1	248.87	ug/L	248.87	ppb	08:30:48
2	Cd 226.502†	29304.0	33666.9	473.47	ug/L	473.47	ppb	08:31:08
2	Co 228.616†	16118.3	18460.3	454.69	ug/L	454.69	ppb	08:31:08
2	Cr 267.716†	27719.6	31553.4	485.61	ug/L	485.61	ppb	08:30:48
2	Cu 324.752†	146051.2	161043.8	545.88	ug/L	545.88	ppb	08:30:48
2	Mn 257.610†	327243.9	373136.1	480.96	ug/L	480.96	ppb	08:30:48
2	Mo 202.031†	4291.5	4886.7	489.59	ug/L	489.59	ppb	08:31:08
2	Ni 231.604†	12795.5	14532.6	473.61	ug/L	473.61	ppb	08:31:08

2	P 214.914†	3658.1	3957.6	2409.6 ug/L	2409.6 ppb	08:31:08
2	Pb 220.353†	1911.6	2249.3	476.13 ug/L	476.13 ppb	08:31:08
2	S 181.975 Axial†	1595.0	1780.6	2576.5 ug/L	2576.5 ppb	08:31:08
2	Sb 206.836†	1199.3	1337.4	534.97 ug/L	534.97 ppb	08:31:08
2	Se 196.026†	2288.6	2634.8	2593.9 ug/L	2593.9 ppb	08:31:08
2	Si 251.611†	125024.2	142230.8	5201.1 ug/L	5201.1 ppb	08:30:48
2	Sn 189.927†	1570.7	1789.0	498.77 ug/L	498.77 ppb	08:31:08
2	Ti 334.940†	234221.3	268808.1	512.79 ug/L	512.79 ppb	08:30:48
2	Tl 190.801†	976.1	1152.3	446.65 ug/L	446.65 ppb	08:31:08
2	U 409.014†	10352.5	14224.9	525.78 ug/L	525.78 ppb	08:30:48
2	V 292.402†	50278.2	59113.9	510.65 ug/L	510.65 ppb	08:30:48
2	Zn 213.857†	40949.0	46082.7	495.65 ug/L	495.65 ppb	08:30:48
2	SiO2†	126626.7	144017.7	11358 ug/L	11358 ppb	08:31:44
3	Sc Radial	3591.4	3591.4	93.6 %		08:30:15
3	Y RADIAL	3931.0	3931.0	90.75 %		08:30:15
3	Al 396.153Radial†	450942.4	482074.1	507450 ug/L	507450 ppb	08:29:55
3	Ca 317.933Radial†	225852.3	241379.6	473960 ug/L	473960 ppb	08:29:55
3	Fe 238.204 Radial†	13646.6	14579.7	185320 ug/L	185320 ppb	08:30:15
3	K 766.490 Radial†	29335.7	28359.1	5112.5 ug/L	5112.5 ppb	08:29:55
3	Mg 279.077 IEC†	11230.3	12000.3	494100 ug/L	494100 ppb	08:30:15
3	Na 589.592 Radial†	10176.6	11954.9	5261.8 ug/L	5261.8 ppb	08:30:15
3	Sr 421.552†	46676.5	49875.5	475.34 ug/L	475.34 ppb	08:29:55
3	Sc 361.383	602349.7	602349.7	87.349 %		08:31:14
3	Y 371.029	467099.5	467099.5	86.209 %		08:31:14
3	Ag 328.068†	35264.5	40271.9	274.39 ug/L	274.39 ppb	08:31:14
3	As 188.979†	845.5	990.7	537.01 ug/L	537.01 ppb	08:31:34
3	B 249.677†	17911.6	21088.8	499.15 ug/L	499.15 ppb	08:31:14
3	Ba 233.527†	43733.6	50066.8	490.68 ug/L	490.68 ppb	08:31:14
3	Be 313.107†	532112.8	613701.7	248.96 ug/L	248.96 ppb	08:31:14
3	Cd 226.502†	29869.9	34409.4	484.32 ug/L	484.32 ppb	08:31:34
3	Co 228.616†	16440.1	18880.8	465.13 ug/L	465.13 ppb	08:31:34
3	Cr 267.716†	27731.3	31656.3	487.13 ug/L	487.13 ppb	08:31:14
3	Cu 324.752†	145465.1	160844.8	545.23 ug/L	545.23 ppb	08:31:14
3	Mn 257.610†	326981.1	373892.6	481.88 ug/L	481.88 ppb	08:31:14
3	Mo 202.031†	4359.6	4978.5	498.25 ug/L	498.25 ppb	08:31:34
3	Ni 231.604†	13047.3	14862.3	484.36 ug/L	484.36 ppb	08:31:34
3	P 214.914†	3747.1	4071.3	2477.4 ug/L	2477.4 ppb	08:31:34
3	Pb 220.353†	1953.7	2303.7	479.40 ug/L	479.40 ppb	08:31:34
3	S 181.975 Axial†	1630.4	1826.3	2648.9 ug/L	2648.9 ppb	08:31:34
3	Sb 206.836†	1209.7	1353.2	542.26 ug/L	542.26 ppb	08:31:34
3	Se 196.026†	2361.4	2725.4	2655.8 ug/L	2655.8 ppb	08:31:34
3	Si 251.611†	124540.1	142080.6	5195.5 ug/L	5195.5 ppb	08:31:14
3	Sn 189.927†	1624.1	1855.2	511.32 ug/L	511.32 ppb	08:31:34
3	Ti 334.940†	233265.5	268470.7	510.04 ug/L	510.04 ppb	08:31:14
3	Tl 190.801†	984.4	1164.9	451.46 ug/L	451.46 ppb	08:31:34
3	U 409.014†	10395.1	14307.1	528.93 ug/L	528.93 ppb	08:31:14
3	V 292.402†	50227.3	59218.1	511.72 ug/L	511.72 ppb	08:31:14
3	Zn 213.857†	40862.1	46115.6	495.94 ug/L	495.94 ppb	08:31:14
3	SiO2†	126462.4	144238.7	11375 ug/L	11375 ppb	08:31:50

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	606816.1	87.997	%	0.9161				1.04%
Sc Radial	3581.8	93.3	%	0.24				0.26%
Y 371.029	470889.8	86.909	%	0.9596				1.10%
Y RADIAL	3936.5	90.87	%	0.131				0.14%
Ag 328.068†	40342.5	274.73	ug/L	0.698	274.73	ppb	0.698	0.25%
QC value within limits for Ag 328.068 Recovery = 109.89%								
Al 396.153Radial†	490201.4	516010	ug/L	10502.1	516010	ppb	10502.1	2.04%
QC value within limits for Al 396.153Radial Recovery = 103.20%								
As 188.979†	972.5	528.04	ug/L	7.817	528.04	ppb	7.817	1.48%
QC value within limits for As 188.979 Recovery = 105.61%								
B 249.677†	21157.9	500.89	ug/L	1.789	500.89	ppb	1.789	0.36%
QC value within limits for B 249.677 Recovery = 100.18%								
Ba 233.527†	49889.6	488.97	ug/L	1.606	488.97	ppb	1.606	0.33%
QC value within limits for Ba 233.527 Recovery = 97.79%								
Be 313.107†	613137.3	248.73	ug/L	0.319	248.73	ppb	0.319	0.13%
QC value within limits for Be 313.107 Recovery = 99.49%								
Ca 317.933Radial†	244627.2	480340	ug/L	7695.0	480340	ppb	7695.0	1.60%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.07%
Cd 226.502†            33909.7      477.00 ug/L         6.343      477.00 ppb          6.343   1.33%
   QC value within limits for Cd 226.502  Recovery = 95.40%
Co 228.616†            18603.6      458.25 ug/L         5.959      458.25 ppb          5.959   1.30%
   QC value within limits for Co 228.616  Recovery = 91.65%
Cr 267.716†            31585.1      486.10 ug/L         0.900      486.10 ppb          0.900   0.19%
   QC value within limits for Cr 267.716  Recovery = 97.22%
Cu 324.752†           161304.3      546.76 ug/L         2.115      546.76 ppb          2.115   0.39%
   QC value within limits for Cu 324.752  Recovery = 109.35%
Fe 238.204 Radial†     14589.8      185440 ug/L         311.0      185440 ppb          311.0   0.17%
   QC value within limits for Fe 238.204 Radial  Recovery = 92.72%
K 766.490 Radial†      28727.2      5178.9 ug/L         85.56      5178.9 ppb          85.56   1.65%
   QC value within limits for K 766.490 Radial  Recovery = 103.58%
Mg 279.077 IEC†        11991.2      493720 ug/L        1160.3      493720 ppb         1160.3   0.24%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.74%
Mn 257.610†           372952.8      480.70 ug/L         1.342      480.70 ppb          1.342   0.28%
   QC value within limits for Mn 257.610  Recovery = 96.14%
Mo 202.031†             4916.4      492.37 ug/L         5.092      492.37 ppb          5.092   1.03%
   QC value within limits for Mo 202.031  Recovery = 98.47%
Na 589.592 Radial†     11978.9      5272.3 ug/L         12.04      5272.3 ppb          12.04   0.23%
   QC value within limits for Na 589.592 Radial  Recovery = 105.45%
Ni 231.604†            14651.6      477.49 ug/L         5.964      477.49 ppb          5.964   1.25%
   QC value within limits for Ni 231.604  Recovery = 95.50%
P 214.914†              4000.2      2433.6 ug/L         38.00      2433.6 ppb          38.00   1.56%
   QC value within limits for P 214.914  Recovery = 97.34%
Pb 220.353†             2263.7      475.32 ug/L         4.532      475.32 ppb          4.532   0.95%
   QC value within limits for Pb 220.353  Recovery = 95.06%
S 181.975 Axial†        1797.7      2604.3 ug/L         39.02      2604.3 ppb          39.02   1.50%
   QC value within limits for S 181.975 Axial  Recovery = 104.17%
Sb 206.836†             1335.8      534.82 ug/L         7.515      534.82 ppb          7.515   1.41%
   QC value within limits for Sb 206.836  Recovery = 106.96%
Se 196.026†             2678.8      2623.9 ug/L         31.00      2623.9 ppb          31.00   1.18%
   QC value within limits for Se 196.026  Recovery = 104.96%
Si 251.611†           142131.8      5197.5 ug/L          3.17      5197.5 ppb           3.17   0.06%
   QC value within limits for Si 251.611  Recovery = 103.95%
Sn 189.927†             1819.1      504.16 ug/L         6.459      504.16 ppb          6.459   1.28%
   QC value within limits for Sn 189.927  Recovery = 100.83%
Sr 421.552†            50881.6      484.96 ug/L         9.757      484.96 ppb          9.757   2.01%
   QC value within limits for Sr 421.552  Recovery = 96.99%
Ti 334.940†           268373.4      510.75 ug/L         1.798      510.75 ppb          1.798   0.35%
   QC value within limits for Ti 334.940  Recovery = 102.15%
Tl 190.801†             1157.0      448.42 ug/L         2.647      448.42 ppb          2.647   0.59%
   QC value within limits for Tl 190.801  Recovery = 89.68%
U 409.014†             14364.6      531.13 ug/L         6.732      531.13 ppb          6.732   1.27%
   QC value within limits for U 409.014  Recovery = 106.23%
V 292.402†             59095.8      510.53 ug/L         1.247      510.53 ppb          1.247   0.24%
   QC value within limits for V 292.402  Recovery = 102.11%
Zn 213.857†            46065.9      495.40 ug/L         0.706      495.40 ppb          0.706   0.14%
   QC value within limits for Zn 213.857  Recovery = 99.08%
SiO2†                 143555.7       11322 ug/L          78.7       11322 ppb           78.7   0.70%
   QC value within limits for SiO2  Recovery = 105.86%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 4/1/2010 08:33:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3558.0	3558.0	92.7	%			08:36:12
1	Y RADIAL	3900.1	3900.1	90.03	%			08:36:12
1	Al 396.153Radial†	448460.7	483919.2	509420	ug/L	509420	ppb	08:35:52
1	Ca 317.933Radial†	227078.5	244967.5	481000	ug/L	481000	ppb	08:35:52
1	Fe 238.204 Radial†	30936.0	33369.5	424110	ug/L	424110	ppb	08:36:12
1	K 766.490 Radial†	2952.4	189.4	-329.96	ug/L	-329.96	ppb	08:35:52
1	Mg 279.077 IEC†	10792.7	11640.8	479040	ug/L	479040	ppb	08:36:12
1	Na 589.592 Radial†	1102189.4	1190187.4	523840	ug/L	523840	ppb	08:35:52
1	Sr 421.552†	1195.3	1275.6	8.6565	ug/L	8.6565	ppb	08:36:12
1	Sc 361.383	600824.1	600824.1	87.128	%			08:37:10
1	Y 371.029	470191.8	470191.8	86.780	%			08:37:10
1	Ag 328.068†	-19658.5	-22662.7	-12.541	ug/L	-12.541	ppb	08:37:10
1	As 188.979†	-171.6	-174.2	13.071	ug/L	13.071	ppb	08:37:30
1	B 249.677†	899.3	1615.2	-28.258	ug/L	-28.258	ppb	08:37:10
1	Ba 233.527†	-1379.7	-1584.4	-2.3434	ug/L	-2.3434	ppb	08:37:30
1	Be 313.107†	-9296.4	-6146.6	-2.5212	ug/L	-2.5212	ppb	08:37:10
1	Cd 226.502†	2410.6	2980.2	2.7288	ug/L	2.7288	ppb	08:37:30
1	Co 228.616†	218.6	310.6	1.5030	ug/L	1.5030	ppb	08:37:30
1	Cr 267.716†	-1402.3	-1700.8	13.853	ug/L	13.853	ppb	08:37:30
1	Cu 324.752†	545.5	-5061.9	-2.8355	ug/L	-2.8355	ppb	08:37:10
1	Mn 257.610†	-19158.3	-22433.6	-6.7441	ug/L	-6.7441	ppb	08:37:10
1	Mo 202.031†	-398.0	-469.3	-6.4345	ug/L	-6.4345	ppb	08:37:30
1	Ni 231.604†	233.8	193.7	6.3116	ug/L	6.3116	ppb	08:37:30
1	P 214.914†	495.5	350.2	11.810	ug/L	11.810	ppb	08:37:30
1	Pb 220.353†	-540.5	-553.3	6.3973	ug/L	6.3973	ppb	08:37:30
1	S 181.975 Axial†	59.1	27.6	-53.991	ug/L	-53.991	ppb	08:37:30
1	Sb 206.836†	68.9	47.3	-1.7245	ug/L	-1.7245	ppb	08:37:30
1	Se 196.026†	-1732.8	-1966.8	-190.77	ug/L	-190.77	ppb	08:37:30
1	Si 251.611†	-353.9	-902.8	-32.496	ug/L	-32.496	ppb	08:37:30
1	Sn 189.927†	-338.9	-393.1	-2.4164	ug/L	-2.4164	ppb	08:37:30
1	Ti 334.940†	-9434.3	-9406.6	1.6067	ug/L	1.6067	ppb	08:37:10
1	Tl 190.801†	-85.6	-60.4	-23.587	ug/L	-23.587	ppb	08:37:30
1	U 409.014†	342106.5	395054.6	15169	ug/L	15169	ppb	08:37:10
1	V 292.402†	1461.7	3394.0	5.9247	ug/L	5.9247	ppb	08:37:30
1	Zn 213.857†	4431.1	4421.1	-12.916	ug/L	-12.916	ppb	08:37:30
1	SiO2†	-408.0	-1007.4	-78.312	ug/L	-78.312	ppb	08:38:27
2	Sc Radial	3528.3	3528.3	91.9	%			08:36:38
2	Y RADIAL	3889.4	3889.4	89.79	%			08:36:38
2	Al 396.153Radial†	434157.0	472433.6	497330	ug/L	497330	ppb	08:36:18
2	Ca 317.933Radial†	220951.3	240365.4	471970	ug/L	471970	ppb	08:36:18
2	Fe 238.204 Radial†	31012.4	33733.7	428740	ug/L	428740	ppb	08:36:38
2	K 766.490 Radial†	3085.0	360.5	-290.36	ug/L	-290.36	ppb	08:36:18
2	Mg 279.077 IEC†	10835.9	11785.9	485010	ug/L	485010	ppb	08:36:38
2	Na 589.592 Radial†	1067454.6	1162415.7	511620	ug/L	511620	ppb	08:36:18
2	Sr 421.552†	1213.4	1306.2	9.0177	ug/L	9.0177	ppb	08:36:38
2	Sc 361.383	593863.9	593863.9	86.119	%			08:37:36
2	Y 371.029	465206.1	465206.1	85.860	%			08:37:36
2	Ag 328.068†	-19442.5	-22676.3	-11.087	ug/L	-11.087	ppb	08:37:36
2	As 188.979†	-170.1	-174.7	13.867	ug/L	13.867	ppb	08:37:56
2	B 249.677†	918.8	1650.0	-28.136	ug/L	-28.136	ppb	08:37:36
2	Ba 233.527†	-1401.9	-1628.7	-2.6331	ug/L	-2.6331	ppb	08:37:56
2	Be 313.107†	-9256.8	-6225.7	-2.5556	ug/L	-2.5556	ppb	08:37:36
2	Cd 226.502†	2378.3	2975.1	2.1826	ug/L	2.1826	ppb	08:37:56
2	Co 228.616†	220.0	315.1	1.5585	ug/L	1.5585	ppb	08:37:56
2	Cr 267.716†	-1375.7	-1688.8	14.509	ug/L	14.509	ppb	08:37:56
2	Cu 324.752†	543.2	-5057.2	-2.5887	ug/L	-2.5887	ppb	08:37:36
2	Mn 257.610†	-19090.6	-22612.8	-6.7630	ug/L	-6.7630	ppb	08:37:36
2	Mo 202.031†	-361.9	-432.7	-2.6671	ug/L	-2.6671	ppb	08:37:56
2	Ni 231.604†	289.7	261.8	8.5313	ug/L	8.5313	ppb	08:37:56

2	P 214.914†	507.7	371.0	18.250	ug/L	18.250 ppb	08:37:56
2	Pb 220.353†	-538.6	-558.4	1.9958	ug/L	1.9958 ppb	08:37:56
2	S 181.975 Axial†	49.2	16.9	-67.778	ug/L	-67.778 ppb	08:37:56
2	Sb 206.836†	77.2	57.9	2.7637	ug/L	2.7637 ppb	08:37:56
2	Se 196.026†	-1714.4	-1968.6	-183.15	ug/L	-183.15 ppb	08:37:56
2	Si 251.611†	-351.2	-904.5	-32.600	ug/L	-32.600 ppb	08:37:56
2	Sn 189.927†	-361.4	-423.8	-11.022	ug/L	-11.022 ppb	08:37:56
2	Ti 334.940†	-9847.4	-10013.2	-1.2056	ug/L	-1.2056 ppb	08:37:36
2	Tl 190.801†	-85.1	-60.9	-23.799	ug/L	-23.799 ppb	08:37:56
2	U 409.014†	338702.2	395703.4	15193	ug/L	15193 ppb	08:37:36
2	V 292.402†	1338.1	3270.2	4.3726	ug/L	4.3726 ppb	08:37:56
2	Zn 213.857†	4410.5	4456.8	-13.214	ug/L	-13.214 ppb	08:37:56
2	SiO2†	-330.1	-922.5	-71.702	ug/L	-71.702 ppb	08:38:32
3	Sc Radial	3543.6	3543.6	92.3	%		08:37:03
3	Y RADIAL	3894.1	3894.1	89.89	%		08:37:03
3	Al 396.153Radial†	450239.9	487820.5	513530	ug/L	513530 ppb	08:36:43
3	Ca 317.933Radial†	226316.7	245141.9	481350	ug/L	481350 ppb	08:36:43
3	Fe 238.204 Radial†	30974.0	33546.8	426370	ug/L	426370 ppb	08:37:03
3	K 766.490 Radial†	3054.2	312.6	-308.09	ug/L	-308.09 ppb	08:36:43
3	Mg 279.077 IEC†	10822.4	11720.4	482310	ug/L	482310 ppb	08:37:03
3	Na 589.592 Radial†	1102683.6	1195574.3	526210	ug/L	526210 ppb	08:36:43
3	Sr 421.552†	1194.2	1279.8	8.6938	ug/L	8.6938 ppb	08:37:03
3	Sc 361.383	594304.4	594304.4	86.183	%		08:38:02
3	Y 371.029	466650.0	466650.0	86.126	%		08:38:02
3	Ag 328.068†	-19425.3	-22639.6	-11.706	ug/L	-11.706 ppb	08:38:02
3	As 188.979†	-177.5	-183.1	9.1401	ug/L	9.1401 ppb	08:38:22
3	B 249.677†	805.0	1517.0	-31.093	ug/L	-31.093 ppb	08:38:02
3	Ba 233.527†	-1410.4	-1637.3	-2.7879	ug/L	-2.7879 ppb	08:38:22
3	Be 313.107†	-9219.6	-6174.5	-2.5362	ug/L	-2.5362 ppb	08:38:02
3	Cd 226.502†	2412.9	3013.2	2.9747	ug/L	2.9747 ppb	08:38:22
3	Co 228.616†	203.8	296.2	1.1174	ug/L	1.1174 ppb	08:38:22
3	Cr 267.716†	-1428.2	-1748.4	13.397	ug/L	13.397 ppb	08:38:22
3	Cu 324.752†	463.3	-5150.4	-2.9987	ug/L	-2.9987 ppb	08:38:02
3	Mn 257.610†	-19154.3	-22670.3	-6.9618	ug/L	-6.9618 ppb	08:38:02
3	Mo 202.031†	-391.4	-466.7	-6.0017	ug/L	-6.0017 ppb	08:38:22
3	Ni 231.604†	236.5	199.8	6.5092	ug/L	6.5092 ppb	08:38:22
3	P 214.914†	519.9	384.8	33.128	ug/L	33.128 ppb	08:38:22
3	Pb 220.353†	-585.0	-611.8	-1.9749	ug/L	-1.9749 ppb	08:38:22
3	S 181.975 Axial†	52.1	20.2	-65.840	ug/L	-65.840 ppb	08:38:22
3	Sb 206.836†	55.3	32.4	-7.8408	ug/L	-7.8408 ppb	08:38:22
3	Se 196.026†	-1766.1	-2027.1	-228.42	ug/L	-228.42 ppb	08:38:22
3	Si 251.611†	-427.3	-992.4	-35.780	ug/L	-35.780 ppb	08:38:22
3	Sn 189.927†	-347.0	-406.7	-5.4611	ug/L	-5.4611 ppb	08:38:22
3	Ti 334.940†	-10109.9	-10309.3	-0.2436	ug/L	-0.2436 ppb	08:38:02
3	Tl 190.801†	-100.0	-78.1	-30.423	ug/L	-30.423 ppb	08:38:22
3	U 409.014†	337891.6	394471.4	15146	ug/L	15146 ppb	08:38:02
3	V 292.402†	1380.2	3317.9	4.9510	ug/L	4.9510 ppb	08:38:22
3	Zn 213.857†	4484.2	4538.5	-11.911	ug/L	-11.911 ppb	08:38:22
3	SiO2†	-375.3	-974.6	-75.732	ug/L	-75.732 ppb	08:38:37

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	596330.8	86.476	%	0.5652				0.65%
Sc Radial	3543.3	92.3	%	0.39				0.42%
Y 371.029	467349.3	86.255	%	0.4735				0.55%
Y RADIAL	3894.5	89.90	%	0.123				0.14%
Ag 328.068†	-22659.5	-11.778	ug/L	0.7300	-11.778	ppb	0.7300	6.20%
Al 396.153Radial†	481391.1	506760	ug/L	8420.4	506760	ppb	8420.4	1.66%
QC value within limits for Al 396.153Radial Recovery = 101.35%								
As 188.979†	-177.3	12.026	ug/L	2.5308	12.026	ppb	2.5308	21.04%
B 249.677†	1594.1	-29.162	ug/L	1.6734	-29.162	ppb	1.6734	5.74%
Ba 233.527†	-1616.8	-2.5881	ug/L	0.22566	-2.5881	ppb	0.22566	8.72%
Be 313.107†	-6182.3	-2.5377	ug/L	0.01726	-2.5377	ppb	0.01726	0.68%
Ca 317.933Radial†	243491.6	478110	ug/L	5318.8	478110	ppb	5318.8	1.11%
QC value within limits for Ca 317.933Radial Recovery = 95.62%								
Cd 226.502†	2989.5	2.6287	ug/L	0.40543	2.6287	ppb	0.40543	15.42%
Co 228.616†	307.3	1.3930	ug/L	0.24022	1.3930	ppb	0.24022	17.25%
Cr 267.716†	-1712.7	13.920	ug/L	0.5592	13.920	ppb	0.5592	4.02%
Cu 324.752†	-5089.9	-2.8076	ug/L	0.20640	-2.8076	ppb	0.20640	7.35%

Fe 238.204 Radial†	33550.0	426410	ug/L	2315.1	426410	ppb	2315.1	0.54%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 85.28%								
K 766.490 Radial†	287.5	-309.47	ug/L	19.839	-309.47	ppb	19.839	6.41%
Mg 279.077 IEC†	11715.7	482120	ug/L	2990.6	482120	ppb	2990.6	0.62%
QC value within limits for Mg 279.077 IEC Recovery = 96.42%								
Mn 257.610†	-22572.2	-6.8230	ug/L	0.12061	-6.8230	ppb	0.12061	1.77%
Mo 202.031†	-456.2	-5.0345	ug/L	2.06156	-5.0345	ppb	2.06156	40.95%
Na 589.592 Radial†	1182725.8	520560	ug/L	7831.8	520560	ppb	7831.8	1.50%
QC value within limits for Na 589.592 Radial Recovery = 104.11%								
Ni 231.604†	218.4	7.1174	ug/L	1.22848	7.1174	ppb	1.22848	17.26%
P 214.914†	368.7	21.062	ug/L	10.9339	21.062	ppb	10.9339	51.91%
Pb 220.353†	-574.5	2.1394	ug/L	4.18795	2.1394	ppb	4.18795	195.75%
S 181.975 Axial†	21.6	-62.536	ug/L	7.4640	-62.536	ppb	7.4640	11.94%
Sb 206.836†	45.9	-2.2672	ug/L	5.32305	-2.2672	ppb	5.32305	234.79%
Se 196.026†	-1987.5	-200.78	ug/L	24.240	-200.78	ppb	24.240	12.07%
Si 251.611†	-933.2	-33.625	ug/L	1.8664	-33.625	ppb	1.8664	5.55%
Sn 189.927†	-407.9	-6.2997	ug/L	4.36350	-6.2997	ppb	4.36350	69.26%
Sr 421.552†	1287.2	8.7893	ug/L	0.19866	8.7893	ppb	0.19866	2.26%
Ti 334.940†	-9909.7	0.0525	ug/L	1.42932	0.0525	ppb	1.42932	>999.9%
Tl 190.801†	-66.4	-25.936	ug/L	3.8868	-25.936	ppb	3.8868	14.99%
U 409.014†	395076.5	15170	ug/L	23.6	15170	ppb	23.6	0.16%
QC value within limits for U 409.014 Recovery = 101.13%								
V 292.402†	3327.4	5.0828	ug/L	0.78439	5.0828	ppb	0.78439	15.43%
Zn 213.857†	4472.1	-12.680	ug/L	0.6827	-12.680	ppb	0.6827	5.38%
SiO2†	-968.2	-75.249	ug/L	3.3317	-75.249	ppb	3.3317	4.43%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 4/1/2010 08:40:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3717.0	3717.0	96.8	%			08:43:06
1	Y RADIAL	4154.3	4154.3	95.90	%			08:42:46
1	Al 396.153Radial†	375.1	479.7	48.612	ug/L	48.612	ppb	08:42:46
1	Ca 317.933Radial†	28.0	10.3	20.208	ug/L	20.208	ppb	08:43:06
1	Fe 238.204 Radial†	-13.7	-20.4	21.898	ug/L	21.898	ppb	08:43:06
1	K 766.490 Radial†	1546560.6	1594182.6	296450	ug/L	296450	ppb	08:42:40
1	Mg 279.077 IEC†	-4.4	-7.6	-212.59	ug/L	-212.59	ppb	08:43:06
1	Na 589.592 Radial†	-806.0	245.4	108.00	ug/L	108.00	ppb	08:42:46
1	Sr 421.552†	989028.5	1021384.9	9806.9	ug/L	9806.9	ppb	08:42:40
1	Sc 361.383	663211.3	663211.3	96.175	%			08:44:23
1	Y 371.029	517721.9	517721.9	95.552	%			08:44:23
1	Ag 328.068†	-5919.1	-6254.4	5.4302	ug/L	5.4302	ppb	08:44:28
1	As 188.979†	19042.5	19822.6	9875.8	ug/L	9875.8	ppb	08:44:28
1	B 249.677†	186999.2	195019.3	4879.8	ug/L	4879.8	ppb	08:44:23
1	Ba 233.527†	1384850.1	1439925.7	13939	ug/L	13939	ppb	08:44:23
1	Be 313.107†	6604342.4	6871524.7	2797.2	ug/L	2797.2	ppb	08:44:16
1	Cd 226.502†	623439.2	648447.3	9486.3	ug/L	9486.3	ppb	08:44:23
1	Co 228.616†	364234.4	378779.9	9380.4	ug/L	9380.4	ppb	08:44:23
1	Cr 267.716†	1538770.2	1599876.8	23615	ug/L	23615	ppb	08:44:23
1	Cu 324.752†	5551301.0	5766391.9	19206	ug/L	19206	ppb	08:44:16
1	Mn 257.610†	6804088.3	7074246.3	9153.6	ug/L	9153.6	ppb	08:44:16
1	Mo 202.031†	94228.1	97963.2	9410.1	ug/L	9410.1	ppb	08:44:28
1	Ni 231.604†	288200.7	299588.0	9763.5	ug/L	9763.5	ppb	08:44:23
1	P 214.914†	25843.0	26652.3	13316	ug/L	13316	ppb	08:44:28
1	Pb 220.353†	140452.0	146104.9	22994	ug/L	22994	ppb	08:44:28
1	S 181.975 Axial†	31846.1	33072.4	49692	ug/L	49692	ppb	08:44:28
1	Sb 206.836†	23836.6	24752.9	10253	ug/L	10253	ppb	08:44:28
1	Se 196.026†	12665.7	13191.5	9812.7	ug/L	9812.7	ppb	08:44:28
1	Si 251.611†	1243664.0	1292628.7	47206	ug/L	47206	ppb	08:44:23
1	Sn 189.927†	41544.0	43192.1	9922.1	ug/L	9922.1	ppb	08:44:28
1	Ti 334.940†	5132871.7	5338430.8	9680.2	ug/L	9680.2	ppb	08:44:16
1	Tl 190.801†	23479.8	24451.6	9470.6	ug/L	9470.6	ppb	08:44:28
1	U 409.014†	-1464.2	884.1	-18.733	ug/L	-18.733	ppb	08:44:23
1	V 292.402†	1077350.8	1121914.1	10004	ug/L	10004	ppb	08:44:23
1	Zn 213.857†	1147728.7	1192710.0	13554	ug/L	13554	ppb	08:44:23
1	SiO2†	1270951.6	1320959.0	104040	ug/L	104040	ppb	08:45:14
2	Sc Radial	3730.3	3730.3	97.2	%			08:43:36
2	Y RADIAL	4162.1	4162.1	96.08	%			08:43:16
2	Al 396.153Radial†	337.7	439.8	2.7015	ug/L	2.7015	ppb	08:43:16
2	Ca 317.933Radial†	25.6	7.7	15.171	ug/L	15.171	ppb	08:43:36
2	Fe 238.204 Radial†	-13.1	-19.6	30.871	ug/L	30.871	ppb	08:43:36
2	K 766.490 Radial†	1493652.5	1534030.9	285270	ug/L	285270	ppb	08:43:11
2	Mg 279.077 IEC†	-0.7	-3.8	-55.873	ug/L	-55.873	ppb	08:43:36
2	Na 589.592 Radial†	-839.1	214.3	94.318	ug/L	94.318	ppb	08:43:16
2	Sr 421.552†	954202.0	981897.3	9427.7	ug/L	9427.7	ppb	08:43:11
2	Sc 361.383	676652.0	676652.0	98.124	%			08:44:43
2	Y 371.029	528534.6	528534.6	97.548	%			08:44:43
2	Ag 328.068†	-6119.6	-6336.5	4.9802	ug/L	4.9802	ppb	08:44:48
2	As 188.979†	19789.9	20191.0	10057	ug/L	10057	ppb	08:44:48
2	B 249.677†	191944.5	196197.0	4909.5	ug/L	4909.5	ppb	08:44:43
2	Ba 233.527†	1408224.1	1435144.6	13892	ug/L	13892	ppb	08:44:43
2	Be 313.107†	6669866.3	6801898.7	2768.7	ug/L	2768.7	ppb	08:44:36
2	Cd 226.502†	635766.0	648133.6	9481.7	ug/L	9481.7	ppb	08:44:43
2	Co 228.616†	371238.0	378394.7	9371.3	ug/L	9371.3	ppb	08:44:43
2	Cr 267.716†	1567651.9	1597529.7	23580	ug/L	23580	ppb	08:44:43
2	Cu 324.752†	5577250.4	5678183.8	18912	ug/L	18912	ppb	08:44:36
2	Mn 257.610†	6833233.3	6963420.6	9010.2	ug/L	9010.2	ppb	08:44:36
2	Mo 202.031†	96956.5	98797.6	9490.2	ug/L	9490.2	ppb	08:44:48
2	Ni 231.604†	294138.7	299687.2	9766.7	ug/L	9766.7	ppb	08:44:43

2	P 214.914†	26742.8	27035.5	13620 ug/L	13620 ppb	08:44:48
2	Pb 220.353†	144557.0	147387.5	23196 ug/L	23196 ppb	08:44:48
2	S 181.975 Axial†	33312.5	33909.1	50949 ug/L	50949 ppb	08:44:48
2	Sb 206.836†	24732.2	25173.3	10425 ug/L	10425 ppb	08:44:48
2	Se 196.026†	13170.0	13443.8	10000 ug/L	10000 ppb	08:44:48
2	Si 251.611†	1271019.4	1294821.1	47285 ug/L	47285 ppb	08:44:43
2	Sn 189.927†	42716.8	43529.3	9999.5 ug/L	9999.5 ppb	08:44:48
2	Ti 334.940†	5155846.1	5255832.9	9530.3 ug/L	9530.3 ppb	08:44:36
2	Tl 190.801†	24212.4	24713.2	9569.4 ug/L	9569.4 ppb	08:44:48
2	U 409.014†	-1613.7	761.9	-23.361 ug/L	-23.361 ppb	08:44:43
2	V 292.402†	1099060.7	1121788.1	10005 ug/L	10005 ppb	08:44:43
2	Zn 213.857†	1169681.4	1191377.8	13540 ug/L	13540 ppb	08:44:43
2	SiO2†	1259385.6	1282922.4	101040 ug/L	101040 ppb	08:45:20
3	Sc Radial	3709.3	3709.3	96.6 %		08:44:07
3	Y RADIAL	4143.8	4143.8	95.66 %		08:43:46
3	Al 396.153Radial†	361.3	466.2	29.354 ug/L	29.354 ppb	08:43:46
3	Ca 317.933Radial†	31.7	14.1	27.747 ug/L	27.747 ppb	08:44:07
3	Fe 238.204 Radial†	-14.3	-21.0	14.029 ug/L	14.029 ppb	08:44:07
3	K 766.490 Radial†	1543614.1	1594442.7	296500 ug/L	296500 ppb	08:43:41
3	Mg 279.077 IEC†	-0.9	-3.9	-61.806 ug/L	-61.806 ppb	08:44:07
3	Na 589.592 Radial†	-834.5	214.2	94.293 ug/L	94.293 ppb	08:43:46
3	Sr 421.552†	988242.5	1022687.8	9819.4 ug/L	9819.4 ppb	08:43:41
3	Sc 361.383	674380.2	674380.2	97.795 %		08:45:03
3	Y 371.029	526094.5	526094.5	97.097 %		08:45:03
3	Ag 328.068†	-6290.7	-6532.4	3.8646 ug/L	3.8646 ppb	08:45:08
3	As 188.979†	19762.4	20230.9	10078 ug/L	10078 ppb	08:45:08
3	B 249.677†	191164.8	196058.6	4906.0 ug/L	4906.0 ppb	08:45:03
3	Ba 233.527†	1405274.2	1436962.9	13910 ug/L	13910 ppb	08:45:03
3	Be 313.107†	6754031.9	6910861.1	2813.2 ug/L	2813.2 ppb	08:44:56
3	Cd 226.502†	633161.4	647652.9	9474.6 ug/L	9474.6 ppb	08:45:03
3	Co 228.616†	370255.3	378664.4	9377.7 ug/L	9377.7 ppb	08:45:03
3	Cr 267.716†	1561380.4	1596498.8	23565 ug/L	23565 ppb	08:45:03
3	Cu 324.752†	5682061.0	5804505.6	19333 ug/L	19333 ppb	08:44:56
3	Mn 257.610†	6927319.4	7083088.0	9165.0 ug/L	9165.0 ppb	08:44:56
3	Mo 202.031†	96871.3	99043.4	9513.8 ug/L	9513.8 ppb	08:45:08
3	Ni 231.604†	292884.7	299414.7	9757.8 ug/L	9757.8 ppb	08:45:03
3	P 214.914†	26665.5	27048.3	13544 ug/L	13544 ppb	08:45:08
3	Pb 220.353†	143797.1	147106.7	23152 ug/L	23152 ppb	08:45:08
3	S 181.975 Axial†	33224.4	33933.4	50986 ug/L	50986 ppb	08:45:08
3	Sb 206.836†	24765.9	25292.7	10472 ug/L	10472 ppb	08:45:08
3	Se 196.026†	13253.3	13574.2	10097 ug/L	10097 ppb	08:45:08
3	Si 251.611†	1267757.3	1295849.0	47322 ug/L	47322 ppb	08:45:03
3	Sn 189.927†	42546.1	43501.4	9993.1 ug/L	9993.1 ppb	08:45:08
3	Ti 334.940†	5238771.2	5358328.9	9716.4 ug/L	9716.4 ppb	08:44:56
3	Tl 190.801†	24162.5	24745.3	9584.0 ug/L	9584.0 ppb	08:45:08
3	U 409.014†	-1433.7	940.4	-16.448 ug/L	-16.448 ppb	08:45:03
3	V 292.402†	1094682.8	1121084.7	9998.5 ug/L	9998.5 ppb	08:45:03
3	Zn 213.857†	1166105.1	1191736.6	13543 ug/L	13543 ppb	08:45:03
3	SiO2†	1253503.7	1281231.5	100900 ug/L	100900 ppb	08:45:26

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	671414.5	97.365	%	1.0433				1.07%
Sc Radial	3718.9	96.9	%	0.28				0.29%
Y 371.029	524117.0	96.732	%	1.0467				1.08%
Y RADIAL	4153.4	95.88	%	0.211				0.22%
Ag 328.068†	-6374.5	4.7583	ug/L	0.80604	4.7583	ppb	0.80604	16.94%
Al 396.153Radial†	461.9	26.889	ug/L	23.0545	26.889	ppb	23.0545	85.74%
As 188.979†	20081.5	10004	ug/L	111.1	10004	ppb	111.1	1.11%
QC value within limits for As 188.979 Recovery = 100.04%								
B 249.677†	195758.3	4898.4	ug/L	16.21	4898.4	ppb	16.21	0.33%
QC value within limits for B 249.677 Recovery = 97.97%								
Ba 233.527†	1437344.4	13914	ug/L	23.3	13914	ppb	23.3	0.17%
QC value within limits for Ba 233.527 Recovery = 92.76%								
Be 313.107†	6861428.2	2793.0	ug/L	22.51	2793.0	ppb	22.51	0.81%
QC value within limits for Be 313.107 Recovery = 93.10%								
Ca 317.933Radial†	10.7	21.042	ug/L	6.3292	21.042	ppb	6.3292	30.08%
Cd 226.502†	648077.9	9480.9	ug/L	5.85	9480.9	ppb	5.85	0.06%
QC value within limits for Cd 226.502 Recovery = 94.81%								

Co 228.616†	378613.0	9376.5 ug/L	4.65	9376.5 ppb	4.65	0.05%
QC value within limits for Co 228.616 Recovery = 93.76%						
Cr 267.716†	1597968.4	23587 ug/L	25.5	23587 ppb	25.5	0.11%
QC value within limits for Cr 267.716 Recovery = 94.35%						
Cu 324.752†	5749693.7	19150 ug/L	215.8	19150 ppb	215.8	1.13%
QC value within limits for Cu 324.752 Recovery = 95.75%						
Fe 238.204 Radial†	-20.3	22.266 ug/L	8.4271	22.266 ppb	8.4271	37.85%
K 766.490 Radial†	1574218.7	292740 ug/L	6472.4	292740 ppb	6472.4	2.21%
QC value within limits for K 766.490 Radial Recovery = 97.58%						
Mg 279.077 IEC†	-5.1	-110.09 ug/L	88.819	-110.09 ppb	88.819	80.68%
Mn 257.610†	7040251.6	9109.6 ug/L	86.29	9109.6 ppb	86.29	0.95%
QC value within limits for Mn 257.610 Recovery = 91.10%						
Mo 202.031†	98601.4	9471.4 ug/L	54.39	9471.4 ppb	54.39	0.57%
QC value within limits for Mo 202.031 Recovery = 94.71%						
Na 589.592 Radial†	224.6	98.871 ug/L	7.9087	98.871 ppb	7.9087	8.00%
Ni 231.604†	299563.3	9762.7 ug/L	4.50	9762.7 ppb	4.50	0.05%
QC value within limits for Ni 231.604 Recovery = 97.63%						
P 214.914†	26912.0	13493 ug/L	158.3	13493 ppb	158.3	1.17%
QC value less than the lower limit for P 214.914 Recovery = 89.96%						
Pb 220.353†	146866.4	23114 ug/L	106.2	23114 ppb	106.2	0.46%
QC value within limits for Pb 220.353 Recovery = 92.46%						
S 181.975 Axial†	33638.3	50542 ug/L	736.6	50542 ppb	736.6	1.46%
QC value within limits for S 181.975 Axial Recovery = 101.08%						
Sb 206.836†	25072.9	10383 ug/L	115.2	10383 ppb	115.2	1.11%
QC value within limits for Sb 206.836 Recovery = 103.83%						
Se 196.026†	13403.2	9969.8 ug/L	144.45	9969.8 ppb	144.45	1.45%
QC value within limits for Se 196.026 Recovery = 99.70%						
Si 251.611†	1294433.0	47271 ug/L	59.6	47271 ppb	59.6	0.13%
QC value within limits for Si 251.611 Recovery = 94.54%						
Sn 189.927†	43407.6	9971.6 ug/L	42.98	9971.6 ppb	42.98	0.43%
QC value within limits for Sn 189.927 Recovery = 99.72%						
Sr 421.552†	1008656.6	9684.7 ug/L	222.60	9684.7 ppb	222.60	2.30%
QC value within limits for Sr 421.552 Recovery = 96.85%						
Ti 334.940†	5317530.9	9642.3 ug/L	98.64	9642.3 ppb	98.64	1.02%
QC value within limits for Ti 334.940 Recovery = 96.42%						
Tl 190.801†	24636.7	9541.3 ug/L	61.68	9541.3 ppb	61.68	0.65%
QC value within limits for Tl 190.801 Recovery = 95.41%						
U 409.014†	862.1	-19.514 ug/L	3.5219	-19.514 ppb	3.5219	18.05%
V 292.402†	1121595.6	10002 ug/L	3.4	10002 ppb	3.4	0.03%
QC value within limits for V 292.402 Recovery = 100.02%						
Zn 213.857†	1191941.5	13546 ug/L	7.8	13546 ppb	7.8	0.06%
QC value within limits for Zn 213.857 Recovery = 90.30%						
SiO2†	1295037.6	101990 ug/L	1775.2	101990 ppb	1775.2	1.74%
QC value within limits for SiO2 Recovery = 95.32%						

QC Failed. Continue with analysis.

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 4/1/2010 08:47:36
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	3792.7	3792.7	98.8	%			08:49:49
1	Y RADIAL	4251.7	4251.7	98.15	%			08:49:29
1	Al 396.153Radial†	4652.3	4800.9	5029.9	ug/L	5029.9	ppb	08:49:29
1	Ca 317.933Radial†	2609.5	2622.4	5149.3	ug/L	5149.3	ppb	08:49:49
1	Fe 238.204 Radial†	403.0	401.6	5119.8	ug/L	5119.8	ppb	08:49:49
1	K 766.490 Radial†	30575.6	27950.4	5191.4	ug/L	5191.4	ppb	08:49:29
1	Mg 279.077 IEC†	128.0	126.5	5211.7	ug/L	5211.7	ppb	08:49:49
1	Na 589.592 Radial†	22104.0	23449.8	10321	ug/L	10321	ppb	08:49:29
1	Sr 421.552†	51179.8	51786.3	497.19	ug/L	497.19	ppb	08:49:29
1	Sc 361.383	680861.9	680861.9	98.735	%			08:50:46
1	Y 371.029	529510.3	529510.3	97.728	%			08:50:46
1	Ag 328.068†	87706.2	88730.3	491.94	ug/L	491.94	ppb	08:50:51
1	As 188.979†	969.1	1004.3	501.49	ug/L	501.49	ppb	08:51:11
1	B 249.677†	19604.7	20438.9	511.96	ug/L	511.96	ppb	08:50:51
1	Ba 233.527†	50238.0	50881.0	493.00	ug/L	493.00	ppb	08:50:51
1	Be 313.107†	1201915.3	1221842.0	494.58	ug/L	494.58	ppb	08:50:46
1	Cd 226.502†	32942.4	33578.0	490.78	ug/L	490.78	ppb	08:50:51
1	Co 228.616†	19989.7	20305.5	503.04	ug/L	503.04	ppb	08:50:51
1	Cr 267.716†	32884.6	33214.7	491.01	ug/L	491.01	ppb	08:50:51
1	Cu 324.752†	148933.7	145154.4	483.47	ug/L	483.47	ppb	08:50:51
1	Mn 257.610†	378611.4	383018.6	495.89	ug/L	495.89	ppb	08:50:46
1	Mo 202.031†	5083.8	5136.4	493.85	ug/L	493.85	ppb	08:51:11
1	Ni 231.604†	15146.6	15266.0	497.50	ug/L	497.50	ppb	08:50:51
1	P 214.914†	3963.5	3795.8	2332.2	ug/L	2332.2	ppb	08:51:11
1	Pb 220.353†	3005.7	3111.2	491.18	ug/L	491.18	ppb	08:51:11
1	S 181.975 Axial†	680.9	649.4	974.80	ug/L	974.80	ppb	08:51:11
1	Sb 206.836†	1242.6	1226.7	508.59	ug/L	508.59	ppb	08:51:11
1	Se 196.026†	630.4	660.6	506.44	ug/L	506.44	ppb	08:51:11
1	Si 251.611†	66808.2	67167.7	2452.9	ug/L	2452.9	ppb	08:50:51
1	Sn 189.927†	2148.5	2171.9	499.87	ug/L	499.87	ppb	08:51:11
1	Ti 334.940†	265329.3	270151.2	490.18	ug/L	490.18	ppb	08:50:51
1	Tl 190.801†	1241.1	1295.0	501.48	ug/L	501.48	ppb	08:51:11
1	U 409.014†	9882.7	12415.9	476.57	ug/L	476.57	ppb	08:50:51
1	V 292.402†	52907.4	55301.8	494.06	ug/L	494.06	ppb	08:50:51
1	Zn 213.857†	43039.2	42926.1	486.41	ug/L	486.41	ppb	08:50:51
1	SiO2†	66618.4	66933.0	5271.3	ug/L	5271.3	ppb	08:52:19
2	Sc Radial	3825.4	3825.4	99.7	%			08:50:14
2	Y RADIAL	4251.3	4251.3	98.14	%			08:49:54
2	Al 396.153Radial†	4612.0	4720.2	4944.9	ug/L	4944.9	ppb	08:49:54
2	Ca 317.933Radial†	2630.4	2620.8	5146.1	ug/L	5146.1	ppb	08:50:14
2	Fe 238.204 Radial†	405.6	400.9	5109.7	ug/L	5109.7	ppb	08:50:14
2	K 766.490 Radial†	30524.2	27634.0	5132.6	ug/L	5132.6	ppb	08:49:54
2	Mg 279.077 IEC†	130.4	127.8	5265.5	ug/L	5265.5	ppb	08:50:14
2	Na 589.592 Radial†	21855.5	23008.9	10127	ug/L	10127	ppb	08:49:54
2	Sr 421.552†	50934.6	51096.9	490.57	ug/L	490.57	ppb	08:49:54
2	Sc 361.383	683443.2	683443.2	99.109	%			08:51:17
2	Y 371.029	532591.3	532591.3	98.296	%			08:51:17
2	Ag 328.068†	88020.2	88711.7	491.83	ug/L	491.83	ppb	08:51:22
2	As 188.979†	972.8	1004.3	501.50	ug/L	501.50	ppb	08:51:42
2	B 249.677†	19774.3	20535.1	514.39	ug/L	514.39	ppb	08:51:22
2	Ba 233.527†	50365.7	50817.8	492.39	ug/L	492.39	ppb	08:51:22
2	Be 313.107†	1209923.9	1225325.0	495.98	ug/L	495.98	ppb	08:51:17
2	Cd 226.502†	33046.7	33557.3	490.48	ug/L	490.48	ppb	08:51:22
2	Co 228.616†	19983.5	20222.8	501.00	ug/L	501.00	ppb	08:51:22
2	Cr 267.716†	33100.8	33307.1	492.38	ug/L	492.38	ppb	08:51:22
2	Cu 324.752†	149820.2	145479.2	484.55	ug/L	484.55	ppb	08:51:22
2	Mn 257.610†	378579.7	381538.3	493.97	ug/L	493.97	ppb	08:51:17
2	Mo 202.031†	5131.2	5164.9	496.58	ug/L	496.58	ppb	08:51:42
2	Ni 231.604†	15268.8	15331.4	499.63	ug/L	499.63	ppb	08:51:22

2	P 214.914†	4029.7	3847.4	2365.0 ug/L	2365.0 ppb	08:51:42
2	Pb 220.353†	3065.0	3159.5	498.76 ug/L	498.76 ppb	08:51:42
2	S 181.975 Axial†	691.6	657.6	987.13 ug/L	987.13 ppb	08:51:42
2	Sb 206.836†	1255.2	1234.8	511.86 ug/L	511.86 ppb	08:51:42
2	Se 196.026†	640.2	668.1	511.95 ug/L	511.95 ppb	08:51:42
2	Si 251.611†	66910.0	67014.9	2447.2 ug/L	2447.2 ppb	08:51:22
2	Sn 189.927†	2156.0	2171.3	499.73 ug/L	499.73 ppb	08:51:42
2	Ti 334.940†	266292.7	270108.3	490.09 ug/L	490.09 ppb	08:51:22
2	Tl 190.801†	1249.1	1298.3	502.75 ug/L	502.75 ppb	08:51:42
2	U 409.014†	9975.0	12471.2	478.70 ug/L	478.70 ppb	08:51:22
2	V 292.402†	53268.7	55464.0	495.53 ug/L	495.53 ppb	08:51:22
2	Zn 213.857†	43135.8	42859.1	485.63 ug/L	485.63 ppb	08:51:22
2	SiO2†	66247.3	66303.7	5221.5 ug/L	5221.5 ppb	08:52:24
3	Sc Radial	3791.2	3791.2	98.8 %		08:50:39
3	Y RADIAL	4219.9	4219.9	97.42 %		08:50:19
3	Al 396.153Radial†	4576.5	4726.0	4951.2 ug/L	4951.2 ppb	08:50:19
3	Ca 317.933Radial†	2611.6	2625.6	5155.5 ug/L	5155.5 ppb	08:50:39
3	Fe 238.204 Radial†	402.3	401.2	5113.8 ug/L	5113.8 ppb	08:50:39
3	K 766.490 Radial†	30206.3	27588.1	5124.0 ug/L	5124.0 ppb	08:50:19
3	Mg 279.077 IEC†	128.6	127.2	5240.7 ug/L	5240.7 ppb	08:50:39
3	Na 589.592 Radial†	21836.2	23187.1	10205 ug/L	10205 ppb	08:50:19
3	Sr 421.552†	50630.6	51249.9	492.04 ug/L	492.04 ppb	08:50:19
3	Sc 361.383	686865.0	686865.0	99.605 %		08:51:48
3	Y 371.029	534422.6	534422.6	98.634 %		08:51:48
3	Ag 328.068†	88294.7	88544.8	490.91 ug/L	490.91 ppb	08:51:53
3	As 188.979†	956.2	982.8	490.86 ug/L	490.86 ppb	08:52:13
3	B 249.677†	19688.8	20349.9	509.74 ug/L	509.74 ppb	08:51:53
3	Ba 233.527†	50334.2	50532.9	489.63 ug/L	489.63 ppb	08:51:53
3	Be 313.107†	1210353.8	1219674.8	493.70 ug/L	493.70 ppb	08:51:48
3	Cd 226.502†	33097.4	33442.0	488.79 ug/L	488.79 ppb	08:51:53
3	Co 228.616†	19968.7	20107.5	498.13 ug/L	498.13 ppb	08:51:53
3	Cr 267.716†	33059.2	33098.9	489.31 ug/L	489.31 ppb	08:51:53
3	Cu 324.752†	150379.9	145288.0	483.92 ug/L	483.92 ppb	08:51:53
3	Mn 257.610†	379688.7	380748.8	492.95 ug/L	492.95 ppb	08:51:48
3	Mo 202.031†	5100.6	5108.3	491.15 ug/L	491.15 ppb	08:52:13
3	Ni 231.604†	15258.4	15244.3	496.79 ug/L	496.79 ppb	08:51:53
3	P 214.914†	3988.0	3785.3	2325.3 ug/L	2325.3 ppb	08:52:13
3	Pb 220.353†	3015.9	3094.8	488.57 ug/L	488.57 ppb	08:52:13
3	S 181.975 Axial†	687.0	649.5	974.94 ug/L	974.94 ppb	08:52:13
3	Sb 206.836†	1246.5	1219.7	505.58 ug/L	505.58 ppb	08:52:13
3	Se 196.026†	638.1	662.7	507.99 ug/L	507.99 ppb	08:52:13
3	Si 251.611†	67353.1	67123.4	2451.3 ug/L	2451.3 ppb	08:51:53
3	Sn 189.927†	2125.1	2129.4	490.12 ug/L	490.12 ppb	08:52:13
3	Ti 334.940†	267100.8	269581.0	489.14 ug/L	489.14 ppb	08:51:53
3	Tl 190.801†	1239.4	1282.3	496.60 ug/L	496.60 ppb	08:52:13
3	U 409.014†	9787.4	12232.7	469.52 ug/L	469.52 ppb	08:51:53
3	V 292.402†	53195.6	55122.9	492.43 ug/L	492.43 ppb	08:51:53
3	Zn 213.857†	43211.5	42718.2	484.04 ug/L	484.04 ppb	08:51:53
3	SiO2†	65819.7	65541.4	5161.5 ug/L	5161.5 ppb	08:52:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	683723.4	99.150	%	0.4367				0.44%
Sc Radial	3803.1	99.1	%	0.50				0.51%
Y 371.029	532174.7	98.219	%	0.4582				0.47%
Y RADIAL	4241.0	97.90	%	0.421				0.43%
Ag 328.068†	88662.3	491.56	ug/L	0.565	491.56	ppb	0.565	0.11%
QC value within limits for Ag 328.068 Recovery = 98.31%								
Al 396.153Radial†	4749.0	4975.3	ug/L	47.41	4975.3	ppb	47.41	0.95%
QC value within limits for Al 396.153Radial Recovery = 99.51%								
As 188.979†	997.1	497.95	ug/L	6.141	497.95	ppb	6.141	1.23%
QC value within limits for As 188.979 Recovery = 99.59%								
B 249.677†	20441.3	512.03	ug/L	2.328	512.03	ppb	2.328	0.45%
QC value within limits for B 249.677 Recovery = 102.41%								
Ba 233.527†	50743.9	491.67	ug/L	1.795	491.67	ppb	1.795	0.37%
QC value within limits for Ba 233.527 Recovery = 98.33%								
Be 313.107†	1222280.6	494.75	ug/L	1.152	494.75	ppb	1.152	0.23%
QC value within limits for Be 313.107 Recovery = 98.95%								
Ca 317.933Radial†	2623.0	5150.3	ug/L	4.78	5150.3	ppb	4.78	0.09%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.01%
Cd 226.502†            33525.8      490.01 ug/L         1.072      490.01 ppb          1.072   0.22%
   QC value within limits for Cd 226.502  Recovery = 98.00%
Co 228.616†            20212.0      500.73 ug/L         2.466      500.73 ppb          2.466   0.49%
   QC value within limits for Co 228.616  Recovery = 100.15%
Cr 267.716†            33206.9      490.90 ug/L         1.539      490.90 ppb          1.539   0.31%
   QC value within limits for Cr 267.716  Recovery = 98.18%
Cu 324.752†           145307.2      483.98 ug/L         0.542      483.98 ppb          0.542   0.11%
   QC value within limits for Cu 324.752  Recovery = 96.80%
Fe 238.204 Radial†       401.2      5114.4 ug/L          5.07      5114.4 ppb           5.07   0.10%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.29%
K 766.490 Radial†      27724.2      5149.3 ug/L         36.65      5149.3 ppb          36.65   0.71%
   QC value within limits for K 766.490 Radial  Recovery = 102.99%
Mg 279.077 IEC†          127.2      5239.3 ug/L         26.91      5239.3 ppb          26.91   0.51%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.79%
Mn 257.610†           381768.6      494.27 ug/L         1.492      494.27 ppb          1.492   0.30%
   QC value within limits for Mn 257.610  Recovery = 98.85%
Mo 202.031†             5136.5      493.86 ug/L         2.716      493.86 ppb          2.716   0.55%
   QC value within limits for Mo 202.031  Recovery = 98.77%
Na 589.592 Radial†     23215.3       10218 ug/L          97.6       10218 ppb           97.6   0.96%
   QC value within limits for Na 589.592 Radial  Recovery = 102.18%
Ni 231.604†            15280.6      497.98 ug/L         1.479      497.98 ppb          1.479   0.30%
   QC value within limits for Ni 231.604  Recovery = 99.60%
P 214.914†              3809.5      2340.8 ug/L         21.19      2340.8 ppb          21.19   0.91%
   QC value within limits for P 214.914  Recovery = 93.63%
Pb 220.353†             3121.9      492.84 ug/L         5.291      492.84 ppb          5.291   1.07%
   QC value within limits for Pb 220.353  Recovery = 98.57%
S 181.975 Axial†         652.2      978.96 ug/L         7.083      978.96 ppb          7.083   0.72%
   QC value within limits for S 181.975 Axial  Recovery = 97.90%
Sb 206.836†             1227.1      508.68 ug/L         3.138      508.68 ppb          3.138   0.62%
   QC value within limits for Sb 206.836  Recovery = 101.74%
Se 196.026†              663.8      508.79 ug/L         2.842      508.79 ppb          2.842   0.56%
   QC value within limits for Se 196.026  Recovery = 101.76%
Si 251.611†            67102.0      2450.5 ug/L          2.90      2450.5 ppb           2.90   0.12%
   QC value within limits for Si 251.611  Recovery = 98.02%
Sn 189.927†             2157.5      496.57 ug/L         5.593      496.57 ppb          5.593   1.13%
   QC value within limits for Sn 189.927  Recovery = 99.31%
Sr 421.552†            51377.7      493.27 ug/L         3.476      493.27 ppb          3.476   0.70%
   QC value within limits for Sr 421.552  Recovery = 98.65%
Ti 334.940†           269946.8      489.81 ug/L         0.573      489.81 ppb          0.573   0.12%
   QC value within limits for Ti 334.940  Recovery = 97.96%
Tl 190.801†             1291.9      500.28 ug/L         3.247      500.28 ppb          3.247   0.65%
   QC value within limits for Tl 190.801  Recovery = 100.06%
U 409.014†             12373.3      474.93 ug/L         4.805      474.93 ppb          4.805   1.01%
   QC value within limits for U 409.014  Recovery = 94.99%
V 292.402†             55296.2      494.01 ug/L         1.551      494.01 ppb          1.551   0.31%
   QC value within limits for V 292.402  Recovery = 98.80%
Zn 213.857†            42834.4      485.36 ug/L         1.210      485.36 ppb          1.210   0.25%
   QC value within limits for Zn 213.857  Recovery = 97.07%
SiO2†                  66259.4      5218.1 ug/L         54.98      5218.1 ppb          54.98   1.05%
   QC value within limits for SiO2  Recovery = 97.58%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 4/1/2010 08:54:39
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	3833.1	3833.1	99.9	%			08:56:52
1	Y RADIAL	4368.7	4368.7	100.9	%			08:56:32
1	Al 396.153Radial†	-98.9	-6.8	-7.1324	ug/L	-7.1324	ppb	08:56:52
1	Ca 317.933Radial†	23.3	4.7	9.1688	ug/L	9.1688	ppb	08:56:52
1	Fe 238.204 Radial†	6.8	0.6	7.9545	ug/L	7.9545	ppb	08:56:52
1	K 766.490 Radial†	3622.7	632.1	117.54	ug/L	117.54	ppb	08:56:32
1	Mg 279.077 IEC†	4.2	1.2	49.337	ug/L	49.337	ppb	08:56:52
1	Na 589.592 Radial†	-1080.4	-4.1	-1.8066	ug/L	-1.8066	ppb	08:56:32
1	Sr 421.552†	3.2	-10.6	-0.1021	ug/L	-0.1021	ppb	08:56:32
1	Sc 361.383	692997.5	692997.5	100.49	%			08:57:49
1	Y 371.029	544403.5	544403.5	100.48	%			08:57:49
1	Ag 328.068†	149.2	48.5	0.2681	ug/L	0.2681	ppb	08:57:49
1	As 188.979†	-19.4	3.5	1.7299	ug/L	1.7299	ppb	08:58:09
1	B 249.677†	448.8	1029.6	25.902	ug/L	25.902	ppb	08:57:49
1	Ba 233.527†	-8.4	-9.1	-0.0893	ug/L	-0.0893	ppb	08:58:09
1	Be 313.107†	-4441.8	103.3	0.0414	ug/L	0.0414	ppb	08:57:49
1	Cd 226.502†	-160.6	53.7	0.7839	ug/L	0.7839	ppb	08:58:09
1	Co 228.616†	-51.1	8.8	0.2160	ug/L	0.2160	ppb	08:58:09
1	Cr 267.716†	104.7	12.9	0.1910	ug/L	0.1910	ppb	08:58:09
1	Cu 324.752†	5705.8	-10.2	-0.0329	ug/L	-0.0329	ppb	08:57:49
1	Mn 257.610†	456.0	8.8	0.0101	ug/L	0.0101	ppb	08:58:09
1	Mo 202.031†	4.6	-7.9	-0.7603	ug/L	-0.7603	ppb	08:58:09
1	Ni 231.604†	81.1	6.0	0.1957	ug/L	0.1957	ppb	08:58:09
1	P 214.914†	212.7	-6.8	-4.3183	ug/L	-4.3183	ppb	08:58:09
1	Pb 220.353†	-65.5	1.9	0.2881	ug/L	0.2881	ppb	08:58:09
1	S 181.975 Axial†	44.5	4.0	6.0718	ug/L	6.0718	ppb	08:58:09
1	Sb 206.836†	40.7	8.7	3.5429	ug/L	3.5429	ppb	08:58:09
1	Se 196.026†	-25.6	-3.4	-2.5049	ug/L	-2.5049	ppb	08:58:09
1	Si 251.611†	590.3	90.8	3.3338	ug/L	3.3338	ppb	08:58:09
1	Sn 189.927†	23.3	19.1	4.3826	ug/L	4.3826	ppb	08:58:09
1	Ti 334.940†	-1507.3	-78.4	-0.1447	ug/L	-0.1447	ppb	08:57:49
1	Tl 190.801†	-24.5	13.6	5.2135	ug/L	5.2135	ppb	08:58:09
1	U 409.014†	-2447.3	-28.7	-1.1076	ug/L	-1.1076	ppb	08:57:49
1	V 292.402†	-1794.9	-69.6	-0.6267	ug/L	-0.6267	ppb	08:57:49
1	Zn 213.857†	756.4	88.1	1.0050	ug/L	1.0050	ppb	08:58:09
1	SiO2†	587.1	45.1	3.5792	ug/L	3.5792	ppb	08:59:05
2	Sc Radial	3723.1	3723.1	97.0	%			08:57:17
2	Y RADIAL	4239.6	4239.6	97.87	%			08:56:57
2	Al 396.153Radial†	-103.4	-14.4	-15.137	ug/L	-15.137	ppb	08:57:17
2	Ca 317.933Radial†	14.1	-4.1	-8.0001	ug/L	-8.0001	ppb	08:57:17
2	Fe 238.204 Radial†	7.1	1.1	14.271	ug/L	14.271	ppb	08:57:17
2	K 766.490 Radial†	3626.2	742.9	138.18	ug/L	138.18	ppb	08:56:57
2	Mg 279.077 IEC†	2.6	-0.3	-12.956	ug/L	-12.956	ppb	08:57:17
2	Na 589.592 Radial†	-1118.0	-74.9	-32.981	ug/L	-32.981	ppb	08:56:57
2	Sr 421.552†	43.1	30.6	0.2938	ug/L	0.2938	ppb	08:56:57
2	Sc 361.383	680454.7	680454.7	98.676	%			08:58:14
2	Y 371.029	534960.3	534960.3	98.734	%			08:58:14
2	Ag 328.068†	194.9	97.6	0.5421	ug/L	0.5421	ppb	08:58:14
2	As 188.979†	-25.0	-2.6	-1.2679	ug/L	-1.2679	ppb	08:58:34
2	B 249.677†	409.1	997.6	25.097	ug/L	25.097	ppb	08:58:14
2	Ba 233.527†	12.6	12.0	0.1137	ug/L	0.1137	ppb	08:58:34
2	Be 313.107†	-4293.5	172.2	0.0692	ug/L	0.0692	ppb	08:58:14
2	Cd 226.502†	-168.9	42.3	0.6162	ug/L	0.6162	ppb	08:58:34
2	Co 228.616†	-58.5	0.4	0.0111	ug/L	0.0111	ppb	08:58:34
2	Cr 267.716†	105.1	15.2	0.2257	ug/L	0.2257	ppb	08:58:34
2	Cu 324.752†	5583.4	-29.7	-0.0950	ug/L	-0.0950	ppb	08:58:14
2	Mn 257.610†	481.3	42.7	0.0573	ug/L	0.0573	ppb	08:58:34
2	Mo 202.031†	18.3	6.0	0.5809	ug/L	0.5809	ppb	08:58:34
2	Ni 231.604†	79.4	5.8	0.1884	ug/L	0.1884	ppb	08:58:34

2	P 214.914†	200.2	-15.6	-9.9467 ug/L	-9.9467 ppb	08:58:34
2	Pb 220.353†	-66.9	-0.8	-0.1285 ug/L	-0.1285 ppb	08:58:34
2	S 181.975 Axial†	42.7	3.0	4.5479 ug/L	4.5479 ppb	08:58:34
2	Sb 206.836†	38.7	7.5	3.0502 ug/L	3.0502 ppb	08:58:34
2	Se 196.026†	-17.4	4.5	3.3636 ug/L	3.3636 ppb	08:58:34
2	Si 251.611†	576.1	87.2	3.1858 ug/L	3.1858 ppb	08:58:34
2	Sn 189.927†	12.9	8.9	2.0478 ug/L	2.0478 ppb	08:58:34
2	Ti 334.940†	-1476.9	-75.2	-0.1342 ug/L	-0.1342 ppb	08:58:14
2	Tl 190.801†	-29.3	8.3	3.1862 ug/L	3.1862 ppb	08:58:34
2	U 409.014†	-2514.6	-141.8	-5.4657 ug/L	-5.4657 ppb	08:58:14
2	V 292.402†	-1819.2	-127.2	-1.1257 ug/L	-1.1257 ppb	08:58:14
2	Zn 213.857†	752.0	97.5	1.1116 ug/L	1.1116 ppb	08:58:34
2	SiO2†	619.3	88.4	6.9645 ug/L	6.9645 ppb	08:59:10
3	Sc Radial	3709.4	3709.4	96.6 %		08:57:42
3	Y RADIAL	4131.5	4131.5	95.38 %		08:57:22
3	Al 396.153Radial†	-95.5	-6.6	-6.9593 ug/L	-6.9593 ppb	08:57:42
3	Ca 317.933Radial†	19.3	1.3	2.5600 ug/L	2.5600 ppb	08:57:42
3	Fe 238.204 Radial†	9.3	3.4	43.775 ug/L	43.775 ppb	08:57:42
3	K 766.490 Radial†	3647.4	778.6	144.81 ug/L	144.81 ppb	08:57:22
3	Mg 279.077 IEC†	2.5	-0.4	-16.797 ug/L	-16.797 ppb	08:57:42
3	Na 589.592 Radial†	-1083.3	-43.2	-19.033 ug/L	-19.033 ppb	08:57:22
3	Sr 421.552†	35.9	23.3	0.2233 ug/L	0.2233 ppb	08:57:22
3	Sc 361.383	682472.7	682472.7	98.968 %		08:58:40
3	Y 371.029	537459.2	537459.2	99.195 %		08:58:40
3	Ag 328.068†	226.1	128.6	0.7272 ug/L	0.7272 ppb	08:58:40
3	As 188.979†	-15.3	7.4	3.6610 ug/L	3.6610 ppb	08:59:00
3	B 249.677†	356.3	943.0	23.717 ug/L	23.717 ppb	08:58:40
3	Ba 233.527†	-3.7	-4.5	-0.0441 ug/L	-0.0441 ppb	08:59:00
3	Be 313.107†	-4294.5	184.0	0.0736 ug/L	0.0736 ppb	08:58:40
3	Cd 226.502†	-151.7	60.2	0.8738 ug/L	0.8738 ppb	08:59:00
3	Co 228.616†	-40.1	19.1	0.4752 ug/L	0.4752 ppb	08:59:00
3	Cr 267.716†	117.9	27.8	0.4178 ug/L	0.4178 ppb	08:59:00
3	Cu 324.752†	5659.5	30.6	0.1100 ug/L	0.1100 ppb	08:58:40
3	Mn 257.610†	492.2	52.3	0.0727 ug/L	0.0727 ppb	08:59:00
3	Mo 202.031†	17.2	4.9	0.4749 ug/L	0.4749 ppb	08:59:00
3	Ni 231.604†	84.8	11.0	0.3582 ug/L	0.3582 ppb	08:59:00
3	P 214.914†	216.2	-0.1	-0.0865 ug/L	-0.0865 ppb	08:59:00
3	Pb 220.353†	-62.2	4.1	0.6476 ug/L	0.6476 ppb	08:59:00
3	S 181.975 Axial†	36.8	-3.1	-4.6352 ug/L	-4.6352 ppb	08:59:00
3	Sb 206.836†	29.2	-2.2	-0.8413 ug/L	-0.8413 ppb	08:59:00
3	Se 196.026†	-17.6	4.3	3.2869 ug/L	3.2869 ppb	08:59:00
3	Si 251.611†	577.9	87.3	3.1911 ug/L	3.1911 ppb	08:59:00
3	Sn 189.927†	14.5	10.5	2.4077 ug/L	2.4077 ppb	08:59:00
3	Ti 334.940†	-1575.4	-170.3	-0.3028 ug/L	-0.3028 ppb	08:58:40
3	Tl 190.801†	-22.8	14.9	5.7293 ug/L	5.7293 ppb	08:59:00
3	U 409.014†	-2654.7	-275.8	-10.631 ug/L	-10.631 ppb	08:58:40
3	V 292.402†	-1788.9	-91.2	-0.8240 ug/L	-0.8240 ppb	08:58:40
3	Zn 213.857†	747.7	90.9	1.0306 ug/L	1.0306 ppb	08:59:00
3	SiO2†	579.9	46.8	3.6785 ug/L	3.6785 ppb	08:59:15

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	685308.3	99.379	%	0.9767				0.98%
Sc Radial	3755.2	97.8	%	1.77				1.81%
Y 371.029	538941.0	99.468	%	0.9030				0.91%
Y RADIAL	4246.6	98.03	%	2.741				2.80%
Ag 328.068†	91.6	0.5125	ug/L	0.23098	0.5125	ppb	0.23098	45.07%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-9.3	-9.7429	ug/L	4.67222	-9.7429	ppb	4.67222	47.95%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.8	1.3744	ug/L	2.48363	1.3744	ppb	2.48363	180.71%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	990.1	24.905	ug/L	1.1050	24.905	ppb	1.1050	4.44%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.6	-0.0066	ug/L	0.10659	-0.0066	ppb	0.10659	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	153.1	0.0614	ug/L	0.01747	0.0614	ppb	0.01747	28.46%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.6	1.2429	ug/L	8.65988	1.2429	ppb	8.65988	696.74%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                52.1      0.7580 ug/L       0.13076      0.7580 ppb        0.13076  17.25%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 9.4      0.2341 ug/L       0.23258      0.2341 ppb        0.23258  99.34%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                18.6      0.2782 ug/L       0.12220      0.2782 ppb        0.12220  43.93%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                -3.1     -0.0060 ug/L       0.10512     -0.0060 ppb        0.10512 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.7      22.000 ug/L       19.1203      22.000 ppb        19.1203  86.91%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         717.9      133.51 ug/L        14.218      133.51 ppb         14.218  10.65%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.2      6.5282 ug/L      37.12348      6.5282 ppb       37.12348 568.67%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                34.6      0.0467 ug/L       0.03262      0.0467 ppb        0.03262  69.84%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.0      0.0985 ug/L       0.74565      0.0985 ppb        0.74565 757.12%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -40.8     -17.940 ug/L       15.6158     -17.940 ppb        15.6158  87.04%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 7.6      0.2474 ug/L       0.09600      0.2474 ppb        0.09600  38.80%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -7.5     -4.7838 ug/L       4.94655     -4.7838 ppb        4.94655 103.40%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.7      0.2691 ug/L       0.38836      0.2691 ppb        0.38836 144.34%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.3      1.9948 ug/L       5.79207      1.9948 ppb        5.79207 290.35%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.7      1.9173 ug/L       2.40167      1.9173 ppb        2.40167 125.27%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 1.8      1.3819 ug/L       3.36622      1.3819 ppb        3.36622 243.60%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                88.5      3.2369 ug/L       0.08396      3.2369 ppb        0.08396   2.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                12.8      2.9460 ug/L       1.25704      2.9460 ppb        1.25704  42.67%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                14.4      0.1383 ug/L       0.21114      0.1383 ppb        0.21114 152.63%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -108.0     -0.1939 ug/L       0.09449     -0.1939 ppb        0.09449  48.73%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                12.2      4.7097 ug/L       1.34435      4.7097 ppb        1.34435  28.54%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -148.8     -5.7349 ug/L       4.76763     -5.7349 ppb        4.76763  83.13%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -96.0     -0.8588 ug/L       0.25134     -0.8588 ppb        0.25134  29.27%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                92.1      1.0491 ug/L       0.05562      1.0491 ppb        0.05562   5.30%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      60.1      4.7407 ug/L       1.92649      4.7407 ppb        1.92649  40.64%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 4/1/2010 09:01:40 **Plasma On Time:** 3/30/2010 17:10:22
Logged In Analyst: Optima3 **Technique:** ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601 **Autosampler Model:** S10

Sample Information File: C:\pe\Optima3\Sample Information\040110.sif
Batch ID:
Results Data Set: 040110
Results Library: C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved:** 4/1/2010 07:31:18
IEC File: 011110.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location:** 37
Sample ID: LR1 **Date Collected:** 4/1/2010 09:01:41
Analyst: HSC **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3704.6	3704.6	96.5	%			09:03:55
1	Y RADIAL	4265.8	4265.8	98.48	%			09:03:35
1	Al 396.153Radial†	-93.3	-4.4	-3.3400	ug/L	-3.3400	ppb	09:03:35

1	Ca 317.933Radial†	13.9	-4.3	-8.4092 ug/L	-8.4092 ppb	09:03:55
1	Fe 238.204 Radial†	29520.7	30582.3	388690 ug/L	388690 ppb	09:03:35
1	K 766.490 Radial†	3212.5	332.9	61.973 ug/L	61.973 ppb	09:03:35
1	Mg 279.077 IEC†	12.5	10.0	3.1216 ug/L	3.1216 ppb	09:03:55
1	Na 589.592 Radial†	-1155.8	-119.8	-52.731 ug/L	-52.731 ppb	09:03:35
1	Sr 421.552†	48.1	35.9	0.3452 ug/L	0.3452 ppb	09:03:35
1	Sc 361.383	683466.6	683466.6	99.112 %		09:04:52
1	Y 371.029	536898.0	536898.0	99.091 %		09:04:52
1	Ag 328.068†	-21182.8	-21472.4	2.0586 ug/L	2.0586 ppb	09:04:52
1	As 188.979†	-189.7	-168.7	7.6068 ug/L	7.6068 ppb	09:05:12
1	B 249.677†	1625.0	2222.6	-7.2517 ug/L	-7.2517 ppb	09:04:52
1	Ba 233.527†	-1609.7	-1624.9	-3.7530 ug/L	-3.7530 ppb	09:04:52
1	Be 313.107†	-4414.7	69.0	0.0276 ug/L	0.0276 ppb	09:04:52
1	Cd 226.502†	2337.6	2572.0	-2.5277 ug/L	-2.5277 ppb	09:04:52
1	Co 228.616†	634.7	700.1	11.661 ug/L	11.661 ppb	09:05:12
1	Cr 267.716†	-521.7	-617.6	32.113 ug/L	32.113 ppb	09:04:52
1	Cu 324.752†	-1147.9	-6846.1	-2.2794 ug/L	-2.2794 ppb	09:04:52
1	Mn 257.610†	-31685.2	-32414.0	-3.5689 ug/L	-3.5689 ppb	09:04:52
1	Mo 202.031†	-268.2	-283.0	2.9873 ug/L	2.9873 ppb	09:04:52
1	Ni 231.604†	173.6	100.5	3.2675 ug/L	3.2675 ppb	09:05:12
1	P 214.914†	620.4	407.4	-48.140 ug/L	-48.140 ppb	09:05:12
1	Pb 220.353†	133.0	201.2	-6.1679 ug/L	-6.1679 ppb	09:05:12
1	S 181.975 Axial†	60.4	20.8	31.183 ug/L	31.183 ppb	09:05:12
1	Sb 206.836†	30.9	-0.6	-5.0114 ug/L	-5.0114 ppb	09:05:12
1	Se 196.026†	-1544.8	-1536.5	-106.68 ug/L	-106.68 ppb	09:05:12
1	Si 251.611†	-337.4	-837.0	-30.306 ug/L	-30.306 ppb	09:04:52
1	Sn 189.927†	-12.3	-16.5	-1.3529 ug/L	-1.3529 ppb	09:05:12
1	Ti 334.940†	-1465.0	-56.6	-0.1741 ug/L	-0.1741 ppb	09:04:52
1	Tl 190.801†	-48.1	-10.5	-4.4423 ug/L	-4.4423 ppb	09:05:12
1	U 409.014†	-37.8	2368.4	46.939 ug/L	46.939 ppb	09:04:52
1	V 292.402†	4708.4	6466.9	0.2014 ug/L	0.2014 ppb	09:04:52
1	Zn 213.857†	3648.6	3016.7	-23.651 ug/L	-23.651 ppb	09:05:12
1	SiO2†	-506.9	-1050.6	-82.208 ug/L	-82.208 ppb	09:06:10
2	Sc Radial	3690.1	3690.1	96.1 %		09:04:20
2	Y RADIAL	4107.1	4107.1	94.81 %		09:04:00
2	Al 396.153Radial†	-130.6	-43.6	-44.536 ug/L	-44.536 ppb	09:04:00
2	Ca 317.933Radial†	18.0	0.1	0.1572 ug/L	0.1572 ppb	09:04:20
2	Fe 238.204 Radial†	29083.1	30247.5	384430 ug/L	384430 ppb	09:04:00
2	K 766.490 Radial†	3165.3	296.8	55.259 ug/L	55.259 ppb	09:04:00
2	Mg 279.077 IEC†	7.7	5.0	-198.02 ug/L	-198.02 ppb	09:04:20
2	Na 589.592 Radial†	-1111.5	-78.5	-34.538 ug/L	-34.538 ppb	09:04:00
2	Sr 421.552†	67.6	56.5	0.5421 ug/L	0.5421 ppb	09:04:00
2	Sc 361.383	680561.8	680561.8	98.691 %		09:05:18
2	Y 371.029	535720.8	535720.8	98.874 %		09:05:18
2	Ag 328.068†	-20902.3	-21279.4	1.8107 ug/L	1.8107 ppb	09:05:18
2	As 188.979†	-164.2	-143.6	19.006 ug/L	19.006 ppb	09:05:38
2	B 249.677†	1576.7	2180.6	-7.6149 ug/L	-7.6149 ppb	09:05:18
2	Ba 233.527†	-1521.1	-1542.1	-3.0855 ug/L	-3.0855 ppb	09:05:18
2	Be 313.107†	-4379.4	85.8	0.0343 ug/L	0.0343 ppb	09:05:18
2	Cd 226.502†	2290.7	2534.5	-2.6382 ug/L	-2.6382 ppb	09:05:18
2	Co 228.616†	598.9	666.5	10.889 ug/L	10.889 ppb	09:05:38
2	Cr 267.716†	-565.3	-664.1	30.980 ug/L	30.980 ppb	09:05:18
2	Cu 324.752†	-1306.1	-7011.3	-3.0480 ug/L	-3.0480 ppb	09:05:18
2	Mn 257.610†	-31541.7	-32405.1	-3.9692 ug/L	-3.9692 ppb	09:05:18
2	Mo 202.031†	-279.1	-295.3	1.4772 ug/L	1.4772 ppb	09:05:18
2	Ni 231.604†	188.6	116.5	3.7877 ug/L	3.7877 ppb	09:05:38
2	P 214.914†	622.5	412.2	-41.554 ug/L	-41.554 ppb	09:05:38
2	Pb 220.353†	123.1	191.7	-7.2657 ug/L	-7.2657 ppb	09:05:38
2	S 181.975 Axial†	54.9	15.4	23.148 ug/L	23.148 ppb	09:05:38
2	Sb 206.836†	24.1	-7.3	-7.7378 ug/L	-7.7378 ppb	09:05:38
2	Se 196.026†	-1560.2	-1558.8	-134.54 ug/L	-134.54 ppb	09:05:38
2	Si 251.611†	-298.4	-798.9	-28.899 ug/L	-28.899 ppb	09:05:18
2	Sn 189.927†	-24.0	-28.4	-4.1129 ug/L	-4.1129 ppb	09:05:38
2	Ti 334.940†	-1487.5	-85.7	-0.2033 ug/L	-0.2033 ppb	09:05:18
2	Tl 190.801†	-24.9	12.7	4.5103 ug/L	4.5103 ppb	09:05:38
2	U 409.014†	-357.3	2044.5	34.948 ug/L	34.948 ppb	09:05:18
2	V 292.402†	4535.2	6311.7	-0.5912 ug/L	-0.5912 ppb	09:05:18
2	Zn 213.857†	3622.9	3006.4	-23.136 ug/L	-23.136 ppb	09:05:38
2	SiO2†	-464.0	-1009.4	-78.921 ug/L	-78.921 ppb	09:06:15
3	Sc Radial	3673.3	3673.3	95.7 %		09:04:45
3	Y RADIAL	4044.4	4044.4	93.37 %		09:04:25

3	Al 396.153Radial†	-116.2	-29.2	-29.674 ug/L	-29.674 ppb	09:04:25
3	Ca 317.933Radial†	17.6	-0.2	-0.4231 ug/L	-0.4231 ppb	09:04:45
3	Fe 238.204 Radial†	28969.2	30266.8	384680 ug/L	384680 ppb	09:04:25
3	K 766.490 Radial†	3152.4	298.4	55.552 ug/L	55.552 ppb	09:04:25
3	Mg 279.077 IEC†	7.9	5.2	-187.11 ug/L	-187.11 ppb	09:04:45
3	Na 589.592 Radial†	-1121.0	-93.6	-41.215 ug/L	-41.215 ppb	09:04:25
3	Sr 421.552†	52.7	41.2	0.3953 ug/L	0.3953 ppb	09:04:25
3	Sc 361.383	674278.2	674278.2	97.780 %		09:05:44
3	Y 371.029	529893.8	529893.8	97.798 %		09:05:44
3	Ag 328.068†	-20911.3	-21486.0	0.7404 ug/L	0.7404 ppb	09:05:44
3	As 188.979†	-182.8	-164.2	8.8819 ug/L	8.8819 ppb	09:06:04
3	B 249.677†	1531.3	2149.0	-8.4517 ug/L	-8.4517 ppb	09:05:44
3	Ba 233.527†	-1617.5	-1655.0	-4.1670 ug/L	-4.1670 ppb	09:05:44
3	Be 313.107†	-4357.7	66.6	0.0264 ug/L	0.0264 ppb	09:05:44
3	Cd 226.502†	2265.1	2529.9	-2.7278 ug/L	-2.7278 ppb	09:05:44
3	Co 228.616†	635.7	709.8	11.972 ug/L	11.972 ppb	09:06:04
3	Cr 267.716†	-518.4	-621.5	31.630 ug/L	31.630 ppb	09:05:44
3	Cu 324.752†	-1405.7	-7125.6	-3.4230 ug/L	-3.4230 ppb	09:05:44
3	Mn 257.610†	-31573.7	-32735.5	-4.3731 ug/L	-4.3731 ppb	09:05:44
3	Mo 202.031†	-207.8	-225.0	8.2481 ug/L	8.2481 ppb	09:05:44
3	Ni 231.604†	180.2	109.6	3.5641 ug/L	3.5641 ppb	09:06:04
3	P 214.914†	623.1	418.7	-37.527 ug/L	-37.527 ppb	09:06:04
3	Pb 220.353†	119.6	189.4	-7.6384 ug/L	-7.6384 ppb	09:06:04
3	S 181.975 Axial†	56.4	17.4	26.195 ug/L	26.195 ppb	09:06:04
3	Sb 206.836†	25.0	-6.2	-7.1040 ug/L	-7.1040 ppb	09:06:04
3	Se 196.026†	-1546.3	-1559.3	-134.23 ug/L	-134.23 ppb	09:06:04
3	Si 251.611†	-413.4	-919.4	-33.393 ug/L	-33.393 ppb	09:05:44
3	Sn 189.927†	-17.8	-22.3	-2.7107 ug/L	-2.7107 ppb	09:06:04
3	Ti 334.940†	-1511.3	-124.1	-0.2801 ug/L	-0.2801 ppb	09:05:44
3	Tl 190.801†	-38.9	-1.8	-1.0789 ug/L	-1.0789 ppb	09:06:04
3	U 409.014†	-6.4	2399.9	48.610 ug/L	48.610 ppb	09:05:44
3	V 292.402†	4585.8	6406.3	0.3283 ug/L	0.3283 ppb	09:05:44
3	Zn 213.857†	3566.8	2983.2	-23.435 ug/L	-23.435 ppb	09:06:04
3	SiO2†	-444.7	-994.0	-77.893 ug/L	-77.893 ppb	09:06:20

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	679435.6	98.528	%	0.6811				0.69%
Sc Radial	3689.3	96.1	%	0.41				0.42%
Y 371.029	534170.9	98.588	%	0.6922				0.70%
Y RADIAL	4139.1	95.55	%	2.634				2.76%
Ag 328.068†	-21412.6	1.5366	ug/L	0.70054	1.5366	ppb	0.70054	45.59%
Al 396.153Radial†	-25.7	-25.850	ug/L	20.8625	-25.850	ppb	20.8625	80.71%
As 188.979†	-158.8	11.831	ug/L	6.2457	11.831	ppb	6.2457	52.79%
B 249.677†	2184.1	-7.7728	ug/L	0.61538	-7.7728	ppb	0.61538	7.92%
Ba 233.527†	-1607.3	-3.6685	ug/L	0.54571	-3.6685	ppb	0.54571	14.88%
Be 313.107†	73.8	0.0294	ug/L	0.00424	0.0294	ppb	0.00424	14.41%
Ca 317.933Radial†	-1.5	-2.8917	ug/L	4.78711	-2.8917	ppb	4.78711	165.55%
Cd 226.502†	2545.5	-2.6312	ug/L	0.10023	-2.6312	ppb	0.10023	3.81%
Co 228.616†	692.1	11.507	ug/L	0.5573	11.507	ppb	0.5573	4.84%
Cr 267.716†	-634.4	31.574	ug/L	0.5687	31.574	ppb	0.5687	1.80%
Cu 324.752†	-6994.3	-2.9168	ug/L	0.58299	-2.9168	ppb	0.58299	19.99%
Fe 238.204 Radial†	30365.6	385930	ug/L	2389.2	385930	ppb	2389.2	0.62%
K 766.490 Radial†	309.4	57.595	ug/L	3.7944	57.595	ppb	3.7944	6.59%
Mg 279.077 IEC†	6.7	-127.34	ug/L	113.111	-127.34	ppb	113.111	88.83%
Mn 257.610†	-32518.2	-3.9704	ug/L	0.40208	-3.9704	ppb	0.40208	10.13%
Mo 202.031†	-267.8	4.2375	ug/L	3.55439	4.2375	ppb	3.55439	83.88%
Na 589.592 Radial†	-97.3	-42.828	ug/L	9.2036	-42.828	ppb	9.2036	21.49%
Ni 231.604†	108.9	3.5398	ug/L	0.26092	3.5398	ppb	0.26092	7.37%
P 214.914†	412.8	-42.407	ug/L	5.3577	-42.407	ppb	5.3577	12.63%
Pb 220.353†	194.1	-7.0240	ug/L	0.76445	-7.0240	ppb	0.76445	10.88%
S 181.975 Axial†	17.9	26.842	ug/L	4.0564	26.842	ppb	4.0564	15.11%
Sb 206.836†	-4.7	-6.6177	ug/L	1.42675	-6.6177	ppb	1.42675	21.56%
Se 196.026†	-1551.6	-125.15	ug/L	15.996	-125.15	ppb	15.996	12.78%
Si 251.611†	-851.8	-30.866	ug/L	2.2989	-30.866	ppb	2.2989	7.45%
Sn 189.927†	-22.4	-2.7255	ug/L	1.38009	-2.7255	ppb	1.38009	50.64%
Sr 421.552†	44.5	0.4275	ug/L	0.10234	0.4275	ppb	0.10234	23.94%
Ti 334.940†	-88.8	-0.2192	ug/L	0.05477	-0.2192	ppb	0.05477	24.99%
Tl 190.801†	0.1	-0.3370	ug/L	4.52215	-0.3370	ppb	4.52215	>999.9%

U 409.014†	2270.9	43.499	ug/L	7.4525	43.499	ppb	7.4525	17.13%
V 292.402†	6395.0	-0.0205	ug/L	0.49829	-0.0205	ppb	0.49829	>999.9%
Zn 213.857†	3002.1	-23.407	ug/L	0.2590	-23.407	ppb	0.2590	1.11%
SiO2†	-1018.0	-79.674	ug/L	2.2538	-79.674	ppb	2.2538	2.83%

Sequence No.: 2
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 4/1/2010 09:08:33
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	3756.5	3756.5	97.9	%			09:10:46
1	Y RADIAL	4326.5	4326.5	99.88	%			09:10:26
1	Al 396.153Radial†	4551.2	4742.9	4969.4	ug/L	4969.4	ppb	09:10:26
1	Ca 317.933Radial†	2567.0	2604.4	5113.9	ug/L	5113.9	ppb	09:10:46
1	Fe 238.204 Radial†	394.1	396.5	5054.0	ug/L	5054.0	ppb	09:10:46
1	K 766.490 Radial†	29446.7	27094.5	5032.3	ug/L	5032.3	ppb	09:10:26
1	Mg 279.077 IEC†	126.2	125.9	5187.1	ug/L	5187.1	ppb	09:10:46
1	Na 589.592 Radial†	21654.8	23205.9	10214	ug/L	10214	ppb	09:10:26
1	Sr 421.552†	50228.1	51312.1	492.64	ug/L	492.64	ppb	09:10:26
1	Sc 361.383	689769.3	689769.3	100.03	%			09:11:43
1	Y 371.029	469119.0	469119.0	86.582	%			09:11:48
1	Ag 328.068†	87909.6	87786.5	486.70	ug/L	486.70	ppb	09:11:48
1	As 188.979†	932.0	954.6	476.85	ug/L	476.85	ppb	09:12:08
1	B 249.677†	18845.0	19423.0	486.44	ug/L	486.44	ppb	09:11:48
1	Ba 233.527†	50269.6	50255.5	486.94	ug/L	486.94	ppb	09:11:48
1	Be 313.107†	1200188.5	1204395.7	487.52	ug/L	487.52	ppb	09:11:43
1	Cd 226.502†	32972.1	33176.9	484.92	ug/L	484.92	ppb	09:11:48
1	Co 228.616†	19949.2	20003.6	495.55	ug/L	495.55	ppb	09:11:48
1	Cr 267.716†	33072.9	32972.8	487.43	ug/L	487.43	ppb	09:11:48
1	Cu 324.752†	149177.4	143450.1	477.79	ug/L	477.79	ppb	09:11:48
1	Mn 257.610†	371791.8	371248.9	480.66	ug/L	480.66	ppb	09:11:48
1	Mo 202.031†	5043.5	5029.7	483.59	ug/L	483.59	ppb	09:12:08
1	Ni 231.604†	15189.2	15110.5	492.43	ug/L	492.43	ppb	09:11:48
1	P 214.914†	3917.2	3697.7	2270.5	ug/L	2270.5	ppb	09:12:08
1	Pb 220.353†	2997.4	3063.6	483.66	ug/L	483.66	ppb	09:12:08
1	S 181.975 Axial†	675.4	635.0	953.18	ug/L	953.18	ppb	09:12:08
1	Sb 206.836†	1226.5	1194.5	495.23	ug/L	495.23	ppb	09:12:08
1	Se 196.026†	624.4	646.3	495.65	ug/L	495.65	ppb	09:12:08
1	Si 251.611†	66832.5	66318.2	2421.9	ug/L	2421.9	ppb	09:11:48
1	Sn 189.927†	2109.8	2105.1	484.51	ug/L	484.51	ppb	09:12:08
1	Ti 334.940†	265917.3	267268.7	484.95	ug/L	484.95	ppb	09:11:48
1	Tl 190.801†	1217.7	1255.3	486.14	ug/L	486.14	ppb	09:12:08
1	U 409.014†	9839.2	12243.1	469.93	ug/L	469.93	ppb	09:11:48
1	V 292.402†	53032.5	54734.9	488.92	ug/L	488.92	ppb	09:11:48
1	Zn 213.857†	42938.0	42262.1	478.87	ug/L	478.87	ppb	09:11:48
1	SiO2†	65629.0	65072.6	5124.7	ug/L	5124.7	ppb	09:13:15
2	Sc Radial	3767.1	3767.1	98.1	%			09:11:11
2	Y RADIAL	4187.2	4187.2	96.66	%			09:10:51
2	Al 396.153Radial†	4544.5	4723.0	4948.1	ug/L	4948.1	ppb	09:10:51
2	Ca 317.933Radial†	2593.7	2624.2	5152.8	ug/L	5152.8	ppb	09:11:11
2	Fe 238.204 Radial†	400.6	402.0	5123.9	ug/L	5123.9	ppb	09:11:11
2	K 766.490 Radial†	29201.7	26760.2	4970.1	ug/L	4970.1	ppb	09:10:51
2	Mg 279.077 IEC†	125.8	125.2	5155.8	ug/L	5155.8	ppb	09:11:11
2	Na 589.592 Radial†	21436.1	22920.9	10088	ug/L	10088	ppb	09:10:51
2	Sr 421.552†	50206.7	51145.9	491.04	ug/L	491.04	ppb	09:10:51
2	Sc 361.383	687475.1	687475.1	99.694	%			09:12:13
2	Y 371.029	470498.0	470498.0	86.836	%			09:12:19
2	Ag 328.068†	87866.5	88036.7	488.09	ug/L	488.09	ppb	09:12:19
2	As 188.979†	941.0	966.7	482.85	ug/L	482.85	ppb	09:12:39
2	B 249.677†	18912.4	19553.5	489.71	ug/L	489.71	ppb	09:12:19
2	Ba 233.527†	50243.9	50397.5	488.31	ug/L	488.31	ppb	09:12:19
2	Be 313.107†	1199013.2	1207220.9	488.66	ug/L	488.66	ppb	09:12:13
2	Cd 226.502†	32739.0	33053.0	483.10	ug/L	483.10	ppb	09:12:19
2	Co 228.616†	19883.2	20004.0	495.58	ug/L	495.58	ppb	09:12:19
2	Cr 267.716†	32871.4	32881.1	486.08	ug/L	486.08	ppb	09:12:19
2	Cu 324.752†	148979.5	143749.4	478.78	ug/L	478.78	ppb	09:12:19
2	Mn 257.610†	371096.2	371791.5	481.37	ug/L	481.37	ppb	09:12:19
2	Mo 202.031†	5106.9	5110.1	491.32	ug/L	491.32	ppb	09:12:39
2	Ni 231.604†	15172.5	15144.5	493.54	ug/L	493.54	ppb	09:12:19

2	P 214.914†	3983.0	3776.7	2320.9 ug/L	2320.9 ppb	09:12:39
2	Pb 220.353†	3013.2	3089.5	487.74 ug/L	487.74 ppb	09:12:39
2	S 181.975 Axial†	673.7	635.6	954.01 ug/L	954.01 ppb	09:12:39
2	Sb 206.836†	1229.5	1201.6	498.35 ug/L	498.35 ppb	09:12:39
2	Se 196.026†	623.0	647.0	496.35 ug/L	496.35 ppb	09:12:39
2	Si 251.611†	66733.0	66441.4	2426.3 ug/L	2426.3 ppb	09:12:19
2	Sn 189.927†	2136.6	2139.0	492.32 ug/L	492.32 ppb	09:12:39
2	Ti 334.940†	265883.2	268121.7	486.50 ug/L	486.50 ppb	09:12:19
2	Tl 190.801†	1233.5	1275.2	493.81 ug/L	493.81 ppb	09:12:39
2	U 409.014†	10158.2	12595.9	483.52 ug/L	483.52 ppb	09:12:19
2	V 292.402†	52973.9	54853.1	490.08 ug/L	490.08 ppb	09:12:19
2	Zn 213.857†	42789.1	42256.0	478.78 ug/L	478.78 ppb	09:12:19
2	SiO2†	66018.6	65682.3	5172.6 ug/L	5172.6 ppb	09:13:20
3	Sc Radial	3770.2	3770.2	98.2 %		09:11:36
3	Y RADIAL	4232.4	4232.4	97.70 %		09:11:16
3	Al 396.153Radial†	4607.5	4783.4	5011.8 ug/L	5011.8 ppb	09:11:16
3	Ca 317.933Radial†	2594.2	2622.6	5149.6 ug/L	5149.6 ppb	09:11:36
3	Fe 238.204 Radial†	400.6	401.6	5119.4 ug/L	5119.4 ppb	09:11:36
3	K 766.490 Radial†	29732.1	27276.1	5066.0 ug/L	5066.0 ppb	09:11:16
3	Mg 279.077 IEC†	126.7	126.0	5190.2 ug/L	5190.2 ppb	09:11:36
3	Na 589.592 Radial†	21670.3	23141.6	10185 ug/L	10185 ppb	09:11:16
3	Sr 421.552†	50761.1	51668.9	496.06 ug/L	496.06 ppb	09:11:16
3	Sc 361.383	686552.9	686552.9	99.560 %		09:12:44
3	Y 371.029	466714.9	466714.9	86.138 %		09:12:49
3	Ag 328.068†	86385.9	86667.9	480.54 ug/L	480.54 ppb	09:12:49
3	As 188.979†	929.9	956.8	477.92 ug/L	477.92 ppb	09:13:09
3	B 249.677†	18555.8	19220.8	481.35 ug/L	481.35 ppb	09:12:49
3	Ba 233.527†	49539.7	49757.9	482.12 ug/L	482.12 ppb	09:12:49
3	Be 313.107†	1195426.0	1205233.4	487.85 ug/L	487.85 ppb	09:12:44
3	Cd 226.502†	32333.6	32689.9	477.79 ug/L	477.79 ppb	09:12:49
3	Co 228.616†	19639.5	19786.0	490.18 ug/L	490.18 ppb	09:12:49
3	Cr 267.716†	32495.5	32547.8	481.16 ug/L	481.16 ppb	09:12:49
3	Cu 324.752†	146515.4	141475.1	471.22 ug/L	471.22 ppb	09:12:49
3	Mn 257.610†	366214.9	367388.6	475.67 ug/L	475.67 ppb	09:12:49
3	Mo 202.031†	5052.0	5061.9	486.69 ug/L	486.69 ppb	09:13:09
3	Ni 231.604†	14998.0	14989.6	488.50 ug/L	488.50 ppb	09:12:49
3	P 214.914†	3936.5	3735.4	2295.9 ug/L	2295.9 ppb	09:13:09
3	Pb 220.353†	3001.1	3081.4	486.47 ug/L	486.47 ppb	09:13:09
3	S 181.975 Axial†	661.9	624.6	937.58 ug/L	937.58 ppb	09:13:09
3	Sb 206.836†	1225.3	1199.0	497.12 ug/L	497.12 ppb	09:13:09
3	Se 196.026†	610.6	635.4	487.71 ug/L	487.71 ppb	09:13:09
3	Si 251.611†	65584.4	65377.7	2387.4 ug/L	2387.4 ppb	09:12:49
3	Sn 189.927†	2111.5	2116.7	487.20 ug/L	487.20 ppb	09:13:09
3	Ti 334.940†	262046.8	264626.6	480.16 ug/L	480.16 ppb	09:12:49
3	Tl 190.801†	1225.8	1269.1	491.43 ug/L	491.43 ppb	09:13:09
3	U 409.014†	9699.0	12148.4	466.29 ug/L	466.29 ppb	09:12:49
3	V 292.402†	52119.9	54066.7	483.06 ug/L	483.06 ppb	09:12:49
3	Zn 213.857†	42243.8	41766.0	473.22 ug/L	473.22 ppb	09:12:49
3	SiO2†	65923.0	65675.3	5172.2 ug/L	5172.2 ppb	09:13:25

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	687932.5	99.760	%	0.2402				0.24%
Sc Radial	3764.6	98.1	%	0.19				0.19%
Y 371.029	468777.3	86.519	%	0.3534				0.41%
Y RADIAL	4248.7	98.08	%	1.641				1.67%
Ag 328.068†	87497.0	485.11	ug/L	4.022	485.11	ppb	4.022	0.83%
QC value within limits for Ag 328.068 Recovery = 97.02%								
Al 396.153Radial†	4749.8	4976.4	ug/L	32.45	4976.4	ppb	32.45	0.65%
QC value within limits for Al 396.153Radial Recovery = 99.53%								
As 188.979†	959.3	479.21	ug/L	3.205	479.21	ppb	3.205	0.67%
QC value within limits for As 188.979 Recovery = 95.84%								
B 249.677†	19399.1	485.83	ug/L	4.210	485.83	ppb	4.210	0.87%
QC value within limits for B 249.677 Recovery = 97.17%								
Ba 233.527†	50137.0	485.79	ug/L	3.254	485.79	ppb	3.254	0.67%
QC value within limits for Ba 233.527 Recovery = 97.16%								
Be 313.107†	1205616.7	488.01	ug/L	0.589	488.01	ppb	0.589	0.12%
QC value within limits for Be 313.107 Recovery = 97.60%								
Ca 317.933Radial†	2617.1	5138.8	ug/L	21.61	5138.8	ppb	21.61	0.42%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.78%
Cd 226.502†            32973.3      481.93 ug/L         3.705      481.93 ppb          3.705   0.77%
   QC value within limits for Cd 226.502  Recovery = 96.39%
Co 228.616†            19931.2      493.77 ug/L         3.109      493.77 ppb          3.109   0.63%
   QC value within limits for Co 228.616  Recovery = 98.75%
Cr 267.716†            32800.6      484.89 ug/L         3.300      484.89 ppb          3.300   0.68%
   QC value within limits for Cr 267.716  Recovery = 96.98%
Cu 324.752†           142891.5      475.93 ug/L         4.111      475.93 ppb          4.111   0.86%
   QC value within limits for Cu 324.752  Recovery = 95.19%
Fe 238.204 Radial†       400.0      5099.1 ug/L        39.14      5099.1 ppb         39.14   0.77%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.98%
K 766.490 Radial†      27043.6      5022.8 ug/L        48.64      5022.8 ppb         48.64   0.97%
   QC value within limits for K 766.490 Radial  Recovery = 100.46%
Mg 279.077 IEC†          125.7      5177.7 ug/L        19.03      5177.7 ppb         19.03   0.37%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.55%
Mn 257.610†           370143.0      479.23 ug/L         3.106      479.23 ppb          3.106   0.65%
   QC value within limits for Mn 257.610  Recovery = 95.85%
Mo 202.031†            5067.2      487.20 ug/L         3.888      487.20 ppb          3.888   0.80%
   QC value within limits for Mo 202.031  Recovery = 97.44%
Na 589.592 Radial†     23089.4       10162 ug/L         65.8       10162 ppb          65.8   0.65%
   QC value within limits for Na 589.592 Radial  Recovery = 101.62%
Ni 231.604†            15081.5      491.49 ug/L         2.652      491.49 ppb          2.652   0.54%
   QC value within limits for Ni 231.604  Recovery = 98.30%
P 214.914†              3736.6      2295.8 ug/L        25.18      2295.8 ppb         25.18   1.10%
   QC value within limits for P 214.914  Recovery = 91.83%
Pb 220.353†             3078.2      485.95 ug/L         2.086      485.95 ppb          2.086   0.43%
   QC value within limits for Pb 220.353  Recovery = 97.19%
S 181.975 Axial†         631.7      948.26 ug/L         9.257      948.26 ppb          9.257   0.98%
   QC value within limits for S 181.975 Axial  Recovery = 94.83%
Sb 206.836†             1198.3      496.90 ug/L         1.572      496.90 ppb          1.572   0.32%
   QC value within limits for Sb 206.836  Recovery = 99.38%
Se 196.026†              642.9      493.24 ug/L         4.800      493.24 ppb          4.800   0.97%
   QC value within limits for Se 196.026  Recovery = 98.65%
Si 251.611†            66045.8      2411.9 ug/L        21.29      2411.9 ppb         21.29   0.88%
   QC value within limits for Si 251.611  Recovery = 96.47%
Sn 189.927†             2120.3      488.01 ug/L         3.966      488.01 ppb          3.966   0.81%
   QC value within limits for Sn 189.927  Recovery = 97.60%
Sr 421.552†            51375.6      493.25 ug/L         2.566      493.25 ppb          2.566   0.52%
   QC value within limits for Sr 421.552  Recovery = 98.65%
Ti 334.940†           266672.3      483.87 ug/L         3.303      483.87 ppb          3.303   0.68%
   QC value within limits for Ti 334.940  Recovery = 96.77%
Tl 190.801†             1266.5      490.46 ug/L         3.923      490.46 ppb          3.923   0.80%
   QC value within limits for Tl 190.801  Recovery = 98.09%
U 409.014†             12329.1      473.25 ug/L         9.078      473.25 ppb          9.078   1.92%
   QC value within limits for U 409.014  Recovery = 94.65%
V 292.402†             54551.5      487.35 ug/L         3.763      487.35 ppb          3.763   0.77%
   QC value within limits for V 292.402  Recovery = 97.47%
Zn 213.857†            42094.7      476.96 ug/L         3.237      476.96 ppb          3.237   0.68%
   QC value within limits for Zn 213.857  Recovery = 95.39%
SiO2†                  65476.7      5156.5 ug/L        27.55      5156.5 ppb         27.55   0.53%
   QC value within limits for SiO2  Recovery = 96.43%
All analyte(s) passed QC.
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Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 4/1/2010 09:15:35
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	3682.9	3682.9	95.9	%			09:17:48
1	Y RADIAL	3937.9	3937.9	90.91	%			09:17:28
1	Al 396.153Radial†	-77.1	11.9	12.475	ug/L	12.475	ppb	09:17:28
1	Ca 317.933Radial†	19.9	2.1	4.1926	ug/L	4.1926	ppb	09:17:48
1	Fe 238.204 Radial†	7.5	1.7	21.060	ug/L	21.060	ppb	09:17:48
1	K 766.490 Radial†	3232.6	373.4	69.487	ug/L	69.487	ppb	09:17:28
1	Mg 279.077 IEC†	3.5	0.6	24.233	ug/L	24.233	ppb	09:17:48
1	Na 589.592 Radial†	-1289.2	-265.9	-117.01	ug/L	-117.01	ppb	09:17:28
1	Sr 421.552†	15.7	2.5	0.0236	ug/L	0.0236	ppb	09:17:28
1	Sc 361.383	640852.2	640852.2	92.933	%			09:18:45
1	Y 371.029	504229.3	504229.3	93.062	%			09:18:45
1	Ag 328.068†	157.4	69.5	0.3953	ug/L	0.3953	ppb	09:18:45
1	As 188.979†	-24.1	-3.2	-1.5709	ug/L	-1.5709	ppb	09:19:05
1	B 249.677†	56.3	643.6	16.189	ug/L	16.189	ppb	09:18:45
1	Ba 233.527†	-3.7	-4.8	-0.0482	ug/L	-0.0482	ppb	09:19:05
1	Be 313.107†	-4160.0	46.9	0.0184	ug/L	0.0184	ppb	09:18:45
1	Cd 226.502†	-201.7	-3.6	-0.0572	ug/L	-0.0572	ppb	09:19:05
1	Co 228.616†	-54.7	0.8	0.0207	ug/L	0.0207	ppb	09:19:05
1	Cr 267.716†	109.4	26.5	0.3963	ug/L	0.3963	ppb	09:18:45
1	Cu 324.752†	5566.0	301.3	1.0123	ug/L	1.0123	ppb	09:18:45
1	Mn 257.610†	453.2	42.7	0.0563	ug/L	0.0563	ppb	09:19:05
1	Mo 202.031†	17.8	6.7	0.6425	ug/L	0.6425	ppb	09:19:05
1	Ni 231.604†	68.7	-0.7	-0.0229	ug/L	-0.0229	ppb	09:19:05
1	P 214.914†	223.3	21.8	13.707	ug/L	13.707	ppb	09:19:05
1	Pb 220.353†	-64.8	-2.7	-0.4225	ug/L	-0.4225	ppb	09:19:05
1	S 181.975 Axial†	35.6	-2.0	-2.9485	ug/L	-2.9485	ppb	09:19:05
1	Sb 206.836†	37.8	8.9	3.6109	ug/L	3.6109	ppb	09:19:05
1	Se 196.026†	-16.4	4.5	3.3681	ug/L	3.3681	ppb	09:19:05
1	Si 251.611†	548.8	93.9	3.4304	ug/L	3.4304	ppb	09:19:05
1	Sn 189.927†	9.8	6.4	1.4699	ug/L	1.4699	ppb	09:19:05
1	Ti 334.940†	-1448.7	-137.4	-0.2448	ug/L	-0.2448	ppb	09:18:45
1	Tl 190.801†	-39.3	-4.4	-1.6836	ug/L	-1.6836	ppb	09:19:05
1	U 409.014†	-2566.3	-355.0	-13.677	ug/L	-13.677	ppb	09:18:45
1	V 292.402†	-1727.8	-142.7	-1.2780	ug/L	-1.2780	ppb	09:18:45
1	Zn 213.857†	702.7	91.6	1.0430	ug/L	1.0430	ppb	09:19:05
1	SiO2†	556.2	59.3	4.6667	ug/L	4.6667	ppb	09:20:01
2	Sc Radial	3873.2	3873.2	101	%			09:18:13
2	Y RADIAL	4418.1	4418.1	102.0	%			09:17:53
2	Al 396.153Radial†	-90.6	2.4	2.5842	ug/L	2.5842	ppb	09:17:53
2	Ca 317.933Radial†	17.2	-1.6	-3.1286	ug/L	-3.1286	ppb	09:18:13
2	Fe 238.204 Radial†	6.5	0.3	3.7410	ug/L	3.7410	ppb	09:18:13
2	K 766.490 Radial†	3404.0	377.7	70.262	ug/L	70.262	ppb	09:17:53
2	Mg 279.077 IEC†	-0.4	-3.4	-141.21	ug/L	-141.21	ppb	09:18:13
2	Na 589.592 Radial†	-1184.7	-96.3	-42.387	ug/L	-42.387	ppb	09:17:53
2	Sr 421.552†	32.1	18.0	0.1726	ug/L	0.1726	ppb	09:17:53
2	Sc 361.383	693895.7	693895.7	100.62	%			09:19:10
2	Y 371.029	546763.5	546763.5	100.91	%			09:19:10
2	Ag 328.068†	199.8	98.6	0.5432	ug/L	0.5432	ppb	09:19:10
2	As 188.979†	-28.2	-5.3	-2.6107	ug/L	-2.6107	ppb	09:19:30
2	B 249.677†	95.9	678.3	17.065	ug/L	17.065	ppb	09:19:10
2	Ba 233.527†	7.6	6.8	0.0675	ug/L	0.0675	ppb	09:19:30
2	Be 313.107†	-4446.8	104.1	0.0418	ug/L	0.0418	ppb	09:19:10
2	Cd 226.502†	-195.2	19.4	0.2852	ug/L	0.2852	ppb	09:19:30
2	Co 228.616†	-44.7	15.2	0.3772	ug/L	0.3772	ppb	09:19:30
2	Cr 267.716†	116.3	24.3	0.3571	ug/L	0.3571	ppb	09:19:10
2	Cu 324.752†	5736.9	13.3	0.0416	ug/L	0.0416	ppb	09:19:10
2	Mn 257.610†	446.2	-1.6	0.0041	ug/L	0.0041	ppb	09:19:30
2	Mo 202.031†	11.4	-1.2	-0.1115	ug/L	-0.1115	ppb	09:19:30
2	Ni 231.604†	102.6	27.3	0.8886	ug/L	0.8886	ppb	09:19:30

2	P 214.914†	217.1	-2.8	-1.8024	ug/L	-1.8024	ppb	09:19:30
2	Pb 220.353†	-69.5	-2.0	-0.3176	ug/L	-0.3176	ppb	09:19:30
2	S 181.975 Axial†	43.1	2.6	3.8850	ug/L	3.8850	ppb	09:19:30
2	Sb 206.836†	25.6	-6.3	-2.5125	ug/L	-2.5125	ppb	09:19:30
2	Se 196.026†	-23.2	-1.0	-0.7036	ug/L	-0.7036	ppb	09:19:30
2	Si 251.611†	542.4	42.4	1.5537	ug/L	1.5537	ppb	09:19:30
2	Sn 189.927†	1.5	-2.6	-0.6049	ug/L	-0.6049	ppb	09:19:30
2	Ti 334.940†	-1485.4	-54.7	-0.0906	ug/L	-0.0906	ppb	09:19:10
2	Tl 190.801†	-24.5	13.6	5.2130	ug/L	5.2130	ppb	09:19:30
2	U 409.014†	-2284.3	136.4	5.2533	ug/L	5.2533	ppb	09:19:10
2	V 292.402†	-1647.9	78.7	0.6993	ug/L	0.6993	ppb	09:19:10
2	Zn 213.857†	711.5	42.5	0.4798	ug/L	0.4798	ppb	09:19:30
2	SiO2†	530.4	-12.0	-0.9450	ug/L	-0.9450	ppb	09:20:06
3	Sc Radial	3789.5	3789.5	98.7	%			09:18:38
3	Y RADIAL	4170.1	4170.1	96.27	%			09:18:18
3	Al 396.153Radial†	-103.9	-13.0	-13.679	ug/L	-13.679	ppb	09:18:18
3	Ca 317.933Radial†	22.0	3.6	7.1296	ug/L	7.1296	ppb	09:18:38
3	Fe 238.204 Radial†	6.3	0.1	1.8791	ug/L	1.8791	ppb	09:18:38
3	K 766.490 Radial†	3260.3	306.7	57.063	ug/L	57.063	ppb	09:18:18
3	Mg 279.077 IEC†	3.1	0.1	3.2048	ug/L	3.2048	ppb	09:18:38
3	Na 589.592 Radial†	-1201.6	-139.3	-61.325	ug/L	-61.325	ppb	09:18:18
3	Sr 421.552†	27.9	14.4	0.1379	ug/L	0.1379	ppb	09:18:18
3	Sc 361.383	683991.3	683991.3	99.188	%			09:19:35
3	Y 371.029	538350.8	538350.8	99.359	%			09:19:35
3	Ag 328.068†	134.2	35.4	0.1983	ug/L	0.1983	ppb	09:19:35
3	As 188.979†	-22.4	0.2	0.0864	ug/L	0.0864	ppb	09:19:55
3	B 249.677†	97.5	681.4	17.143	ug/L	17.143	ppb	09:19:35
3	Ba 233.527†	7.7	6.9	0.0667	ug/L	0.0667	ppb	09:19:55
3	Be 313.107†	-4318.3	169.7	0.0684	ug/L	0.0684	ppb	09:19:35
3	Cd 226.502†	-174.7	37.4	0.5453	ug/L	0.5453	ppb	09:19:55
3	Co 228.616†	-67.2	-8.1	-0.1993	ug/L	-0.1993	ppb	09:19:55
3	Cr 267.716†	93.2	2.7	0.0410	ug/L	0.0410	ppb	09:19:35
3	Cu 324.752†	5705.5	64.2	0.2165	ug/L	0.2165	ppb	09:19:35
3	Mn 257.610†	446.9	5.5	0.0072	ug/L	0.0072	ppb	09:19:55
3	Mo 202.031†	16.7	4.3	0.4149	ug/L	0.4149	ppb	09:19:55
3	Ni 231.604†	85.1	11.1	0.3616	ug/L	0.3616	ppb	09:19:55
3	P 214.914†	218.1	1.4	0.8394	ug/L	0.8394	ppb	09:19:55
3	Pb 220.353†	-84.7	-18.3	-2.8879	ug/L	-2.8879	ppb	09:19:55
3	S 181.975 Axial†	32.9	-7.0	-10.548	ug/L	-10.548	ppb	09:19:55
3	Sb 206.836†	46.4	15.1	6.0550	ug/L	6.0550	ppb	09:19:55
3	Se 196.026†	-25.9	-4.0	-2.9535	ug/L	-2.9535	ppb	09:19:55
3	Si 251.611†	546.4	54.2	1.9797	ug/L	1.9797	ppb	09:19:55
3	Sn 189.927†	9.7	5.6	1.2940	ug/L	1.2940	ppb	09:19:55
3	Ti 334.940†	-1439.7	-30.0	-0.0516	ug/L	-0.0516	ppb	09:19:35
3	Tl 190.801†	-29.6	8.1	3.1327	ug/L	3.1327	ppb	09:19:55
3	U 409.014†	-2508.4	-122.4	-4.7140	ug/L	-4.7140	ppb	09:19:35
3	V 292.402†	-1726.0	-23.7	-0.2124	ug/L	-0.2124	ppb	09:19:35
3	Zn 213.857†	719.0	60.2	0.6862	ug/L	0.6862	ppb	09:19:55
3	SiO2†	572.2	37.7	2.9657	ug/L	2.9657	ppb	09:20:11

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	672913.1	97.582	%	4.0899				4.19%
Sc Radial	3781.9	98.5	%	2.48				2.52%
Y 371.029	529781.2	97.778	%	4.1572				4.25%
Y RADIAL	4175.4	96.39	%	5.544				5.75%
Ag 328.068†	67.8	0.3789	ug/L	0.17304	0.3789	ppb	0.17304	45.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.5	0.4599	ug/L	13.20585	0.4599	ppb	13.20585	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.8	-1.3651	ug/L	1.36031	-1.3651	ppb	1.36031	99.65%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	667.8	16.799	ug/L	0.5297	16.799	ppb	0.5297	3.15%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	3.0	0.0286	ug/L	0.06657	0.0286	ppb	0.06657	232.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	106.9	0.0429	ug/L	0.02503	0.0429	ppb	0.02503	58.41%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.4	2.7312	ug/L	5.28292	2.7312	ppb	5.28292	193.43%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                17.7      0.2578 ug/L       0.30219      0.2578 ppb        0.30219 117.22%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 2.6      0.0662 ug/L       0.29093      0.0662 ppb        0.29093 439.35%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                17.8      0.2648 ug/L       0.19478      0.2648 ppb        0.19478  73.56%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               126.3      0.4235 ug/L       0.51739      0.4235 ppb        0.51739 122.18%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.7      8.8933 ug/L      10.57756      8.8933 ppb       10.57756 118.94%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         352.6      65.604 ug/L        7.4067      65.604 ppb         7.4067  11.29%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.9     -37.923 ug/L       90.0623     -37.923 ppb        90.0623 237.49%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                15.5      0.0225 ug/L       0.02927      0.0225 ppb        0.02927 129.91%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.3      0.3153 ug/L       0.38676      0.3153 ppb        0.38676 122.66%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -167.2     -73.574 ug/L       38.7908     -73.574 ppb        38.7908  52.72%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                12.5      0.4091 ug/L       0.45757      0.4091 ppb        0.45757 111.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  6.8      4.2481 ug/L       8.29775      4.2481 ppb        8.29775 195.33%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -7.7     -1.2093 ug/L       1.45462     -1.2093 ppb        1.45462 120.28%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.1     -3.2039 ug/L       7.21998     -3.2039 ppb        7.21998 225.35%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.9      2.3844 ug/L       4.41347      2.3844 ppb        4.41347 185.09%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.2     -0.0964 ug/L       3.20427     -0.0964 ppb        3.20427 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                63.5      2.3213 ug/L       0.98390      2.3213 ppb        0.98390  42.39%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 3.1      0.7197 ug/L       1.15051      0.7197 ppb        1.15051 159.87%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                11.6      0.1114 ug/L       0.07794      0.1114 ppb        0.07794  69.98%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -74.0     -0.1290 ug/L       0.10218     -0.1290 ppb        0.10218  79.20%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 5.8      2.2207 ug/L       3.53764      2.2207 ppb        3.53764 159.30%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -113.6     -4.3792 ug/L       9.46957     -4.3792 ppb        9.46957 216.24%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -29.2     -0.2637 ug/L       0.98962     -0.2637 ppb        0.98962 375.27%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                64.8      0.7363 ug/L       0.28497      0.7363 ppb        0.28497  38.70%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      28.3      2.2291 ug/L       2.87748      2.2291 ppb        2.87748 129.09%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 4/1/2010 09:49:27
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	3854.9	3854.9	100	%			09:51:39
1	Y RADIAL	4327.0	4327.0	99.89	%			09:51:19
1	Al 396.153Radial†	4687.1	4759.6	4986.3	ug/L	4986.3	ppb	09:51:19
1	Ca 317.933Radial†	2649.6	2619.8	5144.1	ug/L	5144.1	ppb	09:51:39
1	Fe 238.204 Radial†	409.8	401.9	5122.8	ug/L	5122.8	ppb	09:51:39
1	K 766.490 Radial†	30021.6	26899.1	4995.9	ug/L	4995.9	ppb	09:51:19
1	Mg 279.077 IEC†	131.9	128.3	5284.3	ug/L	5284.3	ppb	09:51:39
1	Na 589.592 Radial†	22291.1	23274.9	10244	ug/L	10244	ppb	09:51:19
1	Sr 421.552†	51588.8	51357.4	493.07	ug/L	493.07	ppb	09:51:19
1	Sc 361.383	689706.5	689706.5	100.02	%			09:52:37
1	Y 371.029	537143.4	537143.4	99.136	%			09:52:37
1	Ag 328.068†	89429.9	89314.6	495.16	ug/L	495.16	ppb	09:52:42
1	As 188.979†	962.6	985.2	492.08	ug/L	492.08	ppb	09:53:02
1	B 249.677†	18931.4	19511.1	488.63	ug/L	488.63	ppb	09:52:42
1	Ba 233.527†	50796.0	50786.4	492.09	ug/L	492.09	ppb	09:52:42
1	Be 313.107†	1212170.7	1216485.1	492.42	ug/L	492.42	ppb	09:52:37
1	Cd 226.502†	33398.8	33606.5	491.20	ug/L	491.20	ppb	09:52:42
1	Co 228.616†	20176.4	20232.6	501.23	ug/L	501.23	ppb	09:52:42
1	Cr 267.716†	33421.6	33324.6	492.63	ug/L	492.63	ppb	09:52:42
1	Cu 324.752†	152276.3	146562.1	488.15	ug/L	488.15	ppb	09:52:42
1	Mn 257.610†	380683.0	380172.4	492.21	ug/L	492.21	ppb	09:52:37
1	Mo 202.031†	5171.4	5158.0	495.92	ug/L	495.92	ppb	09:53:02
1	Ni 231.604†	15399.4	15322.1	499.33	ug/L	499.33	ppb	09:52:42
1	P 214.914†	4030.8	3811.6	2341.4	ug/L	2341.4	ppb	09:53:02
1	Pb 220.353†	3059.4	3125.9	493.47	ug/L	493.47	ppb	09:53:02
1	S 181.975 Axial†	678.2	637.9	957.51	ug/L	957.51	ppb	09:53:02
1	Sb 206.836†	1261.5	1229.6	509.78	ug/L	509.78	ppb	09:53:02
1	Se 196.026†	632.4	654.4	501.84	ug/L	501.84	ppb	09:53:02
1	Si 251.611†	67835.5	67327.2	2458.7	ug/L	2458.7	ppb	09:52:42
1	Sn 189.927†	2178.7	2174.2	500.39	ug/L	500.39	ppb	09:53:02
1	Ti 334.940†	270383.4	271758.3	493.08	ug/L	493.08	ppb	09:52:42
1	Tl 190.801†	1242.5	1280.2	495.82	ug/L	495.82	ppb	09:53:02
1	U 409.014†	10278.0	12682.7	486.85	ug/L	486.85	ppb	09:52:42
1	V 292.402†	53896.1	55603.2	496.76	ug/L	496.76	ppb	09:52:42
1	Zn 213.857†	43423.5	42751.5	484.40	ug/L	484.40	ppb	09:52:42
1	SiO2†	66982.7	66432.0	5231.7	ug/L	5231.7	ppb	09:54:09
2	Sc Radial	3653.9	3653.9	95.2	%			09:52:04
2	Y RADIAL	4140.8	4140.8	95.59	%			09:51:44
2	Al 396.153Radial†	4478.2	4797.0	5026.2	ug/L	5026.2	ppb	09:51:44
2	Ca 317.933Radial†	2525.0	2634.0	5172.1	ug/L	5172.1	ppb	09:52:04
2	Fe 238.204 Radial†	386.7	400.1	5099.5	ug/L	5099.5	ppb	09:52:04
2	K 766.490 Radial†	28908.6	27374.6	5084.3	ug/L	5084.3	ppb	09:51:44
2	Mg 279.077 IEC†	120.3	123.3	5079.5	ug/L	5079.5	ppb	09:52:04
2	Na 589.592 Radial†	21256.3	23409.0	10303	ug/L	10303	ppb	09:51:44
2	Sr 421.552†	49200.4	51674.5	496.12	ug/L	496.12	ppb	09:51:44
2	Sc 361.383	692239.2	692239.2	100.38	%			09:53:08
2	Y 371.029	539012.1	539012.1	99.481	%			09:53:08
2	Ag 328.068†	89615.8	89172.6	494.37	ug/L	494.37	ppb	09:53:13
2	As 188.979†	953.5	972.6	485.87	ug/L	485.87	ppb	09:53:33
2	B 249.677†	18962.8	19473.2	487.68	ug/L	487.68	ppb	09:53:13
2	Ba 233.527†	50999.5	50803.4	492.25	ug/L	492.25	ppb	09:53:13
2	Be 313.107†	1216890.1	1216752.2	492.53	ug/L	492.53	ppb	09:53:08
2	Cd 226.502†	33438.4	33523.8	489.99	ug/L	489.99	ppb	09:53:13
2	Co 228.616†	20248.2	20230.3	501.16	ug/L	501.16	ppb	09:53:13
2	Cr 267.716†	33537.2	33317.4	492.53	ug/L	492.53	ppb	09:53:13
2	Cu 324.752†	152391.8	146120.1	486.68	ug/L	486.68	ppb	09:53:13
2	Mn 257.610†	382528.1	380617.9	492.79	ug/L	492.79	ppb	09:53:08
2	Mo 202.031†	5083.2	5051.3	485.67	ug/L	485.67	ppb	09:53:33
2	Ni 231.604†	15435.6	15301.8	498.67	ug/L	498.67	ppb	09:53:13

2	P 214.914†	3962.9	3729.2	2288.9 ug/L	2288.9 ppb	09:53:33
2	Pb 220.353†	3012.4	3067.9	484.34 ug/L	484.34 ppb	09:53:33
2	S 181.975 Axial†	677.2	634.3	952.18 ug/L	952.18 ppb	09:53:33
2	Sb 206.836†	1251.1	1214.6	503.37 ug/L	503.37 ppb	09:53:33
2	Se 196.026†	627.1	646.8	496.11 ug/L	496.11 ppb	09:53:33
2	Si 251.611†	67992.3	67235.2	2455.4 ug/L	2455.4 ppb	09:53:13
2	Sn 189.927†	2129.1	2116.8	487.22 ug/L	487.22 ppb	09:53:33
2	Ti 334.940†	270999.9	271383.3	492.43 ug/L	492.43 ppb	09:53:13
2	Tl 190.801†	1226.2	1259.5	487.84 ug/L	487.84 ppb	09:53:33
2	U 409.014†	10144.1	12511.8	480.27 ug/L	480.27 ppb	09:53:13
2	V 292.402†	53974.1	55483.8	495.55 ug/L	495.55 ppb	09:53:13
2	Zn 213.857†	43644.8	42813.0	485.11 ug/L	485.11 ppb	09:53:13
2	SiO2†	66116.3	65323.9	5144.5 ug/L	5144.5 ppb	09:54:14
3	Sc Radial	3791.0	3791.0	98.8 %		09:52:30
3	Y RADIAL	4041.1	4041.1	93.29 %		09:52:10
3	Al 396.153Radial†	4407.3	4555.0	4770.9 ug/L	4770.9 ppb	09:52:10
3	Ca 317.933Radial†	2601.5	2615.6	5135.8 ug/L	5135.8 ppb	09:52:30
3	Fe 238.204 Radial†	399.8	398.7	5081.9 ug/L	5081.9 ppb	09:52:30
3	K 766.490 Radial†	28426.7	25788.1	4789.5 ug/L	4789.5 ppb	09:52:10
3	Mg 279.077 IEC†	128.4	127.0	5230.4 ug/L	5230.4 ppb	09:52:30
3	Na 589.592 Radial†	20717.6	22055.8	9707.6 ug/L	9707.6 ppb	09:52:10
3	Sr 421.552†	48217.0	48809.1	468.61 ug/L	468.61 ppb	09:52:10
3	Sc 361.383	673437.3	673437.3	97.658 %		09:53:39
3	Y 371.029	524886.5	524886.5	96.874 %		09:53:39
3	Ag 328.068†	85976.4	87938.4	487.54 ug/L	487.54 ppb	09:53:44
3	As 188.979†	946.1	991.6	495.15 ug/L	495.15 ppb	09:54:04
3	B 249.677†	18048.2	19064.0	477.40 ug/L	477.40 ppb	09:53:44
3	Ba 233.527†	49287.4	50468.6	489.00 ug/L	489.00 ppb	09:53:44
3	Be 313.107†	1176679.4	1209421.8	489.55 ug/L	489.55 ppb	09:53:39
3	Cd 226.502†	32156.2	33140.8	484.39 ug/L	484.39 ppb	09:53:44
3	Co 228.616†	19494.7	20021.9	496.04 ug/L	496.04 ppb	09:53:44
3	Cr 267.716†	32231.4	32913.1	486.55 ug/L	486.55 ppb	09:53:44
3	Cu 324.752†	144952.4	142740.7	475.43 ug/L	475.43 ppb	09:53:44
3	Mn 257.610†	371476.1	379939.9	491.90 ug/L	491.90 ppb	09:53:39
3	Mo 202.031†	5073.7	5182.9	498.31 ug/L	498.31 ppb	09:54:04
3	Ni 231.604†	14933.6	15217.1	495.91 ug/L	495.91 ppb	09:53:44
3	P 214.914†	3919.9	3795.4	2333.5 ug/L	2333.5 ppb	09:54:04
3	Pb 220.353†	3000.5	3139.5	495.58 ug/L	495.58 ppb	09:54:04
3	S 181.975 Axial†	673.2	649.1	974.46 ug/L	974.46 ppb	09:54:04
3	Sb 206.836†	1236.7	1234.6	511.83 ug/L	511.83 ppb	09:54:04
3	Se 196.026†	622.7	659.8	505.68 ug/L	505.68 ppb	09:54:04
3	Si 251.611†	64974.9	66036.6	2411.4 ug/L	2411.4 ppb	09:53:44
3	Sn 189.927†	2124.3	2171.1	499.68 ug/L	499.68 ppb	09:54:04
3	Ti 334.940†	259894.2	267548.4	485.45 ug/L	485.45 ppb	09:53:44
3	Tl 190.801†	1215.7	1282.8	496.78 ug/L	496.78 ppb	09:54:04
3	U 409.014†	9657.7	12295.8	471.96 ug/L	471.96 ppb	09:53:44
3	V 292.402†	51793.3	54751.8	489.27 ug/L	489.27 ppb	09:53:44
3	Zn 213.857†	41784.3	42121.8	477.24 ug/L	477.24 ppb	09:53:44
3	SiO2†	66488.1	67543.4	5319.4 ug/L	5319.4 ppb	09:54:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	685127.7	99.353	%	1.4796				1.49%
Sc Radial	3766.6	98.1	%	2.68				2.73%
Y 371.029	533680.7	98.497	%	1.4162				1.44%
Y RADIAL	4169.6	96.26	%	3.349				3.48%
Ag 328.068†	88808.5	492.36	ug/L	4.186	492.36	ppb	4.186	0.85%
QC value within limits for Ag 328.068 Recovery = 98.47%								
Al 396.153Radial†	4703.9	4927.8	ug/L	137.37	4927.8	ppb	137.37	2.79%
QC value within limits for Al 396.153Radial Recovery = 98.56%								
As 188.979†	983.2	491.03	ug/L	4.730	491.03	ppb	4.730	0.96%
QC value within limits for As 188.979 Recovery = 98.21%								
B 249.677†	19349.5	484.57	ug/L	6.226	484.57	ppb	6.226	1.28%
QC value within limits for B 249.677 Recovery = 96.91%								
Ba 233.527†	50686.1	491.11	ug/L	1.832	491.11	ppb	1.832	0.37%
QC value within limits for Ba 233.527 Recovery = 98.22%								
Be 313.107†	1214219.7	491.50	ug/L	1.689	491.50	ppb	1.689	0.34%
QC value within limits for Be 313.107 Recovery = 98.30%								
Ca 317.933Radial†	2623.1	5150.7	ug/L	19.00	5150.7	ppb	19.00	0.37%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.01%
Cd 226.502†            33423.7      488.52 ug/L         3.633      488.52 ppb          3.633   0.74%
   QC value within limits for Cd 226.502  Recovery = 97.70%
Co 228.616†            20161.6      499.48 ug/L         2.977      499.48 ppb          2.977   0.60%
   QC value within limits for Co 228.616  Recovery = 99.90%
Cr 267.716†            33185.0      490.57 ug/L         3.480      490.57 ppb          3.480   0.71%
   QC value within limits for Cr 267.716  Recovery = 98.11%
Cu 324.752†           145141.0      483.42 ug/L         6.960      483.42 ppb          6.960   1.44%
   QC value within limits for Cu 324.752  Recovery = 96.68%
Fe 238.204 Radial†       400.2      5101.4 ug/L        20.56      5101.4 ppb         20.56   0.40%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.03%
K 766.490 Radial†      26687.3      4956.6 ug/L       151.29      4956.6 ppb        151.29   3.05%
   QC value within limits for K 766.490 Radial  Recovery = 99.13%
Mg 279.077 IEC†          126.2      5198.1 ug/L       106.17      5198.1 ppb        106.17   2.04%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.96%
Mn 257.610†           380243.4      492.30 ug/L         0.450      492.30 ppb          0.450   0.09%
   QC value within limits for Mn 257.610  Recovery = 98.46%
Mo 202.031†             5130.7      493.30 ug/L         6.714      493.30 ppb          6.714   1.36%
   QC value within limits for Mo 202.031  Recovery = 98.66%
Na 589.592 Radial†     22913.3       10085 ug/L       328.2        10085 ppb        328.2   3.25%
   QC value within limits for Na 589.592 Radial  Recovery = 100.85%
Ni 231.604†            15280.3      497.97 ug/L         1.815      497.97 ppb          1.815   0.36%
   QC value within limits for Ni 231.604  Recovery = 99.59%
P 214.914†              3778.7      2321.3 ug/L        28.28      2321.3 ppb         28.28   1.22%
   QC value within limits for P 214.914  Recovery = 92.85%
Pb 220.353†             3111.1      491.13 ug/L         5.973      491.13 ppb          5.973   1.22%
   QC value within limits for Pb 220.353  Recovery = 98.23%
S 181.975 Axial†         640.5      961.38 ug/L        11.633      961.38 ppb         11.633   1.21%
   QC value within limits for S 181.975 Axial  Recovery = 96.14%
Sb 206.836†             1226.3      508.32 ug/L         4.414      508.32 ppb          4.414   0.87%
   QC value within limits for Sb 206.836  Recovery = 101.66%
Se 196.026†              653.6      501.21 ug/L         4.820      501.21 ppb          4.820   0.96%
   QC value within limits for Se 196.026  Recovery = 100.24%
Si 251.611†            66866.4      2441.8 ug/L        26.41      2441.8 ppb         26.41   1.08%
   QC value within limits for Si 251.611  Recovery = 97.67%
Sn 189.927†             2154.0      495.77 ug/L         7.407      495.77 ppb          7.407   1.49%
   QC value within limits for Sn 189.927  Recovery = 99.15%
Sr 421.552†            50613.7      485.93 ug/L        15.082      485.93 ppb         15.082   3.10%
   QC value within limits for Sr 421.552  Recovery = 97.19%
Ti 334.940†           270230.0      490.32 ug/L         4.227      490.32 ppb          4.227   0.86%
   QC value within limits for Ti 334.940  Recovery = 98.06%
Tl 190.801†             1274.2      493.48 ug/L         4.907      493.48 ppb          4.907   0.99%
   QC value within limits for Tl 190.801  Recovery = 98.70%
U 409.014†             12496.8      479.69 ug/L         7.459      479.69 ppb          7.459   1.56%
   QC value within limits for U 409.014  Recovery = 95.94%
V 292.402†             55279.6      493.86 ug/L         4.018      493.86 ppb          4.018   0.81%
   QC value within limits for V 292.402  Recovery = 98.77%
Zn 213.857†            42562.1      482.25 ug/L         4.353      482.25 ppb          4.353   0.90%
   QC value within limits for Zn 213.857  Recovery = 96.45%
SiO2†                  66433.1      5231.9 ug/L        87.45      5231.9 ppb         87.45   1.67%
   QC value within limits for SiO2  Recovery = 97.84%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 4/1/2010 09:56:29
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	3738.7	3738.7	97.4	%			09:58:42
1	Y RADIAL	4095.8	4095.8	94.55	%			09:58:22
1	Al 396.153Radial†	-92.5	-2.7	-2.8556	ug/L	-2.8556	ppb	09:58:22
1	Ca 317.933Radial†	17.8	-0.3	-0.6648	ug/L	-0.6648	ppb	09:58:42
1	Fe 238.204 Radial†	7.8	1.8	23.238	ug/L	23.238	ppb	09:58:42
1	K 766.490 Radial†	3172.4	261.3	48.612	ug/L	48.612	ppb	09:58:22
1	Mg 279.077 IEC†	1.9	-1.1	-45.345	ug/L	-45.345	ppb	09:58:42
1	Na 589.592 Radial†	-1153.5	-106.6	-46.898	ug/L	-46.898	ppb	09:58:22
1	Sr 421.552†	45.8	33.1	0.3181	ug/L	0.3181	ppb	09:58:22
1	Sc 361.383	683986.3	683986.3	99.188	%			09:59:39
1	Y 371.029	537723.5	537723.5	99.244	%			09:59:39
1	Ag 328.068†	27.6	-72.1	-0.3930	ug/L	-0.3930	ppb	09:59:39
1	As 188.979†	-19.9	2.7	1.3310	ug/L	1.3310	ppb	09:59:59
1	B 249.677†	-210.7	370.6	9.3196	ug/L	9.3196	ppb	09:59:59
1	Ba 233.527†	-4.0	-4.9	-0.0474	ug/L	-0.0474	ppb	09:59:59
1	Be 313.107†	-4383.7	103.7	0.0416	ug/L	0.0416	ppb	09:59:39
1	Cd 226.502†	-211.8	-0.0	-0.0029	ug/L	-0.0029	ppb	09:59:59
1	Co 228.616†	-56.5	2.7	0.0678	ug/L	0.0678	ppb	09:59:59
1	Cr 267.716†	70.0	-20.7	-0.3043	ug/L	-0.3043	ppb	09:59:59
1	Cu 324.752†	5544.3	-98.3	-0.3266	ug/L	-0.3266	ppb	09:59:39
1	Mn 257.610†	436.9	-4.5	-0.0017	ug/L	-0.0017	ppb	09:59:59
1	Mo 202.031†	13.5	1.2	0.1126	ug/L	0.1126	ppb	09:59:59
1	Ni 231.604†	77.6	3.6	0.1162	ug/L	0.1162	ppb	09:59:59
1	P 214.914†	218.7	2.0	1.3611	ug/L	1.3611	ppb	09:59:59
1	Pb 220.353†	-76.4	-10.1	-1.5847	ug/L	-1.5847	ppb	09:59:59
1	S 181.975 Axial†	39.9	-0.1	-0.0765	ug/L	-0.0765	ppb	09:59:59
1	Sb 206.836†	32.4	0.9	0.3766	ug/L	0.3766	ppb	09:59:59
1	Se 196.026†	-23.8	-1.9	-1.3130	ug/L	-1.3130	ppb	09:59:59
1	Si 251.611†	523.7	31.4	1.1478	ug/L	1.1478	ppb	09:59:59
1	Sn 189.927†	10.7	6.6	1.5251	ug/L	1.5251	ppb	09:59:59
1	Ti 334.940†	-1481.4	-72.1	-0.1275	ug/L	-0.1275	ppb	09:59:39
1	Tl 190.801†	-37.3	0.4	0.1447	ug/L	0.1447	ppb	09:59:59
1	U 409.014†	-2362.4	24.7	0.9510	ug/L	0.9510	ppb	09:59:39
1	V 292.402†	-1764.6	-62.7	-0.5533	ug/L	-0.5533	ppb	09:59:39
1	Zn 213.857†	710.3	51.5	0.5854	ug/L	0.5854	ppb	09:59:59
1	SiO2†	570.0	35.5	2.8005	ug/L	2.8005	ppb	10:00:55
2	Sc Radial	3884.7	3884.7	101	%			09:59:07
2	Y RADIAL	4091.0	4091.0	94.44	%			09:58:47
2	Al 396.153Radial†	-98.5	-5.0	-5.3282	ug/L	-5.3282	ppb	09:58:47
2	Ca 317.933Radial†	20.2	1.3	2.4920	ug/L	2.4920	ppb	09:59:07
2	Fe 238.204 Radial†	6.6	0.4	4.7701	ug/L	4.7701	ppb	09:59:07
2	K 766.490 Radial†	3110.9	78.2	14.549	ug/L	14.549	ppb	09:58:47
2	Mg 279.077 IEC†	1.0	-2.0	-81.481	ug/L	-81.481	ppb	09:59:07
2	Na 589.592 Radial†	-1155.5	-64.0	-28.151	ug/L	-28.151	ppb	09:58:47
2	Sr 421.552†	-12.2	-25.9	-0.2489	ug/L	-0.2489	ppb	09:58:47
2	Sc 361.383	682105.8	682105.8	98.915	%			10:00:04
2	Y 371.029	535412.2	535412.2	98.817	%			10:00:04
2	Ag 328.068†	211.0	113.4	0.6241	ug/L	0.6241	ppb	10:00:04
2	As 188.979†	-27.4	-4.9	-2.4290	ug/L	-2.4290	ppb	10:00:24
2	B 249.677†	-228.0	352.5	8.8672	ug/L	8.8672	ppb	10:00:24
2	Ba 233.527†	10.0	9.3	0.0872	ug/L	0.0872	ppb	10:00:24
2	Be 313.107†	-4403.1	71.8	0.0288	ug/L	0.0288	ppb	10:00:04
2	Cd 226.502†	-191.4	20.0	0.2912	ug/L	0.2912	ppb	10:00:24
2	Co 228.616†	-53.4	5.7	0.1429	ug/L	0.1429	ppb	10:00:24
2	Cr 267.716†	93.1	2.9	0.0423	ug/L	0.0423	ppb	10:00:24
2	Cu 324.752†	5727.1	101.9	0.3416	ug/L	0.3416	ppb	10:00:04
2	Mn 257.610†	452.7	12.7	0.0202	ug/L	0.0202	ppb	10:00:24
2	Mo 202.031†	15.2	2.9	0.2772	ug/L	0.2772	ppb	10:00:24
2	Ni 231.604†	71.5	-2.4	-0.0783	ug/L	-0.0783	ppb	10:00:24

2	P 214.914†	223.7	7.6	4.8152 ug/L	4.8152 ppb	10:00:24
2	Pb 220.353†	-74.0	-7.8	-1.2250 ug/L	-1.2250 ppb	10:00:24
2	S 181.975 Axial†	35.2	-4.7	-7.0479 ug/L	-7.0479 ppb	10:00:24
2	Sb 206.836†	36.7	5.4	2.1865 ug/L	2.1865 ppb	10:00:24
2	Se 196.026†	-20.6	1.3	0.9781 ug/L	0.9781 ppb	10:00:24
2	Si 251.611†	525.0	34.2	1.2480 ug/L	1.2480 ppb	10:00:24
2	Sn 189.927†	13.8	9.8	2.2487 ug/L	2.2487 ppb	10:00:24
2	Ti 334.940†	-1453.8	-48.3	-0.0791 ug/L	-0.0791 ppb	10:00:04
2	Tl 190.801†	-23.1	14.6	5.6025 ug/L	5.6025 ppb	10:00:24
2	U 409.014†	-2468.1	-88.7	-3.4161 ug/L	-3.4161 ppb	10:00:04
2	V 292.402†	-1833.8	-137.6	-1.2175 ug/L	-1.2175 ppb	10:00:04
2	Zn 213.857†	704.4	47.5	0.5430 ug/L	0.5430 ppb	10:00:24
2	SiO2†	497.5	-36.2	-2.8622 ug/L	-2.8622 ppb	10:01:00
3	Sc Radial	3799.5	3799.5	99.0 %		09:59:32
3	Y RADIAL	4238.6	4238.6	97.85 %		09:59:12
3	Al 396.153Radial†	-89.8	1.6	1.6620 ug/L	1.6620 ppb	09:59:12
3	Ca 317.933Radial†	20.8	2.3	4.5987 ug/L	4.5987 ppb	09:59:32
3	Fe 238.204 Radial†	8.4	2.3	29.786 ug/L	29.786 ppb	09:59:32
3	K 766.490 Radial†	3253.8	291.5	54.231 ug/L	54.231 ppb	09:59:12
3	Mg 279.077 IEC†	5.1	2.2	88.556 ug/L	88.556 ppb	09:59:32
3	Na 589.592 Radial†	-1160.0	-94.2	-41.443 ug/L	-41.443 ppb	09:59:12
3	Sr 421.552†	17.1	3.4	0.0330 ug/L	0.0330 ppb	09:59:12
3	Sc 361.383	684805.1	684805.1	99.306 %		10:00:30
3	Y 371.029	536757.6	536757.6	99.065 %		10:00:30
3	Ag 328.068†	64.1	-35.4	-0.1776 ug/L	-0.1776 ppb	10:00:30
3	As 188.979†	-13.6	9.1	4.4961 ug/L	4.4961 ppb	10:00:50
3	B 249.677†	-230.5	350.9	8.8255 ug/L	8.8255 ppb	10:00:50
3	Ba 233.527†	-4.8	-5.6	-0.0538 ug/L	-0.0538 ppb	10:00:50
3	Be 313.107†	-4512.7	-21.0	-0.0088 ug/L	-0.0088 ppb	10:00:30
3	Cd 226.502†	-201.7	10.4	0.1466 ug/L	0.1466 ppb	10:00:50
3	Co 228.616†	-71.5	-12.3	-0.3065 ug/L	-0.3065 ppb	10:00:50
3	Cr 267.716†	78.4	-12.3	-0.1747 ug/L	-0.1747 ppb	10:00:50
3	Cu 324.752†	5670.4	22.1	0.0816 ug/L	0.0816 ppb	10:00:30
3	Mn 257.610†	467.9	26.2	0.0332 ug/L	0.0332 ppb	10:00:50
3	Mo 202.031†	6.4	-6.1	-0.5796 ug/L	-0.5796 ppb	10:00:50
3	Ni 231.604†	84.9	10.8	0.3517 ug/L	0.3517 ppb	10:00:50
3	P 214.914†	222.4	5.4	3.4492 ug/L	3.4492 ppb	10:00:50
3	Pb 220.353†	-69.1	-2.5	-0.4036 ug/L	-0.4036 ppb	10:00:50
3	S 181.975 Axial†	37.5	-2.5	-3.7429 ug/L	-3.7429 ppb	10:00:50
3	Sb 206.836†	36.0	4.5	1.8126 ug/L	1.8126 ppb	10:00:50
3	Se 196.026†	-27.3	-5.4	-3.9190 ug/L	-3.9190 ppb	10:00:50
3	Si 251.611†	514.8	21.8	0.8038 ug/L	0.8038 ppb	10:00:50
3	Sn 189.927†	7.2	3.2	0.7271 ug/L	0.7271 ppb	10:00:50
3	Ti 334.940†	-1482.8	-71.6	-0.1313 ug/L	-0.1313 ppb	10:00:30
3	Tl 190.801†	-27.8	9.9	3.8130 ug/L	3.8130 ppb	10:00:50
3	U 409.014†	-2696.5	-308.8	-11.899 ug/L	-11.899 ppb	10:00:30
3	V 292.402†	-1750.1	-45.9	-0.4381 ug/L	-0.4381 ppb	10:00:30
3	Zn 213.857†	678.3	18.5	0.2045 ug/L	0.2045 ppb	10:00:50
3	SiO2†	556.9	21.7	1.7260 ug/L	1.7260 ppb	10:01:05

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	683632.4	99.136	%	0.2007				0.20%
Sc Radial	3807.6	99.2	%	1.91				1.93%
Y 371.029	536631.1	99.042	%	0.2142				0.22%
Y RADIAL	4141.8	95.61	%	1.936				2.03%
Ag 328.068†	2.0	0.0178	ug/L	0.53596	0.0178	ppb	0.53596	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.1	-2.1739	ug/L	3.54462	-2.1739	ppb	3.54462	163.05%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.3	1.1327	ug/L	3.46682	1.1327	ppb	3.46682	306.07%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	358.0	9.0041	ug/L	0.27401	9.0041	ppb	0.27401	3.04%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.4	-0.0047	ug/L	0.07962	-0.0047	ppb	0.07962	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	51.5	0.0205	ug/L	0.02617	0.0205	ppb	0.02617	127.46%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.1	2.1420	ug/L	2.64915	2.1420	ppb	2.64915	123.68%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              10.1      0.1450 ug/L       0.14704      0.1450 ppb        0.14704 101.42%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -1.3     -0.0319 ug/L       0.24073     -0.0319 ppb        0.24073 753.79%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -10.1     -0.1456 ug/L       0.17514     -0.1456 ppb        0.17514 120.31%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               8.6      0.0322 ug/L       0.33686      0.0322 ppb        0.33686 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.5      19.265 ug/L       12.9728      19.265 ppb        12.9728  67.34%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       210.3      39.131 ug/L       21.4726      39.131 ppb        21.4726  54.87%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.3     -12.757 ug/L       89.5802     -12.757 ppb        89.5802 702.23%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              11.5      0.0172 ug/L       0.01767      0.0172 ppb        0.01767 102.47%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -0.7     -0.0633 ug/L       0.45465     -0.0633 ppb        0.45465 718.75%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -88.2     -38.830 ug/L        9.6428     -38.830 ppb         9.6428  24.83%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               4.0      0.1299 ug/L       0.21537      0.1299 ppb        0.21537 165.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                5.0      3.2085 ug/L       1.73959      3.2085 ppb        1.73959  54.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -6.8     -1.0711 ug/L       0.60537     -1.0711 ppb        0.60537  56.52%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -2.4     -3.6224 ug/L       3.48727     -3.6224 ppb        3.48727  96.27%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               3.6      1.4586 ug/L       0.95551      1.4586 ppb        0.95551  65.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -2.0     -1.4180 ug/L       2.45023     -1.4180 ppb        2.45023 172.80%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              29.1      1.0666 ug/L       0.23299      1.0666 ppb        0.23299  21.84%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               6.5      1.5003 ug/L       0.76109      1.5003 ppb        0.76109  50.73%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               3.5      0.0340 ug/L       0.28351      0.0340 ppb        0.28351 832.70%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -64.0     -0.1126 ug/L       0.02910     -0.1126 ppb        0.02910  25.83%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               8.3      3.1867 ug/L       2.78226      3.1867 ppb        2.78226  87.31%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -124.3     -4.7880 ug/L       6.53389     -4.7880 ppb        6.53389 136.46%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -82.1     -0.7363 ug/L       0.42068     -0.7363 ppb        0.42068  57.13%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              39.2      0.4443 ug/L       0.20876      0.4443 ppb        0.20876  46.99%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     7.0      0.5548 ug/L       3.00755      0.5548 ppb        3.00755 542.12%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 4/1/2010 10:49:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3684.0	3684.0	96.0	%			10:52:00
1	Y RADIAL	4171.6	4171.6	96.30	%			10:51:40
1	Al 396.153Radial†	4453.6	4732.7	4958.2	ug/L	4958.2	ppb	10:51:40
1	Ca 317.933Radial†	2562.3	2651.2	5205.7	ug/L	5205.7	ppb	10:52:00
1	Fe 238.204 Radial†	389.3	399.4	5091.3	ug/L	5091.3	ppb	10:52:00
1	K 766.490 Radial†	28814.5	27027.9	5019.9	ug/L	5019.9	ppb	10:51:40
1	Mg 279.077 IEC†	123.3	125.4	5166.8	ug/L	5166.8	ppb	10:52:00
1	Na 589.592 Radial†	20881.1	22835.2	10051	ug/L	10051	ppb	10:51:40
1	Sr 421.552†	48827.7	50862.9	488.32	ug/L	488.32	ppb	10:51:40
1	Sc 361.383	693604.5	693604.5	100.58	%			10:52:57
1	Y 371.029	540460.1	540460.1	99.749	%			10:52:57
1	Ag 328.068†	90053.3	89431.9	495.79	ug/L	495.79	ppb	10:53:03
1	As 188.979†	965.5	982.7	490.83	ug/L	490.83	ppb	10:53:23
1	B 249.677†	19080.2	19552.7	489.68	ug/L	489.68	ppb	10:53:03
1	Ba 233.527†	51099.8	50803.1	492.25	ug/L	492.25	ppb	10:53:03
1	Be 313.107†	1207123.2	1204655.7	487.64	ug/L	487.64	ppb	10:52:57
1	Cd 226.502†	33370.1	33390.3	488.04	ug/L	488.04	ppb	10:53:03
1	Co 228.616†	20273.0	20215.3	500.80	ug/L	500.80	ppb	10:53:03
1	Cr 267.716†	33508.0	33222.7	491.13	ug/L	491.13	ppb	10:53:03
1	Cu 324.752†	153322.0	146746.1	488.76	ug/L	488.76	ppb	10:53:03
1	Mn 257.610†	380808.0	378157.7	489.60	ug/L	489.60	ppb	10:52:57
1	Mo 202.031†	5169.4	5127.0	492.94	ug/L	492.94	ppb	10:53:23
1	Ni 231.604†	15416.0	15252.1	497.05	ug/L	497.05	ppb	10:53:03
1	P 214.914†	4031.3	3789.4	2327.1	ug/L	2327.1	ppb	10:53:23
1	Pb 220.353†	3057.5	3106.8	490.46	ug/L	490.46	ppb	10:53:23
1	S 181.975 Axial†	695.7	651.4	977.80	ug/L	977.80	ppb	10:53:23
1	Sb 206.836†	1255.0	1216.0	504.20	ug/L	504.20	ppb	10:53:23
1	Se 196.026†	627.6	646.0	495.54	ug/L	495.54	ppb	10:53:23
1	Si 251.611†	68152.1	67260.8	2456.3	ug/L	2456.3	ppb	10:53:03
1	Sn 189.927†	2168.7	2152.0	495.31	ug/L	495.31	ppb	10:53:23
1	Ti 334.940†	271711.3	271559.2	492.74	ug/L	492.74	ppb	10:53:03
1	Tl 190.801†	1238.2	1269.0	491.47	ug/L	491.47	ppb	10:53:23
1	U 409.014†	10346.0	12692.6	487.24	ug/L	487.24	ppb	10:53:03
1	V 292.402†	54168.1	55570.8	496.44	ug/L	496.44	ppb	10:53:03
1	Zn 213.857†	43659.1	42741.6	484.30	ug/L	484.30	ppb	10:53:03
1	SiO2†	66234.4	65311.7	5143.3	ug/L	5143.3	ppb	10:54:30
2	Sc Radial	3811.1	3811.1	99.3	%			10:52:25
2	Y RADIAL	4293.3	4293.3	99.11	%			10:52:05
2	Al 396.153Radial†	4471.9	4596.5	4815.0	ug/L	4815.0	ppb	10:52:05
2	Ca 317.933Radial†	2585.3	2585.3	5076.4	ug/L	5076.4	ppb	10:52:25
2	Fe 238.204 Radial†	396.3	393.0	5009.9	ug/L	5009.9	ppb	10:52:25
2	K 766.490 Radial†	28916.0	26129.2	4852.9	ug/L	4852.9	ppb	10:52:05
2	Mg 279.077 IEC†	124.3	122.2	5031.4	ug/L	5031.4	ppb	10:52:25
2	Na 589.592 Radial†	20914.7	22143.7	9746.2	ug/L	9746.2	ppb	10:52:05
2	Sr 421.552†	49116.3	49457.4	474.83	ug/L	474.83	ppb	10:52:05
2	Sc 361.383	694919.9	694919.9	100.77	%			10:53:28
2	Y 371.029	542217.2	542217.2	100.07	%			10:53:28
2	Ag 328.068†	88973.3	88190.7	488.92	ug/L	488.92	ppb	10:53:34
2	As 188.979†	952.5	967.9	483.46	ug/L	483.46	ppb	10:53:54
2	B 249.677†	18862.4	19300.6	483.37	ug/L	483.37	ppb	10:53:34
2	Ba 233.527†	50724.3	50334.3	487.70	ug/L	487.70	ppb	10:53:34
2	Be 313.107†	1213232.6	1208446.6	489.16	ug/L	489.16	ppb	10:53:28
2	Cd 226.502†	33106.2	33065.6	483.29	ug/L	483.29	ppb	10:53:34
2	Co 228.616†	20068.0	19973.7	494.82	ug/L	494.82	ppb	10:53:34
2	Cr 267.716†	33316.2	32969.2	487.38	ug/L	487.38	ppb	10:53:34
2	Cu 324.752†	151303.8	144454.9	481.13	ug/L	481.13	ppb	10:53:34
2	Mn 257.610†	380937.7	377569.7	488.84	ug/L	488.84	ppb	10:53:28
2	Mo 202.031†	5135.6	5083.7	488.77	ug/L	488.77	ppb	10:53:54
2	Ni 231.604†	15337.8	15145.4	493.57	ug/L	493.57	ppb	10:53:34

2	P 214.914†	3991.5	3742.3	2298.4 ug/L	2298.4 ppb	10:53:54
2	Pb 220.353†	3038.0	3081.7	486.48 ug/L	486.48 ppb	10:53:54
2	S 181.975 Axial†	674.9	629.5	944.92 ug/L	944.92 ppb	10:53:54
2	Sb 206.836†	1247.6	1206.3	500.10 ug/L	500.10 ppb	10:53:54
2	Se 196.026†	637.5	654.7	501.70 ug/L	501.70 ppb	10:53:54
2	Si 251.611†	67495.5	66481.0	2427.8 ug/L	2427.8 ppb	10:53:34
2	Sn 189.927†	2137.2	2116.7	487.18 ug/L	487.18 ppb	10:53:54
2	Ti 334.940†	269230.3	268585.9	487.34 ug/L	487.34 ppb	10:53:34
2	Tl 190.801†	1234.0	1262.5	488.95 ug/L	488.95 ppb	10:53:54
2	U 409.014†	10014.9	12344.5	473.85 ug/L	473.85 ppb	10:53:34
2	V 292.402†	53759.4	55063.3	491.89 ug/L	491.89 ppb	10:53:34
2	Zn 213.857†	43238.7	42242.3	478.64 ug/L	478.64 ppb	10:53:34
2	SiO2†	65396.0	64355.1	5067.9 ug/L	5067.9 ppb	10:54:35
3	Sc Radial	3852.4	3852.4	100 %		10:52:50
3	Y RADIAL	4421.0	4421.0	102.1 %		10:52:30
3	Al 396.153Radial†	4561.3	4637.3	4857.4 ug/L	4857.4 ppb	10:52:30
3	Ca 317.933Radial†	2604.6	2576.6	5059.4 ug/L	5059.4 ppb	10:52:50
3	Fe 238.204 Radial†	398.9	391.3	4988.6 ug/L	4988.6 ppb	10:52:50
3	K 766.490 Radial†	29425.3	26324.4	4889.2 ug/L	4889.2 ppb	10:52:30
3	Mg 279.077 IEC†	127.2	123.7	5095.8 ug/L	5095.8 ppb	10:52:50
3	Na 589.592 Radial†	21313.7	22315.4	9821.8 ug/L	9821.8 ppb	10:52:30
3	Sr 421.552†	50061.8	49869.1	478.78 ug/L	478.78 ppb	10:52:30
3	Sc 361.383	681103.3	681103.3	98.770 %		10:53:59
3	Y 371.029	531112.2	531112.2	98.023 %		10:53:59
3	Ag 328.068†	89572.7	90588.6	502.16 ug/L	502.16 ppb	10:54:05
3	As 188.979†	955.0	989.7	494.31 ug/L	494.31 ppb	10:54:25
3	B 249.677†	18971.0	19790.3	495.65 ug/L	495.65 ppb	10:54:05
3	Ba 233.527†	50899.4	51532.7	499.31 ug/L	499.31 ppb	10:54:05
3	Be 313.107†	1199264.3	1218726.6	493.34 ug/L	493.34 ppb	10:53:59
3	Cd 226.502†	33185.3	33812.2	494.22 ug/L	494.22 ppb	10:54:05
3	Co 228.616†	20245.3	20557.1	509.27 ug/L	509.27 ppb	10:54:05
3	Cr 267.716†	33357.6	33681.9	497.90 ug/L	497.90 ppb	10:54:05
3	Cu 324.752†	152588.6	148801.4	495.60 ug/L	495.60 ppb	10:54:05
3	Mn 257.610†	377848.8	382110.6	494.71 ug/L	494.71 ppb	10:53:59
3	Mo 202.031†	5147.1	5198.8	499.83 ug/L	499.83 ppb	10:54:25
3	Ni 231.604†	15323.0	15439.2	503.14 ug/L	503.14 ppb	10:54:05
3	P 214.914†	3977.5	3808.6	2338.0 ug/L	2338.0 ppb	10:54:25
3	Pb 220.353†	3047.7	3152.7	497.67 ug/L	497.67 ppb	10:54:25
3	S 181.975 Axial†	681.9	650.1	975.92 ug/L	975.92 ppb	10:54:25
3	Sb 206.836†	1243.4	1227.2	508.87 ug/L	508.87 ppb	10:54:25
3	Se 196.026†	637.0	667.0	510.82 ug/L	510.82 ppb	10:54:25
3	Si 251.611†	67877.9	68226.8	2491.6 ug/L	2491.6 ppb	10:54:05
3	Sn 189.927†	2143.5	2166.1	498.53 ug/L	498.53 ppb	10:54:25
3	Ti 334.940†	270799.9	275594.7	500.05 ug/L	500.05 ppb	10:54:05
3	Tl 190.801†	1230.1	1283.4	497.05 ug/L	497.05 ppb	10:54:25
3	U 409.014†	10235.7	12769.7	490.20 ug/L	490.20 ppb	10:54:05
3	V 292.402†	54015.9	56405.1	503.90 ug/L	503.90 ppb	10:54:05
3	Zn 213.857†	43394.5	43270.5	490.32 ug/L	490.32 ppb	10:54:05
3	SiO2†	65514.5	65791.5	5181.0 ug/L	5181.0 ppb	10:54:40

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	689875.9	100.04	%	1.106				1.11%
Sc Radial	3782.5	98.5	%	2.29				2.32%
Y 371.029	537929.8	99.282	%	1.1017				1.11%
Y RADIAL	4295.3	99.16	%	2.879				2.90%
Ag 328.068†	89403.7	495.63	ug/L	6.621	495.63	ppb	6.621	1.34%
QC value within limits for Ag 328.068 Recovery = 99.13%								
Al 396.153Radial†	4655.5	4876.9	ug/L	73.54	4876.9	ppb	73.54	1.51%
QC value within limits for Al 396.153Radial Recovery = 97.54%								
As 188.979†	980.1	489.54	ug/L	5.541	489.54	ppb	5.541	1.13%
QC value within limits for As 188.979 Recovery = 97.91%								
B 249.677†	19547.9	489.56	ug/L	6.142	489.56	ppb	6.142	1.25%
QC value within limits for B 249.677 Recovery = 97.91%								
Ba 233.527†	50890.0	493.09	ug/L	5.850	493.09	ppb	5.850	1.19%
QC value within limits for Ba 233.527 Recovery = 98.62%								
Be 313.107†	1210609.7	490.05	ug/L	2.952	490.05	ppb	2.952	0.60%
QC value within limits for Be 313.107 Recovery = 98.01%								
Ca 317.933Radial†	2604.4	5113.8	ug/L	80.03	5113.8	ppb	80.03	1.56%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.28%
Cd 226.502†            33422.7      488.52 ug/L         5.479      488.52 ppb          5.479   1.12%
   QC value within limits for Cd 226.502  Recovery = 97.70%
Co 228.616†            20248.7      501.63 ug/L         7.262      501.63 ppb          7.262   1.45%
   QC value within limits for Co 228.616  Recovery = 100.33%
Cr 267.716†            33291.3      492.13 ug/L         5.332      492.13 ppb          5.332   1.08%
   QC value within limits for Cr 267.716  Recovery = 98.43%
Cu 324.752†           146667.5      488.50 ug/L         7.237      488.50 ppb          7.237   1.48%
   QC value within limits for Cu 324.752  Recovery = 97.70%
Fe 238.204 Radial†       394.6      5029.9 ug/L        54.21      5029.9 ppb         54.21   1.08%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.60%
K 766.490 Radial†      26493.8      4920.7 ug/L        87.82      4920.7 ppb         87.82   1.78%
   QC value within limits for K 766.490 Radial  Recovery = 98.41%
Mg 279.077 IEC†          123.8      5098.0 ug/L        67.73      5098.0 ppb         67.73   1.33%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.96%
Mn 257.610†           379279.3      491.05 ug/L         3.192      491.05 ppb          3.192   0.65%
   QC value within limits for Mn 257.610  Recovery = 98.21%
Mo 202.031†             5136.5      493.85 ug/L         5.582      493.85 ppb          5.582   1.13%
   QC value within limits for Mo 202.031  Recovery = 98.77%
Na 589.592 Radial†     22431.4      9872.9 ug/L       158.47      9872.9 ppb        158.47   1.61%
   QC value within limits for Na 589.592 Radial  Recovery = 98.73%
Ni 231.604†            15278.9      497.92 ug/L         4.846      497.92 ppb          4.846   0.97%
   QC value within limits for Ni 231.604  Recovery = 99.58%
P 214.914†              3780.1      2321.2 ug/L        20.45      2321.2 ppb         20.45   0.88%
   QC value within limits for P 214.914  Recovery = 92.85%
Pb 220.353†             3113.7      491.54 ug/L         5.674      491.54 ppb          5.674   1.15%
   QC value within limits for Pb 220.353  Recovery = 98.31%
S 181.975 Axial†         643.7      966.21 ug/L        18.465      966.21 ppb         18.465   1.91%
   QC value within limits for S 181.975 Axial  Recovery = 96.62%
Sb 206.836†             1216.5      504.39 ug/L         4.386      504.39 ppb          4.386   0.87%
   QC value within limits for Sb 206.836  Recovery = 100.88%
Se 196.026†              655.9      502.69 ug/L         7.689      502.69 ppb          7.689   1.53%
   QC value within limits for Se 196.026  Recovery = 100.54%
Si 251.611†            67322.9      2458.5 ug/L        31.95      2458.5 ppb         31.95   1.30%
   QC value within limits for Si 251.611  Recovery = 98.34%
Sn 189.927†             2144.9      493.67 ug/L         5.849      493.67 ppb          5.849   1.18%
   QC value within limits for Sn 189.927  Recovery = 98.73%
Sr 421.552†            50063.2      480.65 ug/L         6.937      480.65 ppb          6.937   1.44%
   QC value within limits for Sr 421.552  Recovery = 96.13%
Ti 334.940†           271913.3      493.38 ug/L         6.375      493.38 ppb          6.375   1.29%
   QC value within limits for Ti 334.940  Recovery = 98.68%
Tl 190.801†             1271.6      492.49 ug/L         4.146      492.49 ppb          4.146   0.84%
   QC value within limits for Tl 190.801  Recovery = 98.50%
U 409.014†             12602.3      483.76 ug/L         8.715      483.76 ppb          8.715   1.80%
   QC value within limits for U 409.014  Recovery = 96.75%
V 292.402†             55679.8      497.41 ug/L         6.061      497.41 ppb          6.061   1.22%
   QC value within limits for V 292.402  Recovery = 99.48%
Zn 213.857†            42751.5      484.42 ug/L         5.842      484.42 ppb          5.842   1.21%
   QC value within limits for Zn 213.857  Recovery = 96.88%
SiO2†                  65152.7      5130.7 ug/L        57.59      5130.7 ppb         57.59   1.12%
   QC value within limits for SiO2  Recovery = 95.95%
All analyte(s) passed QC.
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Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 4/1/2010 10:56:51
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	3708.3	3708.3	96.6	%			10:59:03
1	Y RADIAL	4169.0	4169.0	96.24	%			10:58:43
1	Al 396.153Radial†	-98.9	-10.2	-10.696	ug/L	-10.696	ppb	10:59:03
1	Ca 317.933Radial†	23.4	5.6	10.990	ug/L	10.990	ppb	10:59:03
1	Fe 238.204 Radial†	7.2	1.3	16.316	ug/L	16.316	ppb	10:59:03
1	K 766.490 Radial†	3209.5	326.4	60.726	ug/L	60.726	ppb	10:58:43
1	Mg 279.077 IEC†	3.3	0.4	17.076	ug/L	17.076	ppb	10:59:03
1	Na 589.592 Radial†	-1181.3	-145.0	-63.840	ug/L	-63.840	ppb	10:58:43
1	Sr 421.552†	31.1	18.3	0.1754	ug/L	0.1754	ppb	10:58:43
1	Sc 361.383	687198.4	687198.4	99.654	%			11:00:00
1	Y 371.029	540172.2	540172.2	99.695	%			11:00:00
1	Ag 328.068†	165.0	65.7	0.3621	ug/L	0.3621	ppb	11:00:00
1	As 188.979†	-19.4	3.3	1.6594	ug/L	1.6594	ppb	11:00:20
1	B 249.677†	-135.7	446.9	11.241	ug/L	11.241	ppb	11:00:20
1	Ba 233.527†	5.6	4.8	0.0455	ug/L	0.0455	ppb	11:00:20
1	Be 313.107†	-4419.4	88.5	0.0355	ug/L	0.0355	ppb	11:00:00
1	Cd 226.502†	-187.8	25.0	0.3649	ug/L	0.3649	ppb	11:00:20
1	Co 228.616†	-54.3	5.2	0.1281	ug/L	0.1281	ppb	11:00:20
1	Cr 267.716†	96.4	5.5	0.0805	ug/L	0.0805	ppb	11:00:20
1	Cu 324.752†	5628.0	-40.4	-0.1348	ug/L	-0.1348	ppb	11:00:00
1	Mn 257.610†	505.0	61.8	0.0808	ug/L	0.0808	ppb	11:00:20
1	Mo 202.031†	10.1	-2.3	-0.2184	ug/L	-0.2184	ppb	11:00:20
1	Ni 231.604†	99.0	24.7	0.8059	ug/L	0.8059	ppb	11:00:20
1	P 214.914†	202.0	-15.8	-10.080	ug/L	-10.080	ppb	11:00:20
1	Pb 220.353†	-92.5	-25.8	-4.0660	ug/L	-4.0660	ppb	11:00:20
1	S 181.975 Axial†	38.9	-1.2	-1.8519	ug/L	-1.8519	ppb	11:00:20
1	Sb 206.836†	41.8	10.2	4.0735	ug/L	4.0735	ppb	11:00:20
1	Se 196.026†	-19.2	2.8	2.0995	ug/L	2.0995	ppb	11:00:20
1	Si 251.611†	567.8	73.2	2.6813	ug/L	2.6813	ppb	11:00:20
1	Sn 189.927†	1.5	-2.6	-0.5969	ug/L	-0.5969	ppb	11:00:20
1	Ti 334.940†	-1466.0	-49.6	-0.0909	ug/L	-0.0909	ppb	11:00:00
1	Tl 190.801†	-27.7	10.2	3.9174	ug/L	3.9174	ppb	11:00:20
1	U 409.014†	-2346.8	51.5	1.9821	ug/L	1.9821	ppb	11:00:00
1	V 292.402†	-1798.3	-88.1	-0.7780	ug/L	-0.7780	ppb	11:00:00
1	Zn 213.857†	715.8	53.7	0.6065	ug/L	0.6065	ppb	11:00:20
1	SiO2†	582.2	45.0	3.5619	ug/L	3.5619	ppb	11:01:16
2	Sc Radial	3829.4	3829.4	99.8	%			10:59:28
2	Y RADIAL	4273.1	4273.1	98.64	%			10:59:08
2	Al 396.153Radial†	-88.5	3.5	3.6630	ug/L	3.6630	ppb	10:59:28
2	Ca 317.933Radial†	21.9	3.3	6.3959	ug/L	6.3959	ppb	10:59:28
2	Fe 238.204 Radial†	6.0	-0.2	-2.2003	ug/L	-2.2003	ppb	10:59:28
2	K 766.490 Radial†	3015.0	26.3	4.9259	ug/L	4.9259	ppb	10:59:08
2	Mg 279.077 IEC†	1.9	-1.2	-47.521	ug/L	-47.521	ppb	10:59:28
2	Na 589.592 Radial†	-1252.5	-177.7	-78.220	ug/L	-78.220	ppb	10:59:08
2	Sr 421.552†	-0.3	-14.2	-0.1359	ug/L	-0.1359	ppb	10:59:08
2	Sc 361.383	695162.2	695162.2	100.81	%			11:00:25
2	Y 371.029	546443.6	546443.6	100.85	%			11:00:25
2	Ag 328.068†	169.8	68.5	0.3797	ug/L	0.3797	ppb	11:00:25
2	As 188.979†	-24.4	-1.4	-0.6781	ug/L	-0.6781	ppb	11:00:45
2	B 249.677†	-124.1	459.9	11.571	ug/L	11.571	ppb	11:00:45
2	Ba 233.527†	12.3	11.5	0.1112	ug/L	0.1112	ppb	11:00:45
2	Be 313.107†	-4450.1	108.8	0.0442	ug/L	0.0442	ppb	11:00:25
2	Cd 226.502†	-206.0	9.1	0.1331	ug/L	0.1331	ppb	11:00:45
2	Co 228.616†	-45.4	14.7	0.3643	ug/L	0.3643	ppb	11:00:45
2	Cr 267.716†	94.1	2.0	0.0305	ug/L	0.0305	ppb	11:00:45
2	Cu 324.752†	5678.0	-55.5	-0.1835	ug/L	-0.1835	ppb	11:00:25
2	Mn 257.610†	479.7	30.8	0.0416	ug/L	0.0416	ppb	11:00:45
2	Mo 202.031†	16.2	3.6	0.3445	ug/L	0.3445	ppb	11:00:45
2	Ni 231.604†	71.6	-3.7	-0.1202	ug/L	-0.1202	ppb	11:00:45

2	P 214.914†	203.8	-16.3	-10.393 ug/L	-10.393 ppb	11:00:45
2	Pb 220.353†	-70.1	-2.5	-0.3908 ug/L	-0.3908 ppb	11:00:45
2	S 181.975 Axial†	35.1	-5.5	-8.2027 ug/L	-8.2027 ppb	11:00:45
2	Sb 206.836†	29.8	-2.1	-0.8406 ug/L	-0.8406 ppb	11:00:45
2	Se 196.026†	-19.6	2.6	1.9506 ug/L	1.9506 ppb	11:00:45
2	Si 251.611†	558.5	57.4	2.0980 ug/L	2.0980 ppb	11:00:45
2	Sn 189.927†	7.6	3.4	0.7767 ug/L	0.7767 ppb	11:00:45
2	Ti 334.940†	-1370.7	61.7	0.1179 ug/L	0.1179 ppb	11:00:25
2	Tl 190.801†	-40.6	-2.4	-0.9060 ug/L	-0.9060 ppb	11:00:45
2	U 409.014†	-2488.8	-62.3	-2.4009 ug/L	-2.4009 ppb	11:00:25
2	V 292.402†	-1704.2	25.8	0.2273 ug/L	0.2273 ppb	11:00:25
2	Zn 213.857†	721.0	50.6	0.5799 ug/L	0.5799 ppb	11:00:45
2	SiO2†	565.5	21.8	1.7087 ug/L	1.7087 ppb	11:01:21
3	Sc Radial	3840.8	3840.8	100 %		10:59:53
3	Y RADIAL	4322.6	4322.6	99.79 %		10:59:33
3	Al 396.153Radial†	-111.2	-18.9	-19.891 ug/L	-19.891 ppb	10:59:53
3	Ca 317.933Radial†	15.8	-2.8	-5.5585 ug/L	-5.5585 ppb	10:59:53
3	Fe 238.204 Radial†	8.1	1.9	24.620 ug/L	24.620 ppb	10:59:53
3	K 766.490 Radial†	3142.8	145.2	27.019 ug/L	27.019 ppb	10:59:33
3	Mg 279.077 IEC†	0.6	-2.4	-97.712 ug/L	-97.712 ppb	10:59:53
3	Na 589.592 Radial†	-1186.5	-108.0	-47.553 ug/L	-47.553 ppb	10:59:33
3	Sr 421.552†	7.9	-6.0	-0.0574 ug/L	-0.0574 ppb	10:59:33
3	Sc 361.383	682242.7	682242.7	98.935 %		11:00:51
3	Y 371.029	537396.3	537396.3	99.183 %		11:00:51
3	Ag 328.068†	80.2	-18.8	-0.0963 ug/L	-0.0963 ppb	11:00:51
3	As 188.979†	-22.1	0.5	0.2403 ug/L	0.2403 ppb	11:01:11
3	B 249.677†	-164.4	416.9	10.484 ug/L	10.484 ppb	11:01:11
3	Ba 233.527†	-7.4	-8.2	-0.0797 ug/L	-0.0797 ppb	11:01:11
3	Be 313.107†	-4318.3	158.5	0.0639 ug/L	0.0639 ppb	11:00:51
3	Cd 226.502†	-200.9	10.4	0.1486 ug/L	0.1486 ppb	11:01:11
3	Co 228.616†	-58.9	0.2	0.0065 ug/L	0.0065 ppb	11:01:11
3	Cr 267.716†	84.7	-5.7	-0.0811 ug/L	-0.0811 ppb	11:01:11
3	Cu 324.752†	5627.8	0.4	0.0034 ug/L	0.0034 ppb	11:00:51
3	Mn 257.610†	508.9	69.4	0.0962 ug/L	0.0962 ppb	11:01:11
3	Mo 202.031†	22.5	10.3	0.9866 ug/L	0.9866 ppb	11:01:11
3	Ni 231.604†	71.8	-2.1	-0.0672 ug/L	-0.0672 ppb	11:01:11
3	P 214.914†	206.8	-9.5	-6.0811 ug/L	-6.0811 ppb	11:01:11
3	Pb 220.353†	-69.3	-3.1	-0.4873 ug/L	-0.4873 ppb	11:01:11
3	S 181.975 Axial†	33.6	-6.3	-9.4880 ug/L	-9.4880 ppb	11:01:11
3	Sb 206.836†	39.3	8.0	3.2282 ug/L	3.2282 ppb	11:01:11
3	Se 196.026†	-25.0	-3.2	-2.3021 ug/L	-2.3021 ppb	11:01:11
3	Si 251.611†	547.5	56.7	2.0649 ug/L	2.0649 ppb	11:01:11
3	Sn 189.927†	3.6	-0.5	-0.1096 ug/L	-0.1096 ppb	11:01:11
3	Ti 334.940†	-1424.1	-17.9	-0.0247 ug/L	-0.0247 ppb	11:00:51
3	Tl 190.801†	-40.9	-3.4	-1.3005 ug/L	-1.3005 ppb	11:01:11
3	U 409.014†	-2415.9	-35.4	-1.3660 ug/L	-1.3660 ppb	11:00:51
3	V 292.402†	-1734.8	-37.1	-0.3208 ug/L	-0.3208 ppb	11:00:51
3	Zn 213.857†	701.2	44.1	0.5015 ug/L	0.5015 ppb	11:01:11
3	SiO2†	559.0	25.9	2.0184 ug/L	2.0184 ppb	11:01:26

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	688201.1	99.799	%	0.9452				0.95%
Sc Radial	3792.8	98.8	%	1.91				1.94%
Y 371.029	541337.3	99.911	%	0.8554				0.86%
Y RADIAL	4254.9	98.22	%	1.810				1.84%
Ag 328.068†	38.5	0.2152	ug/L	0.26989	0.2152	ppb	0.26989	125.44%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-8.5	-8.9746	ug/L	11.87097	-8.9746	ppb	11.87097	132.27%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.8	0.4072	ug/L	1.17769	0.4072	ppb	1.17769	289.22%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	441.2	11.098	ug/L	0.5570	11.098	ppb	0.5570	5.02%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.7	0.0257	ug/L	0.09698	0.0257	ppb	0.09698	377.51%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	118.6	0.0479	ug/L	0.01456	0.0479	ppb	0.01456	30.40%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.0	3.9426	ug/L	8.54282	3.9426	ppb	8.54282	216.68%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                14.8      0.2155 ug/L       0.12960      0.2155 ppb        0.12960  60.14%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 6.7      0.1663 ug/L       0.18198      0.1663 ppb        0.18198 109.43%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 0.6      0.0100 ug/L       0.08276      0.0100 ppb        0.08276 828.93%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -31.8     -0.1050 ug/L       0.09697     -0.1050 ppb        0.09697  92.39%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.0      12.912 ug/L       13.7305      12.912 ppb        13.7305 106.34%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         166.0      30.890 ug/L       28.1009      30.890 ppb        28.1009  90.97%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.0     -42.719 ug/L       57.5441     -42.719 ppb        57.5441 134.70%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                54.0      0.0729 ug/L       0.02816      0.0729 ppb        0.02816  38.64%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.9      0.3709 ug/L       0.60291      0.3709 ppb        0.60291 162.55%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -143.6     -63.204 ug/L       15.3435     -63.204 ppb        15.3435  24.28%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 6.3      0.2062 ug/L       0.52005      0.2062 ppb        0.52005 252.24%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -13.9     -8.8511 ug/L       2.40400     -8.8511 ppb        2.40400  27.16%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -10.5     -1.6480 ug/L       2.09455     -1.6480 ppb        2.09455 127.09%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -4.3     -6.5142 ug/L       4.08848     -6.5142 ppb        4.08848  62.76%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.4      2.1537 ug/L       2.62732      2.1537 ppb        2.62732 121.99%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 0.7      0.5826 ug/L       2.49941      0.5826 ppb        2.49941 428.98%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                62.4      2.2814 ug/L       0.34671      2.2814 ppb        0.34671  15.20%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 0.1      0.0234 ug/L       0.69637      0.0234 ppb        0.69637 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -0.6     -0.0060 ug/L       0.16193     -0.0060 ppb        0.16193 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                -1.9      0.0008 ug/L       0.10667      0.0008 ppb        0.10667 >999.9%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.5      0.5703 ug/L       2.90537      0.5703 ppb        2.90537 509.44%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -15.4     -0.5949 ug/L       2.29100     -0.5949 ppb        2.29100 385.08%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -33.1     -0.2905 ug/L       0.50333     -0.2905 ppb        0.50333 173.25%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                49.5      0.5626 ug/L       0.05461      0.5626 ppb        0.05461   9.71%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      30.9      2.4297 ug/L       0.99272      2.4297 ppb        0.99272  40.86%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 18
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 4/1/2010 11:59:48
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	3817.3	3817.3	99.4	%			12:02:00
1	Y RADIAL	4302.9	4302.9	99.33	%			12:01:40
1	Al 396.153Radial†	4666.0	4784.4	5012.6	ug/L	5012.6	ppb	12:01:40
1	Ca 317.933Radial†	2626.2	2622.2	5148.9	ug/L	5148.9	ppb	12:02:00
1	Fe 238.204 Radial†	403.8	399.8	5096.5	ug/L	5096.5	ppb	12:02:00
1	K 766.490 Radial†	29877.8	27049.0	5023.7	ug/L	5023.7	ppb	12:01:40
1	Mg 279.077 IEC†	131.1	128.8	5304.5	ug/L	5304.5	ppb	12:02:00
1	Na 589.592 Radial†	22466.2	23669.7	10418	ug/L	10418	ppb	12:01:40
1	Sr 421.552†	51656.5	51931.6	498.59	ug/L	498.59	ppb	12:01:40
1	Sc 361.383	696662.4	696662.4	101.03	%			12:02:57
1	Y 371.029	470771.3	470771.3	86.887	%			12:03:02
1	Ag 328.068†	89800.1	88788.3	492.24	ug/L	492.24	ppb	12:03:02
1	As 188.979†	969.6	982.5	490.72	ug/L	490.72	ppb	12:03:23
1	B 249.677†	18566.7	18961.2	474.80	ug/L	474.80	ppb	12:03:02
1	Ba 233.527†	51189.0	50668.4	490.94	ug/L	490.94	ppb	12:03:02
1	Be 313.107†	1220647.2	1212774.6	490.92	ug/L	490.92	ppb	12:02:57
1	Cd 226.502†	33375.6	33250.1	485.99	ug/L	485.99	ppb	12:03:02
1	Co 228.616†	20288.8	20142.5	499.00	ug/L	499.00	ppb	12:03:02
1	Cr 267.716†	33547.7	33115.7	489.54	ug/L	489.54	ppb	12:03:02
1	Cu 324.752†	152657.1	145418.9	484.34	ug/L	484.34	ppb	12:03:02
1	Mn 257.610†	385357.4	380999.0	493.27	ug/L	493.27	ppb	12:02:57
1	Mo 202.031†	5196.7	5131.5	493.37	ug/L	493.37	ppb	12:03:23
1	Ni 231.604†	15444.8	15213.3	495.78	ug/L	495.78	ppb	12:03:02
1	P 214.914†	4028.7	3769.3	2315.1	ug/L	2315.1	ppb	12:03:23
1	Pb 220.353†	3079.1	3114.8	491.73	ug/L	491.73	ppb	12:03:23
1	S 181.975 Axial†	692.1	644.8	967.94	ug/L	967.94	ppb	12:03:23
1	Sb 206.836†	1278.9	1234.2	511.43	ug/L	511.43	ppb	12:03:23
1	Se 196.026†	641.7	657.3	503.91	ug/L	503.91	ppb	12:03:23
1	Si 251.611†	68244.4	67054.8	2448.7	ug/L	2448.7	ppb	12:03:02
1	Sn 189.927†	2165.7	2139.6	492.45	ug/L	492.45	ppb	12:03:23
1	Ti 334.940†	272076.8	270735.2	491.22	ug/L	491.22	ppb	12:03:02
1	Tl 190.801†	1249.2	1274.5	493.62	ug/L	493.62	ppb	12:03:23
1	U 409.014†	10518.6	12818.3	492.08	ug/L	492.08	ppb	12:03:02
1	V 292.402†	54173.8	55340.0	494.42	ug/L	494.42	ppb	12:03:02
1	Zn 213.857†	43526.5	42419.9	480.64	ug/L	480.64	ppb	12:03:02
1	SiO2†	67917.1	66688.2	5252.0	ug/L	5252.0	ppb	12:04:30
2	Sc Radial	3788.0	3788.0	98.7	%			12:02:25
2	Y RADIAL	4256.8	4256.8	98.27	%			12:02:05
2	Al 396.153Radial†	4632.5	4786.7	5015.2	ug/L	5015.2	ppb	12:02:05
2	Ca 317.933Radial†	2601.8	2617.9	5140.4	ug/L	5140.4	ppb	12:02:25
2	Fe 238.204 Radial†	401.7	400.9	5109.7	ug/L	5109.7	ppb	12:02:25
2	K 766.490 Radial†	29550.4	26949.8	5005.3	ug/L	5005.3	ppb	12:02:05
2	Mg 279.077 IEC†	126.4	125.0	5150.4	ug/L	5150.4	ppb	12:02:25
2	Na 589.592 Radial†	21966.6	23338.3	10272	ug/L	10272	ppb	12:02:05
2	Sr 421.552†	50653.1	51316.8	492.68	ug/L	492.68	ppb	12:02:05
2	Sc 361.383	699454.8	699454.8	101.43	%			12:03:28
2	Y 371.029	472632.6	472632.6	87.230	%			12:03:33
2	Ag 328.068†	90206.3	88833.9	492.49	ug/L	492.49	ppb	12:03:33
2	As 188.979†	945.1	954.6	476.91	ug/L	476.91	ppb	12:03:53
2	B 249.677†	18605.1	18925.6	473.91	ug/L	473.91	ppb	12:03:33
2	Ba 233.527†	51232.3	50508.8	489.39	ug/L	489.39	ppb	12:03:33
2	Be 313.107†	1220168.5	1207479.1	488.78	ug/L	488.78	ppb	12:03:28
2	Cd 226.502†	33216.1	32960.9	481.76	ug/L	481.76	ppb	12:03:33
2	Co 228.616†	20272.6	20046.3	496.61	ug/L	496.61	ppb	12:03:33
2	Cr 267.716†	33554.5	32989.8	487.69	ug/L	487.69	ppb	12:03:33
2	Cu 324.752†	153481.8	145628.7	485.04	ug/L	485.04	ppb	12:03:33
2	Mn 257.610†	384937.6	379062.4	490.77	ug/L	490.77	ppb	12:03:28
2	Mo 202.031†	5172.1	5086.7	489.07	ug/L	489.07	ppb	12:03:53
2	Ni 231.604†	15442.9	15150.4	493.73	ug/L	493.73	ppb	12:03:33

2	P 214.914†	4005.5	3730.5	2290.0 ug/L	2290.0 ppb	12:03:53
2	Pb 220.353†	3056.8	3080.7	486.36 ug/L	486.36 ppb	12:03:53
2	S 181.975 Axial†	688.4	638.4	958.30 ug/L	958.30 ppb	12:03:53
2	Sb 206.836†	1254.7	1205.2	499.66 ug/L	499.66 ppb	12:03:53
2	Se 196.026†	635.6	648.8	497.62 ug/L	497.62 ppb	12:03:53
2	Si 251.611†	68330.5	66870.0	2442.0 ug/L	2442.0 ppb	12:03:33
2	Sn 189.927†	2147.8	2113.3	486.42 ug/L	486.42 ppb	12:03:53
2	Ti 334.940†	272716.7	270291.0	490.43 ug/L	490.43 ppb	12:03:33
2	Tl 190.801†	1243.7	1264.2	489.63 ug/L	489.63 ppb	12:03:53
2	U 409.014†	10391.1	12651.0	485.64 ug/L	485.64 ppb	12:03:33
2	V 292.402†	54187.3	55139.3	492.57 ug/L	492.57 ppb	12:03:33
2	Zn 213.857†	43522.0	42243.4	478.63 ug/L	478.63 ppb	12:03:33
2	SiO2†	67479.5	65988.4	5196.9 ug/L	5196.9 ppb	12:04:35
3	Sc Radial	3756.9	3756.9	97.9 %		12:02:50
3	Y RADIAL	4300.3	4300.3	99.27 %		12:02:30
3	Al 396.153Radial†	4686.5	4880.7	5114.0 ug/L	5114.0 ppb	12:02:30
3	Ca 317.933Radial†	2586.3	2623.9	5152.2 ug/L	5152.2 ppb	12:02:50
3	Fe 238.204 Radial†	397.8	400.3	5102.3 ug/L	5102.3 ppb	12:02:50
3	K 766.490 Radial†	29865.8	27519.5	5111.2 ug/L	5111.2 ppb	12:02:30
3	Mg 279.077 IEC†	125.0	124.7	5135.4 ug/L	5135.4 ppb	12:02:50
3	Na 589.592 Radial†	22219.0	23780.0	10466 ug/L	10466 ppb	12:02:30
3	Sr 421.552†	51475.6	52581.3	504.82 ug/L	504.82 ppb	12:02:30
3	Sc 361.383	683426.6	683426.6	99.107 %		12:03:59
3	Y 371.029	472551.9	472551.9	87.215 %		12:04:04
3	Ag 328.068†	89473.0	90179.7	499.93 ug/L	499.93 ppb	12:04:04
3	As 188.979†	946.6	977.9	488.51 ug/L	488.51 ppb	12:04:24
3	B 249.677†	18453.9	19203.2	480.87 ug/L	480.87 ppb	12:04:04
3	Ba 233.527†	50905.1	51363.2	497.67 ug/L	497.67 ppb	12:04:04
3	Be 313.107†	1196165.6	1211472.3	490.41 ug/L	490.41 ppb	12:03:59
3	Cd 226.502†	33092.7	33604.5	491.17 ug/L	491.17 ppb	12:04:04
3	Co 228.616†	20153.0	20394.3	505.22 ug/L	505.22 ppb	12:04:04
3	Cr 267.716†	33362.3	33571.8	496.28 ug/L	496.28 ppb	12:04:04
3	Cu 324.752†	152273.8	147958.5	492.80 ug/L	492.80 ppb	12:04:04
3	Mn 257.610†	377611.0	380570.1	492.72 ug/L	492.72 ppb	12:03:59
3	Mo 202.031†	5087.2	5120.5	492.32 ug/L	492.32 ppb	12:04:24
3	Ni 231.604†	15369.0	15432.9	502.94 ug/L	502.94 ppb	12:04:04
3	P 214.914†	3932.7	3749.6	2300.8 ug/L	2300.8 ppb	12:04:24
3	Pb 220.353†	2997.0	3091.0	488.01 ug/L	488.01 ppb	12:04:24
3	S 181.975 Axial†	667.6	633.4	950.75 ug/L	950.75 ppb	12:04:24
3	Sb 206.836†	1243.1	1222.5	506.78 ug/L	506.78 ppb	12:04:24
3	Se 196.026†	615.0	642.6	493.11 ug/L	493.11 ppb	12:04:24
3	Si 251.611†	67757.4	67871.7	2478.7 ug/L	2478.7 ppb	12:04:04
3	Sn 189.927†	2132.3	2147.4	494.25 ug/L	494.25 ppb	12:04:24
3	Ti 334.940†	271021.3	274886.0	498.77 ug/L	498.77 ppb	12:04:04
3	Tl 190.801†	1231.8	1280.9	496.08 ug/L	496.08 ppb	12:04:24
3	U 409.014†	10392.7	12892.8	494.94 ug/L	494.94 ppb	12:04:04
3	V 292.402†	53927.9	56130.5	501.36 ug/L	501.36 ppb	12:04:04
3	Zn 213.857†	43160.4	42884.9	485.90 ug/L	485.90 ppb	12:04:04
3	SiO2†	67469.4	67538.4	5319.2 ug/L	5319.2 ppb	12:04:40

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	693181.3	100.52	%	1.242				1.24%
Sc Radial	3787.4	98.7	%	0.79				0.80%
Y 371.029	471985.2	87.111	%	0.1942				0.22%
Y RADIAL	4286.7	98.96	%	0.599				0.61%
Ag 328.068†	89267.3	494.89	ug/L	4.370	494.89	ppb	4.370	0.88%
QC value within limits for Ag 328.068 Recovery = 98.98%								
Al 396.153Radial†	4817.3	5047.3	ug/L	57.84	5047.3	ppb	57.84	1.15%
QC value within limits for Al 396.153Radial Recovery = 100.95%								
As 188.979†	971.7	485.38	ug/L	7.418	485.38	ppb	7.418	1.53%
QC value within limits for As 188.979 Recovery = 97.08%								
B 249.677†	19030.0	476.53	ug/L	3.789	476.53	ppb	3.789	0.80%
QC value within limits for B 249.677 Recovery = 95.31%								
Ba 233.527†	50846.8	492.67	ug/L	4.401	492.67	ppb	4.401	0.89%
QC value within limits for Ba 233.527 Recovery = 98.53%								
Be 313.107†	1210575.3	490.03	ug/L	1.118	490.03	ppb	1.118	0.23%
QC value within limits for Be 313.107 Recovery = 98.01%								
Ca 317.933Radial†	2621.4	5147.2	ug/L	6.06	5147.2	ppb	6.06	0.12%

```
   QC value within limits for Ca 317.933Radial  Recovery = 102.94%
Cd 226.502†            33271.8      486.31 ug/L         4.716      486.31 ppb          4.716   0.97%
   QC value within limits for Cd 226.502  Recovery = 97.26%
Co 228.616†            20194.4      500.28 ug/L         4.446      500.28 ppb          4.446   0.89%
   QC value within limits for Co 228.616  Recovery = 100.06%
Cr 267.716†            33225.8      491.17 ug/L         4.522      491.17 ppb          4.522   0.92%
   QC value within limits for Cr 267.716  Recovery = 98.23%
Cu 324.752†           146335.4      487.39 ug/L         4.693      487.39 ppb          4.693   0.96%
   QC value within limits for Cu 324.752  Recovery = 97.48%
Fe 238.204 Radial†       400.3      5102.9 ug/L          6.63      5102.9 ppb           6.63   0.13%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.06%
K 766.490 Radial†      27172.8      5046.7 ug/L         56.56      5046.7 ppb          56.56   1.12%
   QC value within limits for K 766.490 Radial  Recovery = 100.93%
Mg 279.077 IEC†          126.2      5196.8 ug/L         93.63      5196.8 ppb          93.63   1.80%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.94%
Mn 257.610†           380210.5      492.26 ug/L         1.313      492.26 ppb          1.313   0.27%
   QC value within limits for Mn 257.610  Recovery = 98.45%
Mo 202.031†             5112.9      491.59 ug/L         2.245      491.59 ppb          2.245   0.46%
   QC value within limits for Mo 202.031  Recovery = 98.32%
Na 589.592 Radial†     23596.0       10385 ug/L         101.2       10385 ppb          101.2   0.97%
   QC value within limits for Na 589.592 Radial  Recovery = 103.85%
Ni 231.604†            15265.5      497.49 ug/L         4.834      497.49 ppb          4.834   0.97%
   QC value within limits for Ni 231.604  Recovery = 99.50%
P 214.914†              3749.8      2302.0 ug/L         12.56      2302.0 ppb          12.56   0.55%
   QC value within limits for P 214.914  Recovery = 92.08%
Pb 220.353†             3095.5      488.70 ug/L         2.753      488.70 ppb          2.753   0.56%
   QC value within limits for Pb 220.353  Recovery = 97.74%
S 181.975 Axial†         638.9      959.00 ug/L         8.618      959.00 ppb          8.618   0.90%
   QC value within limits for S 181.975 Axial  Recovery = 95.90%
Sb 206.836†             1220.6      505.96 ug/L         5.925      505.96 ppb          5.925   1.17%
   QC value within limits for Sb 206.836  Recovery = 101.19%
Se 196.026†              649.6      498.21 ug/L         5.423      498.21 ppb          5.423   1.09%
   QC value within limits for Se 196.026  Recovery = 99.64%
Si 251.611†            67265.5      2456.5 ug/L         19.50      2456.5 ppb          19.50   0.79%
   QC value within limits for Si 251.611  Recovery = 98.26%
Sn 189.927†             2133.4      491.04 ug/L         4.102      491.04 ppb          4.102   0.84%
   QC value within limits for Sn 189.927  Recovery = 98.21%
Sr 421.552†            51943.2      498.70 ug/L         6.071      498.70 ppb          6.071   1.22%
   QC value within limits for Sr 421.552  Recovery = 99.74%
Ti 334.940†           271970.8      493.47 ug/L         4.601      493.47 ppb          4.601   0.93%
   QC value within limits for Ti 334.940  Recovery = 98.69%
Tl 190.801†             1273.2      493.11 ug/L         3.254      493.11 ppb          3.254   0.66%
   QC value within limits for Tl 190.801  Recovery = 98.62%
U 409.014†             12787.4      490.89 ug/L         4.762      490.89 ppb          4.762   0.97%
   QC value within limits for U 409.014  Recovery = 98.18%
V 292.402†             55536.6      496.12 ug/L         4.635      496.12 ppb          4.635   0.93%
   QC value within limits for V 292.402  Recovery = 99.22%
Zn 213.857†            42516.1      481.72 ug/L         3.754      481.72 ppb          3.754   0.78%
   QC value within limits for Zn 213.857  Recovery = 96.34%
SiO2†                  66738.4      5256.0 ug/L         61.25      5256.0 ppb          61.25   1.17%
   QC value within limits for SiO2  Recovery = 98.29%
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 4/1/2010 12:06:51
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	3679.5	3679.5	95.9	%			12:09:03
1	Y RADIAL	4353.6	4353.6	100.5	%			12:08:43
1	Al 396.153Radial†	-92.5	-4.3	-4.5230	ug/L	-4.5230	ppb	12:09:03
1	Ca 317.933Radial†	19.3	1.5	2.9369	ug/L	2.9369	ppb	12:09:03
1	Fe 238.204 Radial†	8.4	2.6	33.225	ug/L	33.225	ppb	12:09:03
1	K 766.490 Radial†	3136.0	275.7	51.308	ug/L	51.308	ppb	12:08:43
1	Mg 279.077 IEC†	0.6	-2.4	-97.239	ug/L	-97.239	ppb	12:09:03
1	Na 589.592 Radial†	-1205.9	-180.2	-79.318	ug/L	-79.318	ppb	12:08:43
1	Sr 421.552†	18.4	5.3	0.0512	ug/L	0.0512	ppb	12:08:43
1	Sc 361.383	701143.0	701143.0	101.68	%			12:10:00
1	Y 371.029	551323.0	551323.0	101.75	%			12:10:00
1	Ag 328.068†	163.9	61.3	0.3467	ug/L	0.3467	ppb	12:10:00
1	As 188.979†	-30.3	-7.0	-3.4404	ug/L	-3.4404	ppb	12:10:20
1	B 249.677†	-436.6	153.6	3.8604	ug/L	3.8604	ppb	12:10:20
1	Ba 233.527†	-9.0	-9.6	-0.0909	ug/L	-0.0909	ppb	12:10:20
1	Be 313.107†	-4445.6	150.9	0.0614	ug/L	0.0614	ppb	12:10:00
1	Cd 226.502†	-198.6	18.2	0.2630	ug/L	0.2630	ppb	12:10:20
1	Co 228.616†	-64.4	-3.7	-0.0921	ug/L	-0.0921	ppb	12:10:20
1	Cr 267.716†	106.8	13.7	0.2052	ug/L	0.2052	ppb	12:10:20
1	Cu 324.752†	5697.7	-84.2	-0.2808	ug/L	-0.2808	ppb	12:10:00
1	Mn 257.610†	504.1	50.8	0.0729	ug/L	0.0729	ppb	12:10:20
1	Mo 202.031†	12.9	0.2	0.0213	ug/L	0.0213	ppb	12:10:20
1	Ni 231.604†	89.7	13.5	0.4406	ug/L	0.4406	ppb	12:10:20
1	P 214.914†	209.2	-12.7	-8.0811	ug/L	-8.0811	ppb	12:10:20
1	Pb 220.353†	-65.3	2.8	0.4301	ug/L	0.4301	ppb	12:10:20
1	S 181.975 Axial†	39.7	-1.2	-1.8191	ug/L	-1.8191	ppb	12:10:20
1	Sb 206.836†	31.2	-1.1	-0.3879	ug/L	-0.3879	ppb	12:10:20
1	Se 196.026†	-29.1	-6.5	-4.7336	ug/L	-4.7336	ppb	12:10:20
1	Si 251.611†	621.1	114.3	4.1832	ug/L	4.1832	ppb	12:10:20
1	Sn 189.927†	15.9	11.5	2.6442	ug/L	2.6442	ppb	12:10:20
1	Ti 334.940†	-1323.2	120.1	0.2245	ug/L	0.2245	ppb	12:10:00
1	Tl 190.801†	-31.3	7.2	2.7676	ug/L	2.7676	ppb	12:10:20
1	U 409.014†	-2346.1	99.1	3.8130	ug/L	3.8130	ppb	12:10:00
1	V 292.402†	-1700.4	44.1	0.3891	ug/L	0.3891	ppb	12:10:00
1	Zn 213.857†	712.6	36.2	0.4072	ug/L	0.4072	ppb	12:10:20
1	SiO2†	638.4	88.7	7.0007	ug/L	7.0007	ppb	12:11:16
2	Sc Radial	3814.2	3814.2	99.4	%			12:09:29
2	Y RADIAL	4276.7	4276.7	98.73	%			12:09:09
2	Al 396.153Radial†	-88.0	3.7	3.9219	ug/L	3.9219	ppb	12:09:29
2	Ca 317.933Radial†	22.2	3.7	7.2411	ug/L	7.2411	ppb	12:09:29
2	Fe 238.204 Radial†	7.6	1.4	18.014	ug/L	18.014	ppb	12:09:29
2	K 766.490 Radial†	3000.5	23.9	4.4634	ug/L	4.4634	ppb	12:09:09
2	Mg 279.077 IEC†	0.9	-2.1	-88.167	ug/L	-88.167	ppb	12:09:29
2	Na 589.592 Radial†	-1178.4	-108.1	-47.584	ug/L	-47.584	ppb	12:09:09
2	Sr 421.552†	-9.9	-23.9	-0.2294	ug/L	-0.2294	ppb	12:09:09
2	Sc 361.383	700612.0	700612.0	101.60	%			12:10:26
2	Y 371.029	550661.3	550661.3	101.63	%			12:10:26
2	Ag 328.068†	210.9	107.7	0.5980	ug/L	0.5980	ppb	12:10:26
2	As 188.979†	-23.8	-0.7	-0.3318	ug/L	-0.3318	ppb	12:10:46
2	B 249.677†	-488.3	102.4	2.5736	ug/L	2.5736	ppb	12:10:46
2	Ba 233.527†	6.4	5.5	0.0547	ug/L	0.0547	ppb	12:10:46
2	Be 313.107†	-4565.8	29.3	0.0119	ug/L	0.0119	ppb	12:10:26
2	Cd 226.502†	-221.5	-4.6	-0.0677	ug/L	-0.0677	ppb	12:10:46
2	Co 228.616†	-50.2	10.2	0.2526	ug/L	0.2526	ppb	12:10:46
2	Cr 267.716†	74.9	-17.6	-0.2584	ug/L	-0.2584	ppb	12:10:46
2	Cu 324.752†	5683.5	-93.9	-0.3137	ug/L	-0.3137	ppb	12:10:26
2	Mn 257.610†	458.1	5.9	0.0130	ug/L	0.0130	ppb	12:10:46
2	Mo 202.031†	10.3	-2.3	-0.2204	ug/L	-0.2204	ppb	12:10:46
2	Ni 231.604†	86.8	10.8	0.3505	ug/L	0.3505	ppb	12:10:46

2	P 214.914†	224.5	2.5	1.6213 ug/L	1.6213 ppb	12:10:46
2	Pb 220.353†	-64.8	3.2	0.5032 ug/L	0.5032 ppb	12:10:46
2	S 181.975 Axial†	43.9	2.9	4.4228 ug/L	4.4228 ppb	12:10:46
2	Sb 206.836†	37.9	5.6	2.2314 ug/L	2.2314 ppb	12:10:46
2	Se 196.026†	-19.8	2.6	1.9748 ug/L	1.9748 ppb	12:10:46
2	Si 251.611†	600.7	94.6	3.4668 ug/L	3.4668 ppb	12:10:46
2	Sn 189.927†	4.5	0.3	0.0676 ug/L	0.0676 ppb	12:10:46
2	Ti 334.940†	-1427.7	16.2	0.0360 ug/L	0.0360 ppb	12:10:26
2	Tl 190.801†	-25.6	12.8	4.9052 ug/L	4.9052 ppb	12:10:46
2	U 409.014†	-2346.4	97.0	3.7359 ug/L	3.7359 ppb	12:10:26
2	V 292.402†	-1674.1	68.6	0.6045 ug/L	0.6045 ppb	12:10:26
2	Zn 213.857†	694.6	19.1	0.2137 ug/L	0.2137 ppb	12:10:46
2	SiO2†	598.1	49.5	3.9181 ug/L	3.9181 ppb	12:11:21
3	Sc Radial	3883.4	3883.4	101 %		12:09:54
3	Y RADIAL	4371.3	4371.3	100.9 %		12:09:34
3	Al 396.153Radial†	-82.8	10.4	10.912 ug/L	10.912 ppb	12:09:54
3	Ca 317.933Radial†	19.5	0.6	1.1481 ug/L	1.1481 ppb	12:09:54
3	Fe 238.204 Radial†	7.8	1.5	19.057 ug/L	19.057 ppb	12:09:54
3	K 766.490 Radial†	3031.9	1.0	0.2037 ug/L	0.2037 ppb	12:09:34
3	Mg 279.077 IEC†	0.2	-2.8	-114.79 ug/L	-114.79 ppb	12:09:54
3	Na 589.592 Radial†	-1166.9	-75.6	-33.267 ug/L	-33.267 ppb	12:09:34
3	Sr 421.552†	19.3	5.2	0.0502 ug/L	0.0502 ppb	12:09:34
3	Sc 361.383	691677.9	691677.9	100.30 %		12:10:51
3	Y 371.029	544663.3	544663.3	100.52 %		12:10:51
3	Ag 328.068†	224.7	124.2	0.6877 ug/L	0.6877 ppb	12:10:51
3	As 188.979†	-17.5	5.3	2.6449 ug/L	2.6449 ppb	12:11:11
3	B 249.677†	-447.9	136.5	3.4292 ug/L	3.4292 ppb	12:11:11
3	Ba 233.527†	2.0	1.3	0.0141 ug/L	0.0141 ppb	12:11:11
3	Be 313.107†	-4390.8	145.7	0.0589 ug/L	0.0589 ppb	12:10:51
3	Cd 226.502†	-188.5	25.5	0.3725 ug/L	0.3725 ppb	12:11:11
3	Co 228.616†	-39.0	20.8	0.5166 ug/L	0.5166 ppb	12:11:11
3	Cr 267.716†	81.4	-10.2	-0.1495 ug/L	-0.1495 ppb	12:11:11
3	Cu 324.752†	5697.6	-7.6	-0.0277 ug/L	-0.0277 ppb	12:10:51
3	Mn 257.610†	460.7	14.3	0.0251 ug/L	0.0251 ppb	12:11:11
3	Mo 202.031†	17.3	4.8	0.4583 ug/L	0.4583 ppb	12:11:11
3	Ni 231.604†	84.7	9.8	0.3177 ug/L	0.3177 ppb	12:11:11
3	P 214.914†	211.1	-8.1	-5.1460 ug/L	-5.1460 ppb	12:11:11
3	Pb 220.353†	-60.1	7.1	1.1153 ug/L	1.1153 ppb	12:11:11
3	S 181.975 Axial†	37.9	-2.4	-3.6193 ug/L	-3.6193 ppb	12:11:11
3	Sb 206.836†	37.6	5.7	2.3259 ug/L	2.3259 ppb	12:11:11
3	Se 196.026†	-28.8	-6.6	-4.8299 ug/L	-4.8299 ppb	12:11:11
3	Si 251.611†	604.6	106.2	3.8825 ug/L	3.8825 ppb	12:11:11
3	Sn 189.927†	13.3	9.2	2.1053 ug/L	2.1053 ppb	12:11:11
3	Ti 334.940†	-1413.4	12.4	0.0294 ug/L	0.0294 ppb	12:10:51
3	Tl 190.801†	-38.7	-0.6	-0.2307 ug/L	-0.2307 ppb	12:11:11
3	U 409.014†	-2258.4	155.0	5.9670 ug/L	5.9670 ppb	12:10:51
3	V 292.402†	-1650.0	71.4	0.6426 ug/L	0.6426 ppb	12:10:51
3	Zn 213.857†	701.0	34.3	0.3876 ug/L	0.3876 ppb	12:11:11
3	SiO2†	594.5	53.6	4.2166 ug/L	4.2166 ppb	12:11:26

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	697811.0	101.19	%	0.771				0.76%
Sc Radial	3792.4	98.8	%	2.70				2.73%
Y 371.029	548882.5	101.30	%	0.677				0.67%
Y RADIAL	4333.9	100.0	%	1.16				1.16%
Ag 328.068†	97.7	0.5441	ug/L	0.17678	0.5441	ppb	0.17678	32.49%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.3	3.4368	ug/L	7.72876	3.4368	ppb	7.72876	224.88%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.8	-0.3757	ug/L	3.04289	-0.3757	ppb	3.04289	809.87%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	130.9	3.2878	ug/L	0.65497	3.2878	ppb	0.65497	19.92%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.0	-0.0074	ug/L	0.07513	-0.0074	ppb	0.07513	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	108.7	0.0441	ug/L	0.02790	0.0441	ppb	0.02790	63.27%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.9	3.7754	ug/L	3.13187	3.7754	ppb	3.13187	82.96%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              13.0      0.1893 ug/L       0.22920      0.1893 ppb        0.22920 121.09%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               9.1      0.2257 ug/L       0.30525      0.2257 ppb        0.30525 135.24%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -4.7     -0.0676 ug/L       0.24239     -0.0676 ppb        0.24239 358.72%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -61.9     -0.2074 ug/L       0.15654     -0.2074 ppb        0.15654  75.47%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.8      23.432 ug/L        8.4971      23.432 ppb         8.4971  36.26%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       100.2      18.658 ug/L       28.3557      18.658 ppb        28.3557 151.97%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -2.4     -100.06 ug/L        13.534     -100.06 ppb         13.534  13.52%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              23.7      0.0370 ug/L       0.03170      0.0370 ppb        0.03170  85.67%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               0.9      0.0864 ug/L       0.34400      0.0864 ppb        0.34400 397.95%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -121.3     -53.390 ug/L       23.5685     -53.390 ppb        23.5685  44.14%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              11.3      0.3696 ug/L       0.06365      0.3696 ppb        0.06365  17.22%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -6.1     -3.8686 ug/L       4.97570     -3.8686 ppb        4.97570 128.62%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               4.3      0.6829 ug/L       0.37631      0.6829 ppb        0.37631  55.11%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -0.2     -0.3385 ug/L       4.22054     -0.3385 ppb        4.22054 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               3.4      1.3898 ug/L       1.54024      1.3898 ppb        1.54024 110.83%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -3.5     -2.5296 ug/L       3.90123     -2.5296 ppb        3.90123 154.23%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             105.0      3.8441 ug/L       0.35975      3.8441 ppb        0.35975   9.36%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               7.0      1.6057 ug/L       1.35901      1.6057 ppb        1.35901  84.64%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -4.4     -0.0427 ug/L       0.16174     -0.0427 ppb        0.16174 379.20%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              49.5      0.0966 ug/L       0.11077      0.0966 ppb        0.11077 114.63%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               6.5      2.4807 ug/L       2.57995      2.4807 ppb        2.57995 104.00%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              117.0      4.5053 ug/L       1.26647      4.5053 ppb        1.26647  28.11%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               61.4      0.5454 ug/L       0.13671      0.5454 ppb        0.13671  25.07%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              29.9      0.3362 ug/L       0.10650      0.3362 ppb        0.10650  31.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    63.9      5.0451 ug/L       1.70014      5.0451 ppb        1.70014  33.70%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 28
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 4/1/2010 13:09:57
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	3812.3	3812.3	99.3	%			13:12:09
1	Y RADIAL	4308.7	4308.7	99.47	%			13:11:49
1	Al 396.153Radial†	4682.6	4807.3	5036.8	ug/L	5036.8	ppb	13:11:49
1	Ca 317.933Radial†	2636.4	2636.0	5175.9	ug/L	5175.9	ppb	13:12:09
1	Fe 238.204 Radial†	405.3	401.9	5122.8	ug/L	5122.8	ppb	13:12:09
1	K 766.490 Radial†	30014.0	27225.8	5056.7	ug/L	5056.7	ppb	13:11:49
1	Mg 279.077 IEC†	129.0	126.9	5227.5	ug/L	5227.5	ppb	13:12:09
1	Na 589.592 Radial†	21991.6	23221.5	10221	ug/L	10221	ppb	13:11:49
1	Sr 421.552†	50932.2	51270.7	492.24	ug/L	492.24	ppb	13:11:49
1	Sc 361.383	692822.5	692822.5	100.47	%			13:13:06
1	Y 371.029	467393.2	467393.2	86.263	%			13:13:11
1	Ag 328.068†	89216.2	88699.8	491.77	ug/L	491.77	ppb	13:13:11
1	As 188.979†	971.0	989.3	494.08	ug/L	494.08	ppb	13:13:31
1	B 249.677†	18433.4	18930.3	474.01	ug/L	474.01	ppb	13:13:11
1	Ba 233.527†	50946.5	50707.8	491.32	ug/L	491.32	ppb	13:13:11
1	Be 313.107†	1216830.3	1215672.1	492.09	ug/L	492.09	ppb	13:13:06
1	Cd 226.502†	33312.1	33370.0	487.74	ug/L	487.74	ppb	13:13:11
1	Co 228.616†	20303.3	20268.2	502.11	ug/L	502.11	ppb	13:13:11
1	Cr 267.716†	33290.9	33044.2	488.50	ug/L	488.50	ppb	13:13:11
1	Cu 324.752†	151793.3	145396.6	484.28	ug/L	484.28	ppb	13:13:11
1	Mn 257.610†	383294.0	381059.3	493.36	ug/L	493.36	ppb	13:13:06
1	Mo 202.031†	5131.4	5094.9	489.86	ug/L	489.86	ppb	13:13:31
1	Ni 231.604†	15441.7	15294.9	498.44	ug/L	498.44	ppb	13:13:11
1	P 214.914†	4036.4	3799.1	2334.1	ug/L	2334.1	ppb	13:13:31
1	Pb 220.353†	3058.3	3111.0	491.13	ug/L	491.13	ppb	13:13:31
1	S 181.975 Axial†	691.6	648.2	972.94	ug/L	972.94	ppb	13:13:31
1	Sb 206.836†	1256.0	1218.4	505.00	ug/L	505.00	ppb	13:13:31
1	Se 196.026†	633.4	652.6	500.51	ug/L	500.51	ppb	13:13:31
1	Si 251.611†	68014.2	67200.0	2454.1	ug/L	2454.1	ppb	13:13:11
1	Sn 189.927†	2137.9	2123.7	488.81	ug/L	488.81	ppb	13:13:31
1	Ti 334.940†	270274.6	270434.1	490.70	ug/L	490.70	ppb	13:13:11
1	Tl 190.801†	1235.0	1267.2	490.77	ug/L	490.77	ppb	13:13:31
1	U 409.014†	9915.4	12275.6	471.18	ug/L	471.18	ppb	13:13:11
1	V 292.402†	53730.0	55195.5	493.05	ug/L	493.05	ppb	13:13:11
1	Zn 213.857†	43549.5	42681.6	483.61	ug/L	483.61	ppb	13:13:11
1	SiO2†	68641.6	67782.0	5338.4	ug/L	5338.4	ppb	13:14:38
2	Sc Radial	3755.8	3755.8	97.8	%			13:12:34
2	Y RADIAL	4248.3	4248.3	98.07	%			13:12:14
2	Al 396.153Radial†	4575.4	4768.6	4996.0	ug/L	4996.0	ppb	13:12:14
2	Ca 317.933Radial†	2605.9	2644.7	5192.9	ug/L	5192.9	ppb	13:12:34
2	Fe 238.204 Radial†	397.4	400.0	5098.7	ug/L	5098.7	ppb	13:12:34
2	K 766.490 Radial†	29659.2	27317.4	5073.7	ug/L	5073.7	ppb	13:12:14
2	Mg 279.077 IEC†	128.3	128.1	5277.2	ug/L	5277.2	ppb	13:12:34
2	Na 589.592 Radial†	21658.7	23214.2	10217	ug/L	10217	ppb	13:12:14
2	Sr 421.552†	50015.3	51104.5	490.64	ug/L	490.64	ppb	13:12:14
2	Sc 361.383	689589.4	689589.4	100.00	%			13:13:37
2	Y 371.029	465675.1	465675.1	85.946	%			13:13:42
2	Ag 328.068†	88991.7	88891.6	492.81	ug/L	492.81	ppb	13:13:42
2	As 188.979†	957.5	980.3	489.65	ug/L	489.65	ppb	13:14:02
2	B 249.677†	18384.9	18967.8	474.95	ug/L	474.95	ppb	13:13:42
2	Ba 233.527†	50887.2	50886.3	493.04	ug/L	493.04	ppb	13:13:42
2	Be 313.107†	1208896.4	1213416.6	491.18	ug/L	491.18	ppb	13:13:37
2	Cd 226.502†	33349.8	33563.2	490.56	ug/L	490.56	ppb	13:13:42
2	Co 228.616†	20290.2	20349.9	504.14	ug/L	504.14	ppb	13:13:42
2	Cr 267.716†	33291.1	33199.7	490.79	ug/L	490.79	ppb	13:13:42
2	Cu 324.752†	150977.4	145289.0	483.91	ug/L	483.91	ppb	13:13:42
2	Mn 257.610†	382340.9	381894.9	494.43	ug/L	494.43	ppb	13:13:37
2	Mo 202.031†	5130.4	5117.9	492.07	ug/L	492.07	ppb	13:14:02
2	Ni 231.604†	15396.5	15321.8	499.32	ug/L	499.32	ppb	13:13:42

2	P 214.914†	4036.6	3818.1	2346.3 ug/L	2346.3 ppb	13:14:02
2	Pb 220.353†	3030.6	3097.6	489.03 ug/L	489.03 ppb	13:14:02
2	S 181.975 Axial†	685.8	645.5	968.98 ug/L	968.98 ppb	13:14:02
2	Sb 206.836†	1257.2	1225.4	507.94 ug/L	507.94 ppb	13:14:02
2	Se 196.026†	642.9	665.0	509.68 ug/L	509.68 ppb	13:14:02
2	Si 251.611†	67889.6	67392.8	2461.1 ug/L	2461.1 ppb	13:13:42
2	Sn 189.927†	2151.6	2147.5	494.28 ug/L	494.28 ppb	13:14:02
2	Ti 334.940†	269400.4	270821.2	491.39 ug/L	491.39 ppb	13:13:42
2	Tl 190.801†	1234.9	1272.8	492.95 ug/L	492.95 ppb	13:14:02
2	U 409.014†	10041.1	12447.5	477.80 ug/L	477.80 ppb	13:13:42
2	V 292.402†	53445.1	55161.3	492.80 ug/L	492.80 ppb	13:13:42
2	Zn 213.857†	43483.0	42818.3	485.17 ug/L	485.17 ppb	13:13:42
2	SiO2†	69203.4	68664.1	5408.0 ug/L	5408.0 ppb	13:14:43
3	Sc Radial	3850.3	3850.3	100 %		13:12:59
3	Y RADIAL	4300.1	4300.1	99.27 %		13:12:39
3	Al 396.153Radial†	4689.1	4767.2	4994.4 ug/L	4994.4 ppb	13:12:39
3	Ca 317.933Radial†	2654.3	2627.6	5159.5 ug/L	5159.5 ppb	13:12:59
3	Fe 238.204 Radial†	409.8	402.4	5129.6 ug/L	5129.6 ppb	13:12:59
3	K 766.490 Radial†	30062.6	26976.0	5010.3 ug/L	5010.3 ppb	13:12:39
3	Mg 279.077 IEC†	131.1	127.6	5257.3 ug/L	5257.3 ppb	13:12:59
3	Na 589.592 Radial†	21677.1	22689.5	9986.4 ug/L	9986.4 ppb	13:12:39
3	Sr 421.552†	50663.3	50496.4	484.81 ug/L	484.81 ppb	13:12:39
3	Sc 361.383	695656.5	695656.5	100.88 %		13:14:08
3	Y 371.029	468017.6	468017.6	86.378 %		13:14:13
3	Ag 328.068†	89917.4	89033.1	493.60 ug/L	493.60 ppb	13:14:13
3	As 188.979†	968.9	983.3	491.12 ug/L	491.12 ppb	13:14:33
3	B 249.677†	18784.7	19203.8	480.89 ug/L	480.89 ppb	13:14:13
3	Ba 233.527†	51285.5	50837.3	492.57 ug/L	492.57 ppb	13:14:13
3	Be 313.107†	1225042.7	1218878.9	493.39 ug/L	493.39 ppb	13:14:08
3	Cd 226.502†	33573.5	33494.1	489.55 ug/L	489.55 ppb	13:14:13
3	Co 228.616†	20439.0	20320.4	503.41 ug/L	503.41 ppb	13:14:13
3	Cr 267.716†	33524.1	33140.3	489.92 ug/L	489.92 ppb	13:14:13
3	Cu 324.752†	153238.9	146214.1	487.00 ug/L	487.00 ppb	13:14:13
3	Mn 257.610†	386639.6	382821.6	495.64 ug/L	495.64 ppb	13:14:08
3	Mo 202.031†	5194.0	5136.2	493.83 ug/L	493.83 ppb	13:14:33
3	Ni 231.604†	15585.3	15374.7	501.04 ug/L	501.04 ppb	13:14:13
3	P 214.914†	4107.8	3853.5	2368.3 ug/L	2368.3 ppb	13:14:33
3	Pb 220.353†	3076.4	3116.6	492.01 ug/L	492.01 ppb	13:14:33
3	S 181.975 Axial†	704.3	657.9	987.64 ug/L	987.64 ppb	13:14:33
3	Sb 206.836†	1271.7	1228.9	509.37 ug/L	509.37 ppb	13:14:33
3	Se 196.026†	659.1	675.4	517.47 ug/L	517.47 ppb	13:14:33
3	Si 251.611†	68669.8	67574.1	2467.7 ug/L	2467.7 ppb	13:14:13
3	Sn 189.927†	2173.4	2150.3	494.91 ug/L	494.91 ppb	13:14:33
3	Ti 334.940†	272553.9	271597.7	492.80 ug/L	492.80 ppb	13:14:13
3	Tl 190.801†	1256.1	1283.0	496.91 ug/L	496.91 ppb	13:14:33
3	U 409.014†	10199.0	12516.5	480.45 ug/L	480.45 ppb	13:14:13
3	V 292.402†	54102.2	55346.6	494.46 ug/L	494.46 ppb	13:14:13
3	Zn 213.857†	43833.5	42786.5	484.79 ug/L	484.79 ppb	13:14:13
3	SiO2†	69470.8	68325.6	5381.3 ug/L	5381.3 ppb	13:14:48

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	692689.5	100.45	%	0.440				0.44%
Sc Radial	3806.1	99.2	%	1.24				1.25%
Y 371.029	467028.6	86.196	%	0.2239				0.26%
Y RADIAL	4285.7	98.94	%	0.755				0.76%
Ag 328.068†	88874.8	492.73	ug/L	0.921	492.73	ppb	0.921	0.19%
QC value within limits for Ag 328.068 Recovery = 98.55%								
Al 396.153Radial†	4781.0	5009.1	ug/L	24.02	5009.1	ppb	24.02	0.48%
QC value within limits for Al 396.153Radial Recovery = 100.18%								
As 188.979†	984.3	491.62	ug/L	2.256	491.62	ppb	2.256	0.46%
QC value within limits for As 188.979 Recovery = 98.32%								
B 249.677†	19034.0	476.62	ug/L	3.728	476.62	ppb	3.728	0.78%
QC value within limits for B 249.677 Recovery = 95.32%								
Ba 233.527†	50810.5	492.31	ug/L	0.891	492.31	ppb	0.891	0.18%
QC value within limits for Ba 233.527 Recovery = 98.46%								
Be 313.107†	1215989.2	492.22	ug/L	1.110	492.22	ppb	1.110	0.23%
QC value within limits for Be 313.107 Recovery = 98.44%								
Ca 317.933Radial†	2636.1	5176.1	ug/L	16.73	5176.1	ppb	16.73	0.32%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.52%
Cd 226.502†            33475.8      489.28 ug/L         1.433      489.28 ppb          1.433   0.29%
   QC value within limits for Cd 226.502  Recovery = 97.86%
Co 228.616†            20312.8      503.22 ug/L         1.027      503.22 ppb          1.027   0.20%
   QC value within limits for Co 228.616  Recovery = 100.64%
Cr 267.716†            33128.0      489.73 ug/L         1.155      489.73 ppb          1.155   0.24%
   QC value within limits for Cr 267.716  Recovery = 97.95%
Cu 324.752†           145633.2      485.06 ug/L         1.684      485.06 ppb          1.684   0.35%
   QC value within limits for Cu 324.752  Recovery = 97.01%
Fe 238.204 Radial†       401.4      5117.1 ug/L        16.23      5117.1 ppb         16.23   0.32%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.34%
K 766.490 Radial†      27173.1      5046.9 ug/L        32.81      5046.9 ppb         32.81   0.65%
   QC value within limits for K 766.490 Radial  Recovery = 100.94%
Mg 279.077 IEC†          127.6      5254.0 ug/L        25.01      5254.0 ppb         25.01   0.48%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.08%
Mn 257.610†           381925.3      494.47 ug/L         1.140      494.47 ppb          1.140   0.23%
   QC value within limits for Mn 257.610  Recovery = 98.89%
Mo 202.031†             5116.4      491.92 ug/L         1.988      491.92 ppb          1.988   0.40%
   QC value within limits for Mo 202.031  Recovery = 98.38%
Na 589.592 Radial†     23041.7       10141 ug/L       134.3        10141 ppb        134.3   1.32%
   QC value within limits for Na 589.592 Radial  Recovery = 101.41%
Ni 231.604†            15330.5      499.60 ug/L         1.322      499.60 ppb          1.322   0.26%
   QC value within limits for Ni 231.604  Recovery = 99.92%
P 214.914†              3823.6      2349.6 ug/L        17.35      2349.6 ppb         17.35   0.74%
   QC value within limits for P 214.914  Recovery = 93.98%
Pb 220.353†             3108.4      490.73 ug/L         1.533      490.73 ppb          1.533   0.31%
   QC value within limits for Pb 220.353  Recovery = 98.15%
S 181.975 Axial†         650.5      976.52 ug/L         9.831      976.52 ppb          9.831   1.01%
   QC value within limits for S 181.975 Axial  Recovery = 97.65%
Sb 206.836†             1224.2      507.44 ug/L         2.231      507.44 ppb          2.231   0.44%
   QC value within limits for Sb 206.836  Recovery = 101.49%
Se 196.026†              664.4      509.22 ug/L         8.490      509.22 ppb          8.490   1.67%
   QC value within limits for Se 196.026  Recovery = 101.84%
Si 251.611†            67389.0      2461.0 ug/L         6.82      2461.0 ppb          6.82   0.28%
   QC value within limits for Si 251.611  Recovery = 98.44%
Sn 189.927†             2140.5      492.67 ug/L         3.353      492.67 ppb          3.353   0.68%
   QC value within limits for Sn 189.927  Recovery = 98.53%
Sr 421.552†            50957.2      489.23 ug/L         3.914      489.23 ppb          3.914   0.80%
   QC value within limits for Sr 421.552  Recovery = 97.85%
Ti 334.940†           270951.0      491.63 ug/L         1.071      491.63 ppb          1.071   0.22%
   QC value within limits for Ti 334.940  Recovery = 98.33%
Tl 190.801†             1274.3      493.54 ug/L         3.109      493.54 ppb          3.109   0.63%
   QC value within limits for Tl 190.801  Recovery = 98.71%
U 409.014†             12413.2      476.47 ug/L         4.777      476.47 ppb          4.777   1.00%
   QC value within limits for U 409.014  Recovery = 95.29%
V 292.402†             55234.5      493.44 ug/L         0.892      493.44 ppb          0.892   0.18%
   QC value within limits for V 292.402  Recovery = 98.69%
Zn 213.857†            42762.1      484.52 ug/L         0.814      484.52 ppb          0.814   0.17%
   QC value within limits for Zn 213.857  Recovery = 96.90%
SiO2†                  68257.2      5375.9 ug/L        35.10      5375.9 ppb         35.10   0.65%
   QC value within limits for SiO2  Recovery = 100.53%
All analyte(s) passed QC.
```

Sequence No.: 29
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 4/1/2010 13:16:59
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	3899.3	3899.3	102	%			13:19:11
1	Y RADIAL	4286.1	4286.1	98.94	%			13:18:51
1	Al 396.153Radial†	-94.1	-0.4	-0.3995	ug/L	-0.3995	ppb	13:18:51
1	Ca 317.933Radial†	23.5	4.5	8.8160	ug/L	8.8160	ppb	13:19:11
1	Fe 238.204 Radial†	6.8	0.5	6.3335	ug/L	6.3335	ppb	13:19:11
1	K 766.490 Radial†	3076.7	33.0	6.1433	ug/L	6.1433	ppb	13:18:51
1	Mg 279.077 IEC†	1.2	-1.8	-74.536	ug/L	-74.536	ppb	13:19:11
1	Na 589.592 Radial†	-1187.1	-90.9	-39.992	ug/L	-39.992	ppb	13:18:51
1	Sr 421.552†	38.1	23.6	0.2267	ug/L	0.2267	ppb	13:18:51
1	Sc 361.383	689213.7	689213.7	99.946	%			13:20:08
1	Y 371.029	540087.7	540087.7	99.680	%			13:20:08
1	Ag 328.068†	126.0	26.2	0.1431	ug/L	0.1431	ppb	13:20:08
1	As 188.979†	-29.4	-6.6	-3.2930	ug/L	-3.2930	ppb	13:20:28
1	B 249.677†	-514.6	68.1	1.7122	ug/L	1.7122	ppb	13:20:28
1	Ba 233.527†	-15.7	-16.5	-0.1612	ug/L	-0.1612	ppb	13:20:28
1	Be 313.107†	-4417.9	103.0	0.0413	ug/L	0.0413	ppb	13:20:08
1	Cd 226.502†	-209.0	4.4	0.0625	ug/L	0.0625	ppb	13:20:28
1	Co 228.616†	-56.6	3.1	0.0770	ug/L	0.0770	ppb	13:20:28
1	Cr 267.716†	84.9	-6.3	-0.0940	ug/L	-0.0940	ppb	13:20:28
1	Cu 324.752†	5749.6	64.7	0.2166	ug/L	0.2166	ppb	13:20:08
1	Mn 257.610†	496.2	51.5	0.0702	ug/L	0.0702	ppb	13:20:28
1	Mo 202.031†	18.0	5.5	0.5307	ug/L	0.5307	ppb	13:20:28
1	Ni 231.604†	62.8	-11.8	-0.3853	ug/L	-0.3853	ppb	13:20:28
1	P 214.914†	217.9	-0.5	-0.3288	ug/L	-0.3288	ppb	13:20:28
1	Pb 220.353†	-58.4	8.5	1.3444	ug/L	1.3444	ppb	13:20:28
1	S 181.975 Axial†	40.6	0.4	0.5400	ug/L	0.5400	ppb	13:20:28
1	Sb 206.836†	25.3	-6.5	-2.5364	ug/L	-2.5364	ppb	13:20:28
1	Se 196.026†	-29.8	-7.7	-5.7260	ug/L	-5.7260	ppb	13:20:28
1	Si 251.611†	567.6	71.3	2.6043	ug/L	2.6043	ppb	13:20:28
1	Sn 189.927†	16.5	12.4	2.8403	ug/L	2.8403	ppb	13:20:28
1	Ti 334.940†	-1481.2	-60.5	-0.1020	ug/L	-0.1020	ppb	13:20:08
1	Tl 190.801†	-39.7	-1.8	-0.6951	ug/L	-0.6951	ppb	13:20:28
1	U 409.014†	-2435.9	-30.7	-1.1832	ug/L	-1.1832	ppb	13:20:08
1	V 292.402†	-1831.8	-116.4	-1.0234	ug/L	-1.0234	ppb	13:20:08
1	Zn 213.857†	701.6	37.4	0.4288	ug/L	0.4288	ppb	13:20:28
1	SiO2†	569.6	30.7	2.4108	ug/L	2.4108	ppb	13:21:24
2	Sc Radial	3921.8	3921.8	102	%			13:19:36
2	Y RADIAL	4378.7	4378.7	101.1	%			13:19:16
2	Al 396.153Radial†	-112.5	-17.9	-18.844	ug/L	-18.844	ppb	13:19:16
2	Ca 317.933Radial†	19.0	-0.1	-0.2053	ug/L	-0.2053	ppb	13:19:36
2	Fe 238.204 Radial†	7.8	1.4	17.761	ug/L	17.761	ppb	13:19:36
2	K 766.490 Radial†	2982.9	-76.2	-14.160	ug/L	-14.160	ppb	13:19:16
2	Mg 279.077 IEC†	1.1	-1.9	-78.200	ug/L	-78.200	ppb	13:19:36
2	Na 589.592 Radial†	-1171.6	-69.0	-30.361	ug/L	-30.361	ppb	13:19:16
2	Sr 421.552†	20.4	6.1	0.0584	ug/L	0.0584	ppb	13:19:16
2	Sc 361.383	696639.9	696639.9	101.02	%			13:20:33
2	Y 371.029	545980.2	545980.2	100.77	%			13:20:33
2	Ag 328.068†	112.1	11.1	0.0612	ug/L	0.0612	ppb	13:20:33
2	As 188.979†	-29.2	-6.1	-3.0343	ug/L	-3.0343	ppb	13:20:53
2	B 249.677†	-498.6	89.5	2.2489	ug/L	2.2489	ppb	13:20:53
2	Ba 233.527†	-6.1	-6.8	-0.0662	ug/L	-0.0662	ppb	13:20:53
2	Be 313.107†	-4619.7	-49.7	-0.0199	ug/L	-0.0199	ppb	13:20:33
2	Cd 226.502†	-211.0	4.6	0.0654	ug/L	0.0654	ppb	13:20:53
2	Co 228.616†	-60.8	-0.5	-0.0120	ug/L	-0.0120	ppb	13:20:53
2	Cr 267.716†	99.9	7.5	0.1109	ug/L	0.1109	ppb	13:20:53
2	Cu 324.752†	5722.7	-23.2	-0.0784	ug/L	-0.0784	ppb	13:20:33
2	Mn 257.610†	472.7	22.9	0.0346	ug/L	0.0346	ppb	13:20:53
2	Mo 202.031†	15.3	2.7	0.2593	ug/L	0.2593	ppb	13:20:53
2	Ni 231.604†	64.6	-10.7	-0.3484	ug/L	-0.3484	ppb	13:20:53

2	P 214.914†	220.5	-0.3	-0.1644 ug/L	-0.1644 ppb	13:20:53
2	Pb 220.353†	-76.5	-8.8	-1.3848 ug/L	-1.3848 ppb	13:20:53
2	S 181.975 Axial†	39.7	-0.9	-1.3532 ug/L	-1.3532 ppb	13:20:53
2	Sb 206.836†	39.9	7.8	3.1192 ug/L	3.1192 ppb	13:20:53
2	Se 196.026†	-32.2	-9.8	-7.2288 ug/L	-7.2288 ppb	13:20:53
2	Si 251.611†	576.4	73.9	2.7026 ug/L	2.7026 ppb	13:20:53
2	Sn 189.927†	7.7	3.5	0.8100 ug/L	0.8100 ppb	13:20:53
2	Ti 334.940†	-1399.8	35.9	0.0698 ug/L	0.0698 ppb	13:20:33
2	Tl 190.801†	-36.3	2.0	0.7751 ug/L	0.7751 ppb	13:20:53
2	U 409.014†	-2333.0	97.1	3.7372 ug/L	3.7372 ppb	13:20:33
2	V 292.402†	-1795.0	-60.5	-0.5264 ug/L	-0.5264 ppb	13:20:33
2	Zn 213.857†	709.4	37.7	0.4304 ug/L	0.4304 ppb	13:20:53
2	SiO2†	553.9	9.2	0.7157 ug/L	0.7157 ppb	13:21:29
3	Sc Radial	3847.8	3847.8	100 %		13:20:01
3	Y RADIAL	4316.2	4316.2	99.64 %		13:19:41
3	Al 396.153Radial†	-113.6	-21.1	-22.246 ug/L	-22.246 ppb	13:19:41
3	Ca 317.933Radial†	17.8	-0.9	-1.8076 ug/L	-1.8076 ppb	13:20:01
3	Fe 238.204 Radial†	3.8	-2.4	-30.079 ug/L	-30.079 ppb	13:20:01
3	K 766.490 Radial†	3023.8	20.8	3.8802 ug/L	3.8802 ppb	13:19:41
3	Mg 279.077 IEC†	3.2	0.2	8.2462 ug/L	8.2462 ppb	13:20:01
3	Na 589.592 Radial†	-1174.2	-93.6	-41.208 ug/L	-41.208 ppb	13:19:41
3	Sr 421.552†	14.3	0.3	0.0034 ug/L	0.0034 ppb	13:19:41
3	Sc 361.383	691071.6	691071.6	100.22 %		13:20:58
3	Y 371.029	541226.7	541226.7	99.890 %		13:20:58
3	Ag 328.068†	98.8	-1.3	-0.0105 ug/L	-0.0105 ppb	13:20:58
3	As 188.979†	-27.2	-4.3	-2.1603 ug/L	-2.1603 ppb	13:21:18
3	B 249.677†	-516.7	67.4	1.7007 ug/L	1.7007 ppb	13:21:18
3	Ba 233.527†	-1.3	-2.1	-0.0208 ug/L	-0.0208 ppb	13:21:18
3	Be 313.107†	-4566.0	-32.9	-0.0131 ug/L	-0.0131 ppb	13:20:58
3	Cd 226.502†	-215.8	-1.9	-0.0259 ug/L	-0.0259 ppb	13:21:18
3	Co 228.616†	-63.1	-3.3	-0.0802 ug/L	-0.0802 ppb	13:21:18
3	Cr 267.716†	100.6	9.1	0.1342 ug/L	0.1342 ppb	13:21:18
3	Cu 324.752†	5644.9	-55.1	-0.1814 ug/L	-0.1814 ppb	13:20:58
3	Mn 257.610†	505.9	59.8	0.0741 ug/L	0.0741 ppb	13:21:18
3	Mo 202.031†	16.0	3.5	0.3378 ug/L	0.3378 ppb	13:21:18
3	Ni 231.604†	71.2	-3.6	-0.1171 ug/L	-0.1171 ppb	13:21:18
3	P 214.914†	216.5	-2.5	-1.5070 ug/L	-1.5070 ppb	13:21:18
3	Pb 220.353†	-78.3	-11.1	-1.7516 ug/L	-1.7516 ppb	13:21:18
3	S 181.975 Axial†	41.7	1.4	2.1321 ug/L	2.1321 ppb	13:21:18
3	Sb 206.836†	36.7	4.9	1.9773 ug/L	1.9773 ppb	13:21:18
3	Se 196.026†	-28.1	-6.0	-4.5203 ug/L	-4.5203 ppb	13:21:18
3	Si 251.611†	558.6	60.8	2.2209 ug/L	2.2209 ppb	13:21:18
3	Sn 189.927†	6.3	2.2	0.5002 ug/L	0.5002 ppb	13:21:18
3	Ti 334.940†	-1388.2	36.2	0.0678 ug/L	0.0678 ppb	13:20:58
3	Tl 190.801†	-42.2	-4.1	-1.5881 ug/L	-1.5881 ppb	13:21:18
3	U 409.014†	-2594.2	-182.1	-7.0128 ug/L	-7.0128 ppb	13:20:58
3	V 292.402†	-1711.5	8.6	0.0717 ug/L	0.0717 ppb	13:20:58
3	Zn 213.857†	704.4	38.3	0.4437 ug/L	0.4437 ppb	13:21:18
3	SiO2†	540.6	0.2	0.0094 ug/L	0.0094 ppb	13:21:34

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	692308.4	100.39	%	0.560				0.56%
Sc Radial	3889.6	101	%	1.0				0.98%
Y 371.029	542431.5	100.11	%	0.577				0.58%
Y RADIAL	4327.0	99.89	%	1.091				1.09%
Ag 328.068†	12.0	0.0646	ug/L	0.07686	0.0646	ppb	0.07686	119.03%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-13.1	-13.830	ug/L	11.7548	-13.830	ppb	11.7548	85.00%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-5.7	-2.8292	ug/L	0.59355	-2.8292	ppb	0.59355	20.98%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	75.0	1.8873	ug/L	0.31324	1.8873	ppb	0.31324	16.60%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-8.4	-0.0827	ug/L	0.07162	-0.0827	ppb	0.07162	86.58%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	6.8	0.0028	ug/L	0.03358	0.0028	ppb	0.03358	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.2	2.2677	ug/L	5.72729	2.2677	ppb	5.72729	252.56%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 2.3      0.0340 ug/L       0.05193      0.0340 ppb        0.05193 152.67%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -0.2     -0.0051 ug/L       0.07882     -0.0051 ppb        0.07882 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 3.4      0.0504 ug/L       0.12555      0.0504 ppb        0.12555 249.22%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                -4.5     -0.0144 ug/L       0.20657     -0.0144 ppb        0.20657 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.2     -1.9949 ug/L      24.98389     -1.9949 ppb       24.98389 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          -7.5     -1.3789 ug/L      11.12668     -1.3789 ppb       11.12668 806.92%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.2     -48.163 ug/L       48.8864     -48.163 ppb        48.8864 101.50%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                44.7      0.0596 ug/L       0.02177      0.0596 ppb        0.02177  36.52%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.9      0.3759 ug/L       0.13964      0.3759 ppb        0.13964  37.15%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -84.5     -37.187 ug/L        5.9429     -37.187 ppb         5.9429  15.98%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -8.7     -0.2836 ug/L       0.14538     -0.2836 ppb        0.14538  51.26%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -1.1     -0.6667 ug/L       0.73231     -0.6667 ppb        0.73231 109.84%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -3.8     -0.5973 ug/L       1.69158     -0.5973 ppb        1.69158 283.19%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.3      0.4396 ug/L       1.74485      0.4396 ppb        1.74485 396.90%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.1      0.8534 ug/L       2.99061      0.8534 ppb        2.99061 350.45%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -7.8     -5.8251 ug/L       1.35694     -5.8251 ppb        1.35694  23.29%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                68.7      2.5093 ug/L       0.25452      2.5093 ppb        0.25452  10.14%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.0      1.3835 ug/L       1.27114      1.3835 ppb        1.27114  91.88%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                10.0      0.0962 ug/L       0.11638      0.0962 ppb        0.11638 121.02%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 3.8      0.0119 ug/L       0.09863      0.0119 ppb        0.09863 831.63%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.3     -0.5027 ug/L       1.19330     -0.5027 ppb        1.19330 237.38%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -38.6     -1.4863 ug/L       5.38139     -1.4863 ppb        5.38139 362.08%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -56.1     -0.4927 ug/L       0.54831     -0.4927 ppb        0.54831 111.29%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                37.8      0.4343 ug/L       0.00818      0.4343 ppb        0.00818   1.88%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      13.4      1.0453 ug/L       1.23417      1.0453 ppb        1.23417 118.07%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 4/1/2010 13:44:49 **Plasma On Time:** 3/30/2010 17:10:22
Logged In Analyst: Optima3 **Technique:** ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601 **Autosampler Model:** S10

Sample Information File: C:\pe\Optima3\Sample Information\040110.sif
Batch ID:
Results Data Set: 040110
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location:** 7
Sample ID: CCV **Date Collected:** 4/1/2010 13:44:50
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4179.3	4179.3	109	%			13:46:42
1	Y RADIAL	4540.1	4540.1	104.8	%			13:46:42
1	Al 396.153Radial†	4609.9	4326.4	4530.4	ug/L	4530.4	ppb	13:46:42
1	Ca 317.933Radial†	2661.3	2425.7	4763.0	ug/L	4763.0	ppb	13:47:02
1	Fe 238.204 Radial†	405.6	366.4	4671.7	ug/L	4671.7	ppb	13:47:02
1	K 766.490 Radial†	29793.6	24369.2	4525.9	ug/L	4525.9	ppb	13:46:42
1	Mg 279.077 IEC†	127.4	114.0	4697.8	ug/L	4697.8	ppb	13:47:02
1	Na 589.592 Radial†	21739.7	21045.5	9262.9	ug/L	9262.9	ppb	13:46:42
1	Sr 421.552†	50541.7	46408.2	445.55	ug/L	445.55	ppb	13:46:42
1	Sc 361.383	694768.4	694768.4	100.75	%			13:47:59
1	Y 371.029	447465.7	447465.7	82.585	%			13:48:04
1	Ag 328.068†	91788.9	91004.5	504.36	ug/L	504.36	ppb	13:48:04
1	As 188.979†	971.7	987.3	493.09	ug/L	493.09	ppb	13:48:24
1	B 249.677†	19204.8	19644.6	492.03	ug/L	492.03	ppb	13:48:04
1	Ba 233.527†	52110.4	51721.1	501.12	ug/L	501.12	ppb	13:48:04
1	Be 313.107†	1222314.5	1217723.2	492.94	ug/L	492.94	ppb	13:47:59
1	Cd 226.502†	34182.3	34140.8	499.06	ug/L	499.06	ppb	13:48:04
1	Co 228.616†	20754.5	20659.4	511.79	ug/L	511.79	ppb	13:48:04
1	Cr 267.716†	34074.4	33729.0	498.56	ug/L	498.56	ppb	13:48:04
1	Cu 324.752†	156812.6	149955.3	499.43	ug/L	499.43	ppb	13:48:04
1	Mn 257.610†	386506.8	383179.7	496.08	ug/L	496.08	ppb	13:48:04
1	Mo 202.031†	5194.3	5143.1	494.46	ug/L	494.46	ppb	13:48:24
1	Ni 231.604†	15851.5	15658.7	510.30	ug/L	510.30	ppb	13:48:04
1	P 214.914†	4085.4	3836.5	2355.2	ug/L	2355.2	ppb	13:48:24
1	Pb 220.353†	3063.1	3107.3	490.47	ug/L	490.47	ppb	13:48:24
1	S 181.975 Axial†	706.2	660.7	991.91	ug/L	991.91	ppb	13:48:24
1	Sb 206.836†	1266.6	1225.4	508.01	ug/L	508.01	ppb	13:48:24
1	Se 196.026†	634.3	651.7	498.49	ug/L	498.49	ppb	13:48:24
1	Si 251.611†	70079.8	69060.7	2522.2	ug/L	2522.2	ppb	13:48:04
1	Sn 189.927†	2174.8	2154.5	495.80	ug/L	495.80	ppb	13:48:24
1	Ti 334.940†	278175.1	277522.3	503.54	ug/L	503.54	ppb	13:48:04
1	Tl 190.801†	1257.3	1285.9	498.04	ug/L	498.04	ppb	13:48:24
1	U 409.014†	10492.1	12820.3	492.19	ug/L	492.19	ppb	13:48:04
1	V 292.402†	55143.4	56448.6	504.24	ug/L	504.24	ppb	13:48:04
1	Zn 213.857†	44766.2	43767.8	496.01	ug/L	496.01	ppb	13:48:04
1	SiO2†	67727.3	66683.1	5251.6	ug/L	5251.6	ppb	13:49:31
2	Sc Radial	3794.3	3794.3	98.8	%			13:47:07
2	Y RADIAL	4107.4	4107.4	94.82	%			13:47:07
2	Al 396.153Radial†	4483.9	4628.6	4848.5	ug/L	4848.5	ppb	13:47:07
2	Ca 317.933Radial†	2586.4	2598.0	5101.3	ug/L	5101.3	ppb	13:47:27
2	Fe 238.204 Radial†	394.6	393.1	5010.5	ug/L	5010.5	ppb	13:47:27
2	K 766.490 Radial†	28828.8	26170.1	4860.5	ug/L	4860.5	ppb	13:47:07
2	Mg 279.077 IEC†	124.1	122.6	5048.6	ug/L	5048.6	ppb	13:47:27
2	Na 589.592 Radial†	20778.4	22099.2	9726.6	ug/L	9726.6	ppb	13:47:07
2	Sr 421.552†	48409.0	48961.3	470.07	ug/L	470.07	ppb	13:47:07
2	Sc 361.383	696471.8	696471.8	101.00	%			13:48:30
2	Y 371.029	442927.0	442927.0	81.748	%			13:48:35

2	Ag 328.068†	89686.0	88699.7	491.73 ug/L	491.73 ppb	13:48:35
2	As 188.979†	971.5	984.7	491.76 ug/L	491.76 ppb	13:48:55
2	B 249.677†	18706.7	19104.9	478.42 ug/L	478.42 ppb	13:48:35
2	Ba 233.527†	51055.1	50549.7	489.79 ug/L	489.79 ppb	13:48:35
2	Be 313.107†	1225805.0	1218212.1	493.11 ug/L	493.11 ppb	13:48:30
2	Cd 226.502†	33394.2	33277.6	486.40 ug/L	486.40 ppb	13:48:35
2	Co 228.616†	20358.2	20216.7	500.85 ug/L	500.85 ppb	13:48:35
2	Cr 267.716†	33343.8	32922.9	486.70 ug/L	486.70 ppb	13:48:35
2	Cu 324.752†	153051.8	145851.0	485.78 ug/L	485.78 ppb	13:48:35
2	Mn 257.610†	378482.4	374296.3	484.60 ug/L	484.60 ppb	13:48:35
2	Mo 202.031†	5220.8	5156.7	495.79 ug/L	495.79 ppb	13:48:55
2	Ni 231.604†	15450.9	15223.5	496.12 ug/L	496.12 ppb	13:48:35
2	P 214.914†	4095.5	3836.5	2357.8 ug/L	2357.8 ppb	13:48:55
2	Pb 220.353†	3090.4	3126.9	493.61 ug/L	493.61 ppb	13:48:55
2	S 181.975 Axial†	703.1	656.0	984.68 ug/L	984.68 ppb	13:48:55
2	Sb 206.836†	1285.4	1240.9	514.20 ug/L	514.20 ppb	13:48:55
2	Se 196.026†	646.1	661.8	507.03 ug/L	507.03 ppb	13:48:55
2	Si 251.611†	68364.6	67192.2	2453.7 ug/L	2453.7 ppb	13:48:35
2	Sn 189.927†	2168.7	2143.2	493.26 ug/L	493.26 ppb	13:48:55
2	Ti 334.940†	271820.9	270555.6	490.92 ug/L	490.92 ppb	13:48:35
2	Tl 190.801†	1250.6	1276.2	494.23 ug/L	494.23 ppb	13:48:55
2	U 409.014†	10126.2	12432.7	477.24 ug/L	477.24 ppb	13:48:35
2	V 292.402†	54015.8	55198.3	493.19 ug/L	493.19 ppb	13:48:35
2	Zn 213.857†	43697.4	42600.9	482.72 ug/L	482.72 ppb	13:48:35
2	SiO2†	67676.9	66468.8	5234.6 ug/L	5234.6 ppb	13:49:36
3	Sc Radial	3923.6	3923.6	102 %		13:47:32
3	Y RADIAL	4224.6	4224.6	97.53 %		13:47:32
3	Al 396.153Radial†	4662.7	4654.0	4875.4 ug/L	4875.4 ppb	13:47:32
3	Ca 317.933Radial†	2666.4	2590.1	5085.7 ug/L	5085.7 ppb	13:47:52
3	Fe 238.204 Radial†	408.4	393.4	5015.0 ug/L	5015.0 ppb	13:47:52
3	K 766.490 Radial†	29910.4	26267.1	4878.6 ug/L	4878.6 ppb	13:47:32
3	Mg 279.077 IEC†	129.0	123.2	5075.7 ug/L	5075.7 ppb	13:47:52
3	Na 589.592 Radial†	21668.6	22277.3	9805.1 ug/L	9805.1 ppb	13:47:32
3	Sr 421.552†	50281.8	49179.5	472.16 ug/L	472.16 ppb	13:47:32
3	Sc 361.383	701444.7	701444.7	101.72 %		13:49:00
3	Y 371.029	442308.7	442308.7	81.634 %		13:49:06
3	Ag 328.068†	89904.5	88284.9	489.43 ug/L	489.43 ppb	13:49:06
3	As 188.979†	975.3	981.6	490.25 ug/L	490.25 ppb	13:49:26
3	B 249.677†	18724.2	18990.7	475.56 ug/L	475.56 ppb	13:49:06
3	Ba 233.527†	51339.8	50471.2	489.02 ug/L	489.02 ppb	13:49:06
3	Be 313.107†	1232226.4	1215920.4	492.18 ug/L	492.18 ppb	13:49:00
3	Cd 226.502†	33704.2	33347.9	487.42 ug/L	487.42 ppb	13:49:06
3	Co 228.616†	20438.4	20152.6	499.25 ug/L	499.25 ppb	13:49:06
3	Cr 267.716†	33602.4	32943.1	486.99 ug/L	486.99 ppb	13:49:06
3	Cu 324.752†	153179.0	144901.7	482.62 ug/L	482.62 ppb	13:49:06
3	Mn 257.610†	380335.7	373461.6	483.52 ug/L	483.52 ppb	13:49:06
3	Mo 202.031†	5215.2	5114.5	491.74 ug/L	491.74 ppb	13:49:26
3	Ni 231.604†	15580.3	15242.3	496.73 ug/L	496.73 ppb	13:49:06
3	P 214.914†	4117.0	3828.9	2353.6 ug/L	2353.6 ppb	13:49:26
3	Pb 220.353†	3071.8	3086.9	487.32 ug/L	487.32 ppb	13:49:26
3	S 181.975 Axial†	712.5	660.3	991.14 ug/L	991.14 ppb	13:49:26
3	Sb 206.836†	1293.6	1239.9	513.76 ug/L	513.76 ppb	13:49:26
3	Se 196.026†	647.0	658.1	504.28 ug/L	504.28 ppb	13:49:26
3	Si 251.611†	68646.0	66989.0	2446.3 ug/L	2446.3 ppb	13:49:06
3	Sn 189.927†	2192.9	2151.7	495.23 ug/L	495.23 ppb	13:49:26
3	Ti 334.940†	272895.2	269703.7	489.37 ug/L	489.37 ppb	13:49:06
3	Tl 190.801†	1261.6	1278.2	494.99 ug/L	494.99 ppb	13:49:26
3	U 409.014†	10271.4	12504.3	480.00 ug/L	480.00 ppb	13:49:06
3	V 292.402†	54102.5	54904.3	490.54 ug/L	490.54 ppb	13:49:06
3	Zn 213.857†	43847.3	42441.5	480.89 ug/L	480.89 ppb	13:49:06
3	SiO2†	67812.9	66127.4	5207.8 ug/L	5207.8 ppb	13:49:41

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	697561.6	101.16	%	0.503				0.50%
Sc Radial	3965.7	103	%	5.1				4.94%
Y 371.029	444233.8	81.989	%	0.5197				0.63%
Y RADIAL	4290.7	99.05	%	5.166				5.22%
Ag 328.068†	89329.7	495.17	ug/L	8.038	495.17	ppb	8.038	1.62%

```
   QC value within limits for Ag 328.068  Recovery = 99.03%
Al 396.153Radial†       4536.3      4751.4 ug/L        191.93      4751.4 ppb         191.93   4.04%
   QC value within limits for Al 396.153Radial  Recovery = 95.03%
As 188.979†              984.5      491.70 ug/L         1.421      491.70 ppb          1.421   0.29%
   QC value within limits for As 188.979  Recovery = 98.34%
B 249.677†             19246.7      482.00 ug/L         8.800      482.00 ppb          8.800   1.83%
   QC value within limits for B 249.677  Recovery = 96.40%
Ba 233.527†            50914.0      493.31 ug/L         6.776      493.31 ppb          6.776   1.37%
   QC value within limits for Ba 233.527  Recovery = 98.66%
Be 313.107†          1217285.2      492.75 ug/L         0.495      492.75 ppb          0.495   0.10%
   QC value within limits for Be 313.107  Recovery = 98.55%
Ca 317.933Radial†       2537.9      4983.3 ug/L        190.99      4983.3 ppb         190.99   3.83%
   QC value within limits for Ca 317.933Radial  Recovery = 99.67%
Cd 226.502†            33588.8      490.96 ug/L         7.035      490.96 ppb          7.035   1.43%
   QC value within limits for Cd 226.502  Recovery = 98.19%
Co 228.616†            20342.9      503.96 ug/L         6.825      503.96 ppb          6.825   1.35%
   QC value within limits for Co 228.616  Recovery = 100.79%
Cr 267.716†            33198.3      490.75 ug/L         6.767      490.75 ppb          6.767   1.38%
   QC value within limits for Cr 267.716  Recovery = 98.15%
Cu 324.752†           146902.7      489.28 ug/L         8.931      489.28 ppb          8.931   1.83%
   QC value within limits for Cu 324.752  Recovery = 97.86%
Fe 238.204 Radial†       384.3      4899.1 ug/L        196.91      4899.1 ppb         196.91   4.02%
   QC value within limits for Fe 238.204 Radial  Recovery = 97.98%
K 766.490 Radial†      25602.1      4755.0 ug/L        198.59      4755.0 ppb         198.59   4.18%
   QC value within limits for K 766.490 Radial  Recovery = 95.10%
Mg 279.077 IEC†          119.9      4940.7 ug/L        210.80      4940.7 ppb         210.80   4.27%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.81%
Mn 257.610†           376979.2      488.07 ug/L         6.958      488.07 ppb          6.958   1.43%
   QC value within limits for Mn 257.610  Recovery = 97.61%
Mo 202.031†             5138.1      493.99 ug/L         2.064      493.99 ppb          2.064   0.42%
   QC value within limits for Mo 202.031  Recovery = 98.80%
Na 589.592 Radial†     21807.3      9598.2 ug/L        293.03      9598.2 ppb         293.03   3.05%
   QC value within limits for Na 589.592 Radial  Recovery = 95.98%
Ni 231.604†            15374.8      501.05 ug/L         8.017      501.05 ppb          8.017   1.60%
   QC value within limits for Ni 231.604  Recovery = 100.21%
P 214.914†              3834.0      2355.5 ug/L          2.11      2355.5 ppb           2.11   0.09%
   QC value within limits for P 214.914  Recovery = 94.22%
Pb 220.353†             3107.0      490.46 ug/L         3.143      490.46 ppb          3.143   0.64%
   QC value within limits for Pb 220.353  Recovery = 98.09%
S 181.975 Axial†         659.0      989.24 ug/L         3.973      989.24 ppb          3.973   0.40%
   QC value within limits for S 181.975 Axial  Recovery = 98.92%
Sb 206.836†             1235.4      511.99 ug/L         3.451      511.99 ppb          3.451   0.67%
   QC value within limits for Sb 206.836  Recovery = 102.40%
Se 196.026†              657.2      503.27 ug/L         4.362      503.27 ppb          4.362   0.87%
   QC value within limits for Se 196.026  Recovery = 100.65%
Si 251.611†            67747.3      2474.1 ug/L        41.80      2474.1 ppb         41.80   1.69%
   QC value within limits for Si 251.611  Recovery = 98.96%
Sn 189.927†             2149.8      494.76 ug/L         1.334      494.76 ppb          1.334   0.27%
   QC value within limits for Sn 189.927  Recovery = 98.95%
Sr 421.552†            48183.0      462.59 ug/L        14.794      462.59 ppb         14.794   3.20%
   QC value within limits for Sr 421.552  Recovery = 92.52%
Ti 334.940†           272593.9      494.61 ug/L         7.771      494.61 ppb          7.771   1.57%
   QC value within limits for Ti 334.940  Recovery = 98.92%
Tl 190.801†             1280.1      495.75 ug/L         2.017      495.75 ppb          2.017   0.41%
   QC value within limits for Tl 190.801  Recovery = 99.15%
U 409.014†             12585.8      483.14 ug/L         7.953      483.14 ppb          7.953   1.65%
   QC value within limits for U 409.014  Recovery = 96.63%
V 292.402†             55517.1      495.99 ug/L         7.267      495.99 ppb          7.267   1.47%
   QC value within limits for V 292.402  Recovery = 99.20%
Zn 213.857†            42936.7      486.54 ug/L         8.249      486.54 ppb          8.249   1.70%
   QC value within limits for Zn 213.857  Recovery = 97.31%
SiO2†                  66426.5      5231.3 ug/L        22.09      5231.3 ppb         22.09   0.42%
   QC value within limits for SiO2  Recovery = 97.83%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 4/1/2010 13:51:51
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	3924.7	3924.7	102	%			13:54:04
1	Y RADIAL	4413.9	4413.9	101.9	%			13:53:44
1	Al 396.153Radial†	-95.4	-1.1	-1.1833	ug/L	-1.1833	ppb	13:53:44
1	Ca 317.933Radial†	22.2	3.0	5.9389	ug/L	5.9389	ppb	13:54:04
1	Fe 238.204 Radial†	6.1	-0.2	-2.7320	ug/L	-2.7320	ppb	13:54:04
1	K 766.490 Radial†	2906.1	-153.5	-28.550	ug/L	-28.550	ppb	13:53:44
1	Mg 279.077 IEC†	1.3	-1.8	-73.301	ug/L	-73.301	ppb	13:54:04
1	Na 589.592 Radial†	-1124.2	-21.8	-9.5783	ug/L	-9.5783	ppb	13:53:44
1	Sr 421.552†	27.9	13.4	0.1288	ug/L	0.1288	ppb	13:53:44
1	Sc 361.383	692036.1	692036.1	100.36	%			13:55:01
1	Y 371.029	542380.8	542380.8	100.10	%			13:55:01
1	Ag 328.068†	19.8	-80.1	-0.4368	ug/L	-0.4368	ppb	13:55:01
1	As 188.979†	-28.5	-5.6	-2.7648	ug/L	-2.7648	ppb	13:55:21
1	B 249.677†	-552.8	32.1	0.8099	ug/L	0.8099	ppb	13:55:21
1	Ba 233.527†	-11.0	-11.8	-0.1124	ug/L	-0.1124	ppb	13:55:21
1	Be 313.107†	-4463.7	75.3	0.0300	ug/L	0.0300	ppb	13:55:01
1	Cd 226.502†	-211.7	2.5	0.0357	ug/L	0.0357	ppb	13:55:21
1	Co 228.616†	-73.8	-13.8	-0.3402	ug/L	-0.3402	ppb	13:55:21
1	Cr 267.716†	92.5	0.9	0.0150	ug/L	0.0150	ppb	13:55:21
1	Cu 324.752†	5591.1	-116.6	-0.3864	ug/L	-0.3864	ppb	13:55:01
1	Mn 257.610†	461.6	15.0	0.0221	ug/L	0.0221	ppb	13:55:21
1	Mo 202.031†	20.0	7.4	0.7132	ug/L	0.7132	ppb	13:55:21
1	Ni 231.604†	78.9	4.0	0.1296	ug/L	0.1296	ppb	13:55:21
1	P 214.914†	214.7	-4.6	-2.8507	ug/L	-2.8507	ppb	13:55:21
1	Pb 220.353†	-86.6	-19.3	-3.0380	ug/L	-3.0380	ppb	13:55:21
1	S 181.975 Axial†	38.5	-1.8	-2.7422	ug/L	-2.7422	ppb	13:55:21
1	Sb 206.836†	45.8	13.9	5.5795	ug/L	5.5795	ppb	13:55:21
1	Se 196.026†	-29.1	-6.9	-5.1522	ug/L	-5.1522	ppb	13:55:21
1	Si 251.611†	546.4	47.9	1.7442	ug/L	1.7442	ppb	13:55:21
1	Sn 189.927†	8.1	3.9	0.9015	ug/L	0.9015	ppb	13:55:21
1	Ti 334.940†	-1523.4	-96.6	-0.1668	ug/L	-0.1668	ppb	13:55:01
1	Tl 190.801†	-48.1	-10.0	-3.8385	ug/L	-3.8385	ppb	13:55:21
1	U 409.014†	-2516.5	-101.1	-3.8923	ug/L	-3.8923	ppb	13:55:01
1	V 292.402†	-1655.1	67.2	0.5941	ug/L	0.5941	ppb	13:55:01
1	Zn 213.857†	716.4	49.2	0.5631	ug/L	0.5631	ppb	13:55:21
1	SiO2†	549.8	8.6	0.6634	ug/L	0.6634	ppb	13:56:17
2	Sc Radial	3830.2	3830.2	99.8	%			13:54:29
2	Y RADIAL	4428.9	4428.9	102.2	%			13:54:09
2	Al 396.153Radial†	-104.8	-12.7	-13.447	ug/L	-13.447	ppb	13:54:09
2	Ca 317.933Radial†	16.7	-1.9	-3.6843	ug/L	-3.6843	ppb	13:54:29
2	Fe 238.204 Radial†	7.3	1.1	13.970	ug/L	13.970	ppb	13:54:29
2	K 766.490 Radial†	2989.7	0.4	0.0899	ug/L	0.0899	ppb	13:54:09
2	Mg 279.077 IEC†	-0.1	-3.1	-127.19	ug/L	-127.19	ppb	13:54:29
2	Na 589.592 Radial†	-1160.9	-85.7	-37.721	ug/L	-37.721	ppb	13:54:09
2	Sr 421.552†	18.0	4.1	0.0396	ug/L	0.0396	ppb	13:54:09
2	Sc 361.383	689234.4	689234.4	99.949	%			13:55:26
2	Y 371.029	541197.6	541197.6	99.885	%			13:55:26
2	Ag 328.068†	131.9	32.1	0.1785	ug/L	0.1785	ppb	13:55:26
2	As 188.979†	-30.8	-8.0	-3.9796	ug/L	-3.9796	ppb	13:55:46
2	B 249.677†	-500.6	82.2	2.0657	ug/L	2.0657	ppb	13:55:46
2	Ba 233.527†	2.0	1.3	0.0125	ug/L	0.0125	ppb	13:55:46
2	Be 313.107†	-4479.5	41.5	0.0168	ug/L	0.0168	ppb	13:55:26
2	Cd 226.502†	-212.7	0.6	0.0080	ug/L	0.0080	ppb	13:55:46
2	Co 228.616†	-65.5	-5.8	-0.1430	ug/L	-0.1430	ppb	13:55:46
2	Cr 267.716†	92.7	1.5	0.0220	ug/L	0.0220	ppb	13:55:46
2	Cu 324.752†	5614.9	-70.2	-0.2345	ug/L	-0.2345	ppb	13:55:26
2	Mn 257.610†	474.2	29.4	0.0447	ug/L	0.0447	ppb	13:55:46
2	Mo 202.031†	19.9	7.4	0.7140	ug/L	0.7140	ppb	13:55:46
2	Ni 231.604†	86.1	11.5	0.3756	ug/L	0.3756	ppb	13:55:46

2	P 214.914†	229.4	11.0	7.0985 ug/L	7.0985 ppb	13:55:46
2	Pb 220.353†	-78.5	-11.5	-1.8187 ug/L	-1.8187 ppb	13:55:46
2	S 181.975 Axial†	45.5	5.2	7.8743 ug/L	7.8743 ppb	13:55:46
2	Sb 206.836†	43.0	11.2	4.5693 ug/L	4.5693 ppb	13:55:46
2	Se 196.026†	-32.7	-10.7	-7.8729 ug/L	-7.8729 ppb	13:55:46
2	Si 251.611†	554.8	58.5	2.1325 ug/L	2.1325 ppb	13:55:46
2	Sn 189.927†	20.5	16.4	3.7708 ug/L	3.7708 ppb	13:55:46
2	Ti 334.940†	-1404.9	15.8	0.0374 ug/L	0.0374 ppb	13:55:26
2	Tl 190.801†	-48.6	-10.7	-4.0973 ug/L	-4.0973 ppb	13:55:46
2	U 409.014†	-2337.6	67.7	2.6076 ug/L	2.6076 ppb	13:55:26
2	V 292.402†	-1727.1	-11.6	-0.0915 ug/L	-0.0915 ppb	13:55:26
2	Zn 213.857†	710.6	46.4	0.5267 ug/L	0.5267 ppb	13:55:46
2	SiO2†	561.0	22.2	1.7298 ug/L	1.7298 ppb	13:56:22
3	Sc Radial	3801.3	3801.3	99.0 %		13:54:54
3	Y RADIAL	4325.4	4325.4	99.85 %		13:54:34
3	Al 396.153Radial†	-93.4	-2.1	-2.2147 ug/L	-2.2147 ppb	13:54:34
3	Ca 317.933Radial†	15.9	-2.6	-5.0648 ug/L	-5.0648 ppb	13:54:54
3	Fe 238.204 Radial†	6.4	0.3	3.4869 ug/L	3.4869 ppb	13:54:54
3	K 766.490 Radial†	2998.7	32.2	5.9969 ug/L	5.9969 ppb	13:54:34
3	Mg 279.077 IEC†	0.9	-2.1	-87.410 ug/L	-87.410 ppb	13:54:54
3	Na 589.592 Radial†	-1074.1	-6.8	-2.9892 ug/L	-2.9892 ppb	13:54:34
3	Sr 421.552†	19.6	5.9	0.0565 ug/L	0.0565 ppb	13:54:34
3	Sc 361.383	691940.7	691940.7	100.34 %		13:55:51
3	Y 371.029	542622.8	542622.8	100.15 %		13:55:51
3	Ag 328.068†	84.0	-16.2	-0.0873 ug/L	-0.0873 ppb	13:55:51
3	As 188.979†	-22.2	0.7	0.3475 ug/L	0.3475 ppb	13:56:11
3	B 249.677†	-525.4	59.4	1.4948 ug/L	1.4948 ppb	13:56:11
3	Ba 233.527†	3.0	2.2	0.0198 ug/L	0.0198 ppb	13:56:11
3	Be 313.107†	-4516.9	21.7	0.0089 ug/L	0.0089 ppb	13:55:51
3	Cd 226.502†	-214.2	0.0	-0.0005 ug/L	-0.0005 ppb	13:56:11
3	Co 228.616†	-67.9	-8.0	-0.1984 ug/L	-0.1984 ppb	13:56:11
3	Cr 267.716†	80.4	-11.2	-0.1636 ug/L	-0.1636 ppb	13:56:11
3	Cu 324.752†	5568.7	-138.2	-0.4578 ug/L	-0.4578 ppb	13:55:51
3	Mn 257.610†	453.1	6.5	0.0124 ug/L	0.0124 ppb	13:56:11
3	Mo 202.031†	10.9	-1.6	-0.1531 ug/L	-0.1531 ppb	13:56:11
3	Ni 231.604†	92.8	17.8	0.5799 ug/L	0.5799 ppb	13:56:11
3	P 214.914†	224.2	4.9	3.2552 ug/L	3.2552 ppb	13:56:11
3	Pb 220.353†	-78.7	-11.5	-1.8029 ug/L	-1.8029 ppb	13:56:11
3	S 181.975 Axial†	36.4	-4.0	-5.9826 ug/L	-5.9826 ppb	13:56:11
3	Sb 206.836†	47.1	15.3	6.1079 ug/L	6.1079 ppb	13:56:11
3	Se 196.026†	-27.1	-4.9	-3.6251 ug/L	-3.6251 ppb	13:56:11
3	Si 251.611†	520.1	21.7	0.7974 ug/L	0.7974 ppb	13:56:11
3	Sn 189.927†	7.3	3.2	0.7327 ug/L	0.7327 ppb	13:56:11
3	Ti 334.940†	-1402.5	23.8	0.0514 ug/L	0.0514 ppb	13:55:51
3	Tl 190.801†	-33.7	4.4	1.6945 ug/L	1.6945 ppb	13:56:11
3	U 409.014†	-2519.7	-104.6	-4.0300 ug/L	-4.0300 ppb	13:55:51
3	V 292.402†	-1792.4	-69.9	-0.6286 ug/L	-0.6286 ppb	13:55:51
3	Zn 213.857†	719.9	52.9	0.6011 ug/L	0.6011 ppb	13:56:11
3	SiO2†	557.5	16.4	1.3016 ug/L	1.3016 ppb	13:56:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	691070.4	100.22	%	0.231				0.23%
Sc Radial	3852.1	100	%	1.7				1.68%
Y 371.029	542067.1	100.05	%	0.141				0.14%
Y RADIAL	4389.4	101.3	%	1.29				1.27%
Ag 328.068†	-21.4	-0.1152	ug/L	0.30862	-0.1152	ppb	0.30862	267.89%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.3	-5.6150	ug/L	6.80226	-5.6150	ppb	6.80226	121.14%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.3	-2.1323	ug/L	2.23180	-2.1323	ppb	2.23180	104.67%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	57.9	1.4568	ug/L	0.62874	1.4568	ppb	0.62874	43.16%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.8	-0.0267	ug/L	0.07433	-0.0267	ppb	0.07433	278.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	46.2	0.0186	ug/L	0.01069	0.0186	ppb	0.01069	57.58%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-0.5	-0.9367	ug/L	5.99434	-0.9367	ppb	5.99434	639.93%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                1.0      0.0144 ug/L       0.01893      0.0144 ppb        0.01893 131.34%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -9.2     -0.2272 ug/L       0.10172     -0.2272 ppb        0.10172  44.76%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -2.9     -0.0422 ug/L       0.10520     -0.0422 ppb        0.10520 249.21%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -108.3     -0.3596 ug/L       0.11407     -0.3596 ppb        0.11407  31.72%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.4      4.9084 ug/L       8.44147      4.9084 ppb        8.44147 171.98%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        -40.3     -7.4877 ug/L      18.47792     -7.4877 ppb       18.47792 246.78%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -2.3    -95.968 ug/L       27.9468     -95.968 ppb        27.9468  29.12%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               17.0      0.0264 ug/L       0.01656      0.0264 ppb        0.01656  62.73%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.4      0.4247 ug/L       0.50041      0.4247 ppb        0.50041 117.82%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -38.1     -16.763 ug/L       18.4466     -16.763 ppb        18.4466 110.05%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               11.1      0.3617 ug/L       0.22549      0.3617 ppb        0.22549  62.34%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 3.8      2.5010 ug/L       5.01727      2.5010 ppb        5.01727 200.61%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -14.1     -2.2198 ug/L       0.70857     -2.2198 ppb        0.70857  31.92%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -0.2     -0.2835 ug/L       7.24824     -0.2835 ppb        7.24824 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               13.5      5.4189 ug/L       0.78177      5.4189 ppb        0.78177  14.43%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -7.5     -5.5501 ug/L       2.15170     -5.5501 ppb        2.15170  38.77%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               42.7      1.5580 ug/L       0.68677      1.5580 ppb        0.68677  44.08%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                7.8      1.8017 ug/L       1.70743      1.8017 ppb        1.70743  94.77%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                7.8      0.0750 ug/L       0.04740      0.0750 ppb        0.04740  63.22%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -19.0     -0.0260 ug/L       0.12214     -0.0260 ppb        0.12214 470.08%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -5.4     -2.0805 ug/L       3.27178     -2.0805 ppb        3.27178 157.26%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -46.0     -1.7716 ug/L       3.79308     -1.7716 ppb        3.79308 214.10%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -4.8     -0.0420 ug/L       0.61284     -0.0420 ppb        0.61284 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               49.5      0.5636 ug/L       0.03723      0.5636 ppb        0.03723   6.61%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     15.7      1.2316 ug/L       0.53663      1.2316 ppb        0.53663  43.57%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: 1202060836|960819|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 4/1/2010 13:58:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202060836|960819|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3963.3	3963.3	103	%			14:00:50
1	Y RADIAL	4406.7	4406.7	101.7	%			14:00:30
1	Al 396.153Radial†	-78.6	16.1	16.995	ug/L	16.995	ppb	14:00:30
1	Ca 317.933Radial†	27.7	8.2	16.082	ug/L	16.082	ppb	14:00:50
1	Fe 238.204 Radial†	16.2	9.5	121.34	ug/L	121.34	ppb	14:00:50
1	K 766.490 Radial†	2883.4	-203.1	-37.793	ug/L	-37.793	ppb	14:00:30
1	Mg 279.077 IEC†	2.7	-0.4	-15.747	ug/L	-15.747	ppb	14:00:50
1	Na 589.592 Radial†	-1038.3	72.2	31.782	ug/L	31.782	ppb	14:00:30
1	Sr 421.552†	16.6	2.2	0.0207	ug/L	0.0207	ppb	14:00:30
1	Sc 361.383	701080.2	701080.2	101.67	%			14:01:47
1	Y 371.029	549150.0	549150.0	101.35	%			14:01:47
1	Ag 328.068†	116.1	14.3	0.1160	ug/L	0.1160	ppb	14:01:47
1	As 188.979†	-21.9	1.3	0.6716	ug/L	0.6716	ppb	14:02:07
1	B 249.677†	-516.6	74.8	1.8623	ug/L	1.8623	ppb	14:02:07
1	Ba 233.527†	0.8	-0.0	0.0052	ug/L	0.0052	ppb	14:02:07
1	Be 313.107†	-4517.8	79.5	0.0326	ug/L	0.0326	ppb	14:01:47
1	Cd 226.502†	-223.5	-6.4	-0.1044	ug/L	-0.1044	ppb	14:02:07
1	Co 228.616†	-46.3	14.1	0.3473	ug/L	0.3473	ppb	14:02:07
1	Cr 267.716†	124.4	31.0	0.4699	ug/L	0.4699	ppb	14:02:07
1	Cu 324.752†	5661.1	-119.7	-0.3944	ug/L	-0.3944	ppb	14:01:47
1	Mn 257.610†	984.0	522.9	0.6892	ug/L	0.6892	ppb	14:02:07
1	Mo 202.031†	9.4	-3.3	-0.3030	ug/L	-0.3030	ppb	14:02:07
1	Ni 231.604†	88.4	12.3	0.3993	ug/L	0.3993	ppb	14:02:07
1	P 214.914†	221.1	-1.0	-0.6559	ug/L	-0.6559	ppb	14:02:07
1	Pb 220.353†	-69.9	-1.7	-0.2820	ug/L	-0.2820	ppb	14:02:07
1	S 181.975 Axial†	38.8	-2.1	-3.1457	ug/L	-3.1457	ppb	14:02:07
1	Sb 206.836†	34.9	2.6	1.0847	ug/L	1.0847	ppb	14:02:07
1	Se 196.026†	-24.8	-2.3	-1.3826	ug/L	-1.3826	ppb	14:02:07
1	Si 251.611†	1103.7	589.0	21.567	ug/L	21.567	ppb	14:02:07
1	Sn 189.927†	16.1	11.7	2.6923	ug/L	2.6923	ppb	14:02:07
1	Ti 334.940†	-1334.0	109.3	0.1999	ug/L	0.1999	ppb	14:01:47
1	Tl 190.801†	-39.1	-0.5	-0.1862	ug/L	-0.1862	ppb	14:02:07
1	U 409.014†	-2337.7	107.1	4.1102	ug/L	4.1102	ppb	14:01:47
1	V 292.402†	-1652.3	91.2	0.7888	ug/L	0.7888	ppb	14:01:47
1	Zn 213.857†	773.3	96.0	1.0784	ug/L	1.0784	ppb	14:02:07
1	SiO2†	1136.4	578.6	45.692	ug/L	45.692	ppb	14:03:03
2	Sc Radial	3888.2	3888.2	101	%			14:01:15
2	Y RADIAL	4363.9	4363.9	100.7	%			14:00:55
2	Al 396.153Radial†	-70.2	22.9	24.091	ug/L	24.091	ppb	14:00:55
2	Ca 317.933Radial†	26.9	7.9	15.571	ug/L	15.571	ppb	14:01:15
2	Fe 238.204 Radial†	14.2	7.8	99.244	ug/L	99.244	ppb	14:01:15
2	K 766.490 Radial†	2976.6	-57.2	-10.646	ug/L	-10.646	ppb	14:00:55
2	Mg 279.077 IEC†	3.3	0.2	9.5347	ug/L	9.5347	ppb	14:01:15
2	Na 589.592 Radial†	-1073.1	18.4	8.1028	ug/L	8.1028	ppb	14:00:55
2	Sr 421.552†	19.9	5.8	0.0556	ug/L	0.0556	ppb	14:00:55
2	Sc 361.383	694764.3	694764.3	100.75	%			14:02:12
2	Y 371.029	545970.4	545970.4	100.77	%			14:02:12
2	Ag 328.068†	153.1	52.1	0.3178	ug/L	0.3178	ppb	14:02:12
2	As 188.979†	-27.7	-4.7	-2.3025	ug/L	-2.3025	ppb	14:02:32
2	B 249.677†	-506.2	80.5	2.0098	ug/L	2.0098	ppb	14:02:32
2	Ba 233.527†	2.5	1.7	0.0209	ug/L	0.0209	ppb	14:02:32
2	Be 313.107†	-4412.6	143.5	0.0586	ug/L	0.0586	ppb	14:02:12
2	Cd 226.502†	-217.5	-2.5	-0.0457	ug/L	-0.0457	ppb	14:02:32
2	Co 228.616†	-51.6	8.5	0.2094	ug/L	0.2094	ppb	14:02:32
2	Cr 267.716†	129.6	37.3	0.5605	ug/L	0.5605	ppb	14:02:32
2	Cu 324.752†	5553.5	-175.9	-0.5819	ug/L	-0.5819	ppb	14:02:12
2	Mn 257.610†	974.5	522.2	0.6852	ug/L	0.6852	ppb	14:02:32
2	Mo 202.031†	18.1	5.5	0.5336	ug/L	0.5336	ppb	14:02:32
2	Ni 231.604†	86.7	11.4	0.3714	ug/L	0.3714	ppb	14:02:32

2	P 214.914†	211.9	-8.1	-5.1364 ug/L	-5.1364 ppb	14:02:32
2	Pb 220.353†	-63.2	4.3	0.6685 ug/L	0.6685 ppb	14:02:32
2	S 181.975 Axial†	45.2	4.6	6.9626 ug/L	6.9626 ppb	14:02:32
2	Sb 206.836†	37.3	5.3	2.1804 ug/L	2.1804 ppb	14:02:32
2	Se 196.026†	-20.9	1.4	1.2796 ug/L	1.2796 ppb	14:02:32
2	Si 251.611†	1075.2	570.6	20.883 ug/L	20.883 ppb	14:02:32
2	Sn 189.927†	15.8	11.5	2.6473 ug/L	2.6473 ppb	14:02:32
2	Ti 334.940†	-1272.5	158.4	0.2876 ug/L	0.2876 ppb	14:02:12
2	Tl 190.801†	-37.0	1.3	0.4847 ug/L	0.4847 ppb	14:02:32
2	U 409.014†	-2361.6	62.5	2.3936 ug/L	2.3936 ppb	14:02:12
2	V 292.402†	-1664.2	64.6	0.5669 ug/L	0.5669 ppb	14:02:12
2	Zn 213.857†	773.1	102.7	1.1587 ug/L	1.1587 ppb	14:02:32
2	SiO2†	1147.6	599.9	47.354 ug/L	47.354 ppb	14:03:08
3	Sc Radial	3927.1	3927.1	102 %		14:01:40
3	Y RADIAL	4328.5	4328.5	99.92 %		14:01:20
3	Al 396.153Radial†	-90.3	4.0	4.1945 ug/L	4.1945 ppb	14:01:20
3	Ca 317.933Radial†	28.5	9.2	18.084 ug/L	18.084 ppb	14:01:40
3	Fe 238.204 Radial†	13.4	6.9	87.810 ug/L	87.810 ppb	14:01:40
3	K 766.490 Radial†	2886.7	-174.2	-32.400 ug/L	-32.400 ppb	14:01:20
3	Mg 279.077 IEC†	3.8	0.7	28.954 ug/L	28.954 ppb	14:01:40
3	Na 589.592 Radial†	-1092.9	9.5	4.2028 ug/L	4.2028 ppb	14:01:20
3	Sr 421.552†	7.9	-6.2	-0.0594 ug/L	-0.0594 ppb	14:01:20
3	Sc 361.383	690374.8	690374.8	100.11 %		14:02:37
3	Y 371.029	541640.9	541640.9	99.967 %		14:02:37
3	Ag 328.068†	145.2	45.2	0.2771 ug/L	0.2771 ppb	14:02:37
3	As 188.979†	-25.5	-2.7	-1.2963 ug/L	-1.2963 ppb	14:02:57
3	B 249.677†	-528.6	55.1	1.3700 ug/L	1.3700 ppb	14:02:57
3	Ba 233.527†	9.2	8.5	0.0845 ug/L	0.0845 ppb	14:02:57
3	Be 313.107†	-4312.3	215.8	0.0872 ug/L	0.0872 ppb	14:02:37
3	Cd 226.502†	-213.5	0.2	-0.0060 ug/L	-0.0060 ppb	14:02:57
3	Co 228.616†	-44.8	14.9	0.3681 ug/L	0.3681 ppb	14:02:57
3	Cr 267.716†	97.1	5.7	0.0937 ug/L	0.0937 ppb	14:02:57
3	Cu 324.752†	5460.2	-234.0	-0.7741 ug/L	-0.7741 ppb	14:02:37
3	Mn 257.610†	946.5	500.4	0.6550 ug/L	0.6550 ppb	14:02:57
3	Mo 202.031†	15.2	2.7	0.2675 ug/L	0.2675 ppb	14:02:57
3	Ni 231.604†	88.5	13.7	0.4478 ug/L	0.4478 ppb	14:02:57
3	P 214.914†	215.2	-3.5	-2.1610 ug/L	-2.1610 ppb	14:02:57
3	Pb 220.353†	-56.0	11.0	1.7303 ug/L	1.7303 ppb	14:02:57
3	S 181.975 Axial†	36.4	-3.9	-5.8157 ug/L	-5.8157 ppb	14:02:57
3	Sb 206.836†	33.9	2.1	0.8737 ug/L	0.8737 ppb	14:02:57
3	Se 196.026†	-28.0	-5.8	-4.0994 ug/L	-4.0994 ppb	14:02:57
3	Si 251.611†	1064.7	566.9	20.750 ug/L	20.750 ppb	14:02:57
3	Sn 189.927†	13.5	9.3	2.1436 ug/L	2.1436 ppb	14:02:57
3	Ti 334.940†	-1407.0	16.1	0.0298 ug/L	0.0298 ppb	14:02:37
3	Tl 190.801†	-34.2	3.8	1.4744 ug/L	1.4744 ppb	14:02:57
3	U 409.014†	-2445.1	-35.8	-1.3907 ug/L	-1.3907 ppb	14:02:37
3	V 292.402†	-1714.8	3.5	0.0200 ug/L	0.0200 ppb	14:02:37
3	Zn 213.857†	776.2	110.7	1.2509 ug/L	1.2509 ppb	14:02:57
3	SiO2†	1150.1	609.6	48.125 ug/L	48.125 ppb	14:03:13

Mean Data: 1202060836|960819|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	695406.5	100.84	%	0.780				0.77%
Sc Radial	3926.2	102	%	1.0				0.96%
Y 371.029	545587.1	100.69	%	0.696				0.69%
Y RADIAL	4366.4	100.8	%	0.90				0.90%
Ag 328.068†	37.2	0.2369	ug/L	0.10670	0.2369	ppb	0.10670	45.03%
Al 396.153Radial†	14.3	15.094	ug/L	10.0836	15.094	ppb	10.0836	66.81%
As 188.979†	-2.0	-0.9758	ug/L	1.51278	-0.9758	ppb	1.51278	155.04%
B 249.677†	70.2	1.7474	ug/L	0.33504	1.7474	ppb	0.33504	19.17%
Ba 233.527†	3.4	0.0369	ug/L	0.04196	0.0369	ppb	0.04196	113.86%
Be 313.107†	146.3	0.0595	ug/L	0.02735	0.0595	ppb	0.02735	45.99%
Ca 317.933Radial†	8.4	16.579	ug/L	1.3279	16.579	ppb	1.3279	8.01%
Cd 226.502†	-2.9	-0.0520	ug/L	0.04950	-0.0520	ppb	0.04950	95.15%
Co 228.616†	12.5	0.3082	ug/L	0.08625	0.3082	ppb	0.08625	27.98%
Cr 267.716†	24.7	0.3747	ug/L	0.24758	0.3747	ppb	0.24758	66.07%
Cu 324.752†	-176.5	-0.5835	ug/L	0.18983	-0.5835	ppb	0.18983	32.53%
Fe 238.204 Radial†	8.1	102.80	ug/L	17.045	102.80	ppb	17.045	16.58%
K 766.490 Radial†	-144.8	-26.946	ug/L	14.3718	-26.946	ppb	14.3718	53.33%

Mg 279.077 IEC†	0.2	7.5805	ug/L	22.41432	7.5805	ppb	22.41432 295.68%
Mn 257.610†	515.2	0.6765	ug/L	0.01871	0.6765	ppb	0.01871 2.77%
Mo 202.031†	1.6	0.1660	ug/L	0.42744	0.1660	ppb	0.42744 257.44%
Na 589.592 Radial†	33.4	14.696	ug/L	14.9250	14.696	ppb	14.9250 101.56%
Ni 231.604†	12.5	0.4061	ug/L	0.03865	0.4061	ppb	0.03865 9.52%
P 214.914†	-4.2	-2.6511	ug/L	2.28010	-2.6511	ppb	2.28010 86.01%
Pb 220.353†	4.5	0.7056	ug/L	1.00663	0.7056	ppb	1.00663 142.67%
S 181.975 Axial†	-0.4	-0.6662	ug/L	6.74030	-0.6662	ppb	6.74030 >999.9%
Sb 206.836†	3.3	1.3796	ug/L	0.70151	1.3796	ppb	0.70151 50.85%
Se 196.026†	-2.3	-1.4008	ug/L	2.68954	-1.4008	ppb	2.68954 192.00%
Si 251.611†	575.5	21.067	ug/L	0.4385	21.067	ppb	0.4385 2.08%
Sn 189.927†	10.8	2.4944	ug/L	0.30464	2.4944	ppb	0.30464 12.21%
Sr 421.552†	0.6	0.0056	ug/L	0.05893	0.0056	ppb	0.05893 >999.9%
Ti 334.940†	94.6	0.1724	ug/L	0.13107	0.1724	ppb	0.13107 76.02%
Tl 190.801†	1.5	0.5910	ug/L	0.83538	0.5910	ppb	0.83538 141.36%
U 409.014†	44.6	1.7044	ug/L	2.81447	1.7044	ppb	2.81447 165.13%
V 292.402†	53.1	0.4586	ug/L	0.39573	0.4586	ppb	0.39573 86.30%
Zn 213.857†	103.1	1.1627	ug/L	0.08631	1.1627	ppb	0.08631 7.42%
SiO2†	596.0	47.057	ug/L	1.2433	47.057	ppb	1.2433 2.64%

Sequence No.: 4
Sample ID: 1202060837|960819|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 4/1/2010 14:05:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202060837|960819|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4165.0	4165.0	109	%			14:07:36
1	Y RADIAL	4999.7	4999.7	115.4	%			14:07:36
1	Al 396.153Radial†	110640.5	102062.5	107410	ug/L	107410	ppb	14:07:16
1	Ca 317.933Radial†	59188.8	54531.8	107080	ug/L	107080	ppb	14:07:16
1	Fe 238.204 Radial†	16751.9	15433.0	196180	ug/L	196180	ppb	14:07:16
1	K 766.490 Radial†	273615.8	249178.2	46296	ug/L	46296	ppb	14:07:16
1	Mg 279.077 IEC†	1116.4	1025.9	42059	ug/L	42059	ppb	14:07:36
1	Na 589.592 Radial†	26982.1	25945.5	11420	ug/L	11420	ppb	14:07:16
1	Sr 421.552†	278136.3	256326.5	2460.3	ug/L	2460.3	ppb	14:07:16
1	Sc 361.383	717926.3	717926.3	104.11	%			14:08:37
1	Y 371.029	614307.9	614307.9	113.38	%			14:08:37
1	Ag 328.068†	51948.4	49797.9	339.21	ug/L	339.21	ppb	14:08:37
1	As 188.979†	2168.1	2105.3	1143.4	ug/L	1143.4	ppb	14:08:42
1	B 249.677†	68316.1	66202.5	1630.8	ug/L	1630.8	ppb	14:08:37
1	Ba 233.527†	218744.6	210109.3	2039.7	ug/L	2039.7	ppb	14:08:37
1	Be 313.107†	2198139.9	2115896.1	869.32	ug/L	869.32	ppb	14:08:37
1	Cd 226.502†	47072.5	45427.9	644.80	ug/L	644.80	ppb	14:08:42
1	Co 228.616†	42917.2	41282.8	1007.2	ug/L	1007.2	ppb	14:08:42
1	Cr 267.716†	187234.2	179752.2	2674.4	ug/L	2674.4	ppb	14:08:37
1	Cu 324.752†	639159.1	608241.6	2036.3	ug/L	2036.3	ppb	14:08:37
1	Mn 257.610†	4620976.5	4438128.1	5760.3	ug/L	5760.3	ppb	14:08:37
1	Mo 202.031†	5930.2	5683.6	562.45	ug/L	562.45	ppb	14:08:42
1	Ni 231.604†	47992.6	46023.6	1500.1	ug/L	1500.1	ppb	14:08:42
1	P 214.914†	14255.0	13473.8	8089.3	ug/L	8089.3	ppb	14:08:42
1	Pb 220.353†	5576.5	5423.4	862.71	ug/L	862.71	ppb	14:08:42
1	S 181.975 Axial†	3095.2	2932.8	4386.5	ug/L	4386.5	ppb	14:08:42
1	Sb 206.836†	3702.4	3524.5	1416.1	ug/L	1416.1	ppb	14:08:42
1	Se 196.026†	3750.4	3624.5	3241.0	ug/L	3241.0	ppb	14:08:42
1	Si 251.611†	1140909.0	1095377.4	40094	ug/L	40094	ppb	14:08:37
1	Sn 189.927†	4801.0	4607.3	1078.6	ug/L	1078.6	ppb	14:08:42
1	Ti 334.940†	3731389.8	3585522.5	6517.4	ug/L	6517.4	ppb	14:08:37
1	Tl 190.801†	3183.3	3095.6	1265.2	ug/L	1265.2	ppb	14:08:42
1	U 409.014†	-6930.0	-4250.0	-192.00	ug/L	-192.00	ppb	14:08:37
1	V 292.402†	159313.5	154741.4	1335.9	ug/L	1335.9	ppb	14:08:37
1	Zn 213.857†	584097.1	560376.4	6368.1	ug/L	6368.1	ppb	14:08:37
1	SiO2†	1116601.4	1071986.8	84625	ug/L	84625	ppb	14:09:17
2	Sc Radial	4221.5	4221.5	110	%			14:08:01
2	Y RADIAL	5065.2	5065.2	116.9	%			14:08:01
2	Al 396.153Radial†	112590.1	102470.7	107840	ug/L	107840	ppb	14:07:41
2	Ca 317.933Radial†	60071.1	54604.1	107220	ug/L	107220	ppb	14:07:41
2	Fe 238.204 Radial†	16997.8	15450.0	196390	ug/L	196390	ppb	14:07:41
2	K 766.490 Radial†	279358.6	251025.4	46640	ug/L	46640	ppb	14:07:41
2	Mg 279.077 IEC†	1130.7	1025.1	42024	ug/L	42024	ppb	14:08:01
2	Na 589.592 Radial†	27527.5	26108.6	11491	ug/L	11491	ppb	14:07:41
2	Sr 421.552†	283552.0	257820.5	2474.7	ug/L	2474.7	ppb	14:07:41
2	Sc 361.383	718584.8	718584.8	104.20	%			14:08:52
2	Y 371.029	615877.7	615877.7	113.67	%			14:08:52
2	Ag 328.068†	51994.2	49796.2	339.25	ug/L	339.25	ppb	14:08:52
2	As 188.979†	2222.0	2155.1	1168.1	ug/L	1168.1	ppb	14:08:57
2	B 249.677†	68312.3	66138.7	1629.2	ug/L	1629.2	ppb	14:08:52
2	Ba 233.527†	218870.0	210037.1	2039.0	ug/L	2039.0	ppb	14:08:52
2	Be 313.107†	2195315.5	2111250.9	867.44	ug/L	867.44	ppb	14:08:52
2	Cd 226.502†	47934.7	46213.8	656.28	ug/L	656.28	ppb	14:08:57
2	Co 228.616†	43612.9	41912.6	1022.8	ug/L	1022.8	ppb	14:08:57
2	Cr 267.716†	186878.5	179246.1	2667.0	ug/L	2667.0	ppb	14:08:52
2	Cu 324.752†	640088.0	608570.5	2037.4	ug/L	2037.4	ppb	14:08:52
2	Mn 257.610†	4615414.1	4428722.8	5748.1	ug/L	5748.1	ppb	14:08:52
2	Mo 202.031†	6039.5	5783.3	572.05	ug/L	572.05	ppb	14:08:57
2	Ni 231.604†	48941.0	46891.4	1528.4	ug/L	1528.4	ppb	14:08:57

2	P 214.914†	14622.3	13813.8	8306.6	ug/L	8306.6 ppb	14:08:57
2	Pb 220.353†	5676.0	5514.0	877.07	ug/L	877.07 ppb	14:08:57
2	S 181.975 Axial†	3166.5	2998.5	4485.1	ug/L	4485.1 ppb	14:08:57
2	Sb 206.836†	3761.0	3577.5	1437.9	ug/L	1437.9 ppb	14:08:57
2	Se 196.026†	3852.3	3719.0	3311.8	ug/L	3311.8 ppb	14:08:57
2	Si 251.611†	1136675.0	1090310.0	39908	ug/L	39908 ppb	14:08:52
2	Sn 189.927†	4915.2	4712.8	1102.8	ug/L	1102.8 ppb	14:08:57
2	Ti 334.940†	3734153.0	3584889.8	6516.3	ug/L	6516.3 ppb	14:08:52
2	Tl 190.801†	3285.6	3191.0	1301.8	ug/L	1301.8 ppb	14:08:57
2	U 409.014†	-6844.1	-4161.4	-188.60	ug/L	-188.60 ppb	14:08:52
2	V 292.402†	159136.3	154431.1	1333.3	ug/L	1333.3 ppb	14:08:52
2	Zn 213.857†	583459.1	559250.1	6355.0	ug/L	6355.0 ppb	14:08:52
2	SiO2†	1114290.6	1068786.4	84372	ug/L	84372 ppb	14:09:23
3	Sc Radial	4208.1	4208.1	110	%		14:08:27
3	Y RADIAL	5046.6	5046.6	116.5	%		14:08:27
3	Al 396.153Radial†	110445.1	100841.3	106130	ug/L	106130 ppb	14:08:07
3	Ca 317.933Radial†	59137.3	53926.9	105890	ug/L	105890 ppb	14:08:07
3	Fe 238.204 Radial†	16737.3	15261.7	194000	ug/L	194000 ppb	14:08:07
3	K 766.490 Radial†	273689.5	246666.1	45829	ug/L	45829 ppb	14:08:07
3	Mg 279.077 IEC†	1130.7	1028.4	42163	ug/L	42163 ppb	14:08:27
3	Na 589.592 Radial†	26702.1	25435.7	11195	ug/L	11195 ppb	14:08:07
3	Sr 421.552†	276203.8	251941.7	2418.2	ug/L	2418.2 ppb	14:08:07
3	Sc 361.383	710688.7	710688.7	103.06	%		14:09:06
3	Y 371.029	608045.1	608045.1	112.22	%		14:09:06
3	Ag 328.068†	51505.8	49876.7	338.98	ug/L	338.98 ppb	14:09:06
3	As 188.979†	2200.3	2157.8	1168.9	ug/L	1168.9 ppb	14:09:11
3	B 249.677†	67369.4	65952.2	1624.9	ug/L	1624.9 ppb	14:09:06
3	Ba 233.527†	216986.9	210543.6	2043.8	ug/L	2043.8 ppb	14:09:06
3	Be 313.107†	2167099.3	2107279.4	865.85	ug/L	865.85 ppb	14:09:06
3	Cd 226.502†	47068.8	45884.7	651.71	ug/L	651.71 ppb	14:09:11
3	Co 228.616†	42913.5	41699.0	1017.5	ug/L	1017.5 ppb	14:09:11
3	Cr 267.716†	185232.4	179641.4	2672.6	ug/L	2672.6 ppb	14:09:06
3	Cu 324.752†	631664.0	607221.3	2032.8	ug/L	2032.8 ppb	14:09:06
3	Mn 257.610†	4577127.2	4440783.1	5763.5	ug/L	5763.5 ppb	14:09:06
3	Mo 202.031†	5891.3	5703.9	564.22	ug/L	564.22 ppb	14:09:11
3	Ni 231.604†	47973.0	46474.0	1514.8	ug/L	1514.8 ppb	14:09:11
3	P 214.914†	14230.0	13589.0	8165.3	ug/L	8165.3 ppb	14:09:11
3	Pb 220.353†	5596.9	5497.7	874.28	ug/L	874.28 ppb	14:09:11
3	S 181.975 Axial†	3084.3	2952.5	4416.3	ug/L	4416.3 ppb	14:09:11
3	Sb 206.836†	3682.0	3540.9	1423.1	ug/L	1423.1 ppb	14:09:11
3	Se 196.026†	3750.6	3661.3	3262.2	ug/L	3262.2 ppb	14:09:11
3	Si 251.611†	1127536.9	1093562.7	40027	ug/L	40027 ppb	14:09:06
3	Sn 189.927†	4848.6	4700.6	1099.8	ug/L	1099.8 ppb	14:09:11
3	Ti 334.940†	3696164.9	3587843.9	6521.5	ug/L	6521.5 ppb	14:09:06
3	Tl 190.801†	3225.3	3167.5	1292.9	ug/L	1292.9 ppb	14:09:11
3	U 409.014†	-7024.0	-4408.9	-197.87	ug/L	-197.87 ppb	14:09:06
3	V 292.402†	157489.8	154530.1	1334.4	ug/L	1334.4 ppb	14:09:06
3	Zn 213.857†	577952.6	560128.0	6365.5	ug/L	6365.5 ppb	14:09:06
3	SiO2†	1116523.7	1082833.9	85481	ug/L	85481 ppb	14:09:29

Mean Data: 1202060837|960819|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	715733.3	103.79	%	0.635				0.61%
Sc Radial	4198.2	109	%	0.8				0.70%
Y 371.029	612743.6	113.09	%	0.765				0.68%
Y RADIAL	5037.2	116.3	%	0.78				0.67%
Ag 328.068†	49823.6	339.14	ug/L	0.144	339.14	ppb	0.144	0.04%
Al 396.153Radial†	101791.5	107130	ug/L	892.4	107130	ppb	892.4	0.83%
As 188.979†	2139.4	1160.1	ug/L	14.49	1160.1	ppb	14.49	1.25%
B 249.677†	66097.8	1628.3	ug/L	3.08	1628.3	ppb	3.08	0.19%
Ba 233.527†	210230.0	2040.8	ug/L	2.61	2040.8	ppb	2.61	0.13%
Be 313.107†	2111475.5	867.54	ug/L	1.737	867.54	ppb	1.737	0.20%
Ca 317.933Radial†	54354.3	106730	ug/L	730.1	106730	ppb	730.1	0.68%
Cd 226.502†	45842.2	650.93	ug/L	5.783	650.93	ppb	5.783	0.89%
Co 228.616†	41631.5	1015.9	ug/L	7.95	1015.9	ppb	7.95	0.78%
Cr 267.716†	179546.5	2671.3	ug/L	3.88	2671.3	ppb	3.88	0.15%
Cu 324.752†	608011.1	2035.5	ug/L	2.41	2035.5	ppb	2.41	0.12%
Fe 238.204 Radial†	15381.6	195520	ug/L	1323.4	195520	ppb	1323.4	0.68%
K 766.490 Radial†	248956.6	46255	ug/L	406.6	46255	ppb	406.6	0.88%

Mg 279.077 IEC†	1026.5	42082	ug/L	72.1	42082	ppb	72.1	0.17%
Mn 257.610†	4435878.0	5757.3	ug/L	8.10	5757.3	ppb	8.10	0.14%
Mo 202.031†	5723.6	566.24	ug/L	5.107	566.24	ppb	5.107	0.90%
Na 589.592 Radial†	25829.9	11369	ug/L	154.5	11369	ppb	154.5	1.36%
Ni 231.604†	46463.0	1514.5	ug/L	14.15	1514.5	ppb	14.15	0.93%
P 214.914†	13625.5	8187.0	ug/L	110.26	8187.0	ppb	110.26	1.35%
Pb 220.353†	5478.4	871.35	ug/L	7.613	871.35	ppb	7.613	0.87%
S 181.975 Axial†	2961.3	4429.3	ug/L	50.57	4429.3	ppb	50.57	1.14%
Sb 206.836†	3547.6	1425.7	ug/L	11.11	1425.7	ppb	11.11	0.78%
Se 196.026†	3668.3	3271.7	ug/L	36.34	3271.7	ppb	36.34	1.11%
Si 251.611†	1093083.4	40010	ug/L	94.1	40010	ppb	94.1	0.24%
Sn 189.927†	4673.5	1093.7	ug/L	13.20	1093.7	ppb	13.20	1.21%
Sr 421.552†	255362.9	2451.1	ug/L	29.33	2451.1	ppb	29.33	1.20%
Ti 334.940†	3586085.4	6518.4	ug/L	2.72	6518.4	ppb	2.72	0.04%
Tl 190.801†	3151.4	1286.6	ug/L	19.07	1286.6	ppb	19.07	1.48%
U 409.014†	-4273.4	-192.82	ug/L	4.692	-192.82	ppb	4.692	2.43%
V 292.402†	154567.5	1334.5	ug/L	1.32	1334.5	ppb	1.32	0.10%
Zn 213.857†	559918.2	6362.9	ug/L	6.93	6362.9	ppb	6.93	0.11%
SiO2†	1074535.7	84826	ug/L	581.4	84826	ppb	581.4	0.69%

Sequence No.: 5
Sample ID: 248374001|960819|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 4/1/2010 14:11:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248374001|960819|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3968.8	3968.8	103	%			14:13:32
1	Y RADIAL	5507.8	5507.8	127.1	%			14:13:32
1	Al 396.153Radial†	41796.9	40518.7	42654	ug/L	42654	ppb	14:13:32
1	Ca 317.933Radial†	7503.6	7239.0	14214	ug/L	14214	ppb	14:13:32
1	Fe 238.204 Radial†	7210.8	6968.2	88564	ug/L	88564	ppb	14:13:32
1	K 766.490 Radial†	51209.7	46534.8	8647.0	ug/L	8647.0	ppb	14:13:32
1	Mg 279.077 IEC†	242.2	231.3	9434.1	ug/L	9434.1	ppb	14:13:52
1	Na 589.592 Radial†	694.0	1749.0	769.81	ug/L	769.81	ppb	14:13:32
1	Sr 421.552†	10733.3	10367.5	99.438	ug/L	99.438	ppb	14:13:32
1	Sc 361.383	699948.0	699948.0	101.50	%			14:14:51
1	Y 371.029	689287.2	689287.2	127.22	%			14:14:51
1	Ag 328.068†	-4756.3	-4785.8	1.4826	ug/L	1.4826	ppb	14:14:56
1	As 188.979†	-44.4	-20.9	37.231	ug/L	37.231	ppb	14:15:16
1	B 249.677†	1526.0	2086.5	38.048	ug/L	38.048	ppb	14:14:56
1	Ba 233.527†	45100.4	44432.1	432.36	ug/L	432.36	ppb	14:14:56
1	Be 313.107†	-3837.4	742.7	7.3380	ug/L	7.3380	ppb	14:14:56
1	Cd 226.502†	411.5	618.9	-0.1054	ug/L	-0.1054	ppb	14:15:16
1	Co 228.616†	856.9	903.9	14.787	ug/L	14.787	ppb	14:15:16
1	Cr 267.716†	5932.5	5753.4	94.515	ug/L	94.515	ppb	14:15:16
1	Cu 324.752†	15487.9	9570.6	36.718	ug/L	36.718	ppb	14:14:56
1	Mn 257.610†	3832160.7	3774993.8	4892.9	ug/L	4892.9	ppb	14:14:51
1	Mo 202.031†	17.6	4.9	7.5131	ug/L	7.5131	ppb	14:15:16
1	Ni 231.604†	2444.3	2333.5	76.077	ug/L	76.077	ppb	14:15:16
1	P 214.914†	1841.9	1596.1	953.16	ug/L	953.16	ppb	14:15:16
1	Pb 220.353†	344.9	406.8	66.281	ug/L	66.281	ppb	14:15:16
1	S 181.975 Axial†	545.6	497.3	739.25	ug/L	739.25	ppb	14:15:16
1	Sb 206.836†	65.5	32.8	0.9178	ug/L	0.9178	ppb	14:15:16
1	Se 196.026†	-364.3	-336.8	-2.5978	ug/L	-2.5978	ppb	14:15:16
1	Si 251.611†	955363.4	940725.9	34439	ug/L	34439	ppb	14:14:51
1	Sn 189.927†	-46.3	-49.7	-8.3447	ug/L	-8.3447	ppb	14:15:16
1	Ti 334.940†	1732345.8	1708125.8	3101.3	ug/L	3101.3	ppb	14:14:51
1	Tl 190.801†	-167.6	-127.1	-0.1323	ug/L	-0.1323	ppb	14:15:16
1	U 409.014†	-9746.3	-7195.5	-287.45	ug/L	-287.45	ppb	14:14:51
1	V 292.402†	10444.3	12006.1	89.285	ug/L	89.285	ppb	14:14:56
1	Zn 213.857†	42594.1	41299.0	458.61	ug/L	458.61	ppb	14:14:56
1	SiO2†	970242.1	955341.8	75430	ug/L	75430	ppb	14:16:26
2	Sc Radial	4419.7	4419.7	115	%			14:13:58
2	Y RADIAL	5945.8	5945.8	137.3	%			14:13:58
2	Al 396.153Radial†	41215.1	35889.0	37780	ug/L	37780	ppb	14:13:58
2	Ca 317.933Radial†	7394.4	6403.6	12574	ug/L	12574	ppb	14:13:58
2	Fe 238.204 Radial†	7115.4	6173.8	78467	ug/L	78467	ppb	14:13:58
2	K 766.490 Radial†	50294.9	40687.1	7560.1	ug/L	7560.1	ppb	14:13:58
2	Mg 279.077 IEC†	247.1	211.6	8633.8	ug/L	8633.8	ppb	14:14:18
2	Na 589.592 Radial†	717.3	1700.8	748.59	ug/L	748.59	ppb	14:13:58
2	Sr 421.552†	10651.6	9237.5	88.600	ug/L	88.600	ppb	14:13:58
2	Sc 361.383	702982.7	702982.7	101.94	%			14:15:23
2	Y 371.029	690746.8	690746.8	127.49	%			14:15:23
2	Ag 328.068†	-4609.6	-4621.6	-0.7205	ug/L	-0.7205	ppb	14:15:28
2	As 188.979†	-53.6	-29.8	30.314	ug/L	30.314	ppb	14:15:48
2	B 249.677†	1485.4	2040.1	38.520	ug/L	38.520	ppb	14:15:28
2	Ba 233.527†	44984.8	44126.8	429.10	ug/L	429.10	ppb	14:15:28
2	Be 313.107†	-3934.3	664.0	7.2577	ug/L	7.2577	ppb	14:15:28
2	Cd 226.502†	436.7	641.9	1.2736	ug/L	1.2736	ppb	14:15:48
2	Co 228.616†	880.1	923.0	15.447	ug/L	15.447	ppb	14:15:48
2	Cr 267.716†	5922.1	5717.9	92.919	ug/L	92.919	ppb	14:15:48
2	Cu 324.752†	15519.5	9535.8	36.066	ug/L	36.066	ppb	14:15:28
2	Mn 257.610†	3833943.4	3760444.5	4873.2	ug/L	4873.2	ppb	14:15:23
2	Mo 202.031†	10.6	-2.1	6.0377	ug/L	6.0377	ppb	14:15:48
2	Ni 231.604†	2455.5	2334.1	76.097	ug/L	76.097	ppb	14:15:48

2	P 214.914†	1844.9	1591.2	956.95	ug/L	956.95 ppb	14:15:48
2	Pb 220.353†	337.3	397.9	64.611	ug/L	64.611 ppb	14:15:48
2	S 181.975 Axial†	566.4	515.4	767.35	ug/L	767.35 ppb	14:15:48
2	Sb 206.836†	58.1	25.2	-1.8040	ug/L	-1.8040 ppb	14:15:48
2	Se 196.026†	-351.5	-322.7	-20.363	ug/L	-20.363 ppb	14:15:48
2	Si 251.611†	953494.0	934829.0	34223	ug/L	34223 ppb	14:15:23
2	Sn 189.927†	-50.7	-53.8	-9.6455	ug/L	-9.6455 ppb	14:15:48
2	Ti 334.940†	1727874.1	1696371.8	3079.8	ug/L	3079.8 ppb	14:15:23
2	Tl 190.801†	-165.0	-123.9	0.8474	ug/L	0.8474 ppb	14:15:48
2	U 409.014†	-9724.1	-7132.3	-283.86	ug/L	-283.86 ppb	14:15:23
2	V 292.402†	10333.8	11853.3	89.411	ug/L	89.411 ppb	14:15:28
2	Zn 213.857†	42446.7	40973.3	456.40	ug/L	456.40 ppb	14:15:28
2	SiO2†	961685.6	942821.9	74441	ug/L	74441 ppb	14:16:32
3	Sc Radial	4090.1	4090.1	107	%		14:14:23
3	Y RADIAL	5641.8	5641.8	130.2	%		14:14:23
3	Al 396.153Radial†	41763.9	39288.4	41358	ug/L	41358 ppb	14:14:23
3	Ca 317.933Radial†	7502.4	7022.5	13789	ug/L	13789 ppb	14:14:23
3	Fe 238.204 Radial†	7174.0	6726.8	85495	ug/L	85495 ppb	14:14:23
3	K 766.490 Radial†	50761.7	44644.9	8295.7	ug/L	8295.7 ppb	14:14:23
3	Mg 279.077 IEC†	244.3	226.3	9230.8	ug/L	9230.8 ppb	14:14:43
3	Na 589.592 Radial†	727.2	1760.3	774.79	ug/L	774.79 ppb	14:14:23
3	Sr 421.552†	10803.3	10125.2	97.115	ug/L	97.115 ppb	14:14:23
3	Sc 361.383	708856.1	708856.1	102.79	%		14:15:55
3	Y 371.029	697408.0	697408.0	128.72	%		14:15:55
3	Ag 328.068†	-4653.5	-4626.9	1.4097	ug/L	1.4097 ppb	14:16:00
3	As 188.979†	-50.9	-26.7	33.410	ug/L	33.410 ppb	14:16:20
3	B 249.677†	1423.2	1967.6	35.555	ug/L	35.555 ppb	14:16:00
3	Ba 233.527†	45421.3	44185.9	429.89	ug/L	429.89 ppb	14:16:00
3	Be 313.107†	-3905.3	724.1	7.2647	ug/L	7.2647 ppb	14:16:00
3	Cd 226.502†	421.6	623.6	0.2790	ug/L	0.2790 ppb	14:16:20
3	Co 228.616†	872.7	908.7	15.007	ug/L	15.007 ppb	14:16:20
3	Cr 267.716†	5916.4	5664.3	92.874	ug/L	92.874 ppb	14:16:20
3	Cu 324.752†	15450.8	9342.8	35.798	ug/L	35.798 ppb	14:16:00
3	Mn 257.610†	3841361.8	3736499.2	4842.8	ug/L	4842.8 ppb	14:15:55
3	Mo 202.031†	6.4	-6.3	6.1983	ug/L	6.1983 ppb	14:16:20
3	Ni 231.604†	2437.7	2296.8	74.881	ug/L	74.881 ppb	14:16:20
3	P 214.914†	1867.7	1598.4	956.95	ug/L	956.95 ppb	14:16:20
3	Pb 220.353†	348.5	406.0	66.124	ug/L	66.124 ppb	14:16:20
3	S 181.975 Axial†	566.4	510.8	759.73	ug/L	759.73 ppb	14:16:20
3	Sb 206.836†	59.1	25.7	-1.7366	ug/L	-1.7366 ppb	14:16:20
3	Se 196.026†	-359.5	-327.7	-4.3614	ug/L	-4.3614 ppb	14:16:20
3	Si 251.611†	958349.4	931802.5	34112	ug/L	34112 ppb	14:15:55
3	Sn 189.927†	-42.0	-45.0	-7.3647	ug/L	-7.3647 ppb	14:16:20
3	Ti 334.940†	1737992.8	1692171.3	3072.3	ug/L	3072.3 ppb	14:15:55
3	Tl 190.801†	-176.3	-133.5	-3.0770	ug/L	-3.0770 ppb	14:16:20
3	U 409.014†	-9958.8	-7281.6	-290.42	ug/L	-290.42 ppb	14:15:55
3	V 292.402†	10354.5	11789.5	87.828	ug/L	87.828 ppb	14:16:00
3	Zn 213.857†	42827.4	40998.6	455.64	ug/L	455.64 ppb	14:16:00
3	SiO2†	963405.2	936678.4	73956	ug/L	73956 ppb	14:16:38

Mean Data: 248374001|960819|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	703928.9	102.08	%	0.657				0.64%
Sc Radial	4159.5	108	%	6.1				5.61%
Y 371.029	692480.6	127.81	%	0.799				0.63%
Y RADIAL	5698.5	131.5	%	5.18				3.94%
Ag 328.068†	-4678.1	0.7239	ug/L	1.25148	0.7239	ppb	1.25148	172.87%
Al 396.153Radial†	38565.4	40597	ug/L	2524.4	40597	ppb	2524.4	6.22%
As 188.979†	-25.8	33.651	ug/L	3.4650	33.651	ppb	3.4650	10.30%
B 249.677†	2031.4	37.374	ug/L	1.5934	37.374	ppb	1.5934	4.26%
Ba 233.527†	44248.3	430.45	ug/L	1.702	430.45	ppb	1.702	0.40%
Be 313.107†	710.2	7.2868	ug/L	0.04444	7.2868	ppb	0.04444	0.61%
Ca 317.933Radial†	6888.4	13526	ug/L	851.2	13526	ppb	851.2	6.29%
Cd 226.502†	628.1	0.4824	ug/L	0.71164	0.4824	ppb	0.71164	147.52%
Co 228.616†	911.9	15.080	ug/L	0.3357	15.080	ppb	0.3357	2.23%
Cr 267.716†	5711.9	93.436	ug/L	0.9344	93.436	ppb	0.9344	1.00%
Cu 324.752†	9483.1	36.194	ug/L	0.4729	36.194	ppb	0.4729	1.31%
Fe 238.204 Radial†	6622.9	84175	ug/L	5176.2	84175	ppb	5176.2	6.15%
K 766.490 Radial†	43955.6	8167.6	ug/L	554.67	8167.6	ppb	554.67	6.79%

Mg 279.077 IEC†	223.1	9099.6	ug/L	416.02	9099.6	ppb	416.02	4.57%
Mn 257.610†	3757312.5	4869.6	ug/L	25.24	4869.6	ppb	25.24	0.52%
Mo 202.031†	-1.2	6.5830	ug/L	0.80942	6.5830	ppb	0.80942	12.30%
Na 589.592 Radial†	1736.7	764.40	ug/L	13.911	764.40	ppb	13.911	1.82%
Ni 231.604†	2321.4	75.685	ug/L	0.6963	75.685	ppb	0.6963	0.92%
P 214.914†	1595.3	955.69	ug/L	2.188	955.69	ppb	2.188	0.23%
Pb 220.353†	403.5	65.672	ug/L	0.9221	65.672	ppb	0.9221	1.40%
S 181.975 Axial†	507.8	755.44	ug/L	14.530	755.44	ppb	14.530	1.92%
Sb 206.836†	27.9	-0.8743	ug/L	1.55235	-0.8743	ppb	1.55235	177.56%
Se 196.026†	-329.1	-9.1075	ug/L	9.78764	-9.1075	ppb	9.78764	107.47%
Si 251.611†	935785.8	34258	ug/L	166.1	34258	ppb	166.1	0.48%
Sn 189.927†	-49.5	-8.4516	ug/L	1.14418	-8.4516	ppb	1.14418	13.54%
Sr 421.552†	9910.1	95.051	ug/L	5.7061	95.051	ppb	5.7061	6.00%
Ti 334.940†	1698889.6	3084.5	ug/L	15.05	3084.5	ppb	15.05	0.49%
Tl 190.801†	-128.2	-0.7873	ug/L	2.04257	-0.7873	ppb	2.04257	259.44%
U 409.014†	-7203.1	-287.25	ug/L	3.281	-287.25	ppb	3.281	1.14%
V 292.402†	11883.0	88.842	ug/L	0.8798	88.842	ppb	0.8798	0.99%
Zn 213.857†	41090.3	456.88	ug/L	1.543	456.88	ppb	1.543	0.34%
SiO2†	944947.4	74609	ug/L	751.0	74609	ppb	751.0	1.01%

Sequence No.: 6
Sample ID: 1202060838|960819|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 4/1/2010 14:18:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202060838|960819|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4197.8	4197.8	109	%			14:20:41
1	Y RADIAL	5648.8	5648.8	130.4	%			14:20:41
1	Al 396.153Radial†	42066.2	38558.9	40591	ug/L	40591	ppb	14:20:41
1	Ca 317.933Radial†	7977.8	7276.5	14288	ug/L	14288	ppb	14:20:41
1	Fe 238.204 Radial†	7055.4	6445.5	81920	ug/L	81920	ppb	14:20:41
1	K 766.490 Radial†	50927.7	43574.0	8096.4	ug/L	8096.4	ppb	14:20:41
1	Mg 279.077 IEC†	246.0	221.9	9056.2	ug/L	9056.2	ppb	14:21:01
1	Na 589.592 Radial†	602.6	1628.8	716.89	ug/L	716.89	ppb	14:20:41
1	Sr 421.552†	11634.7	10625.2	101.91	ug/L	101.91	ppb	14:20:41
1	Sc 361.383	695614.2	695614.2	100.87	%			14:22:00
1	Y 371.029	672542.5	672542.5	124.13	%			14:22:00
1	Ag 328.068†	-4360.9	-4423.1	1.4117	ug/L	1.4117	ppb	14:22:05
1	As 188.979†	-48.6	-25.4	32.026	ug/L	32.026	ppb	14:22:25
1	B 249.677†	1285.4	1857.3	33.357	ug/L	33.357	ppb	14:22:05
1	Ba 233.527†	46390.4	45987.8	447.19	ug/L	447.19	ppb	14:22:05
1	Be 313.107†	-3322.3	1229.8	7.1509	ug/L	7.1509	ppb	14:22:05
1	Cd 226.502†	388.8	598.9	0.2935	ug/L	0.2935	ppb	14:22:25
1	Co 228.616†	890.0	942.0	16.177	ug/L	16.177	ppb	14:22:25
1	Cr 267.716†	6987.8	6835.9	109.78	ug/L	109.78	ppb	14:22:05
1	Cu 324.752†	15611.6	9788.3	37.091	ug/L	37.091	ppb	14:22:05
1	Mn 257.610†	3916888.2	3882508.6	5031.4	ug/L	5031.4	ppb	14:22:00
1	Mo 202.031†	5.2	-7.3	5.8240	ug/L	5.8240	ppb	14:22:25
1	Ni 231.604†	2676.8	2578.9	84.082	ug/L	84.082	ppb	14:22:25
1	P 214.914†	1859.8	1625.2	976.43	ug/L	976.43	ppb	14:22:25
1	Pb 220.353†	346.2	410.2	66.945	ug/L	66.945	ppb	14:22:25
1	S 181.975 Axial†	576.0	530.8	789.96	ug/L	789.96	ppb	14:22:25
1	Sb 206.836†	50.2	18.0	-4.3513	ug/L	-4.3513	ppb	14:22:25
1	Se 196.026†	-345.0	-320.0	-8.3672	ug/L	-8.3672	ppb	14:22:25
1	Si 251.611†	909307.3	900932.7	32982	ug/L	32982	ppb	14:22:00
1	Sn 189.927†	-58.1	-61.7	-11.138	ug/L	-11.138	ppb	14:22:25
1	Ti 334.940†	1627659.3	1614979.3	2932.3	ug/L	2932.3	ppb	14:22:00
1	Tl 190.801†	-158.2	-118.9	2.2933	ug/L	2.2933	ppb	14:22:25
1	U 409.014†	-9682.1	-7191.7	-286.58	ug/L	-286.58	ppb	14:22:00
1	V 292.402†	9995.7	11625.5	87.047	ug/L	87.047	ppb	14:22:05
1	Zn 213.857†	37388.9	36400.4	403.52	ug/L	403.52	ppb	14:22:05
1	SiO2†	932137.4	923522.5	72917	ug/L	72917	ppb	14:23:36
2	Sc Radial	4095.1	4095.1	107	%			14:21:07
2	Y RADIAL	5571.0	5571.0	128.6	%			14:21:07
2	Al 396.153Radial†	41295.6	38801.6	40846	ug/L	40846	ppb	14:21:07
2	Ca 317.933Radial†	7819.6	7311.2	14356	ug/L	14356	ppb	14:21:07
2	Fe 238.204 Radial†	6900.2	6461.9	82128	ug/L	82128	ppb	14:21:07
2	K 766.490 Radial†	49963.7	43838.7	8145.6	ug/L	8145.6	ppb	14:21:07
2	Mg 279.077 IEC†	248.4	229.8	9380.7	ug/L	9380.7	ppb	14:21:27
2	Na 589.592 Radial†	586.3	1627.4	716.27	ug/L	716.27	ppb	14:21:07
2	Sr 421.552†	11360.9	10635.5	102.01	ug/L	102.01	ppb	14:21:07
2	Sc 361.383	706649.0	706649.0	102.47	%			14:22:32
2	Y 371.029	683540.3	683540.3	126.16	%			14:22:32
2	Ag 328.068†	-4600.7	-4589.5	0.5554	ug/L	0.5554	ppb	14:22:37
2	As 188.979†	-51.0	-27.0	31.165	ug/L	31.165	ppb	14:22:57
2	B 249.677†	1238.2	1791.3	31.667	ug/L	31.667	ppb	14:22:37
2	Ba 233.527†	47389.7	46244.8	449.68	ug/L	449.68	ppb	14:22:37
2	Be 313.107†	-3350.3	1253.8	7.1364	ug/L	7.1364	ppb	14:22:37
2	Cd 226.502†	414.6	618.0	0.5510	ug/L	0.5510	ppb	14:22:57
2	Co 228.616†	878.4	916.9	15.576	ug/L	15.576	ppb	14:22:57
2	Cr 267.716†	7230.2	6964.3	111.69	ug/L	111.69	ppb	14:22:37
2	Cu 324.752†	15852.1	9781.4	37.077	ug/L	37.077	ppb	14:22:37
2	Mn 257.610†	3954151.3	3858237.5	5000.0	ug/L	5000.0	ppb	14:22:32
2	Mo 202.031†	12.2	-0.6	6.4873	ug/L	6.4873	ppb	14:22:57
2	Ni 231.604†	2650.2	2511.5	81.883	ug/L	81.883	ppb	14:22:57

2	P 214.914†	1855.6	1592.3	955.31	ug/L	955.31 ppb	14:22:57
2	Pb 220.353†	361.6	419.9	68.520	ug/L	68.520 ppb	14:22:57
2	S 181.975 Axial†	588.6	534.1	794.88	ug/L	794.88 ppb	14:22:57
2	Sb 206.836†	50.9	17.9	-4.3487	ug/L	-4.3487 ppb	14:22:57
2	Se 196.026†	-346.1	-315.6	-4.5180	ug/L	-4.5180 ppb	14:22:57
2	Si 251.611†	921815.0	899062.1	32914	ug/L	32914 ppb	14:22:32
2	Sn 189.927†	-52.6	-55.4	-9.6733	ug/L	-9.6733 ppb	14:22:57
2	Ti 334.940†	1647463.4	1609108.6	2921.6	ug/L	2921.6 ppb	14:22:32
2	Tl 190.801†	-177.0	-134.8	-4.0387	ug/L	-4.0387 ppb	14:22:57
2	U 409.014†	-9733.2	-7091.7	-282.76	ug/L	-282.76 ppb	14:22:32
2	V 292.402†	10171.1	11641.9	87.195	ug/L	87.195 ppb	14:22:37
2	Zn 213.857†	38171.7	36585.5	405.62	ug/L	405.62 ppb	14:22:37
2	SiO2†	921777.2	898982.7	70980	ug/L	70980 ppb	14:23:41
3	Sc Radial	4053.6	4053.6	106	%		14:21:32
3	Y RADIAL	5482.0	5482.0	126.6	%		14:21:32
3	Al 396.153Radial†	41218.3	39124.7	41186	ug/L	41186 ppb	14:21:32
3	Ca 317.933Radial†	7837.4	7403.1	14536	ug/L	14536 ppb	14:21:32
3	Fe 238.204 Radial†	6892.3	6520.6	82875	ug/L	82875 ppb	14:21:32
3	K 766.490 Radial†	49943.4	44299.0	8231.1	ug/L	8231.1 ppb	14:21:32
3	Mg 279.077 IEC†	236.2	220.6	9001.6	ug/L	9001.6 ppb	14:21:52
3	Na 589.592 Radial†	541.5	1590.6	700.07	ug/L	700.07 ppb	14:21:32
3	Sr 421.552†	11353.4	10737.5	102.99	ug/L	102.99 ppb	14:21:32
3	Sc 361.383	715595.6	715595.6	103.77	%		14:23:04
3	Y 371.029	692074.9	692074.9	127.73	%		14:23:04
3	Ag 328.068†	-4373.4	-4314.3	2.2936	ug/L	2.2936 ppb	14:23:09
3	As 188.979†	-45.3	-20.8	34.432	ug/L	34.432 ppb	14:23:29
3	B 249.677†	1263.9	1801.0	31.788	ug/L	31.788 ppb	14:23:09
3	Ba 233.527†	47307.4	45587.3	443.35	ug/L	443.35 ppb	14:23:09
3	Be 313.107†	-3249.0	1392.3	7.1994	ug/L	7.1994 ppb	14:23:09
3	Cd 226.502†	392.7	591.9	0.0927	ug/L	0.0927 ppb	14:23:29
3	Co 228.616†	904.8	931.6	15.920	ug/L	15.920 ppb	14:23:29
3	Cr 267.716†	7143.1	6792.2	109.23	ug/L	109.23 ppb	14:23:09
3	Cu 324.752†	15875.7	9610.7	36.546	ug/L	36.546 ppb	14:23:09
3	Mn 257.610†	4005827.5	3859793.1	5002.1	ug/L	5002.1 ppb	14:23:04
3	Mo 202.031†	7.8	-5.0	6.1309	ug/L	6.1309 ppb	14:23:29
3	Ni 231.604†	2678.0	2506.0	81.705	ug/L	81.705 ppb	14:23:29
3	P 214.914†	1859.9	1573.8	943.11	ug/L	943.11 ppb	14:23:29
3	Pb 220.353†	341.2	395.8	64.749	ug/L	64.749 ppb	14:23:29
3	S 181.975 Axial†	588.8	527.1	784.29	ug/L	784.29 ppb	14:23:29
3	Sb 206.836†	55.8	22.1	-2.7015	ug/L	-2.7015 ppb	14:23:29
3	Se 196.026†	-337.7	-303.3	6.6653	ug/L	6.6653 ppb	14:23:29
3	Si 251.611†	935166.3	900681.7	32973	ug/L	32973 ppb	14:23:04
3	Sn 189.927†	-47.8	-50.2	-8.4393	ug/L	-8.4393 ppb	14:23:29
3	Ti 334.940†	1670108.3	1610830.7	2924.8	ug/L	2924.8 ppb	14:23:04
3	Tl 190.801†	-175.9	-131.6	-2.7889	ug/L	-2.7889 ppb	14:23:29
3	U 409.014†	-9731.4	-6971.2	-278.20	ug/L	-278.20 ppb	14:23:04
3	V 292.402†	10218.7	11563.7	86.390	ug/L	86.390 ppb	14:23:09
3	Zn 213.857†	38266.4	36211.0	401.23	ug/L	401.23 ppb	14:23:09
3	SiO2†	938851.3	904190.1	71391	ug/L	71391 ppb	14:23:47

Mean Data: 1202060838|960819|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	705952.9	102.37	%	1.451				1.42%
Sc Radial	4115.5	107	%	1.9				1.80%
Y 371.029	682719.2	126.00	%	1.807				1.43%
Y RADIAL	5567.3	128.5	%	1.93				1.50%
Ag 328.068†	-4442.3	1.4202	ug/L	0.86913	1.4202	ppb	0.86913	61.20%
Al 396.153Radial†	38828.4	40874	ug/L	298.8	40874	ppb	298.8	0.73%
As 188.979†	-24.4	32.541	ug/L	1.6933	32.541	ppb	1.6933	5.20%
B 249.677†	1816.5	32.271	ug/L	0.9430	32.271	ppb	0.9430	2.92%
Ba 233.527†	45939.9	446.74	ug/L	3.191	446.74	ppb	3.191	0.71%
Be 313.107†	1292.0	7.1623	ug/L	0.03302	7.1623	ppb	0.03302	0.46%
Ca 317.933Radial†	7330.3	14393	ug/L	128.4	14393	ppb	128.4	0.89%
Cd 226.502†	602.9	0.3124	ug/L	0.22973	0.3124	ppb	0.22973	73.55%
Co 228.616†	930.1	15.891	ug/L	0.3015	15.891	ppb	0.3015	1.90%
Cr 267.716†	6864.1	110.23	ug/L	1.293	110.23	ppb	1.293	1.17%
Cu 324.752†	9726.8	36.905	ug/L	0.3110	36.905	ppb	0.3110	0.84%
Fe 238.204 Radial†	6476.0	82308	ug/L	502.1	82308	ppb	502.1	0.61%
K 766.490 Radial†	43903.9	8157.7	ug/L	68.19	8157.7	ppb	68.19	0.84%

Mg 279.077 IEC†	224.1	9146.1	ug/L	204.98	9146.1	ppb	204.98	2.24%
Mn 257.610†	3866846.4	5011.2	ug/L	17.55	5011.2	ppb	17.55	0.35%
Mo 202.031†	-4.3	6.1474	ug/L	0.33198	6.1474	ppb	0.33198	5.40%
Na 589.592 Radial†	1615.6	711.08	ug/L	9.537	711.08	ppb	9.537	1.34%
Ni 231.604†	2532.2	82.557	ug/L	1.3238	82.557	ppb	1.3238	1.60%
P 214.914†	1597.1	958.28	ug/L	16.856	958.28	ppb	16.856	1.76%
Pb 220.353†	408.7	66.738	ug/L	1.8939	66.738	ppb	1.8939	2.84%
S 181.975 Axial†	530.7	789.71	ug/L	5.298	789.71	ppb	5.298	0.67%
Sb 206.836†	19.3	-3.8005	ug/L	0.95178	-3.8005	ppb	0.95178	25.04%
Se 196.026†	-313.0	-2.0733	ug/L	7.80874	-2.0733	ppb	7.80874	376.63%
Si 251.611†	900225.5	32956	ug/L	37.2	32956	ppb	37.2	0.11%
Sn 189.927†	-55.8	-9.7503	ug/L	1.35112	-9.7503	ppb	1.35112	13.86%
Sr 421.552†	10666.1	102.30	ug/L	0.595	102.30	ppb	0.595	0.58%
Ti 334.940†	1611639.5	2926.2	ug/L	5.48	2926.2	ppb	5.48	0.19%
Tl 190.801†	-128.4	-1.5114	ug/L	3.35376	-1.5114	ppb	3.35376	221.89%
U 409.014†	-7084.9	-282.51	ug/L	4.198	-282.51	ppb	4.198	1.49%
V 292.402†	11610.4	86.877	ug/L	0.4287	86.877	ppb	0.4287	0.49%
Zn 213.857†	36399.0	403.46	ug/L	2.197	403.46	ppb	2.197	0.54%
SiO2†	908898.4	71763	ug/L	1020.9	71763	ppb	1020.9	1.42%

Sequence No.: 7
Sample ID: 1202060839|960819|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 4/1/2010 14:25:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202060839|960819|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4050.2	4050.2	106	%			14:28:11
1	Y RADIAL	5620.2	5620.2	129.7	%			14:28:11
1	Al 396.153Radial†	74025.8	70251.5	73929	ug/L	73929	ppb	14:27:51
1	Ca 317.933Radial†	10600.0	10027.7	19690	ug/L	19690	ppb	14:27:51
1	Fe 238.204 Radial†	7955.8	7534.1	95770	ug/L	95770	ppb	14:27:51
1	K 766.490 Radial†	95661.3	87668.8	16292	ug/L	16292	ppb	14:27:51
1	Mg 279.077 IEC†	436.6	410.8	16824	ug/L	16824	ppb	14:28:11
1	Na 589.592 Radial†	12536.3	12959.3	5703.9	ug/L	5703.9	ppb	14:27:51
1	Sr 421.552†	64244.7	60875.1	584.35	ug/L	584.35	ppb	14:27:51
1	Sc 361.383	684774.8	684774.8	99.302	%			14:29:14
1	Y 371.029	685055.5	685055.5	126.44	%			14:29:14
1	Ag 328.068†	85894.4	86398.2	507.67	ug/L	507.67	ppb	14:29:14
1	As 188.979†	958.6	988.1	546.29	ug/L	546.29	ppb	14:29:34
1	B 249.677†	20840.2	21569.7	525.64	ug/L	525.64	ppb	14:29:14
1	Ba 233.527†	98779.6	99473.1	965.69	ug/L	965.69	ppb	14:29:14
1	Be 313.107†	1245793.1	1259072.2	517.89	ug/L	517.89	ppb	14:29:09
1	Cd 226.502†	33635.5	34085.4	488.84	ug/L	488.84	ppb	14:29:34
1	Co 228.616†	20773.3	20979.0	510.98	ug/L	510.98	ppb	14:29:34
1	Cr 267.716†	39327.1	39512.2	593.81	ug/L	593.81	ppb	14:29:14
1	Cu 324.752†	174167.8	169704.0	570.17	ug/L	570.17	ppb	14:29:14
1	Mn 257.610†	4078043.6	4106260.6	5322.0	ug/L	5322.0	ppb	14:29:09
1	Mo 202.031†	5166.5	5190.4	506.24	ug/L	506.24	ppb	14:29:34
1	Ni 231.604†	17904.3	17955.5	585.19	ug/L	585.19	ppb	14:29:34
1	P 214.914†	2840.5	2642.0	1522.5	ug/L	1522.5	ppb	14:29:34
1	Pb 220.353†	3441.0	3532.2	566.07	ug/L	566.07	ppb	14:29:34
1	S 181.975 Axial†	4044.4	4032.6	6045.2	ug/L	6045.2	ppb	14:29:34
1	Sb 206.836†	1157.7	1134.1	457.06	ug/L	457.06	ppb	14:29:34
1	Se 196.026†	324.5	348.9	535.24	ug/L	535.24	ppb	14:29:34
1	Si 251.611†	915431.0	921368.3	33724	ug/L	33724	ppb	14:29:09
1	Sn 189.927†	2130.1	2141.0	495.91	ug/L	495.91	ppb	14:29:34
1	Ti 334.940†	2261509.8	2278826.0	4136.8	ug/L	4136.8	ppb	14:29:09
1	Tl 190.801†	959.5	1004.2	442.58	ug/L	442.58	ppb	14:29:34
1	U 409.014†	3406.1	5836.5	212.60	ug/L	212.60	ppb	14:29:14
1	V 292.402†	68357.8	70554.7	611.23	ug/L	611.23	ppb	14:29:14
1	Zn 213.857†	84185.9	84113.0	943.29	ug/L	943.29	ppb	14:29:14
1	SiO2†	921089.7	927024.3	73180	ug/L	73180	ppb	14:30:45
2	Sc Radial	3995.9	3995.9	104	%			14:28:36
2	Y RADIAL	5545.8	5545.8	128.0	%			14:28:36
2	Al 396.153Radial†	72590.5	69826.4	73482	ug/L	73482	ppb	14:28:16
2	Ca 317.933Radial†	10435.5	10006.2	19648	ug/L	19648	ppb	14:28:16
2	Fe 238.204 Radial†	7747.7	7436.7	94532	ug/L	94532	ppb	14:28:16
2	K 766.490 Radial†	93743.4	87059.0	16179	ug/L	16179	ppb	14:28:16
2	Mg 279.077 IEC†	427.2	407.4	16687	ug/L	16687	ppb	14:28:36
2	Na 589.592 Radial†	12257.7	12853.2	5657.1	ug/L	5657.1	ppb	14:28:16
2	Sr 421.552†	62564.0	60088.4	576.79	ug/L	576.79	ppb	14:28:16
2	Sc 361.383	700908.7	700908.7	101.64	%			14:29:46
2	Y 371.029	702021.2	702021.2	129.57	%			14:29:46
2	Ag 328.068†	88287.1	86761.2	509.28	ug/L	509.28	ppb	14:29:46
2	As 188.979†	963.7	970.9	537.11	ug/L	537.11	ppb	14:30:07
2	B 249.677†	21519.3	21754.8	530.53	ug/L	530.53	ppb	14:29:46
2	Ba 233.527†	100535.4	98910.8	960.22	ug/L	960.22	ppb	14:29:46
2	Be 313.107†	1263409.5	1247526.2	513.12	ug/L	513.12	ppb	14:29:41
2	Cd 226.502†	33830.7	33497.7	480.37	ug/L	480.37	ppb	14:30:07
2	Co 228.616†	20881.9	20604.2	501.78	ug/L	501.78	ppb	14:30:07
2	Cr 267.716†	40177.9	39437.6	592.57	ug/L	592.57	ppb	14:29:46
2	Cu 324.752†	179433.2	170847.0	573.91	ug/L	573.91	ppb	14:29:46
2	Mn 257.610†	4115739.9	4048817.6	5247.5	ug/L	5247.5	ppb	14:29:41
2	Mo 202.031†	5184.4	5088.2	496.33	ug/L	496.33	ppb	14:30:07
2	Ni 231.604†	18038.0	17672.0	575.95	ug/L	575.95	ppb	14:30:07

2	P 214.914†	2884.9	2619.8	1508.4 ug/L	1508.4 ppb	14:30:07
2	Pb 220.353†	3474.3	3485.2	558.66 ug/L	558.66 ppb	14:30:07
2	S 181.975 Axial†	4080.3	3974.2	5957.5 ug/L	5957.5 ppb	14:30:07
2	Sb 206.836†	1163.6	1113.1	448.49 ug/L	448.49 ppb	14:30:07
2	Se 196.026†	334.4	351.1	533.48 ug/L	533.48 ppb	14:30:07
2	Si 251.611†	926173.8	910717.6	33334 ug/L	33334 ppb	14:29:41
2	Sn 189.927†	2141.4	2102.7	487.10 ug/L	487.10 ppb	14:30:07
2	Ti 334.940†	2288662.2	2253117.2	4090.2 ug/L	4090.2 ppb	14:29:41
2	Tl 190.801†	964.4	986.8	435.16 ug/L	435.16 ppb	14:30:07
2	U 409.014†	3807.9	6152.9	224.93 ug/L	224.93 ppb	14:29:46
2	V 292.402†	70001.9	70587.6	611.64 ug/L	611.64 ppb	14:29:46
2	Zn 213.857†	86117.4	84061.9	942.94 ug/L	942.94 ppb	14:29:46
2	SiO2†	919739.6	904344.8	71390 ug/L	71390 ppb	14:30:51
3	Sc Radial	4048.4	4048.4	105 %		14:29:01
3	Y RADIAL	5627.3	5627.3	129.9 %		14:29:01
3	Al 396.153Radial†	73375.4	69666.1	73313 ug/L	73313 ppb	14:28:41
3	Ca 317.933Radial†	10485.5	9923.6	19485 ug/L	19485 ppb	14:28:41
3	Fe 238.204 Radial†	7803.7	7393.2	93980 ug/L	93980 ppb	14:28:41
3	K 766.490 Radial†	94395.8	86509.3	16077 ug/L	16077 ppb	14:28:41
3	Mg 279.077 IEC†	431.1	405.7	16618 ug/L	16618 ppb	14:29:01
3	Na 589.592 Radial†	12407.0	12842.0	5652.2 ug/L	5652.2 ppb	14:28:41
3	Sr 421.552†	63468.2	60166.1	577.54 ug/L	577.54 ppb	14:28:41
3	Sc 361.383	692856.8	692856.8	100.47 %		14:30:18
3	Y 371.029	694240.9	694240.9	128.13 %		14:30:18
3	Ag 328.068†	87143.5	86632.5	508.41 ug/L	508.41 ppb	14:30:18
3	As 188.979†	953.5	971.8	537.62 ug/L	537.62 ppb	14:30:39
3	B 249.677†	21335.0	21817.3	532.18 ug/L	532.18 ppb	14:30:18
3	Ba 233.527†	99589.8	99119.1	962.22 ug/L	962.22 ppb	14:30:18
3	Be 313.107†	1253978.6	1252585.1	515.22 ug/L	515.22 ppb	14:30:13
3	Cd 226.502†	33605.3	33660.2	482.80 ug/L	482.80 ppb	14:30:39
3	Co 228.616†	20790.0	20751.6	505.40 ug/L	505.40 ppb	14:30:39
3	Cr 267.716†	39778.9	39499.9	593.43 ug/L	593.43 ppb	14:30:18
3	Cu 324.752†	176842.4	170320.0	572.13 ug/L	572.13 ppb	14:30:18
3	Mn 257.610†	4100443.2	4080650.8	5288.7 ug/L	5288.7 ppb	14:30:13
3	Mo 202.031†	5178.0	5141.1	501.36 ug/L	501.36 ppb	14:30:39
3	Ni 231.604†	17920.8	17761.6	578.87 ug/L	578.87 ppb	14:30:39
3	P 214.914†	2840.1	2608.2	1501.7 ug/L	1501.7 ppb	14:30:39
3	Pb 220.353†	3449.7	3500.4	561.08 ug/L	561.08 ppb	14:30:39
3	S 181.975 Axial†	4028.5	3969.3	5950.2 ug/L	5950.2 ppb	14:30:39
3	Sb 206.836†	1155.7	1118.5	450.71 ug/L	450.71 ppb	14:30:39
3	Se 196.026†	320.5	341.1	524.52 ug/L	524.52 ppb	14:30:39
3	Si 251.611†	920551.0	915710.9	33517 ug/L	33517 ppb	14:30:13
3	Sn 189.927†	2121.4	2107.2	488.12 ug/L	488.12 ppb	14:30:39
3	Ti 334.940†	2275579.7	2266264.1	4114.0 ug/L	4114.0 ppb	14:30:13
3	Tl 190.801†	977.2	1010.5	444.68 ug/L	444.68 ppb	14:30:39
3	U 409.014†	3617.1	6006.6	219.35 ug/L	219.35 ppb	14:30:18
3	V 292.402†	69147.7	70537.8	611.31 ug/L	611.31 ppb	14:30:18
3	Zn 213.857†	85068.2	84002.2	942.33 ug/L	942.33 ppb	14:30:18
3	SiO2†	911285.1	906446.2	71556 ug/L	71556 ppb	14:30:57

Mean Data: 1202060839|960819|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	692846.8	100.47	%	1.170				1.16%
Sc Radial	4031.5	105	%	0.8				0.77%
Y 371.029	693772.5	128.04	%	1.567				1.22%
Y RADIAL	5597.8	129.2	%	1.04				0.81%
Ag 328.068†	86597.3	508.45	ug/L	0.805	508.45	ppb	0.805	0.16%
Al 396.153Radial†	69914.7	73574	ug/L	318.3	73574	ppb	318.3	0.43%
As 188.979†	976.9	540.34	ug/L	5.157	540.34	ppb	5.157	0.95%
B 249.677†	21713.9	529.45	ug/L	3.399	529.45	ppb	3.399	0.64%
Ba 233.527†	99167.7	962.71	ug/L	2.769	962.71	ppb	2.769	0.29%
Be 313.107†	1253061.2	515.41	ug/L	2.390	515.41	ppb	2.390	0.46%
Ca 317.933Radial†	9985.8	19608	ug/L	107.9	19608	ppb	107.9	0.55%
Cd 226.502†	33747.8	484.00	ug/L	4.359	484.00	ppb	4.359	0.90%
Co 228.616†	20778.3	506.05	ug/L	4.631	506.05	ppb	4.631	0.92%
Cr 267.716†	39483.3	593.27	ug/L	0.634	593.27	ppb	0.634	0.11%
Cu 324.752†	170290.3	572.07	ug/L	1.868	572.07	ppb	1.868	0.33%
Fe 238.204 Radial†	7454.6	94761	ug/L	917.0	94761	ppb	917.0	0.97%
K 766.490 Radial†	87079.0	16183	ug/L	107.8	16183	ppb	107.8	0.67%

Mg 279.077 IEC†	408.0	16710	ug/L	105.1	16710	ppb	105.1	0.63%
Mn 257.610†	4078576.3	5286.1	ug/L	37.29	5286.1	ppb	37.29	0.71%
Mo 202.031†	5139.9	501.31	ug/L	4.955	501.31	ppb	4.955	0.99%
Na 589.592 Radial†	12884.8	5671.1	ug/L	28.50	5671.1	ppb	28.50	0.50%
Ni 231.604†	17796.4	580.00	ug/L	4.722	580.00	ppb	4.722	0.81%
P 214.914†	2623.4	1510.9	ug/L	10.61	1510.9	ppb	10.61	0.70%
Pb 220.353†	3505.9	561.94	ug/L	3.779	561.94	ppb	3.779	0.67%
S 181.975 Axial†	3992.0	5984.3	ug/L	52.83	5984.3	ppb	52.83	0.88%
Sb 206.836†	1121.9	452.09	ug/L	4.450	452.09	ppb	4.450	0.98%
Se 196.026†	347.0	531.08	ug/L	5.748	531.08	ppb	5.748	1.08%
Si 251.611†	915932.3	33525	ug/L	195.0	33525	ppb	195.0	0.58%
Sn 189.927†	2117.0	490.38	ug/L	4.821	490.38	ppb	4.821	0.98%
Sr 421.552†	60376.5	579.56	ug/L	4.162	579.56	ppb	4.162	0.72%
Ti 334.940†	2266069.1	4113.7	ug/L	23.33	4113.7	ppb	23.33	0.57%
Tl 190.801†	1000.5	440.80	ug/L	5.003	440.80	ppb	5.003	1.14%
U 409.014†	5998.7	218.96	ug/L	6.175	218.96	ppb	6.175	2.82%
V 292.402†	70560.0	611.39	ug/L	0.213	611.39	ppb	0.213	0.03%
Zn 213.857†	84059.0	942.85	ug/L	0.487	942.85	ppb	0.487	0.05%
SiO2†	912605.1	72042	ug/L	989.3	72042	ppb	989.3	1.37%

Sequence No.: 8
Sample ID: 1202060841|960819|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 4/1/2010 14:33:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202060841|960819|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4020.7	4020.7	105	%			14:35:20
1	Y RADIAL	5568.1	5568.1	128.5	%			14:35:20
1	Al 396.153Radial†	69691.9	66629.0	70115	ug/L	70115	ppb	14:35:00
1	Ca 317.933Radial†	10674.6	10172.6	19974	ug/L	19974	ppb	14:35:00
1	Fe 238.204 Radial†	8324.7	7941.7	100950	ug/L	100950	ppb	14:35:00
1	K 766.490 Radial†	92557.1	85370.9	15865	ug/L	15865	ppb	14:35:00
1	Mg 279.077 IEC†	416.9	395.0	16169	ug/L	16169	ppb	14:35:20
1	Na 589.592 Radial†	13234.2	13712.9	6035.5	ug/L	6035.5	ppb	14:35:00
1	Sr 421.552†	66279.2	63264.7	607.29	ug/L	607.29	ppb	14:35:00
1	Sc 361.383	699287.8	699287.8	101.41	%			14:36:23
1	Y 371.029	696477.9	696477.9	128.54	%			14:36:23
1	Ag 328.068†	89946.4	88598.8	521.40	ug/L	521.40	ppb	14:36:23
1	As 188.979†	973.3	982.6	545.55	ug/L	545.55	ppb	14:36:43
1	B 249.677†	22034.6	22312.0	543.47	ug/L	543.47	ppb	14:36:23
1	Ba 233.527†	98796.6	97425.4	946.07	ug/L	946.07	ppb	14:36:23
1	Be 313.107†	1279077.1	1265857.7	520.83	ug/L	520.83	ppb	14:36:18
1	Cd 226.502†	34529.6	34264.1	490.92	ug/L	490.92	ppb	14:36:43
1	Co 228.616†	21317.6	21081.5	513.24	ug/L	513.24	ppb	14:36:43
1	Cr 267.716†	41698.1	41028.3	616.72	ug/L	616.72	ppb	14:36:23
1	Cu 324.752†	180167.3	171980.2	578.02	ug/L	578.02	ppb	14:36:23
1	Mn 257.610†	4040946.5	3984447.8	5164.9	ug/L	5164.9	ppb	14:36:18
1	Mo 202.031†	5276.4	5190.7	506.68	ug/L	506.68	ppb	14:36:43
1	Ni 231.604†	18381.7	18052.0	588.34	ug/L	588.34	ppb	14:36:43
1	P 214.914†	2801.6	2544.2	1453.3	ug/L	1453.3	ppb	14:36:43
1	Pb 220.353†	3524.3	3542.4	566.21	ug/L	566.21	ppb	14:36:43
1	S 181.975 Axial†	4074.2	3977.5	5963.1	ug/L	5963.1	ppb	14:36:43
1	Sb 206.836†	1215.6	1167.0	469.92	ug/L	469.92	ppb	14:36:43
1	Se 196.026†	310.2	328.0	532.47	ug/L	532.47	ppb	14:36:43
1	Si 251.611†	903462.0	890433.1	32592	ug/L	32592	ppb	14:36:18
1	Sn 189.927†	2149.6	2115.6	490.18	ug/L	490.18	ppb	14:36:43
1	Ti 334.940†	2358052.3	2326764.3	4223.9	ug/L	4223.9	ppb	14:36:18
1	Tl 190.801†	985.5	1009.8	444.67	ug/L	444.67	ppb	14:36:43
1	U 409.014†	4007.1	6358.1	232.05	ug/L	232.05	ppb	14:36:23
1	V 292.402†	70306.2	71047.3	614.75	ug/L	614.75	ppb	14:36:23
1	Zn 213.857†	88578.9	86685.6	971.91	ug/L	971.91	ppb	14:36:23
1	SiO2†	894001.1	881060.9	69551	ug/L	69551	ppb	14:37:54
2	Sc Radial	4119.8	4119.8	107	%			14:35:45
2	Y RADIAL	5702.5	5702.5	131.6	%			14:35:45
2	Al 396.153Radial†	69265.0	64630.2	68012	ug/L	68012	ppb	14:35:25
2	Ca 317.933Radial†	10490.9	9756.2	19157	ug/L	19157	ppb	14:35:25
2	Fe 238.204 Radial†	8212.0	7645.4	97185	ug/L	97185	ppb	14:35:25
2	K 766.490 Radial†	91742.4	82485.4	15328	ug/L	15328	ppb	14:35:25
2	Mg 279.077 IEC†	424.3	392.3	16062	ug/L	16062	ppb	14:35:45
2	Na 589.592 Radial†	13070.0	13255.9	5834.4	ug/L	5834.4	ppb	14:35:25
2	Sr 421.552†	65802.0	61297.4	588.41	ug/L	588.41	ppb	14:35:25
2	Sc 361.383	707200.4	707200.4	102.55	%			14:36:55
2	Y 371.029	704363.5	704363.5	130.00	%			14:36:55
2	Ag 328.068†	90841.2	88478.9	519.59	ug/L	519.59	ppb	14:36:55
2	As 188.979†	991.3	989.4	548.19	ug/L	548.19	ppb	14:37:15
2	B 249.677†	22305.2	22332.7	544.62	ug/L	544.62	ppb	14:36:55
2	Ba 233.527†	99790.5	97304.5	944.79	ug/L	944.79	ppb	14:36:55
2	Be 313.107†	1303703.8	1275758.5	524.87	ug/L	524.87	ppb	14:36:50
2	Cd 226.502†	34429.5	33785.5	484.31	ug/L	484.31	ppb	14:37:15
2	Co 228.616†	21257.2	20787.4	505.96	ug/L	505.96	ppb	14:37:15
2	Cr 267.716†	42085.9	40946.4	615.11	ug/L	615.11	ppb	14:36:55
2	Cu 324.752†	182500.2	172267.1	578.77	ug/L	578.77	ppb	14:36:55
2	Mn 257.610†	4091429.7	3989088.3	5170.5	ug/L	5170.5	ppb	14:36:50
2	Mo 202.031†	5273.1	5129.3	500.48	ug/L	500.48	ppb	14:37:15
2	Ni 231.604†	18364.0	17832.0	581.17	ug/L	581.17	ppb	14:37:15

2	P 214.914†	2781.4	2493.6	1423.3 ug/L	1423.3 ppb	14:37:15
2	Pb 220.353†	3538.6	3517.4	562.10 ug/L	562.10 ppb	14:37:15
2	S 181.975 Axial†	4065.6	3924.1	5883.3 ug/L	5883.3 ppb	14:37:15
2	Sb 206.836†	1199.4	1137.7	458.07 ug/L	458.07 ppb	14:37:15
2	Se 196.026†	326.8	340.8	531.35 ug/L	531.35 ppb	14:37:15
2	Si 251.611†	919133.6	895746.1	32786 ug/L	32786 ppb	14:36:50
2	Sn 189.927†	2161.1	2103.2	487.15 ug/L	487.15 ppb	14:37:15
2	Ti 334.940†	2395303.4	2337070.2	4242.5 ug/L	4242.5 ppb	14:36:50
2	Tl 190.801†	980.3	993.8	438.73 ug/L	438.73 ppb	14:37:15
2	U 409.014†	4089.9	6394.5	233.88 ug/L	233.88 ppb	14:36:55
2	V 292.402†	71265.7	71207.3	616.60 ug/L	616.60 ppb	14:36:55
2	Zn 213.857†	89726.5	86827.2	974.14 ug/L	974.14 ppb	14:36:55
2	SiO2†	909517.7	886327.1	69967 ug/L	69967 ppb	14:38:00
3	Sc Radial	4102.9	4102.9	107 %		14:36:10
3	Y RADIAL	5695.7	5695.7	131.5 %		14:36:10
3	Al 396.153Radial†	69093.8	64736.0	68123 ug/L	68123 ppb	14:35:50
3	Ca 317.933Radial†	10439.4	9748.4	19141 ug/L	19141 ppb	14:35:50
3	Fe 238.204 Radial†	8166.2	7634.1	97042 ug/L	97042 ppb	14:35:50
3	K 766.490 Radial†	91833.8	82923.2	15410 ug/L	15410 ppb	14:35:50
3	Mg 279.077 IEC†	422.9	392.6	16076 ug/L	16076 ppb	14:36:10
3	Na 589.592 Radial†	12942.3	13186.5	5803.9 ug/L	5803.9 ppb	14:35:50
3	Sr 421.552†	65577.3	61339.8	588.81 ug/L	588.81 ppb	14:35:50
3	Sc 361.383	696999.0	696999.0	101.07 %		14:37:27
3	Y 371.029	692862.5	692862.5	127.88 %		14:37:27
3	Ag 328.068†	89833.1	88778.0	521.19 ug/L	521.19 ppb	14:37:27
3	As 188.979†	986.8	999.1	552.76 ug/L	552.76 ppb	14:37:47
3	B 249.677†	22118.5	22466.3	547.98 ug/L	547.98 ppb	14:37:27
3	Ba 233.527†	98793.2	97741.9	949.01 ug/L	949.01 ppb	14:37:27
3	Be 313.107†	1274271.5	1265245.2	520.57 ug/L	520.57 ppb	14:37:22
3	Cd 226.502†	34529.6	34375.9	492.96 ug/L	492.96 ppb	14:37:47
3	Co 228.616†	21313.3	21146.3	514.92 ug/L	514.92 ppb	14:37:47
3	Cr 267.716†	41657.2	41122.9	617.70 ug/L	617.70 ppb	14:37:27
3	Cu 324.752†	180120.5	172517.3	579.60 ug/L	579.60 ppb	14:37:27
3	Mn 257.610†	4030288.2	3986988.4	5167.8 ug/L	5167.8 ppb	14:37:22
3	Mo 202.031†	5264.1	5195.6	506.84 ug/L	506.84 ppb	14:37:47
3	Ni 231.604†	18413.6	18143.1	591.31 ug/L	591.31 ppb	14:37:47
3	P 214.914†	2796.7	2548.5	1458.4 ug/L	1458.4 ppb	14:37:47
3	Pb 220.353†	3531.8	3561.3	569.05 ug/L	569.05 ppb	14:37:47
3	S 181.975 Axial†	4067.1	3983.6	5972.7 ug/L	5972.7 ppb	14:37:47
3	Sb 206.836†	1195.8	1151.3	463.85 ug/L	463.85 ppb	14:37:47
3	Se 196.026†	317.6	336.3	527.72 ug/L	527.72 ppb	14:37:47
3	Si 251.611†	899474.9	889414.0	32554 ug/L	32554 ppb	14:37:22
3	Sn 189.927†	2165.4	2138.3	495.21 ug/L	495.21 ppb	14:37:47
3	Ti 334.940†	2347195.4	2323658.7	4218.1 ug/L	4218.1 ppb	14:37:22
3	Tl 190.801†	996.1	1023.5	449.90 ug/L	449.90 ppb	14:37:47
3	U 409.014†	4075.4	6438.6	235.59 ug/L	235.59 ppb	14:37:27
3	V 292.402†	70272.6	71241.8	617.05 ug/L	617.05 ppb	14:37:27
3	Zn 213.857†	88779.6	87170.9	978.02 ug/L	978.02 ppb	14:37:27
3	SiO2†	906821.7	896640.1	70781 ug/L	70781 ppb	14:38:06

Mean Data: 1202060841|960819|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	701162.4	101.68	%	0.776				0.76%
Sc Radial	4081.1	106	%	1.4				1.30%
Y 371.029	697901.3	128.81	%	1.085				0.84%
Y RADIAL	5655.5	130.6	%	1.75				1.34%
Ag 328.068†	88618.6	520.72	ug/L	0.990	520.72	ppb	0.990	0.19%
Al 396.153Radial†	65331.7	68750	ug/L	1183.9	68750	ppb	1183.9	1.72%
As 188.979†	990.4	548.83	ug/L	3.646	548.83	ppb	3.646	0.66%
B 249.677†	22370.3	545.36	ug/L	2.345	545.36	ppb	2.345	0.43%
Ba 233.527†	97490.6	946.62	ug/L	2.166	946.62	ppb	2.166	0.23%
Be 313.107†	1268953.8	522.09	ug/L	2.412	522.09	ppb	2.412	0.46%
Ca 317.933Radial†	9892.4	19424	ug/L	476.5	19424	ppb	476.5	2.45%
Cd 226.502†	34141.8	489.40	ug/L	4.524	489.40	ppb	4.524	0.92%
Co 228.616†	21005.1	511.37	ug/L	4.763	511.37	ppb	4.763	0.93%
Cr 267.716†	41032.6	616.51	ug/L	1.306	616.51	ppb	1.306	0.21%
Cu 324.752†	172254.9	578.80	ug/L	0.790	578.80	ppb	0.790	0.14%
Fe 238.204 Radial†	7740.4	98392	ug/L	2216.7	98392	ppb	2216.7	2.25%
K 766.490 Radial†	83593.2	15534	ug/L	289.0	15534	ppb	289.0	1.86%

Mg 279.077 IEC†	393.3	16102	ug/L	58.1	16102	ppb	58.1	0.36%
Mn 257.610†	3986841.5	5167.8	ug/L	2.82	5167.8	ppb	2.82	0.05%
Mo 202.031†	5171.9	504.67	ug/L	3.625	504.67	ppb	3.625	0.72%
Na 589.592 Radial†	13385.1	5891.3	ug/L	125.87	5891.3	ppb	125.87	2.14%
Ni 231.604†	18009.1	586.94	ug/L	5.213	586.94	ppb	5.213	0.89%
P 214.914†	2528.8	1445.0	ug/L	18.98	1445.0	ppb	18.98	1.31%
Pb 220.353†	3540.4	565.79	ug/L	3.496	565.79	ppb	3.496	0.62%
S 181.975 Axial†	3961.7	5939.7	ug/L	49.10	5939.7	ppb	49.10	0.83%
Sb 206.836†	1152.0	463.95	ug/L	5.923	463.95	ppb	5.923	1.28%
Se 196.026†	335.0	530.51	ug/L	2.487	530.51	ppb	2.487	0.47%
Si 251.611†	891864.4	32644	ug/L	124.5	32644	ppb	124.5	0.38%
Sn 189.927†	2119.0	490.84	ug/L	4.072	490.84	ppb	4.072	0.83%
Sr 421.552†	61967.3	594.84	ug/L	10.786	594.84	ppb	10.786	1.81%
Ti 334.940†	2329164.4	4228.2	ug/L	12.73	4228.2	ppb	12.73	0.30%
Tl 190.801†	1009.0	444.43	ug/L	5.589	444.43	ppb	5.589	1.26%
U 409.014†	6397.1	233.84	ug/L	1.772	233.84	ppb	1.772	0.76%
V 292.402†	71165.5	616.13	ug/L	1.220	616.13	ppb	1.220	0.20%
Zn 213.857†	86894.6	974.69	ug/L	3.095	974.69	ppb	3.095	0.32%
SiO2†	888009.4	70100	ug/L	625.7	70100	ppb	625.7	0.89%

Sequence No.: 9
Sample ID: 1202060840|960819|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 4/1/2010 14:40:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202060840|960819|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4185.4	4185.4	109	%			14:42:08
1	Y RADIAL	4787.2	4787.2	110.5	%			14:42:08
1	Al 396.153Radial†	8263.4	7671.0	8075.2	ug/L	8075.2	ppb	14:42:08
1	Ca 317.933Radial†	1517.6	1373.2	2696.3	ug/L	2696.3	ppb	14:42:28
1	Fe 238.204 Radial†	1490.0	1360.4	17290	ug/L	17290	ppb	14:42:28
1	K 766.490 Radial†	12535.4	8500.9	1579.6	ug/L	1579.6	ppb	14:42:08
1	Mg 279.077 IEC†	54.3	46.8	1910.3	ug/L	1910.3	ppb	14:42:28
1	Na 589.592 Radial†	-788.3	354.9	156.18	ug/L	156.18	ppb	14:42:08
1	Sr 421.552†	2206.4	2009.7	19.276	ug/L	19.276	ppb	14:42:08
1	Sc 361.383	677166.8	677166.8	98.199	%			14:43:25
1	Y 371.029	554871.2	554871.2	102.41	%			14:43:25
1	Ag 328.068†	-832.4	-947.5	0.2098	ug/L	0.2098	ppb	14:43:31
1	As 188.979†	-36.4	-14.3	2.2895	ug/L	2.2895	ppb	14:43:51
1	B 249.677†	-72.7	509.0	9.9864	ug/L	9.9864	ppb	14:43:31
1	Ba 233.527†	9013.5	9178.1	89.278	ug/L	89.278	ppb	14:43:31
1	Be 313.107†	-4394.9	47.8	1.4107	ug/L	1.4107	ppb	14:43:31
1	Cd 226.502†	-94.1	117.6	-0.0650	ug/L	-0.0650	ppb	14:43:51
1	Co 228.616†	103.0	164.5	2.5736	ug/L	2.5736	ppb	14:43:51
1	Cr 267.716†	1259.1	1190.8	19.445	ug/L	19.445	ppb	14:43:31
1	Cu 324.752†	7427.1	1875.4	7.1855	ug/L	7.1855	ppb	14:43:31
1	Mn 257.610†	754465.8	767859.5	995.19	ug/L	995.19	ppb	14:43:25
1	Mo 202.031†	-1.7	-14.2	0.0101	ug/L	0.0101	ppb	14:43:51
1	Ni 231.604†	533.0	468.1	15.261	ug/L	15.261	ppb	14:43:51
1	P 214.914†	544.5	336.0	201.60	ug/L	201.60	ppb	14:43:51
1	Pb 220.353†	-17.6	49.1	8.1000	ug/L	8.1000	ppb	14:43:51
1	S 181.975 Axial†	144.5	106.9	159.10	ug/L	159.10	ppb	14:43:51
1	Sb 206.836†	40.2	9.2	1.2688	ug/L	1.2688	ppb	14:43:51
1	Se 196.026†	-89.6	-69.1	-3.0821	ug/L	-3.0821	ppb	14:43:51
1	Si 251.611†	184084.2	186964.2	6844.6	ug/L	6844.6	ppb	14:43:25
1	Sn 189.927†	-3.1	-7.3	-1.0821	ug/L	-1.0821	ppb	14:43:51
1	Ti 334.940†	330227.4	337706.0	613.12	ug/L	613.12	ppb	14:43:25
1	Tl 190.801†	-61.0	-24.2	0.4820	ug/L	0.4820	ppb	14:43:51
1	U 409.014†	-3476.0	-1133.3	-45.663	ug/L	-45.663	ppb	14:43:25
1	V 292.402†	636.5	2364.6	17.605	ug/L	17.605	ppb	14:43:31
1	Zn 213.857†	8882.4	8380.8	93.169	ug/L	93.169	ppb	14:43:31
1	SiO2†	190323.5	193275.4	15260	ug/L	15260	ppb	14:44:57
2	Sc Radial	4085.5	4085.5	106	%			14:42:34
2	Y RADIAL	4670.0	4670.0	107.8	%			14:42:34
2	Al 396.153Radial†	8095.7	7698.8	8104.4	ug/L	8104.4	ppb	14:42:34
2	Ca 317.933Radial†	1518.8	1408.4	2765.5	ug/L	2765.5	ppb	14:42:54
2	Fe 238.204 Radial†	1494.3	1397.8	17765	ug/L	17765	ppb	14:42:54
2	K 766.490 Radial†	12411.4	8665.6	1610.2	ug/L	1610.2	ppb	14:42:34
2	Mg 279.077 IEC†	53.0	46.8	1909.2	ug/L	1909.2	ppb	14:42:54
2	Na 589.592 Radial†	-745.1	377.7	166.24	ug/L	166.24	ppb	14:42:34
2	Sr 421.552†	2219.2	2071.2	19.866	ug/L	19.866	ppb	14:42:34
2	Sc 361.383	707880.9	707880.9	102.65	%			14:43:56
2	Y 371.029	579374.2	579374.2	106.93	%			14:43:56
2	Ag 328.068†	-755.9	-836.2	0.9709	ug/L	0.9709	ppb	14:44:01
2	As 188.979†	-23.4	-0.0	9.4054	ug/L	9.4054	ppb	14:44:21
2	B 249.677†	-23.2	560.4	11.203	ug/L	11.203	ppb	14:44:01
2	Ba 233.527†	9108.0	8871.8	86.333	ug/L	86.333	ppb	14:44:01
2	Be 313.107†	-4589.3	52.6	1.4010	ug/L	1.4010	ppb	14:44:01
2	Cd 226.502†	-78.3	137.2	0.1707	ug/L	0.1707	ppb	14:44:21
2	Co 228.616†	124.0	180.5	2.9766	ug/L	2.9766	ppb	14:44:21
2	Cr 267.716†	1301.6	1176.6	19.287	ug/L	19.287	ppb	14:44:01
2	Cu 324.752†	7713.9	1826.6	7.0496	ug/L	7.0496	ppb	14:44:01
2	Mn 257.610†	780664.9	760045.8	985.12	ug/L	985.12	ppb	14:43:56
2	Mo 202.031†	20.5	7.5	2.1328	ug/L	2.1328	ppb	14:44:21
2	Ni 231.604†	546.4	457.7	14.921	ug/L	14.921	ppb	14:44:21

2	P 214.914†	528.1	295.9	175.66	ug/L	175.66 ppb	14:44:21
2	Pb 220.353†	2.8	69.8	11.322	ug/L	11.322 ppb	14:44:21
2	S 181.975 Axial†	143.5	99.6	148.13	ug/L	148.13 ppb	14:44:21
2	Sb 206.836†	51.2	18.2	4.9090	ug/L	4.9090 ppb	14:44:21
2	Se 196.026†	-88.7	-64.3	1.7325	ug/L	1.7325 ppb	14:44:21
2	Si 251.611†	191366.9	185924.9	6806.5	ug/L	6806.5 ppb	14:43:56
2	Sn 189.927†	-3.7	-7.7	-1.1779	ug/L	-1.1779 ppb	14:44:21
2	Ti 334.940†	342280.4	334856.6	607.96	ug/L	607.96 ppb	14:43:56
2	Tl 190.801†	-61.1	-21.6	1.3694	ug/L	1.3694 ppb	14:44:21
2	U 409.014†	-3689.2	-1187.3	-47.799	ug/L	-47.799 ppb	14:43:56
2	V 292.402†	668.4	2367.5	17.593	ug/L	17.593 ppb	14:44:01
2	Zn 213.857†	9037.6	8139.4	90.340	ug/L	90.340 ppb	14:44:01
2	SiO2†	192593.0	187076.8	14771	ug/L	14771 ppb	14:45:03
3	Sc Radial	3992.0	3992.0	104	%		14:42:59
3	Y RADIAL	4542.5	4542.5	104.9	%		14:42:59
3	Al 396.153Radial†	7935.5	7722.9	8129.8	ug/L	8129.8 ppb	14:42:59
3	Ca 317.933Radial†	1511.2	1434.5	2816.7	ug/L	2816.7 ppb	14:43:19
3	Fe 238.204 Radial†	1481.9	1418.8	18033	ug/L	18033 ppb	14:43:19
3	K 766.490 Radial†	12231.1	8765.3	1628.7	ug/L	1628.7 ppb	14:42:59
3	Mg 279.077 IEC†	49.0	44.1	1798.8	ug/L	1798.8 ppb	14:43:19
3	Na 589.592 Radial†	-814.3	294.8	129.74	ug/L	129.74 ppb	14:42:59
3	Sr 421.552†	2144.4	2048.1	19.644	ug/L	19.644 ppb	14:42:59
3	Sc 361.383	718616.8	718616.8	104.21	%		14:44:27
3	Y 371.029	587825.3	587825.3	108.49	%		14:44:27
3	Ag 328.068†	-933.7	-995.9	0.1670	ug/L	0.1670 ppb	14:44:32
3	As 188.979†	-31.3	-7.3	5.8916	ug/L	5.8916 ppb	14:44:52
3	B 249.677†	-71.2	514.7	10.006	ug/L	10.006 ppb	14:44:32
3	Ba 233.527†	9125.4	8756.0	85.220	ug/L	85.220 ppb	14:44:32
3	Be 313.107†	-4471.9	232.0	1.4760	ug/L	1.4760 ppb	14:44:32
3	Cd 226.502†	-81.2	135.6	0.1213	ug/L	0.1213 ppb	14:44:52
3	Co 228.616†	142.9	196.8	3.3735	ug/L	3.3735 ppb	14:44:52
3	Cr 267.716†	1334.8	1189.6	19.504	ug/L	19.504 ppb	14:44:32
3	Cu 324.752†	7643.3	1646.6	6.4608	ug/L	6.4608 ppb	14:44:32
3	Mn 257.610†	792105.0	759662.2	984.66	ug/L	984.66 ppb	14:44:27
3	Mo 202.031†	16.6	3.5	1.7694	ug/L	1.7694 ppb	14:44:52
3	Ni 231.604†	567.6	470.0	15.322	ug/L	15.322 ppb	14:44:52
3	P 214.914†	523.6	283.9	167.87	ug/L	167.87 ppb	14:44:52
3	Pb 220.353†	-11.7	55.8	9.0997	ug/L	9.0997 ppb	14:44:52
3	S 181.975 Axial†	149.6	103.3	153.74	ug/L	153.74 ppb	14:44:52
3	Sb 206.836†	35.2	2.0	-1.5874	ug/L	-1.5874 ppb	14:44:52
3	Se 196.026†	-105.4	-79.1	-8.4725	ug/L	-8.4725 ppb	14:44:52
3	Si 251.611†	194927.5	186556.6	6829.6	ug/L	6829.6 ppb	14:44:27
3	Sn 189.927†	-4.7	-8.6	-1.3715	ug/L	-1.3715 ppb	14:44:52
3	Ti 334.940†	348125.0	335483.7	609.11	ug/L	609.11 ppb	14:44:27
3	Tl 190.801†	-69.8	-29.1	-1.4901	ug/L	-1.4901 ppb	14:44:52
3	U 409.014†	-3592.4	-1040.8	-42.187	ug/L	-42.187 ppb	14:44:27
3	V 292.402†	624.1	2315.2	17.095	ug/L	17.095 ppb	14:44:32
3	Zn 213.857†	9084.1	8052.5	89.304	ug/L	89.304 ppb	14:44:32
3	SiO2†	189666.3	181465.4	14328	ug/L	14328 ppb	14:45:08

Mean Data: 1202060840|960819|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	701221.5	101.69	%	3.120				3.07%
Sc Radial	4087.6	106	%	2.5				2.37%
Y 371.029	574023.6	105.94	%	3.159				2.98%
Y RADIAL	4666.6	107.7	%	2.83				2.62%
Ag 328.068†	-926.5	0.4492	ug/L	0.45229	0.4492	ppb	0.45229	100.68%
Al 396.153Radial†	7697.6	8103.1	ug/L	27.28	8103.1	ppb	27.28	0.34%
As 188.979†	-7.2	5.8622	ug/L	3.55803	5.8622	ppb	3.55803	60.69%
B 249.677†	528.0	10.398	ug/L	0.6967	10.398	ppb	0.6967	6.70%
Ba 233.527†	8935.3	86.944	ug/L	2.0968	86.944	ppb	2.0968	2.41%
Be 313.107†	110.8	1.4292	ug/L	0.04079	1.4292	ppb	0.04079	2.85%
Ca 317.933Radial†	1405.4	2759.5	ug/L	60.42	2759.5	ppb	60.42	2.19%
Cd 226.502†	130.1	0.0757	ug/L	0.12432	0.0757	ppb	0.12432	164.33%
Co 228.616†	180.6	2.9746	ug/L	0.39997	2.9746	ppb	0.39997	13.45%
Cr 267.716†	1185.7	19.412	ug/L	0.1123	19.412	ppb	0.1123	0.58%
Cu 324.752†	1782.8	6.8986	ug/L	0.38522	6.8986	ppb	0.38522	5.58%
Fe 238.204 Radial†	1392.3	17696	ug/L	376.2	17696	ppb	376.2	2.13%
K 766.490 Radial†	8644.0	1606.1	ug/L	24.82	1606.1	ppb	24.82	1.55%

Mg 279.077 IEC†	45.9	1872.8	ug/L	64.08	1872.8	ppb	64.08	3.42%
Mn 257.610†	762522.5	988.32	ug/L	5.949	988.32	ppb	5.949	0.60%
Mo 202.031†	-1.1	1.3041	ug/L	1.13528	1.3041	ppb	1.13528	87.05%
Na 589.592 Radial†	342.4	150.72	ug/L	18.854	150.72	ppb	18.854	12.51%
Ni 231.604†	465.2	15.168	ug/L	0.2162	15.168	ppb	0.2162	1.43%
P 214.914†	305.3	181.71	ug/L	17.656	181.71	ppb	17.656	9.72%
Pb 220.353†	58.2	9.5073	ug/L	1.64934	9.5073	ppb	1.64934	17.35%
S 181.975 Axial†	103.3	153.66	ug/L	5.485	153.66	ppb	5.485	3.57%
Sb 206.836†	9.8	1.5301	ug/L	3.25612	1.5301	ppb	3.25612	212.80%
Se 196.026†	-70.8	-3.2740	ug/L	5.10520	-3.2740	ppb	5.10520	155.93%
Si 251.611†	186481.9	6826.9	ug/L	19.18	6826.9	ppb	19.18	0.28%
Sn 189.927†	-7.9	-1.2105	ug/L	0.14740	-1.2105	ppb	0.14740	12.18%
Sr 421.552†	2043.0	19.596	ug/L	0.2979	19.596	ppb	0.2979	1.52%
Ti 334.940†	336015.4	610.07	ug/L	2.709	610.07	ppb	2.709	0.44%
Tl 190.801†	-24.9	0.1204	ug/L	1.46361	0.1204	ppb	1.46361	>999.9%
U 409.014†	-1120.5	-45.216	ug/L	2.8325	-45.216	ppb	2.8325	6.26%
V 292.402†	2349.1	17.431	ug/L	0.2909	17.431	ppb	0.2909	1.67%
Zn 213.857†	8190.9	90.937	ug/L	2.0008	90.937	ppb	2.0008	2.20%
SiO2†	187272.5	14786	ug/L	466.4	14786	ppb	466.4	3.15%

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 4/1/2010 14:47:18
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	3876.6	3876.6	101	%			14:49:10
1	Y RADIAL	4206.7	4206.7	97.11	%			14:49:10
1	Al 396.153Radial†	4556.3	4604.0	4823.2	ug/L	4823.2	ppb	14:49:10
1	Ca 317.933Radial†	2630.1	2585.8	5077.2	ug/L	5077.2	ppb	14:49:30
1	Fe 238.204 Radial†	394.3	384.3	4898.8	ug/L	4898.8	ppb	14:49:30
1	K 766.490 Radial†	29693.2	26406.8	4904.7	ug/L	4904.7	ppb	14:49:10
1	Mg 279.077 IEC†	125.9	121.6	5009.2	ug/L	5009.2	ppb	14:49:30
1	Na 589.592 Radial†	20632.6	21508.5	9466.7	ug/L	9466.7	ppb	14:49:10
1	Sr 421.552†	48244.0	47758.0	458.51	ug/L	458.51	ppb	14:49:10
1	Sc 361.383	699168.8	699168.8	101.39	%			14:50:27
1	Y 371.029	474005.3	474005.3	87.484	%			14:50:32
1	Ag 328.068†	87657.6	86356.4	478.73	ug/L	478.73	ppb	14:50:32
1	As 188.979†	957.4	967.0	482.91	ug/L	482.91	ppb	14:50:52
1	B 249.677†	18298.3	18630.5	466.55	ug/L	466.55	ppb	14:50:32
1	Ba 233.527†	49759.5	49076.8	475.52	ug/L	475.52	ppb	14:50:32
1	Be 313.107†	1200917.9	1188984.3	481.27	ug/L	481.27	ppb	14:50:27
1	Cd 226.502†	32639.6	32405.8	473.65	ug/L	473.65	ppb	14:50:32
1	Co 228.616†	19862.0	19649.5	486.80	ug/L	486.80	ppb	14:50:32
1	Cr 267.716†	32454.9	31918.9	471.86	ug/L	471.86	ppb	14:50:32
1	Cu 324.752†	148969.0	141239.6	470.42	ug/L	470.42	ppb	14:50:32
1	Mn 257.610†	379078.7	373438.9	483.48	ug/L	483.48	ppb	14:50:27
1	Mo 202.031†	5097.8	5015.5	482.22	ug/L	482.22	ppb	14:50:52
1	Ni 231.604†	15084.7	14803.4	482.42	ug/L	482.42	ppb	14:50:32
1	P 214.914†	4029.5	3755.7	2309.2	ug/L	2309.2	ppb	14:50:52
1	Pb 220.353†	3014.6	3040.3	479.97	ug/L	479.97	ppb	14:50:52
1	S 181.975 Axial†	695.5	645.8	969.39	ug/L	969.39	ppb	14:50:52
1	Sb 206.836†	1264.3	1215.2	503.50	ug/L	503.50	ppb	14:50:52
1	Se 196.026†	637.6	650.9	498.62	ug/L	498.62	ppb	14:50:52
1	Si 251.611†	66655.5	65245.4	2382.6	ug/L	2382.6	ppb	14:50:32
1	Sn 189.927†	2138.1	2104.7	484.42	ug/L	484.42	ppb	14:50:52
1	Ti 334.940†	264385.1	262183.6	475.74	ug/L	475.74	ppb	14:50:32
1	Tl 190.801†	1236.9	1257.9	487.12	ug/L	487.12	ppb	14:50:52
1	U 409.014†	9840.6	12112.2	464.95	ug/L	464.95	ppb	14:50:32
1	V 292.402†	52487.0	53484.1	477.90	ug/L	477.90	ppb	14:50:32
1	Zn 213.857†	42642.5	41393.5	469.03	ug/L	469.03	ppb	14:50:32
1	SiO2†	68339.4	66863.7	5266.2	ug/L	5266.2	ppb	14:51:59
2	Sc Radial	4022.8	4022.8	105	%			14:49:35
2	Y RADIAL	4370.2	4370.2	100.9	%			14:49:35
2	Al 396.153Radial†	4736.1	4611.6	4830.7	ug/L	4830.7	ppb	14:49:35
2	Ca 317.933Radial†	2656.3	2516.1	4940.5	ug/L	4940.5	ppb	14:49:55
2	Fe 238.204 Radial†	403.4	378.7	4828.6	ug/L	4828.6	ppb	14:49:55
2	K 766.490 Radial†	30475.2	26084.3	4844.7	ug/L	4844.7	ppb	14:49:35
2	Mg 279.077 IEC†	130.5	121.5	5006.4	ug/L	5006.4	ppb	14:49:55
2	Na 589.592 Radial†	21579.1	21669.1	9537.3	ug/L	9537.3	ppb	14:49:35
2	Sr 421.552†	50610.2	48279.5	463.52	ug/L	463.52	ppb	14:49:35
2	Sc 361.383	682884.5	682884.5	99.028	%			14:50:58
2	Y 371.029	465231.0	465231.0	85.864	%			14:51:03
2	Ag 328.068†	88561.2	89330.6	495.17	ug/L	495.17	ppb	14:51:03
2	As 188.979†	958.3	990.5	494.62	ug/L	494.62	ppb	14:51:23
2	B 249.677†	18715.1	19481.8	487.92	ug/L	487.92	ppb	14:51:03
2	Ba 233.527†	50536.7	51032.0	494.45	ug/L	494.45	ppb	14:51:03
2	Be 313.107†	1203487.6	1219824.2	493.77	ug/L	493.77	ppb	14:50:58
2	Cd 226.502†	33201.1	33740.5	493.19	ug/L	493.19	ppb	14:51:03
2	Co 228.616†	20230.4	20488.6	507.57	ug/L	507.57	ppb	14:51:03
2	Cr 267.716†	33044.9	33278.0	491.92	ug/L	491.92	ppb	14:51:03
2	Cu 324.752†	150989.5	146783.7	488.88	ug/L	488.88	ppb	14:51:03
2	Mn 257.610†	379915.0	383199.2	496.10	ug/L	496.10	ppb	14:50:58
2	Mo 202.031†	5084.8	5122.3	492.46	ug/L	492.46	ppb	14:51:23
2	Ni 231.604†	15384.5	15460.8	503.85	ug/L	503.85	ppb	14:51:03

2	P 214.914†	4016.8	3837.7	2358.1 ug/L	2358.1 ppb	14:51:23
2	Pb 220.353†	3029.8	3126.5	493.55 ug/L	493.55 ppb	14:51:23
2	S 181.975 Axial†	695.3	661.9	993.59 ug/L	993.59 ppb	14:51:23
2	Sb 206.836†	1263.5	1244.2	515.47 ug/L	515.47 ppb	14:51:23
2	Se 196.026†	637.8	666.1	509.72 ug/L	509.72 ppb	14:51:23
2	Si 251.611†	67706.3	67874.3	2478.7 ug/L	2478.7 ppb	14:51:03
2	Sn 189.927†	2136.8	2153.6	495.63 ug/L	495.63 ppb	14:51:23
2	Ti 334.940†	268097.3	272150.5	493.80 ug/L	493.80 ppb	14:51:03
2	Tl 190.801†	1222.5	1272.4	492.80 ug/L	492.80 ppb	14:51:23
2	U 409.014†	9771.3	12273.7	471.13 ug/L	471.13 ppb	14:51:03
2	V 292.402†	53222.8	55461.6	495.47 ug/L	495.47 ppb	14:51:03
2	Zn 213.857†	43403.0	43164.4	489.14 ug/L	489.14 ppb	14:51:03
2	SiO2†	67835.4	67962.1	5352.6 ug/L	5352.6 ppb	14:52:04
3	Sc Radial	4051.5	4051.5	106 %		14:50:00
3	Y RADIAL	4372.9	4372.9	100.9 %		14:50:00
3	Al 396.153Radial†	4601.7	4452.1	4662.8 ug/L	4662.8 ppb	14:50:00
3	Ca 317.933Radial†	2640.4	2483.0	4875.6 ug/L	4875.6 ppb	14:50:20
3	Fe 238.204 Radial†	399.5	372.4	4747.5 ug/L	4747.5 ppb	14:50:20
3	K 766.490 Radial†	29844.8	25280.9	4695.5 ug/L	4695.5 ppb	14:50:00
3	Mg 279.077 IEC†	127.1	117.4	4835.3 ug/L	4835.3 ppb	14:50:20
3	Na 589.592 Radial†	20858.3	20840.2	9172.5 ug/L	9172.5 ppb	14:50:00
3	Sr 421.552†	49175.7	46578.2	447.19 ug/L	447.19 ppb	14:50:00
3	Sc 361.383	689209.8	689209.8	99.945 %		14:51:29
3	Y 371.029	464821.8	464821.8	85.789 %		14:51:34
3	Ag 328.068†	88947.6	88896.5	492.73 ug/L	492.73 ppb	14:51:34
3	As 188.979†	960.2	983.6	491.16 ug/L	491.16 ppb	14:51:54
3	B 249.677†	18709.9	19303.1	483.45 ug/L	483.45 ppb	14:51:34
3	Ba 233.527†	50646.5	50673.5	490.97 ug/L	490.97 ppb	14:51:34
3	Be 313.107†	1209719.5	1214906.0	491.78 ug/L	491.78 ppb	14:51:29
3	Cd 226.502†	33274.0	33505.7	489.76 ug/L	489.76 ppb	14:51:34
3	Co 228.616†	20236.4	20307.2	503.09 ug/L	503.09 ppb	14:51:34
3	Cr 267.716†	33093.7	33020.6	488.11 ug/L	488.11 ppb	14:51:34
3	Cu 324.752†	151284.1	145679.1	485.19 ug/L	485.19 ppb	14:51:34
3	Mn 257.610†	382488.3	382253.0	494.88 ug/L	494.88 ppb	14:51:29
3	Mo 202.031†	5135.6	5125.9	492.81 ug/L	492.81 ppb	14:51:54
3	Ni 231.604†	15334.3	15268.0	497.57 ug/L	497.57 ppb	14:51:34
3	P 214.914†	4054.7	3838.4	2359.3 ug/L	2359.3 ppb	14:51:54
3	Pb 220.353†	3034.5	3103.2	489.85 ug/L	489.85 ppb	14:51:54
3	S 181.975 Axial†	704.0	664.2	997.05 ug/L	997.05 ppb	14:51:54
3	Sb 206.836†	1275.7	1244.7	515.68 ug/L	515.68 ppb	14:51:54
3	Se 196.026†	636.5	658.9	504.13 ug/L	504.13 ppb	14:51:54
3	Si 251.611†	67788.2	67328.8	2458.8 ug/L	2458.8 ppb	14:51:34
3	Sn 189.927†	2152.6	2149.6	494.70 ug/L	494.70 ppb	14:51:54
3	Ti 334.940†	269225.7	270794.8	491.34 ug/L	491.34 ppb	14:51:34
3	Tl 190.801†	1246.9	1285.5	497.84 ug/L	497.84 ppb	14:51:54
3	U 409.014†	10086.0	12498.0	479.79 ug/L	479.79 ppb	14:51:34
3	V 292.402†	53318.0	55063.7	492.00 ug/L	492.00 ppb	14:51:34
3	Zn 213.857†	43397.8	42757.0	484.53 ug/L	484.53 ppb	14:51:34
3	SiO2†	67886.2	67384.3	5307.0 ug/L	5307.0 ppb	14:52:10

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	690421.0	100.12	%	1.190				1.19%
Sc Radial	3983.6	104	%	2.4				2.35%
Y 371.029	468019.4	86.379	%	0.9575				1.11%
Y RADIAL	4316.6	99.65	%	2.197				2.20%
Ag 328.068†	88194.5	488.88	ug/L	8.867	488.88	ppb	8.867	1.81%
QC value within limits for Ag 328.068 Recovery = 97.78%								
Al 396.153Radial†	4555.9	4772.2	ug/L	94.82	4772.2	ppb	94.82	1.99%
QC value within limits for Al 396.153Radial Recovery = 95.44%								
As 188.979†	980.4	489.56	ug/L	6.016	489.56	ppb	6.016	1.23%
QC value within limits for As 188.979 Recovery = 97.91%								
B 249.677†	19138.5	479.30	ug/L	11.271	479.30	ppb	11.271	2.35%
QC value within limits for B 249.677 Recovery = 95.86%								
Ba 233.527†	50260.8	486.98	ug/L	10.079	486.98	ppb	10.079	2.07%
QC value within limits for Ba 233.527 Recovery = 97.40%								
Be 313.107†	1207904.9	488.94	ug/L	6.714	488.94	ppb	6.714	1.37%
QC value within limits for Be 313.107 Recovery = 97.79%								
Ca 317.933Radial†	2528.3	4964.4	ug/L	102.95	4964.4	ppb	102.95	2.07%

```
   QC value within limits for Ca 317.933Radial  Recovery = 99.29%
Cd 226.502†            33217.3      485.53 ug/L        10.431      485.53 ppb         10.431   2.15%
   QC value within limits for Cd 226.502  Recovery = 97.11%
Co 228.616†            20148.4      499.15 ug/L        10.931      499.15 ppb         10.931   2.19%
   QC value within limits for Co 228.616  Recovery = 99.83%
Cr 267.716†            32739.1      483.96 ug/L        10.655      483.96 ppb         10.655   2.20%
   QC value within limits for Cr 267.716  Recovery = 96.79%
Cu 324.752†           144567.5      481.50 ug/L         9.768      481.50 ppb          9.768   2.03%
   QC value within limits for Cu 324.752  Recovery = 96.30%
Fe 238.204 Radial†       378.5      4825.0 ug/L        75.71      4825.0 ppb          75.71   1.57%
   QC value within limits for Fe 238.204 Radial  Recovery = 96.50%
K 766.490 Radial†      25924.0      4815.0 ug/L       107.73      4815.0 ppb         107.73   2.24%
   QC value within limits for K 766.490 Radial  Recovery = 96.30%
Mg 279.077 IEC†          120.2      4950.3 ug/L        99.63      4950.3 ppb          99.63   2.01%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.01%
Mn 257.610†           379630.4      491.49 ug/L         6.961      491.49 ppb          6.961   1.42%
   QC value within limits for Mn 257.610  Recovery = 98.30%
Mo 202.031†             5087.9      489.16 ug/L         6.019      489.16 ppb          6.019   1.23%
   QC value within limits for Mo 202.031  Recovery = 97.83%
Na 589.592 Radial†     21339.3      9392.2 ug/L       193.48      9392.2 ppb         193.48   2.06%
   QC value within limits for Na 589.592 Radial  Recovery = 93.92%
Ni 231.604†            15177.4      494.61 ug/L        11.014      494.61 ppb         11.014   2.23%
   QC value within limits for Ni 231.604  Recovery = 98.92%
P 214.914†              3810.6      2342.2 ug/L        28.59      2342.2 ppb          28.59   1.22%
   QC value within limits for P 214.914  Recovery = 93.69%
Pb 220.353†             3090.0      487.79 ug/L         7.021      487.79 ppb          7.021   1.44%
   QC value within limits for Pb 220.353  Recovery = 97.56%
S 181.975 Axial†         657.3      986.68 ug/L        15.073      986.68 ppb         15.073   1.53%
   QC value within limits for S 181.975 Axial  Recovery = 98.67%
Sb 206.836†             1234.7      511.55 ug/L         6.970      511.55 ppb          6.970   1.36%
   QC value within limits for Sb 206.836  Recovery = 102.31%
Se 196.026†              658.7      504.16 ug/L         5.554      504.16 ppb          5.554   1.10%
   QC value within limits for Se 196.026  Recovery = 100.83%
Si 251.611†            66816.2      2440.0 ug/L        50.72      2440.0 ppb          50.72   2.08%
   QC value within limits for Si 251.611  Recovery = 97.60%
Sn 189.927†             2136.0      491.58 ug/L         6.222      491.58 ppb          6.222   1.27%
   QC value within limits for Sn 189.927  Recovery = 98.32%
Sr 421.552†            47538.6      456.41 ug/L         8.369      456.41 ppb          8.369   1.83%
   QC value within limits for Sr 421.552  Recovery = 91.28%
Ti 334.940†           268376.3      486.96 ug/L         9.795      486.96 ppb          9.795   2.01%
   QC value within limits for Ti 334.940  Recovery = 97.39%
Tl 190.801†             1271.9      492.59 ug/L         5.362      492.59 ppb          5.362   1.09%
   QC value within limits for Tl 190.801  Recovery = 98.52%
U 409.014†             12294.6      471.95 ug/L         7.454      471.95 ppb          7.454   1.58%
   QC value within limits for U 409.014  Recovery = 94.39%
V 292.402†             54669.8      488.45 ug/L         9.307      488.45 ppb          9.307   1.91%
   QC value within limits for V 292.402  Recovery = 97.69%
Zn 213.857†            42438.3      480.90 ug/L        10.533      480.90 ppb         10.533   2.19%
   QC value within limits for Zn 213.857  Recovery = 96.18%
SiO2†                  67403.4      5308.6 ug/L        43.24      5308.6 ppb          43.24   0.81%
   QC value within limits for SiO2  Recovery = 99.27%
All analyte(s) passed QC.
```

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

Autosampler Location: 6
Date Collected: 4/1/2010 14:54:19
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	3894.3	3894.3	101	%			14:56:11
1	Y RADIAL	4244.0	4244.0	97.97	%			14:56:11
1	Al 396.153Radial†	-86.6	6.9	7.2386	ug/L	7.2386	ppb	14:56:11
1	Ca 317.933Radial†	14.4	-4.5	-8.8019	ug/L	-8.8019	ppb	14:56:31
1	Fe 238.204 Radial†	8.9	2.5	32.361	ug/L	32.361	ppb	14:56:31
1	K 766.490 Radial†	3062.3	22.7	4.2381	ug/L	4.2381	ppb	14:56:11
1	Mg 279.077 IEC†	0.5	-2.5	-103.11	ug/L	-103.11	ppb	14:56:31
1	Na 589.592 Radial†	-1193.9	-99.0	-43.592	ug/L	-43.592	ppb	14:56:11
1	Sr 421.552†	19.1	4.9	0.0475	ug/L	0.0475	ppb	14:56:11
1	Sc 361.383	653906.9	653906.9	94.826	%			14:57:28
1	Y 371.029	512300.1	512300.1	94.551	%			14:57:28
1	Ag 328.068†	31.0	-67.2	-0.3538	ug/L	-0.3538	ppb	14:57:28
1	As 188.979†	-29.6	-8.4	-4.1772	ug/L	-4.1772	ppb	14:57:48
1	B 249.677†	-390.7	171.0	4.2979	ug/L	4.2979	ppb	14:57:48
1	Ba 233.527†	-4.8	-5.8	-0.0579	ug/L	-0.0579	ppb	14:57:48
1	Be 313.107†	-4359.6	-74.2	-0.0307	ug/L	-0.0307	ppb	14:57:28
1	Cd 226.502†	-223.2	-21.9	-0.3260	ug/L	-0.3260	ppb	14:57:48
1	Co 228.616†	-70.8	-15.0	-0.3714	ug/L	-0.3714	ppb	14:57:48
1	Cr 267.716†	96.4	10.3	0.1594	ug/L	0.1594	ppb	14:57:48
1	Cu 324.752†	5409.0	16.2	0.0634	ug/L	0.0634	ppb	14:57:28
1	Mn 257.610†	456.4	36.3	0.0544	ug/L	0.0544	ppb	14:57:48
1	Mo 202.031†	14.6	2.9	0.2805	ug/L	0.2805	ppb	14:57:48
1	Ni 231.604†	67.1	-3.9	-0.1276	ug/L	-0.1276	ppb	14:57:48
1	P 214.914†	223.9	17.6	11.198	ug/L	11.198	ppb	14:57:48
1	Pb 220.353†	-92.4	-30.4	-4.7904	ug/L	-4.7904	ppb	14:57:48
1	S 181.975 Axial†	39.9	1.8	2.7208	ug/L	2.7208	ppb	14:57:48
1	Sb 206.836†	39.1	9.4	3.7639	ug/L	3.7639	ppb	14:57:48
1	Se 196.026†	-28.6	-8.1	-5.9086	ug/L	-5.9086	ppb	14:57:48
1	Si 251.611†	562.0	96.0	3.5118	ug/L	3.5118	ppb	14:57:48
1	Sn 189.927†	-0.9	-5.0	-1.1592	ug/L	-1.1592	ppb	14:57:48
1	Ti 334.940†	-1510.2	-171.1	-0.2972	ug/L	-0.2972	ppb	14:57:28
1	Tl 190.801†	-30.0	6.3	2.4196	ug/L	2.4196	ppb	14:57:48
1	U 409.014†	-2622.3	-358.9	-13.828	ug/L	-13.828	ppb	14:57:28
1	V 292.402†	-1754.7	-134.0	-1.2104	ug/L	-1.2104	ppb	14:57:28
1	Zn 213.857†	654.6	25.8	0.2905	ug/L	0.2905	ppb	14:57:48
1	SiO2†	540.2	30.5	2.4010	ug/L	2.4010	ppb	14:58:44
2	Sc Radial	3927.9	3927.9	102	%			14:56:36
2	Y RADIAL	4288.0	4288.0	98.99	%			14:56:36
2	Al 396.153Radial†	-97.7	-3.2	-3.3543	ug/L	-3.3543	ppb	14:56:36
2	Ca 317.933Radial†	13.2	-5.8	-11.302	ug/L	-11.302	ppb	14:56:56
2	Fe 238.204 Radial†	9.8	3.4	43.019	ug/L	43.019	ppb	14:56:56
2	K 766.490 Radial†	3084.4	18.5	3.4546	ug/L	3.4546	ppb	14:56:36
2	Mg 279.077 IEC†	0.5	-2.5	-105.01	ug/L	-105.01	ppb	14:56:56
2	Na 589.592 Radial†	-1181.4	-76.7	-33.759	ug/L	-33.759	ppb	14:56:36
2	Sr 421.552†	-0.4	-14.3	-0.1368	ug/L	-0.1368	ppb	14:56:36
2	Sc 361.383	665886.1	665886.1	96.563	%			14:57:53
2	Y 371.029	521935.1	521935.1	96.330	%			14:57:53
2	Ag 328.068†	75.5	-21.7	-0.1018	ug/L	-0.1018	ppb	14:57:53
2	As 188.979†	-28.4	-6.7	-3.2903	ug/L	-3.2903	ppb	14:58:13
2	B 249.677†	-402.1	166.6	4.1844	ug/L	4.1844	ppb	14:58:13
2	Ba 233.527†	-1.5	-2.3	-0.0234	ug/L	-0.0234	ppb	14:58:13
2	Be 313.107†	-4389.7	-22.7	-0.0098	ug/L	-0.0098	ppb	14:57:53
2	Cd 226.502†	-215.6	-9.9	-0.1502	ug/L	-0.1502	ppb	14:58:13
2	Co 228.616†	-62.7	-5.2	-0.1313	ug/L	-0.1313	ppb	14:58:13
2	Cr 267.716†	91.8	3.7	0.0621	ug/L	0.0621	ppb	14:58:13
2	Cu 324.752†	5393.3	-102.7	-0.3338	ug/L	-0.3338	ppb	14:57:53
2	Mn 257.610†	453.8	25.0	0.0409	ug/L	0.0409	ppb	14:58:13
2	Mo 202.031†	4.4	-7.9	-0.7596	ug/L	-0.7596	ppb	14:58:13
2	Ni 231.604†	90.8	19.4	0.6327	ug/L	0.6327	ppb	14:58:13

2	P 214.914†	222.0	11.4	7.3481	ug/L	7.3481 ppb	14:58:13
2	Pb 220.353†	-70.2	-5.7	-0.9078	ug/L	-0.9078 ppb	14:58:13
2	S 181.975 Axial†	43.8	5.1	7.6868	ug/L	7.6868 ppb	14:58:13
2	Sb 206.836†	35.6	5.1	2.0515	ug/L	2.0515 ppb	14:58:13
2	Se 196.026†	-26.9	-5.8	-4.1770	ug/L	-4.1770 ppb	14:58:13
2	Si 251.611†	546.0	68.8	2.5288	ug/L	2.5288 ppb	14:58:13
2	Sn 189.927†	10.3	6.5	1.4904	ug/L	1.4904 ppb	14:58:13
2	Ti 334.940†	-1522.3	-155.0	-0.2696	ug/L	-0.2696 ppb	14:57:53
2	Tl 190.801†	-25.9	11.1	4.2863	ug/L	4.2863 ppb	14:58:13
2	U 409.014†	-2592.3	-278.1	-10.716	ug/L	-10.716 ppb	14:57:53
2	V 292.402†	-1771.8	-118.4	-1.0834	ug/L	-1.0834 ppb	14:57:53
2	Zn 213.857†	644.4	2.8	0.0217	ug/L	0.0217 ppb	14:58:13
2	SiO2†	595.5	77.6	6.1457	ug/L	6.1457 ppb	14:58:49
3	Sc Radial	3957.0	3957.0	103	%		14:57:01
3	Y RADIAL	4309.7	4309.7	99.49	%		14:57:01
3	Al 396.153Radial†	-107.9	-12.5	-13.123	ug/L	-13.123 ppb	14:57:01
3	Ca 317.933Radial†	19.7	0.5	0.9210	ug/L	0.9210 ppb	14:57:21
3	Fe 238.204 Radial†	7.4	0.9	11.968	ug/L	11.968 ppb	14:57:21
3	K 766.490 Radial†	3136.1	46.4	8.6271	ug/L	8.6271 ppb	14:57:01
3	Mg 279.077 IEC†	1.7	-1.3	-55.411	ug/L	-55.411 ppb	14:57:21
3	Na 589.592 Radial†	-1130.8	-19.1	-8.4182	ug/L	-8.4182 ppb	14:57:01
3	Sr 421.552†	13.9	-0.4	-0.0037	ug/L	-0.0037 ppb	14:57:01
3	Sc 361.383	697677.6	697677.6	101.17	%		14:58:19
3	Y 371.029	545917.4	545917.4	100.76	%		14:58:19
3	Ag 328.068†	134.8	33.3	0.1849	ug/L	0.1849 ppb	14:58:19
3	As 188.979†	-18.1	4.9	2.4358	ug/L	2.4358 ppb	14:58:39
3	B 249.677†	-377.9	209.5	5.2697	ug/L	5.2697 ppb	14:58:39
3	Ba 233.527†	-2.2	-2.9	-0.0274	ug/L	-0.0274 ppb	14:58:39
3	Be 313.107†	-4464.6	110.4	0.0441	ug/L	0.0441 ppb	14:58:19
3	Cd 226.502†	-223.0	-7.0	-0.1025	ug/L	-0.1025 ppb	14:58:39
3	Co 228.616†	-55.9	4.4	0.1100	ug/L	0.1100 ppb	14:58:39
3	Cr 267.716†	80.3	-11.9	-0.1756	ug/L	-0.1756 ppb	14:58:39
3	Cu 324.752†	5614.1	-138.9	-0.4645	ug/L	-0.4645 ppb	14:58:19
3	Mn 257.610†	501.9	51.0	0.0695	ug/L	0.0695 ppb	14:58:39
3	Mo 202.031†	15.1	2.4	0.2358	ug/L	0.2358 ppb	14:58:39
3	Ni 231.604†	72.5	-3.0	-0.0965	ug/L	-0.0965 ppb	14:58:39
3	P 214.914†	220.6	-0.5	-0.2215	ug/L	-0.2215 ppb	14:58:39
3	Pb 220.353†	-71.4	-3.6	-0.5673	ug/L	-0.5673 ppb	14:58:39
3	S 181.975 Axial†	42.5	1.8	2.7325	ug/L	2.7325 ppb	14:58:39
3	Sb 206.836†	44.0	11.8	4.7347	ug/L	4.7347 ppb	14:58:39
3	Se 196.026†	-28.4	-6.0	-4.4263	ug/L	-4.4263 ppb	14:58:39
3	Si 251.611†	558.1	55.0	2.0123	ug/L	2.0123 ppb	14:58:39
3	Sn 189.927†	9.3	5.0	1.1569	ug/L	1.1569 ppb	14:58:39
3	Ti 334.940†	-1567.0	-127.4	-0.2283	ug/L	-0.2283 ppb	14:58:19
3	Tl 190.801†	-36.0	2.4	0.9103	ug/L	0.9103 ppb	14:58:39
3	U 409.014†	-2320.1	113.3	4.3639	ug/L	4.3639 ppb	14:58:19
3	V 292.402†	-1705.1	31.1	0.2833	ug/L	0.2833 ppb	14:58:19
3	Zn 213.857†	637.7	-34.3	-0.3931	ug/L	-0.3931 ppb	14:58:39
3	SiO2†	581.7	35.8	2.8206	ug/L	2.8206 ppb	14:58:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	672490.2	97.521	%	3.2803				3.36%
Sc Radial	3926.4	102	%	0.8				0.80%
Y 371.029	526717.5	97.212	%	3.1950				3.29%
Y RADIAL	4280.6	98.82	%	0.773				0.78%
Ag 328.068†	-18.5	-0.0902	ug/L	0.26952	-0.0902	ppb	0.26952	298.74%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.9	-3.0797	ug/L	10.18375	-3.0797	ppb	10.18375	330.67%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.4	-1.6772	ug/L	3.58949	-1.6772	ppb	3.58949	214.02%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	182.4	4.5840	ug/L	0.59653	4.5840	ppb	0.59653	13.01%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.7	-0.0362	ug/L	0.01884	-0.0362	ppb	0.01884	51.97%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	4.5	0.0012	ug/L	0.03857	0.0012	ppb	0.03857	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-3.3	-6.3944	ug/L	6.45753	-6.3944	ppb	6.45753	100.99%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -12.9     -0.1929 ug/L       0.11775     -0.1929 ppb        0.11775  61.05%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -5.3     -0.1309 ug/L       0.24071     -0.1309 ppb        0.24071 183.88%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                0.7      0.0153 ug/L       0.17236      0.0153 ppb        0.17236 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -75.1     -0.2450 ug/L       0.27492     -0.2450 ppb        0.27492 112.21%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         2.3      29.116 ug/L       15.7776      29.116 ppb        15.7776  54.19%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         29.2      5.4399 ug/L       2.78780      5.4399 ppb        2.78780  51.25%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -2.1     -87.841 ug/L       28.1012     -87.841 ppb        28.1012  31.99%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               37.4      0.0549 ug/L       0.01432      0.0549 ppb        0.01432  26.08%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -0.9     -0.0811 ug/L       0.58803     -0.0811 ppb        0.58803 725.20%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -65.0     -28.590 ug/L       18.1476     -28.590 ppb        18.1476  63.48%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                4.2      0.1362 ug/L       0.43027      0.1362 ppb        0.43027 315.86%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 9.5      6.1083 ug/L       5.80997      6.1083 ppb        5.80997  95.12%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -13.3     -2.0885 ug/L       2.34609     -2.0885 ppb        2.34609 112.33%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           2.9      4.3800 ug/L       2.86378      4.3800 ppb        2.86378  65.38%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                8.8      3.5167 ug/L       1.35856      3.5167 ppb        1.35856  38.63%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -6.6     -4.8373 ug/L       0.93611     -4.8373 ppb        0.93611  19.35%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               73.3      2.6843 ug/L       0.76173      2.6843 ppb        0.76173  28.38%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                2.2      0.4961 ug/L       1.44316      0.4961 ppb        1.44316 290.93%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -3.2     -0.0310 ug/L       0.09516     -0.0310 ppb        0.09516 306.97%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -151.2     -0.2651 ug/L       0.03467     -0.2651 ppb        0.03467  13.08%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                6.6      2.5387 ug/L       1.69113      2.5387 ppb        1.69113  66.61%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -174.5     -6.7268 ug/L       9.73003     -6.7268 ppb        9.73003 144.65%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -73.8     -0.6702 ug/L       0.82815     -0.6702 ppb        0.82815 123.57%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -1.9     -0.0270 ug/L       0.34440     -0.0270 ppb        0.34440 >999.9%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     48.0      3.7891 ug/L       2.05162      3.7891 ppb        2.05162  54.15%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: 248374002|960819|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 4/1/2010 15:01:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248374002|960819|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3831.5	3831.5	99.8	%			15:02:57
1	Y RADIAL	4945.2	4945.2	114.2	%			15:02:57
1	Al 396.153Radial†	33897.8	34053.2	35847	ug/L	35847	ppb	15:02:57
1	Ca 317.933Radial†	11990.2	11993.9	23551	ug/L	23551	ppb	15:02:57
1	Fe 238.204 Radial†	5798.2	5802.8	73752	ug/L	73752	ppb	15:02:57
1	K 766.490 Radial†	47086.0	44177.9	8204.9	ug/L	8204.9	ppb	15:02:57
1	Mg 279.077 IEC†	233.4	230.8	9429.8	ug/L	9429.8	ppb	15:03:17
1	Na 589.592 Radial†	106.4	1184.4	521.31	ug/L	521.31	ppb	15:02:57
1	Sr 421.552†	14496.0	14509.2	139.13	ug/L	139.13	ppb	15:02:57
1	Sc 361.383	708893.8	708893.8	102.80	%			15:04:16
1	Y 371.029	643500.0	643500.0	118.77	%			15:04:16
1	Ag 328.068†	-3483.3	-3488.4	3.7292	ug/L	3.7292	ppb	15:04:21
1	As 188.979†	-52.7	-28.4	22.639	ug/L	22.639	ppb	15:04:41
1	B 249.677†	1624.1	2162.8	42.388	ug/L	42.388	ppb	15:04:21
1	Ba 233.527†	57382.3	55818.7	541.90	ug/L	541.90	ppb	15:04:21
1	Be 313.107†	-4290.0	350.1	5.2365	ug/L	5.2365	ppb	15:04:21
1	Cd 226.502†	340.2	544.4	0.3384	ug/L	0.3384	ppb	15:04:41
1	Co 228.616†	673.0	714.3	12.171	ug/L	12.171	ppb	15:04:41
1	Cr 267.716†	2615.4	2452.8	44.178	ug/L	44.178	ppb	15:04:41
1	Cu 324.752†	18459.8	12269.1	44.868	ug/L	44.868	ppb	15:04:21
1	Mn 257.610†	5492935.1	5342894.9	6920.2	ug/L	6920.2	ppb	15:04:16
1	Mo 202.031†	13.0	0.1	6.0199	ug/L	6.0199	ppb	15:04:41
1	Ni 231.604†	1721.8	1600.2	52.170	ug/L	52.170	ppb	15:04:41
1	P 214.914†	2318.7	2037.1	1243.4	ug/L	1243.4	ppb	15:04:41
1	Pb 220.353†	430.5	485.7	78.555	ug/L	78.555	ppb	15:04:41
1	S 181.975 Axial†	852.4	789.0	1178.7	ug/L	1178.7	ppb	15:04:41
1	Sb 206.836†	48.8	15.7	-3.0267	ug/L	-3.0267	ppb	15:04:41
1	Se 196.026†	-279.1	-249.4	20.934	ug/L	20.934	ppb	15:04:41
1	Si 251.611†	716652.4	696638.4	25503	ug/L	25503	ppb	15:04:16
1	Sn 189.927†	-104.7	-106.0	-19.705	ug/L	-19.705	ppb	15:04:41
1	Ti 334.940†	1269730.1	1236571.6	2246.7	ug/L	2246.7	ppb	15:04:16
1	Tl 190.801†	-190.4	-147.3	-5.2251	ug/L	-5.2251	ppb	15:04:41
1	U 409.014†	-7297.6	-4692.4	-189.24	ug/L	-189.24	ppb	15:04:21
1	V 292.402†	7260.1	8778.8	64.095	ug/L	64.095	ppb	15:04:21
1	Zn 213.857†	34190.6	32594.8	361.41	ug/L	361.41	ppb	15:04:21
1	SiO2†	719793.0	699650.9	55241	ug/L	55241	ppb	15:05:51
2	Sc Radial	4146.2	4146.2	108	%			15:03:22
2	Y RADIAL	5284.0	5284.0	122.0	%			15:03:22
2	Al 396.153Radial†	33389.2	31004.7	32638	ug/L	32638	ppb	15:03:22
2	Ca 317.933Radial†	11773.1	10881.2	21366	ug/L	21366	ppb	15:03:22
2	Fe 238.204 Radial†	5695.0	5266.3	66933	ug/L	66933	ppb	15:03:22
2	K 766.490 Radial†	46223.7	39799.0	7391.3	ug/L	7391.3	ppb	15:03:22
2	Mg 279.077 IEC†	235.3	214.8	8777.4	ug/L	8777.4	ppb	15:03:42
2	Na 589.592 Radial†	95.9	1166.6	513.44	ug/L	513.44	ppb	15:03:22
2	Sr 421.552†	14388.9	13307.7	127.62	ug/L	127.62	ppb	15:03:22
2	Sc 361.383	702718.0	702718.0	101.90	%			15:04:48
2	Y 371.029	638394.0	638394.0	117.82	%			15:04:48
2	Ag 328.068†	-3376.0	-3412.8	2.0712	ug/L	2.0712	ppb	15:04:53
2	As 188.979†	-44.8	-21.2	24.562	ug/L	24.562	ppb	15:05:13
2	B 249.677†	1513.9	2068.6	41.127	ug/L	41.127	ppb	15:04:53
2	Ba 233.527†	56732.7	55671.9	540.28	ug/L	540.28	ppb	15:04:53
2	Be 313.107†	-4283.7	319.6	5.2056	ug/L	5.2056	ppb	15:04:53
2	Cd 226.502†	326.2	533.5	0.8839	ug/L	0.8839	ppb	15:05:13
2	Co 228.616†	642.5	690.1	11.684	ug/L	11.684	ppb	15:05:13
2	Cr 267.716†	2593.5	2453.7	43.471	ug/L	43.471	ppb	15:05:13
2	Cu 324.752†	18210.0	12181.8	44.219	ug/L	44.219	ppb	15:04:53
2	Mn 257.610†	5438463.9	5336401.2	6911.2	ug/L	6911.2	ppb	15:04:48
2	Mo 202.031†	-1.5	-13.9	4.1131	ug/L	4.1131	ppb	15:05:13
2	Ni 231.604†	1718.7	1612.0	52.554	ug/L	52.554	ppb	15:05:13

2	P 214.914†	2288.5	2027.3	1241.8	ug/L	1241.8 ppb	15:05:13
2	Pb 220.353†	426.4	485.5	78.336	ug/L	78.336 ppb	15:05:13
2	S 181.975 Axial†	823.6	767.9	1147.7	ug/L	1147.7 ppb	15:05:13
2	Sb 206.836†	47.4	14.8	-3.2164	ug/L	-3.2164 ppb	15:05:13
2	Se 196.026†	-272.2	-245.0	5.1680	ug/L	5.1680 ppb	15:05:13
2	Si 251.611†	707490.0	693773.9	25398	ug/L	25398 ppb	15:04:48
2	Sn 189.927†	-98.5	-100.8	-18.939	ug/L	-18.939 ppb	15:05:13
2	Ti 334.940†	1254079.8	1232068.8	2238.3	ug/L	2238.3 ppb	15:04:48
2	Tl 190.801†	-178.7	-137.5	-1.5455	ug/L	-1.5455 ppb	15:05:13
2	U 409.014†	-7331.3	-4787.8	-192.14	ug/L	-192.14 ppb	15:04:53
2	V 292.402†	7241.8	8822.8	65.446	ug/L	65.446 ppb	15:04:53
2	Zn 213.857†	33823.5	32526.9	361.65	ug/L	361.65 ppb	15:04:53
2	SiO2†	714693.1	700799.9	55332	ug/L	55332 ppb	15:05:56
3	Sc Radial	4147.6	4147.6	108	%		15:03:47
3	Y RADIAL	5332.3	5332.3	123.1	%		15:03:47
3	Al 396.153Radial†	33537.3	31131.4	32772	ug/L	32772 ppb	15:03:47
3	Ca 317.933Radial†	11861.7	10959.5	21519	ug/L	21519 ppb	15:03:47
3	Fe 238.204 Radial†	5677.3	5248.2	66703	ug/L	66703 ppb	15:03:47
3	K 766.490 Radial†	46306.8	39861.6	7402.9	ug/L	7402.9 ppb	15:03:47
3	Mg 279.077 IEC†	237.9	217.2	8876.0	ug/L	8876.0 ppb	15:04:07
3	Na 589.592 Radial†	62.3	1135.5	499.77	ug/L	499.77 ppb	15:03:47
3	Sr 421.552†	14244.9	13169.9	126.29	ug/L	126.29 ppb	15:03:47
3	Sc 361.383	709538.3	709538.3	102.89	%		15:05:20
3	Y 371.029	645576.5	645576.5	119.15	%		15:05:20
3	Ag 328.068†	-3356.7	-3362.2	2.2771	ug/L	2.2771 ppb	15:05:25
3	As 188.979†	-43.1	-19.1	25.496	ug/L	25.496 ppb	15:05:45
3	B 249.677†	1531.1	2071.0	41.224	ug/L	41.224 ppb	15:05:25
3	Ba 233.527†	57011.5	55407.6	537.72	ug/L	537.72 ppb	15:05:25
3	Be 313.107†	-4337.9	307.3	5.1861	ug/L	5.1861 ppb	15:05:25
3	Cd 226.502†	332.7	536.8	0.9565	ug/L	0.9565 ppb	15:05:45
3	Co 228.616†	665.6	706.5	12.108	ug/L	12.108 ppb	15:05:45
3	Cr 267.716†	2614.9	2450.1	43.392	ug/L	43.392 ppb	15:05:45
3	Cu 324.752†	18321.0	12117.9	43.993	ug/L	43.993 ppb	15:05:25
3	Mn 257.610†	5447348.6	5293736.7	6856.0	ug/L	6856.0 ppb	15:05:20
3	Mo 202.031†	14.1	1.2	5.5483	ug/L	5.5483 ppb	15:05:45
3	Ni 231.604†	1747.5	1623.7	52.935	ug/L	52.935 ppb	15:05:45
3	P 214.914†	2297.9	2014.8	1234.1	ug/L	1234.1 ppb	15:05:45
3	Pb 220.353†	427.9	482.9	77.985	ug/L	77.985 ppb	15:05:45
3	S 181.975 Axial†	845.5	781.5	1168.1	ug/L	1168.1 ppb	15:05:45
3	Sb 206.836†	64.8	31.3	3.3780	ug/L	3.3780 ppb	15:05:45
3	Se 196.026†	-283.0	-253.0	-1.2732	ug/L	-1.2732 ppb	15:05:45
3	Si 251.611†	711384.2	690885.1	25293	ug/L	25293 ppb	15:05:20
3	Sn 189.927†	-112.0	-112.9	-21.714	ug/L	-21.714 ppb	15:05:45
3	Ti 334.940†	1262621.9	1228541.4	2231.9	ug/L	2231.9 ppb	15:05:20
3	Tl 190.801†	-178.5	-135.6	-1.1325	ug/L	-1.1325 ppb	15:05:45
3	U 409.014†	-7367.5	-4753.8	-190.80	ug/L	-190.80 ppb	15:05:25
3	V 292.402†	7363.5	8872.9	65.952	ug/L	65.952 ppb	15:05:25
3	Zn 213.857†	33946.6	32327.5	359.40	ug/L	359.40 ppb	15:05:25
3	SiO2†	715670.5	695008.3	54875	ug/L	54875 ppb	15:06:02

Mean Data: 248374002|960819|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	707050.0	102.53	%	0.546				0.53%
Sc Radial	4041.8	105	%	4.7				4.51%
Y 371.029	642490.2	118.58	%	0.682				0.58%
Y RADIAL	5187.2	119.7	%	4.87				4.07%
Ag 328.068†	-3421.1	2.6925	ug/L	0.90368	2.6925	ppb	0.90368	33.56%
Al 396.153Radial†	32063.1	33752	ug/L	1815.5	33752	ppb	1815.5	5.38%
As 188.979†	-22.9	24.232	ug/L	1.4563	24.232	ppb	1.4563	6.01%
B 249.677†	2100.8	41.580	ug/L	0.7021	41.580	ppb	0.7021	1.69%
Ba 233.527†	55632.8	539.97	ug/L	2.110	539.97	ppb	2.110	0.39%
Be 313.107†	325.7	5.2094	ug/L	0.02539	5.2094	ppb	0.02539	0.49%
Ca 317.933Radial†	11278.2	22145	ug/L	1219.5	22145	ppb	1219.5	5.51%
Cd 226.502†	538.3	0.7263	ug/L	0.33784	0.7263	ppb	0.33784	46.52%
Co 228.616†	703.7	11.988	ug/L	0.2654	11.988	ppb	0.2654	2.21%
Cr 267.716†	2452.2	43.680	ug/L	0.4327	43.680	ppb	0.4327	0.99%
Cu 324.752†	12189.6	44.360	ug/L	0.4544	44.360	ppb	0.4544	1.02%
Fe 238.204 Radial†	5439.1	69129	ug/L	4004.8	69129	ppb	4004.8	5.79%
K 766.490 Radial†	41279.5	7666.4	ug/L	466.42	7666.4	ppb	466.42	6.08%

Mg 279.077 IEC†	220.9	9027.7	ug/L	351.67	9027.7	ppb	351.67	3.90%
Mn 257.610†	5324344.3	6895.8	ug/L	34.80	6895.8	ppb	34.80	0.50%
Mo 202.031†	-4.2	5.2271	ug/L	0.99312	5.2271	ppb	0.99312	19.00%
Na 589.592 Radial†	1162.2	511.51	ug/L	10.902	511.51	ppb	10.902	2.13%
Ni 231.604†	1612.0	52.553	ug/L	0.3826	52.553	ppb	0.3826	0.73%
P 214.914†	2026.4	1239.8	ug/L	4.96	1239.8	ppb	4.96	0.40%
Pb 220.353†	484.7	78.292	ug/L	0.2874	78.292	ppb	0.2874	0.37%
S 181.975 Axial†	779.5	1164.8	ug/L	15.75	1164.8	ppb	15.75	1.35%
Sb 206.836†	20.6	-0.9550	ug/L	3.75369	-0.9550	ppb	3.75369	393.04%
Se 196.026†	-249.1	8.2762	ug/L	11.42511	8.2762	ppb	11.42511	138.05%
Si 251.611†	693765.8	25398	ug/L	105.3	25398	ppb	105.3	0.41%
Sn 189.927†	-106.6	-20.119	ug/L	1.4331	-20.119	ppb	1.4331	7.12%
Sr 421.552†	13662.3	131.01	ug/L	7.064	131.01	ppb	7.064	5.39%
Ti 334.940†	1232393.9	2239.0	ug/L	7.42	2239.0	ppb	7.42	0.33%
Tl 190.801†	-140.1	-2.6344	ug/L	2.25313	-2.6344	ppb	2.25313	85.53%
U 409.014†	-4744.7	-190.72	ug/L	1.452	-190.72	ppb	1.452	0.76%
V 292.402†	8824.8	65.164	ug/L	0.9602	65.164	ppb	0.9602	1.47%
Zn 213.857†	32483.1	360.82	ug/L	1.235	360.82	ppb	1.235	0.34%
SiO2†	698486.4	55150	ug/L	242.1	55150	ppb	242.1	0.44%

Sequence No.: 13
Sample ID: 248374003|960819|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 4/1/2010 15:08:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248374003|960819|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	4086.0	4086.0	106	%			15:10:25
1	Y RADIAL	4915.5	4915.5	113.5	%			15:10:25
1	Al 396.153Radial†	105698.1	99390.6	104630	ug/L	104630	ppb	15:10:05
1	Ca 317.933Radial†	16702.2	15672.3	30773	ug/L	30773	ppb	15:10:05
1	Fe 238.204 Radial†	7709.5	7236.6	91975	ug/L	91975	ppb	15:10:05
1	K 766.490 Radial†	77907.3	70194.3	13043	ug/L	13043	ppb	15:10:05
1	Mg 279.077 IEC†	351.0	326.7	13360	ug/L	13360	ppb	15:10:25
1	Na 589.592 Radial†	1323.8	2321.4	1021.7	ug/L	1021.7	ppb	15:10:05
1	Sr 421.552†	24513.1	23015.0	220.75	ug/L	220.75	ppb	15:10:05
1	Sc 361.383	702744.0	702744.0	101.91	%			15:11:23
1	Y 371.029	602806.0	602806.0	111.26	%			15:11:23
1	Ag 328.068†	-4985.7	-4992.3	1.4315	ug/L	1.4315	ppb	15:11:28
1	As 188.979†	-63.0	-39.0	36.009	ug/L	36.009	ppb	15:11:48
1	B 249.677†	1210.2	1770.6	29.507	ug/L	29.507	ppb	15:11:28
1	Ba 233.527†	123389.6	121078.8	1173.5	ug/L	1173.5	ppb	15:11:28
1	Be 313.107†	-7635.8	-2969.6	7.6476	ug/L	7.6476	ppb	15:11:28
1	Cd 226.502†	471.2	675.8	0.4000	ug/L	0.4000	ppb	15:11:48
1	Co 228.616†	1438.7	1471.5	27.464	ug/L	27.464	ppb	15:11:48
1	Cr 267.716†	6926.8	6705.8	109.00	ug/L	109.00	ppb	15:11:28
1	Cu 324.752†	19717.9	13660.7	50.443	ug/L	50.443	ppb	15:11:28
1	Mn 257.610†	1442741.1	1415286.1	1839.8	ug/L	1839.8	ppb	15:11:23
1	Mo 202.031†	-46.0	-57.7	1.9680	ug/L	1.9680	ppb	15:11:48
1	Ni 231.604†	2368.5	2249.5	73.332	ug/L	73.332	ppb	15:11:48
1	P 214.914†	3542.3	3257.5	2025.0	ug/L	2025.0	ppb	15:11:48
1	Pb 220.353†	294.7	356.2	73.775	ug/L	73.775	ppb	15:11:48
1	S 181.975 Axial†	848.1	792.0	1170.3	ug/L	1170.3	ppb	15:11:48
1	Sb 206.836†	71.6	38.5	-1.3304	ug/L	-1.3304	ppb	15:11:48
1	Se 196.026†	-386.5	-357.2	8.4731	ug/L	8.4731	ppb	15:11:48
1	Si 251.611†	1055929.9	1035664.9	37915	ug/L	37915	ppb	15:11:23
1	Sn 189.927†	-146.2	-147.6	-27.874	ug/L	-27.874	ppb	15:11:48
1	Ti 334.940†	2186655.4	2147139.8	3899.9	ug/L	3899.9	ppb	15:11:23
1	Tl 190.801†	-145.5	-104.8	0.2454	ug/L	0.2454	ppb	15:11:48
1	U 409.014†	-6049.2	-3529.5	-146.66	ug/L	-146.66	ppb	15:11:28
1	V 292.402†	21129.7	22450.5	180.27	ug/L	180.27	ppb	15:11:28
1	Zn 213.857†	21047.1	19988.4	214.34	ug/L	214.34	ppb	15:11:28
1	SiO2†	1045815.2	1025697.0	80985	ug/L	80985	ppb	15:12:57
2	Sc Radial	4056.5	4056.5	106	%			15:10:50
2	Y RADIAL	4868.0	4868.0	112.4	%			15:10:50
2	Al 396.153Radial†	105968.7	100370.0	105660	ug/L	105660	ppb	15:10:30
2	Ca 317.933Radial†	16635.9	15723.8	30874	ug/L	30874	ppb	15:10:30
2	Fe 238.204 Radial†	7654.2	7236.9	91979	ug/L	91979	ppb	15:10:30
2	K 766.490 Radial†	77781.0	70608.0	13119	ug/L	13119	ppb	15:10:30
2	Mg 279.077 IEC†	353.3	331.3	13550	ug/L	13550	ppb	15:10:50
2	Na 589.592 Radial†	1255.2	2265.6	997.19	ug/L	997.19	ppb	15:10:30
2	Sr 421.552†	24569.5	23236.2	222.87	ug/L	222.87	ppb	15:10:30
2	Sc 361.383	708843.5	708843.5	102.79	%			15:11:54
2	Y 371.029	608393.1	608393.1	112.29	%			15:11:54
2	Ag 328.068†	-4936.4	-4902.2	1.9175	ug/L	1.9175	ppb	15:11:59
2	As 188.979†	-57.7	-33.3	38.841	ug/L	38.841	ppb	15:12:19
2	B 249.677†	1171.0	1722.2	28.288	ug/L	28.288	ppb	15:11:59
2	Ba 233.527†	123241.2	119892.6	1162.0	ug/L	1162.0	ppb	15:11:59
2	Be 313.107†	-7758.9	-3024.9	7.6297	ug/L	7.6297	ppb	15:11:59
2	Cd 226.502†	492.1	692.2	0.6395	ug/L	0.6395	ppb	15:12:19
2	Co 228.616†	1448.5	1468.8	27.388	ug/L	27.388	ppb	15:12:19
2	Cr 267.716†	6852.8	6575.3	107.07	ug/L	107.07	ppb	15:11:59
2	Cu 324.752†	19803.0	13577.1	50.163	ug/L	50.163	ppb	15:11:59
2	Mn 257.610†	1453517.1	1413587.1	1837.6	ug/L	1837.6	ppb	15:11:54
2	Mo 202.031†	-48.4	-59.5	1.7899	ug/L	1.7899	ppb	15:12:19
2	Ni 231.604†	2364.3	2225.4	72.546	ug/L	72.546	ppb	15:12:19

2	P 214.914†	3536.2	3221.6	2002.3	ug/L	2002.3	ppb	15:12:19
2	Pb 220.353†	275.6	335.1	70.725	ug/L	70.725	ppb	15:12:19
2	S 181.975 Axial†	838.4	775.4	1145.2	ug/L	1145.2	ppb	15:12:19
2	Sb 206.836†	71.4	37.7	-1.6910	ug/L	-1.6910	ppb	15:12:19
2	Se 196.026†	-373.6	-341.4	20.482	ug/L	20.482	ppb	15:12:19
2	Si 251.611†	1066694.3	1037220.7	37972	ug/L	37972	ppb	15:11:54
2	Sn 189.927†	-145.1	-145.3	-27.330	ug/L	-27.330	ppb	15:12:19
2	Ti 334.940†	2206758.2	2148232.7	3901.9	ug/L	3901.9	ppb	15:11:54
2	Tl 190.801†	-126.9	-85.5	7.6609	ug/L	7.6609	ppb	15:12:19
2	U 409.014†	-6045.2	-3474.5	-144.54	ug/L	-144.54	ppb	15:11:59
2	V 292.402†	21061.0	22205.2	178.11	ug/L	178.11	ppb	15:11:59
2	Zn 213.857†	21044.8	19808.5	212.29	ug/L	212.29	ppb	15:11:59
2	SiO2†	1044820.1	1015898.2	80211	ug/L	80211	ppb	15:13:02
3	Sc Radial	4064.0	4064.0	106	%			15:11:15
3	Y RADIAL	4886.2	4886.2	112.8	%			15:11:15
3	Al 396.153Radial†	105951.7	100169.5	105450	ug/L	105450	ppb	15:10:55
3	Ca 317.933Radial†	16664.4	15721.8	30870	ug/L	30870	ppb	15:10:55
3	Fe 238.204 Radial†	7621.7	7192.9	91420	ug/L	91420	ppb	15:10:55
3	K 766.490 Radial†	77525.7	70231.4	13049	ug/L	13049	ppb	15:10:55
3	Mg 279.077 IEC†	350.2	327.8	13405	ug/L	13405	ppb	15:11:15
3	Na 589.592 Radial†	1285.2	2291.7	1008.7	ug/L	1008.7	ppb	15:10:55
3	Sr 421.552†	24386.9	23020.9	220.81	ug/L	220.81	ppb	15:10:55
3	Sc 361.383	707127.1	707127.1	102.54	%			15:12:25
3	Y 371.029	607829.0	607829.0	112.18	%			15:12:25
3	Ag 328.068†	-4997.4	-4973.3	1.3537	ug/L	1.3537	ppb	15:12:30
3	As 188.979†	-55.2	-31.1	39.711	ug/L	39.711	ppb	15:12:50
3	B 249.677†	1231.1	1783.6	29.924	ug/L	29.924	ppb	15:12:30
3	Ba 233.527†	122998.5	119946.9	1162.5	ug/L	1162.5	ppb	15:12:30
3	Be 313.107†	-7774.7	-3058.6	7.5885	ug/L	7.5885	ppb	15:12:30
3	Cd 226.502†	468.7	670.5	0.3792	ug/L	0.3792	ppb	15:12:50
3	Co 228.616†	1444.4	1468.2	27.410	ug/L	27.410	ppb	15:12:50
3	Cr 267.716†	6860.7	6599.3	107.37	ug/L	107.37	ppb	15:12:30
3	Cu 324.752†	19584.0	13410.3	49.578	ug/L	49.578	ppb	15:12:30
3	Mn 257.610†	1445611.8	1409310.2	1832.0	ug/L	1832.0	ppb	15:12:25
3	Mo 202.031†	-31.9	-43.6	3.2771	ug/L	3.2771	ppb	15:12:50
3	Ni 231.604†	2338.2	2205.6	71.899	ug/L	71.899	ppb	15:12:50
3	P 214.914†	3506.1	3200.7	1989.5	ug/L	1989.5	ppb	15:12:50
3	Pb 220.353†	294.4	354.1	73.722	ug/L	73.722	ppb	15:12:50
3	S 181.975 Axial†	841.4	780.3	1152.6	ug/L	1152.6	ppb	15:12:50
3	Sb 206.836†	63.5	30.2	-4.5860	ug/L	-4.5860	ppb	15:12:50
3	Se 196.026†	-384.7	-353.1	10.269	ug/L	10.269	ppb	15:12:50
3	Si 251.611†	1059566.1	1032788.3	37809	ug/L	37809	ppb	15:12:25
3	Sn 189.927†	-136.6	-137.4	-25.510	ug/L	-25.510	ppb	15:12:50
3	Ti 334.940†	2194531.5	2141520.4	3889.7	ug/L	3889.7	ppb	15:12:25
3	Tl 190.801†	-148.9	-107.3	-0.8335	ug/L	-0.8335	ppb	15:12:50
3	U 409.014†	-6002.5	-3447.1	-143.42	ug/L	-143.42	ppb	15:12:30
3	V 292.402†	21064.0	22257.9	178.69	ug/L	178.69	ppb	15:12:30
3	Zn 213.857†	20945.2	19761.1	211.83	ug/L	211.83	ppb	15:12:30
3	SiO2†	1039050.2	1012738.7	79962	ug/L	79962	ppb	15:13:08

Mean Data: 248374003|960819|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	706238.2	102.41	%	0.456				0.45%
Sc Radial	4068.8	106	%	0.4				0.38%
Y 371.029	606342.7	111.91	%	0.568				0.51%
Y RADIAL	4889.9	112.9	%	0.55				0.49%
Ag 328.068†	-4955.9	1.5676	ug/L	0.30553	1.5676	ppb	0.30553	19.49%
Al 396.153Radial†	99976.7	105240	ug/L	544.6	105240	ppb	544.6	0.52%
As 188.979†	-34.5	38.187	ug/L	1.9357	38.187	ppb	1.9357	5.07%
B 249.677†	1758.8	29.240	ug/L	0.8501	29.240	ppb	0.8501	2.91%
Ba 233.527†	120306.1	1166.0	ug/L	6.48	1166.0	ppb	6.48	0.56%
Be 313.107†	-3017.7	7.6219	ug/L	0.03030	7.6219	ppb	0.03030	0.40%
Ca 317.933Radial†	15706.0	30839	ug/L	57.3	30839	ppb	57.3	0.19%
Cd 226.502†	679.5	0.4729	ug/L	0.14464	0.4729	ppb	0.14464	30.59%
Co 228.616†	1469.5	27.421	ug/L	0.0388	27.421	ppb	0.0388	0.14%
Cr 267.716†	6626.8	107.81	ug/L	1.039	107.81	ppb	1.039	0.96%
Cu 324.752†	13549.4	50.061	ug/L	0.4416	50.061	ppb	0.4416	0.88%
Fe 238.204 Radial†	7222.1	91791	ug/L	321.6	91791	ppb	321.6	0.35%
K 766.490 Radial†	70344.6	13070	ug/L	42.6	13070	ppb	42.6	0.33%

Mg 279.077 IEC†	328.6	13438	ug/L	99.2	13438	ppb	99.2	0.74%
Mn 257.610†	1412727.8	1836.5	ug/L	4.01	1836.5	ppb	4.01	0.22%
Mo 202.031†	-53.6	2.3450	ug/L	0.81214	2.3450	ppb	0.81214	34.63%
Na 589.592 Radial†	2292.9	1009.2	ug/L	12.28	1009.2	ppb	12.28	1.22%
Ni 231.604†	2226.8	72.592	ug/L	0.7173	72.592	ppb	0.7173	0.99%
P 214.914†	3226.6	2005.6	ug/L	17.98	2005.6	ppb	17.98	0.90%
Pb 220.353†	348.5	72.741	ug/L	1.7456	72.741	ppb	1.7456	2.40%
S 181.975 Axial†	782.5	1156.1	ug/L	12.91	1156.1	ppb	12.91	1.12%
Sb 206.836†	35.5	-2.5358	ug/L	1.78466	-2.5358	ppb	1.78466	70.38%
Se 196.026†	-350.5	13.074	ug/L	6.4773	13.074	ppb	6.4773	49.54%
Si 251.611†	1035224.6	37898	ug/L	82.3	37898	ppb	82.3	0.22%
Sn 189.927†	-143.4	-26.905	ug/L	1.2384	-26.905	ppb	1.2384	4.60%
Sr 421.552†	23090.7	221.48	ug/L	1.210	221.48	ppb	1.210	0.55%
Ti 334.940†	2145631.0	3897.2	ug/L	6.53	3897.2	ppb	6.53	0.17%
Tl 190.801†	-99.2	2.3576	ug/L	4.62434	2.3576	ppb	4.62434	196.14%
U 409.014†	-3483.7	-144.87	ug/L	1.646	-144.87	ppb	1.646	1.14%
V 292.402†	22304.6	179.03	ug/L	1.117	179.03	ppb	1.117	0.62%
Zn 213.857†	19852.7	212.82	ug/L	1.336	212.82	ppb	1.336	0.63%
SiO2†	1018111.3	80386	ug/L	533.5	80386	ppb	533.5	0.66%

Sequence No.: 14
Sample ID: 248374004|960819|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 4/1/2010 15:15:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248374004|960819|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4187.1	4187.1	109	%			15:17:13
1	Y RADIAL	4865.8	4865.8	112.3	%			15:17:13
1	Al 396.153Radial†	49440.8	45417.8	47811	ug/L	47811	ppb	15:17:13
1	Ca 317.933Radial†	13619.6	12467.3	24480	ug/L	24480	ppb	15:17:13
1	Fe 238.204 Radial†	4514.9	4132.9	52529	ug/L	52529	ppb	15:17:13
1	K 766.490 Radial†	49342.7	42239.9	7846.1	ug/L	7846.1	ppb	15:17:13
1	Mg 279.077 IEC†	212.9	192.1	7858.3	ug/L	7858.3	ppb	15:17:33
1	Na 589.592 Radial†	430.8	1472.8	648.22	ug/L	648.22	ppb	15:17:13
1	Sr 421.552†	17689.6	16203.3	155.39	ug/L	155.39	ppb	15:17:13
1	Sc 361.383	702849.3	702849.3	101.92	%			15:18:30
1	Y 371.029	478922.5	478922.5	88.391	%			15:18:35
1	Ag 328.068†	-2817.2	-2863.9	0.6339	ug/L	0.6339	ppb	15:18:35
1	As 188.979†	-46.2	-22.5	21.211	ug/L	21.211	ppb	15:18:55
1	B 249.677†	893.8	1459.9	28.140	ug/L	28.140	ppb	15:18:35
1	Ba 233.527†	63525.7	62326.3	604.22	ug/L	604.22	ppb	15:18:35
1	Be 313.107†	-7964.0	-3290.5	3.9245	ug/L	3.9245	ppb	15:18:35
1	Cd 226.502†	221.6	430.8	0.8828	ug/L	0.8828	ppb	15:18:55
1	Co 228.616†	816.5	860.8	15.972	ug/L	15.972	ppb	15:18:55
1	Cr 267.716†	3624.9	3465.2	56.866	ug/L	56.866	ppb	15:18:55
1	Cu 324.752†	17005.2	10996.4	39.449	ug/L	39.449	ppb	15:18:35
1	Mn 257.610†	1456411.9	1428486.7	1853.2	ug/L	1853.2	ppb	15:18:30
1	Mo 202.031†	-35.0	-46.8	-0.1249	ug/L	-0.1249	ppb	15:18:55
1	Ni 231.604†	1304.8	1205.5	39.296	ug/L	39.296	ppb	15:18:55
1	P 214.914†	2749.3	2479.0	1546.7	ug/L	1546.7	ppb	15:18:55
1	Pb 220.353†	283.1	344.8	61.453	ug/L	61.453	ppb	15:18:55
1	S 181.975 Axial†	769.5	714.8	1065.0	ug/L	1065.0	ppb	15:18:55
1	Sb 206.836†	47.0	14.4	-4.0016	ug/L	-4.0016	ppb	15:18:55
1	Se 196.026†	-218.6	-192.4	10.111	ug/L	10.111	ppb	15:18:55
1	Si 251.611†	761214.2	746354.7	27323	ug/L	27323	ppb	15:18:30
1	Sn 189.927†	-132.5	-134.1	-26.145	ug/L	-26.145	ppb	15:18:55
1	Ti 334.940†	1298068.1	1274997.1	2316.7	ug/L	2316.7	ppb	15:18:30
1	Tl 190.801†	-107.6	-67.6	1.7138	ug/L	1.7138	ppb	15:18:55
1	U 409.014†	-4498.8	-2007.4	-83.425	ug/L	-83.425	ppb	15:18:35
1	V 292.402†	10768.2	12281.4	98.087	ug/L	98.087	ppb	15:18:35
1	Zn 213.857†	18597.5	17582.0	192.95	ug/L	192.95	ppb	15:18:35
1	SiO2†	771567.9	756470.5	59728	ug/L	59728	ppb	15:20:04
2	Sc Radial	4111.4	4111.4	107	%			15:17:38
2	Y RADIAL	4772.7	4772.7	110.2	%			15:17:38
2	Al 396.153Radial†	49577.4	46380.2	48824	ug/L	48824	ppb	15:17:38
2	Ca 317.933Radial†	13595.3	12674.6	24887	ug/L	24887	ppb	15:17:38
2	Fe 238.204 Radial†	4500.4	4195.6	53324	ug/L	53324	ppb	15:17:38
2	K 766.490 Radial†	49426.2	43150.8	8015.4	ug/L	8015.4	ppb	15:17:38
2	Mg 279.077 IEC†	214.2	197.0	8058.5	ug/L	8058.5	ppb	15:17:58
2	Na 589.592 Radial†	459.7	1507.0	663.29	ug/L	663.29	ppb	15:17:38
2	Sr 421.552†	17788.3	16594.1	159.14	ug/L	159.14	ppb	15:17:38
2	Sc 361.383	697791.1	697791.1	101.19	%			15:19:01
2	Y 371.029	479354.4	479354.4	88.471	%			15:19:06
2	Ag 328.068†	-2724.0	-2791.9	1.2729	ug/L	1.2729	ppb	15:19:06
2	As 188.979†	-42.9	-19.6	22.840	ug/L	22.840	ppb	15:19:26
2	B 249.677†	910.3	1482.6	28.581	ug/L	28.581	ppb	15:19:06
2	Ba 233.527†	63062.0	62319.8	604.18	ug/L	604.18	ppb	15:19:06
2	Be 313.107†	-7941.7	-3325.1	3.9125	ug/L	3.9125	ppb	15:19:06
2	Cd 226.502†	216.5	427.4	0.7513	ug/L	0.7513	ppb	15:19:26
2	Co 228.616†	800.3	850.5	15.709	ug/L	15.709	ppb	15:19:26
2	Cr 267.716†	3629.4	3495.4	57.397	ug/L	57.397	ppb	15:19:26
2	Cu 324.752†	16977.9	11090.3	39.803	ug/L	39.803	ppb	15:19:06
2	Mn 257.610†	1445384.0	1427946.7	1852.6	ug/L	1852.6	ppb	15:19:01
2	Mo 202.031†	-12.6	-25.0	2.0373	ug/L	2.0373	ppb	15:19:26
2	Ni 231.604†	1341.5	1251.1	40.784	ug/L	40.784	ppb	15:19:26

2	P 214.914†	2770.4	2519.4	1572.1 ug/L	1572.1 ppb	15:19:26
2	Pb 220.353†	285.4	349.0	62.310 ug/L	62.310 ppb	15:19:26
2	S 181.975 Axial†	770.5	721.2	1074.5 ug/L	1074.5 ppb	15:19:26
2	Sb 206.836†	56.8	24.4	-0.0109 ug/L	-0.0109 ppb	15:19:26
2	Se 196.026†	-228.6	-203.8	4.0326 ug/L	4.0326 ppb	15:19:26
2	Si 251.611†	755224.2	745849.0	27305 ug/L	27305 ppb	15:19:01
2	Sn 189.927†	-135.9	-138.4	-27.054 ug/L	-27.054 ppb	15:19:26
2	Ti 334.940†	1289227.1	1275492.1	2317.6 ug/L	2317.6 ppb	15:19:01
2	Tl 190.801†	-105.6	-66.4	2.2035 ug/L	2.2035 ppb	15:19:26
2	U 409.014†	-4413.5	-1955.1	-81.503 ug/L	-81.503 ppb	15:19:06
2	V 292.402†	10780.4	12370.0	98.789 ug/L	98.789 ppb	15:19:06
2	Zn 213.857†	18450.8	17569.3	192.67 ug/L	192.67 ppb	15:19:06
2	SiO2†	769354.7	759770.8	59988 ug/L	59988 ppb	15:20:09
3	Sc Radial	4122.2	4122.2	107 %		15:18:03
3	Y RADIAL	4766.7	4766.7	110.0 %		15:18:03
3	Al 396.153Radial†	49757.6	46427.1	48873 ug/L	48873 ppb	15:18:03
3	Ca 317.933Radial†	13623.1	12667.3	24873 ug/L	24873 ppb	15:18:03
3	Fe 238.204 Radial†	4495.5	4180.1	53128 ug/L	53128 ppb	15:18:03
3	K 766.490 Radial†	49294.9	42908.1	7970.3 ug/L	7970.3 ppb	15:18:03
3	Mg 279.077 IEC†	213.7	196.0	8018.4 ug/L	8018.4 ppb	15:18:23
3	Na 589.592 Radial†	456.5	1502.9	661.48 ug/L	661.48 ppb	15:18:03
3	Sr 421.552†	17662.8	16433.9	157.61 ug/L	157.61 ppb	15:18:03
3	Sc 361.383	711344.5	711344.5	103.16 %		15:19:32
3	Y 371.029	479652.7	479652.7	88.526 %		15:19:37
3	Ag 328.068†	-2843.6	-2856.5	0.8508 ug/L	0.8508 ppb	15:19:37
3	As 188.979†	-46.5	-22.3	21.426 ug/L	21.426 ppb	15:19:57
3	B 249.677†	849.7	1406.7	26.704 ug/L	26.704 ppb	15:19:37
3	Ba 233.527†	63374.8	61435.7	595.63 ug/L	595.63 ppb	15:19:37
3	Be 313.107†	-7935.1	-3169.2	3.9599 ug/L	3.9599 ppb	15:19:37
3	Cd 226.502†	230.6	437.0	0.9115 ug/L	0.9115 ppb	15:19:57
3	Co 228.616†	814.1	848.9	15.683 ug/L	15.683 ppb	15:19:57
3	Cr 267.716†	3640.9	3438.3	56.531 ug/L	56.531 ppb	15:19:57
3	Cu 324.752†	16807.1	10605.0	38.177 ug/L	38.177 ppb	15:19:37
3	Mn 257.610†	1465775.9	1420499.4	1842.9 ug/L	1842.9 ppb	15:19:32
3	Mo 202.031†	-14.9	-27.0	1.8306 ug/L	1.8306 ppb	15:19:57
3	Ni 231.604†	1351.2	1235.2	40.266 ug/L	40.266 ppb	15:19:57
3	P 214.914†	2780.2	2476.7	1545.2 ug/L	1545.2 ppb	15:19:57
3	Pb 220.353†	302.4	360.1	64.087 ug/L	64.087 ppb	15:19:57
3	S 181.975 Axial†	786.5	722.2	1075.9 ug/L	1075.9 ppb	15:19:57
3	Sb 206.836†	49.0	15.7	-3.4635 ug/L	-3.4635 ppb	15:19:57
3	Se 196.026†	-235.4	-206.1	1.8785 ug/L	1.8785 ppb	15:19:57
3	Si 251.611†	767495.3	743524.5	27220 ug/L	27220 ppb	15:19:32
3	Sn 189.927†	-141.0	-140.8	-27.610 ug/L	-27.610 ppb	15:19:57
3	Ti 334.940†	1310352.4	1271696.0	2310.7 ug/L	2310.7 ppb	15:19:32
3	Tl 190.801†	-101.6	-60.5	4.3609 ug/L	4.3609 ppb	15:19:57
3	U 409.014†	-4577.3	-2030.8	-84.396 ug/L	-84.396 ppb	15:19:37
3	V 292.402†	10769.1	12156.1	96.930 ug/L	96.930 ppb	15:19:37
3	Zn 213.857†	18512.8	17282.0	189.42 ug/L	189.42 ppb	15:19:37
3	SiO2†	773044.4	748861.3	59127 ug/L	59127 ppb	15:20:15

Mean Data: 248374004|960819|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	703995.0	102.09	%	0.993				0.97%
Sc Radial	4140.3	108	%	1.1				0.99%
Y 371.029	479309.9	88.463	%	0.0678				0.08%
Y RADIAL	4801.7	110.8	%	1.28				1.16%
Ag 328.068†	-2837.5	0.9192	ug/L	0.32492	0.9192	ppb	0.32492	35.35%
Al 396.153Radial†	46075.0	48503	ug/L	599.6	48503	ppb	599.6	1.24%
As 188.979†	-21.5	21.825	ug/L	0.8849	21.825	ppb	0.8849	4.05%
B 249.677†	1449.7	27.808	ug/L	0.9813	27.808	ppb	0.9813	3.53%
Ba 233.527†	62027.3	601.35	ug/L	4.950	601.35	ppb	4.950	0.82%
Be 313.107†	-3261.6	3.9323	ug/L	0.02461	3.9323	ppb	0.02461	0.63%
Ca 317.933Radial†	12603.1	24747	ug/L	231.0	24747	ppb	231.0	0.93%
Cd 226.502†	431.7	0.8486	ug/L	0.08540	0.8486	ppb	0.08540	10.06%
Co 228.616†	853.4	15.788	ug/L	0.1602	15.788	ppb	0.1602	1.01%
Cr 267.716†	3466.3	56.931	ug/L	0.4363	56.931	ppb	0.4363	0.77%
Cu 324.752†	10897.2	39.143	ug/L	0.8547	39.143	ppb	0.8547	2.18%
Fe 238.204 Radial†	4169.5	52994	ug/L	414.6	52994	ppb	414.6	0.78%
K 766.490 Radial†	42766.3	7943.9	ug/L	87.65	7943.9	ppb	87.65	1.10%

Mg 279.077 IEC†	195.0	7978.4	ug/L	105.88	7978.4	ppb	105.88	1.33%
Mn 257.610†	1425644.3	1849.6	ug/L	5.76	1849.6	ppb	5.76	0.31%
Mo 202.031†	-32.9	1.2477	ug/L	1.19317	1.2477	ppb	1.19317	95.63%
Na 589.592 Radial†	1494.2	657.66	ug/L	8.230	657.66	ppb	8.230	1.25%
Ni 231.604†	1230.6	40.115	ug/L	0.7552	40.115	ppb	0.7552	1.88%
P 214.914†	2491.7	1554.7	ug/L	15.08	1554.7	ppb	15.08	0.97%
Pb 220.353†	351.3	62.617	ug/L	1.3435	62.617	ppb	1.3435	2.15%
S 181.975 Axial†	719.4	1071.8	ug/L	5.91	1071.8	ppb	5.91	0.55%
Sb 206.836†	18.2	-2.4920	ug/L	2.16548	-2.4920	ppb	2.16548	86.90%
Se 196.026†	-200.8	5.3407	ug/L	4.26922	5.3407	ppb	4.26922	79.94%
Si 251.611†	745242.7	27283	ug/L	55.3	27283	ppb	55.3	0.20%
Sn 189.927†	-137.8	-26.936	ug/L	0.7394	-26.936	ppb	0.7394	2.75%
Sr 421.552†	16410.4	157.38	ug/L	1.884	157.38	ppb	1.884	1.20%
Ti 334.940†	1274061.7	2315.0	ug/L	3.74	2315.0	ppb	3.74	0.16%
Tl 190.801†	-64.9	2.7594	ug/L	1.40838	2.7594	ppb	1.40838	51.04%
U 409.014†	-1997.8	-83.108	ug/L	1.4721	-83.108	ppb	1.4721	1.77%
V 292.402†	12269.2	97.935	ug/L	0.9386	97.935	ppb	0.9386	0.96%
Zn 213.857†	17477.8	191.68	ug/L	1.961	191.68	ppb	1.961	1.02%
SiO2†	755034.2	59614	ug/L	441.7	59614	ppb	441.7	0.74%

Sequence No.: 15
Sample ID: 248374005|960819|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 4/1/2010 15:22:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248374005|960819|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4086.9	4086.9	106	%			15:24:20
1	Y RADIAL	5544.1	5544.1	128.0	%			15:24:20
1	Al 396.153Radial†	52501.9	49405.0	52008	ug/L	52008	ppb	15:24:20
1	Ca 317.933Radial†	10966.0	10281.2	20188	ug/L	20188	ppb	15:24:20
1	Fe 238.204 Radial†	8038.1	7543.7	95878	ug/L	95878	ppb	15:24:20
1	K 766.490 Radial†	60231.4	53576.9	9955.2	ug/L	9955.2	ppb	15:24:20
1	Mg 279.077 IEC†	282.5	262.3	10703	ug/L	10703	ppb	15:24:40
1	Na 589.592 Radial†	434.0	1485.4	653.78	ug/L	653.78	ppb	15:24:20
1	Sr 421.552†	15824.6	14849.4	142.43	ug/L	142.43	ppb	15:24:20
1	Sc 361.383	711769.6	711769.6	103.22	%			15:25:38
1	Y 371.029	683294.0	683294.0	126.11	%			15:25:38
1	Ag 328.068†	-4372.9	-4336.5	6.2292	ug/L	6.2292	ppb	15:25:43
1	As 188.979†	-56.4	-31.8	36.405	ug/L	36.405	ppb	15:26:03
1	B 249.677†	1367.2	1907.6	32.337	ug/L	32.337	ppb	15:25:43
1	Ba 233.527†	60657.6	58766.4	571.18	ug/L	571.18	ppb	15:25:43
1	Be 313.107†	-6739.5	-2006.2	6.9715	ug/L	6.9715	ppb	15:25:43
1	Cd 226.502†	504.5	702.3	0.3511	ug/L	0.3511	ppb	15:26:03
1	Co 228.616†	1227.5	1248.9	22.608	ug/L	22.608	ppb	15:26:03
1	Cr 267.716†	5391.8	5132.4	86.159	ug/L	86.159	ppb	15:26:03
1	Cu 324.752†	19000.9	12720.8	47.591	ug/L	47.591	ppb	15:25:43
1	Mn 257.610†	2933781.1	2841906.3	3686.3	ug/L	3686.3	ppb	15:25:38
1	Mo 202.031†	2.9	-9.6	6.7566	ug/L	6.7566	ppb	15:26:03
1	Ni 231.604†	2027.4	1889.5	61.596	ug/L	61.596	ppb	15:26:03
1	P 214.914†	2639.1	2338.3	1421.9	ug/L	1421.9	ppb	15:26:03
1	Pb 220.353†	521.6	572.3	94.033	ug/L	94.033	ppb	15:26:03
1	S 181.975 Axial†	827.1	761.1	1133.8	ug/L	1133.8	ppb	15:26:03
1	Sb 206.836†	62.9	29.2	-1.9873	ug/L	-1.9873	ppb	15:26:03
1	Se 196.026†	-394.4	-360.0	2.1700	ug/L	2.1700	ppb	15:26:03
1	Si 251.611†	1003101.2	971343.5	35560	ug/L	35560	ppb	15:25:38
1	Sn 189.927†	-79.6	-81.2	-14.480	ug/L	-14.480	ppb	15:26:03
1	Ti 334.940†	1947912.9	1888628.6	3429.6	ug/L	3429.6	ppb	15:25:38
1	Tl 190.801†	-155.6	-112.8	2.2294	ug/L	2.2294	ppb	15:26:03
1	U 409.014†	-9594.1	-6888.6	-276.44	ug/L	-276.44	ppb	15:25:38
1	V 292.402†	13532.9	14827.6	112.78	ug/L	112.78	ppb	15:25:43
1	Zn 213.857†	40944.5	39003.9	431.34	ug/L	431.34	ppb	15:25:43
1	SiO2†	992922.8	961439.6	75911	ug/L	75911	ppb	15:27:11
2	Sc Radial	3966.6	3966.6	103	%			15:24:45
2	Y RADIAL	5393.4	5393.4	124.5	%			15:24:45
2	Al 396.153Radial†	51472.0	49903.8	52533	ug/L	52533	ppb	15:24:45
2	Ca 317.933Radial†	10751.1	10385.6	20393	ug/L	20393	ppb	15:24:45
2	Fe 238.204 Radial†	7820.9	7562.4	96116	ug/L	96116	ppb	15:24:45
2	K 766.490 Radial†	58848.9	53954.7	10025	ug/L	10025	ppb	15:24:45
2	Mg 279.077 IEC†	278.1	266.2	10862	ug/L	10862	ppb	15:25:05
2	Na 589.592 Radial†	382.4	1447.9	637.28	ug/L	637.28	ppb	15:24:45
2	Sr 421.552†	15389.5	14879.2	142.71	ug/L	142.71	ppb	15:24:45
2	Sc 361.383	709253.1	709253.1	102.85	%			15:26:09
2	Y 371.029	681586.2	681586.2	125.80	%			15:26:09
2	Ag 328.068†	-4254.9	-4236.8	6.8504	ug/L	6.8504	ppb	15:26:14
2	As 188.979†	-52.6	-28.3	38.165	ug/L	38.165	ppb	15:26:34
2	B 249.677†	1264.5	1812.5	29.902	ug/L	29.902	ppb	15:26:14
2	Ba 233.527†	60135.2	58467.0	568.29	ug/L	568.29	ppb	15:26:14
2	Be 313.107†	-6925.4	-2210.1	6.8869	ug/L	6.8869	ppb	15:26:14
2	Cd 226.502†	517.2	716.3	0.5306	ug/L	0.5306	ppb	15:26:34
2	Co 228.616†	1245.7	1270.8	23.151	ug/L	23.151	ppb	15:26:34
2	Cr 267.716†	5474.2	5231.1	87.642	ug/L	87.642	ppb	15:26:34
2	Cu 324.752†	18873.8	12662.5	47.413	ug/L	47.413	ppb	15:26:14
2	Mn 257.610†	2926072.5	2844496.6	3689.6	ug/L	3689.6	ppb	15:26:09
2	Mo 202.031†	15.9	3.0	7.9951	ug/L	7.9951	ppb	15:26:34
2	Ni 231.604†	2054.1	1922.5	62.672	ug/L	62.672	ppb	15:26:34

2	P 214.914†	2648.2	2356.3	1433.4	ug/L	1433.4 ppb	15:26:34
2	Pb 220.353†	529.9	582.2	95.707	ug/L	95.707 ppb	15:26:34
2	S 181.975 Axial†	828.4	765.2	1139.9	ug/L	1139.9 ppb	15:26:34
2	Sb 206.836†	57.9	24.6	-3.8114	ug/L	-3.8114 ppb	15:26:34
2	Se 196.026†	-410.7	-377.3	-9.8322	ug/L	-9.8322 ppb	15:26:34
2	Si 251.611†	1000129.2	971902.1	35580	ug/L	35580 ppb	15:26:09
2	Sn 189.927†	-70.8	-73.0	-12.541	ug/L	-12.541 ppb	15:26:34
2	Ti 334.940†	1940462.1	1888080.6	3428.6	ug/L	3428.6 ppb	15:26:09
2	Tl 190.801†	-169.8	-127.1	-3.2636	ug/L	-3.2636 ppb	15:26:34
2	U 409.014†	-9739.9	-7063.3	-283.20	ug/L	-283.20 ppb	15:26:09
2	V 292.402†	13349.7	14696.0	111.59	ug/L	111.59 ppb	15:26:14
2	Zn 213.857†	40377.5	38593.3	426.60	ug/L	426.60 ppb	15:26:14
2	SiO2†	996064.1	967907.2	76422	ug/L	76422 ppb	15:27:17
3	Sc Radial	4157.8	4157.8	108	%		15:25:10
3	Y RADIAL	5618.0	5618.0	129.7	%		15:25:10
3	Al 396.153Radial†	53430.7	49421.6	52026	ug/L	52026 ppb	15:25:10
3	Ca 317.933Radial†	11109.5	10238.1	20103	ug/L	20103 ppb	15:25:10
3	Fe 238.204 Radial†	8123.6	7493.8	95245	ug/L	95245 ppb	15:25:10
3	K 766.490 Radial†	61012.2	53333.1	9909.8	ug/L	9909.8 ppb	15:25:10
3	Mg 279.077 IEC†	281.7	257.1	10489	ug/L	10489 ppb	15:25:30
3	Na 589.592 Radial†	537.6	1574.1	692.82	ug/L	692.82 ppb	15:25:10
3	Sr 421.552†	16101.3	14851.5	142.45	ug/L	142.45 ppb	15:25:10
3	Sc 361.383	710404.7	710404.7	103.02	%		15:26:40
3	Y 371.029	683952.7	683952.7	126.23	%		15:26:40
3	Ag 328.068†	-4412.6	-4383.2	5.7843	ug/L	5.7843 ppb	15:26:45
3	As 188.979†	-51.1	-26.8	38.671	ug/L	38.671 ppb	15:27:05
3	B 249.677†	1300.6	1845.5	30.876	ug/L	30.876 ppb	15:26:45
3	Ba 233.527†	61117.3	59325.6	576.57	ug/L	576.57 ppb	15:26:45
3	Be 313.107†	-7205.4	-2471.0	6.7679	ug/L	6.7679 ppb	15:26:45
3	Cd 226.502†	528.4	726.3	0.7681	ug/L	0.7681 ppb	15:27:05
3	Co 228.616†	1226.8	1250.5	22.674	ug/L	22.674 ppb	15:27:05
3	Cr 267.716†	5437.3	5186.6	86.895	ug/L	86.895 ppb	15:27:05
3	Cu 324.752†	19284.3	13031.3	48.593	ug/L	48.593 ppb	15:26:45
3	Mn 257.610†	2928453.9	2842196.2	3686.6	ug/L	3686.6 ppb	15:26:40
3	Mo 202.031†	5.7	-6.9	6.9708	ug/L	6.9708 ppb	15:27:05
3	Ni 231.604†	2043.4	1908.8	62.226	ug/L	62.226 ppb	15:27:05
3	P 214.914†	2622.8	2327.5	1415.3	ug/L	1415.3 ppb	15:27:05
3	Pb 220.353†	537.6	588.8	96.696	ug/L	96.696 ppb	15:27:05
3	S 181.975 Axial†	831.7	767.1	1142.9	ug/L	1142.9 ppb	15:27:05
3	Sb 206.836†	58.1	24.6	-3.7788	ug/L	-3.7788 ppb	15:27:05
3	Se 196.026†	-398.7	-364.9	-3.1520	ug/L	-3.1520 ppb	15:27:05
3	Si 251.611†	1000952.9	971125.3	35552	ug/L	35552 ppb	15:26:40
3	Sn 189.927†	-76.9	-78.8	-13.940	ug/L	-13.940 ppb	15:27:05
3	Ti 334.940†	1940191.8	1884759.7	3422.6	ug/L	3422.6 ppb	15:26:40
3	Tl 190.801†	-153.7	-111.2	2.7965	ug/L	2.7965 ppb	15:27:05
3	U 409.014†	-9648.5	-6959.2	-279.10	ug/L	-279.10 ppb	15:26:40
3	V 292.402†	13636.4	14953.2	113.98	ug/L	113.98 ppb	15:26:45
3	Zn 213.857†	41228.4	39355.7	435.46	ug/L	435.46 ppb	15:26:45
3	SiO2†	1001284.9	971405.0	76698	ug/L	76698 ppb	15:27:23

Mean Data: 248374005|960819|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	710475.8	103.03	%	0.183				0.18%
Sc Radial	4070.4	106	%	2.5				2.37%
Y 371.029	682944.3	126.05	%	0.225				0.18%
Y RADIAL	5518.5	127.4	%	2.64				2.07%
Ag 328.068†	-4318.8	6.2879	ug/L	0.53547	6.2879	ppb	0.53547	8.52%
Al 396.153Radial†	49576.8	52189	ug/L	298.2	52189	ppb	298.2	0.57%
As 188.979†	-29.0	37.747	ug/L	1.1892	37.747	ppb	1.1892	3.15%
B 249.677†	1855.2	31.038	ug/L	1.2252	31.038	ppb	1.2252	3.95%
Ba 233.527†	58853.0	572.02	ug/L	4.201	572.02	ppb	4.201	0.73%
Be 313.107†	-2229.1	6.8754	ug/L	0.10231	6.8754	ppb	0.10231	1.49%
Ca 317.933Radial†	10301.7	20228	ug/L	148.9	20228	ppb	148.9	0.74%
Cd 226.502†	715.0	0.5499	ug/L	0.20919	0.5499	ppb	0.20919	38.04%
Co 228.616†	1256.7	22.811	ug/L	0.2961	22.811	ppb	0.2961	1.30%
Cr 267.716†	5183.4	86.899	ug/L	0.7411	86.899	ppb	0.7411	0.85%
Cu 324.752†	12804.9	47.865	ug/L	0.6361	47.865	ppb	0.6361	1.33%
Fe 238.204 Radial†	7533.3	95746	ug/L	450.3	95746	ppb	450.3	0.47%
K 766.490 Radial†	53621.6	9963.5	ug/L	58.21	9963.5	ppb	58.21	0.58%

Mg 279.077 IEC†	261.8	10685	ug/L	187.2	10685	ppb	187.2	1.75%
Mn 257.610†	2842866.4	3687.5	ug/L	1.86	3687.5	ppb	1.86	0.05%
Mo 202.031†	-4.5	7.2408	ug/L	0.66196	7.2408	ppb	0.66196	9.14%
Na 589.592 Radial†	1502.5	661.29	ug/L	28.523	661.29	ppb	28.523	4.31%
Ni 231.604†	1907.0	62.165	ug/L	0.5406	62.165	ppb	0.5406	0.87%
P 214.914†	2340.7	1423.5	ug/L	9.16	1423.5	ppb	9.16	0.64%
Pb 220.353†	581.1	95.479	ug/L	1.3458	95.479	ppb	1.3458	1.41%
S 181.975 Axial†	764.5	1138.8	ug/L	4.62	1138.8	ppb	4.62	0.41%
Sb 206.836†	26.2	-3.1925	ug/L	1.04382	-3.1925	ppb	1.04382	32.70%
Se 196.026†	-367.4	-3.6047	ug/L	6.01388	-3.6047	ppb	6.01388	166.83%
Si 251.611†	971457.0	35564	ug/L	14.7	35564	ppb	14.7	0.04%
Sn 189.927†	-77.7	-13.654	ug/L	1.0004	-13.654	ppb	1.0004	7.33%
Sr 421.552†	14860.0	142.53	ug/L	0.159	142.53	ppb	0.159	0.11%
Ti 334.940†	1887156.3	3426.9	ug/L	3.80	3426.9	ppb	3.80	0.11%
Tl 190.801†	-117.1	0.5874	ug/L	3.34712	0.5874	ppb	3.34712	569.77%
U 409.014†	-6970.4	-279.58	ug/L	3.406	-279.58	ppb	3.406	1.22%
V 292.402†	14825.6	112.78	ug/L	1.194	112.78	ppb	1.194	1.06%
Zn 213.857†	38984.3	431.13	ug/L	4.429	431.13	ppb	4.429	1.03%
SiO2†	966917.3	76344	ug/L	399.2	76344	ppb	399.2	0.52%

Sequence No.: 16
Sample ID: 248374006|960819|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 4/1/2010 15:29:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248374006|960819|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4043.1	4043.1	105	%			15:31:29
1	Y RADIAL	4855.3	4855.3	112.1	%			15:31:29
1	Al 396.153Radial†	58531.4	55663.1	58596	ug/L	58596	ppb	15:31:29
1	Ca 317.933Radial†	13264.8	12575.2	24692	ug/L	24692	ppb	15:31:29
1	Fe 238.204 Radial†	6932.1	6575.3	83570	ug/L	83570	ppb	15:31:29
1	K 766.490 Radial†	71956.1	65320.7	12138	ug/L	12138	ppb	15:31:29
1	Mg 279.077 IEC†	285.1	267.7	10939	ug/L	10939	ppb	15:31:49
1	Na 589.592 Radial†	184.8	1253.3	551.62	ug/L	551.62	ppb	15:31:29
1	Sr 421.552†	19733.7	18721.7	179.57	ug/L	179.57	ppb	15:31:29
1	Sc 361.383	707276.1	707276.1	102.57	%			15:32:46
1	Y 371.029	603371.3	603371.3	111.36	%			15:32:46
1	Ag 328.068†	-4679.9	-4662.7	0.5828	ug/L	0.5828	ppb	15:32:51
1	As 188.979†	-70.5	-45.9	27.923	ug/L	27.923	ppb	15:33:12
1	B 249.677†	880.1	1441.1	22.575	ug/L	22.575	ppb	15:32:51
1	Ba 233.527†	84489.9	82376.1	799.06	ug/L	799.06	ppb	15:32:51
1	Be 313.107†	-11514.5	-6703.3	5.4344	ug/L	5.4344	ppb	15:32:51
1	Cd 226.502†	436.0	638.6	0.7073	ug/L	0.7073	ppb	15:33:12
1	Co 228.616†	1555.9	1576.6	30.678	ug/L	30.678	ppb	15:33:12
1	Cr 267.716†	4927.2	4712.7	78.656	ug/L	78.656	ppb	15:33:12
1	Cu 324.752†	19464.1	13289.3	48.763	ug/L	48.763	ppb	15:32:51
1	Mn 257.610†	2196105.4	2140737.6	2777.8	ug/L	2777.8	ppb	15:32:46
1	Mo 202.031†	-27.7	-39.5	2.9857	ug/L	2.9857	ppb	15:33:12
1	Ni 231.604†	1606.4	1491.5	48.613	ug/L	48.613	ppb	15:33:12
1	P 214.914†	2765.9	2478.3	1522.4	ug/L	1522.4	ppb	15:33:12
1	Pb 220.353†	465.5	520.8	88.844	ug/L	88.844	ppb	15:33:12
1	S 181.975 Axial†	815.1	754.5	1122.7	ug/L	1122.7	ppb	15:33:12
1	Sb 206.836†	59.0	25.8	-4.1041	ug/L	-4.1041	ppb	15:33:12
1	Se 196.026†	-363.6	-332.4	-8.2450	ug/L	-8.2450	ppb	15:33:12
1	Si 251.611†	1000573.2	975053.0	35696	ug/L	35696	ppb	15:32:46
1	Sn 189.927†	-130.8	-131.6	-25.335	ug/L	-25.335	ppb	15:33:12
1	Ti 334.940†	2025197.2	1975970.1	3588.7	ug/L	3588.7	ppb	15:32:46
1	Tl 190.801†	-140.1	-98.7	4.5582	ug/L	4.5582	ppb	15:33:12
1	U 409.014†	-6177.9	-3616.9	-149.00	ug/L	-149.00	ppb	15:32:51
1	V 292.402†	16926.7	18219.8	144.51	ug/L	144.51	ppb	15:32:51
1	Zn 213.857†	26979.1	25639.8	280.40	ug/L	280.40	ppb	15:32:51
1	SiO2†	1005820.1	980126.2	77387	ug/L	77387	ppb	15:34:20
2	Sc Radial	4115.7	4115.7	107	%			15:31:54
2	Y RADIAL	4920.2	4920.2	113.6	%			15:31:54
2	Al 396.153Radial†	59698.9	55772.9	58712	ug/L	58712	ppb	15:31:54
2	Ca 317.933Radial†	13508.8	12580.9	24703	ug/L	24703	ppb	15:31:54
2	Fe 238.204 Radial†	7048.0	6567.4	83470	ug/L	83470	ppb	15:31:54
2	K 766.490 Radial†	73623.2	65671.8	12203	ug/L	12203	ppb	15:31:54
2	Mg 279.077 IEC†	291.9	269.2	11001	ug/L	11001	ppb	15:32:14
2	Na 589.592 Radial†	185.1	1250.5	550.37	ug/L	550.37	ppb	15:31:54
2	Sr 421.552†	19967.8	18609.9	178.50	ug/L	178.50	ppb	15:31:54
2	Sc 361.383	708958.1	708958.1	102.81	%			15:33:17
2	Y 371.029	605361.4	605361.4	111.73	%			15:33:17
2	Ag 328.068†	-4647.2	-4620.1	0.7862	ug/L	0.7862	ppb	15:33:23
2	As 188.979†	-63.4	-38.9	31.418	ug/L	31.418	ppb	15:33:43
2	B 249.677†	1020.5	1575.7	25.977	ug/L	25.977	ppb	15:33:23
2	Ba 233.527†	84043.6	81746.6	792.97	ug/L	792.97	ppb	15:33:23
2	Be 313.107†	-11475.7	-6638.9	5.4683	ug/L	5.4683	ppb	15:33:23
2	Cd 226.502†	438.6	640.0	0.7382	ug/L	0.7382	ppb	15:33:43
2	Co 228.616†	1546.0	1563.5	30.347	ug/L	30.347	ppb	15:33:43
2	Cr 267.716†	4871.7	4647.3	77.682	ug/L	77.682	ppb	15:33:43
2	Cu 324.752†	19417.7	13199.2	48.459	ug/L	48.459	ppb	15:33:23
2	Mn 257.610†	2199136.9	2138606.1	2775.0	ug/L	2775.0	ppb	15:33:17
2	Mo 202.031†	-12.5	-24.6	4.4065	ug/L	4.4065	ppb	15:33:43
2	Ni 231.604†	1598.6	1480.3	48.247	ug/L	48.247	ppb	15:33:43

2	P 214.914†	2752.9	2459.2	1510.4	ug/L	1510.4 ppb	15:33:43
2	Pb 220.353†	445.5	500.4	85.667	ug/L	85.667 ppb	15:33:43
2	S 181.975 Axial†	815.9	753.4	1121.0	ug/L	1121.0 ppb	15:33:43
2	Sb 206.836†	66.6	33.0	-1.1643	ug/L	-1.1643 ppb	15:33:43
2	Se 196.026†	-350.4	-318.7	1.6683	ug/L	1.6683 ppb	15:33:43
2	Si 251.611†	1003894.4	975969.0	35729	ug/L	35729 ppb	15:33:17
2	Sn 189.927†	-121.0	-121.8	-23.083	ug/L	-23.083 ppb	15:33:43
2	Ti 334.940†	2031994.8	1977897.2	3592.1	ug/L	3592.1 ppb	15:33:17
2	Tl 190.801†	-145.4	-103.4	2.7461	ug/L	2.7461 ppb	15:33:43
2	U 409.014†	-6287.8	-3709.5	-152.56	ug/L	-152.56 ppb	15:33:23
2	V 292.402†	16873.5	18128.9	143.74	ug/L	143.74 ppb	15:33:23
2	Zn 213.857†	26819.7	25422.3	277.93	ug/L	277.93 ppb	15:33:23
2	SiO2†	1010084.6	981947.5	77530	ug/L	77530 ppb	15:34:26
3	Sc Radial	4198.7	4198.7	109	%		15:32:19
3	Y RADIAL	5024.3	5024.3	116.0	%		15:32:19
3	Al 396.153Radial†	60648.7	55539.6	58466	ug/L	58466 ppb	15:32:19
3	Ca 317.933Radial†	13653.3	12463.7	24473	ug/L	24473 ppb	15:32:19
3	Fe 238.204 Radial†	7137.7	6519.4	82860	ug/L	82860 ppb	15:32:19
3	K 766.490 Radial†	74054.9	64708.0	12024	ug/L	12024 ppb	15:32:19
3	Mg 279.077 IEC†	292.3	264.2	10796	ug/L	10796 ppb	15:32:39
3	Na 589.592 Radial†	181.0	1243.3	547.23	ug/L	547.23 ppb	15:32:19
3	Sr 421.552†	20244.9	18494.8	177.40	ug/L	177.40 ppb	15:32:19
3	Sc 361.383	710428.4	710428.4	103.02	%		15:33:49
3	Y 371.029	606922.2	606922.2	112.01	%		15:33:49
3	Ag 328.068†	-4746.1	-4706.8	0.1216	ug/L	0.1216 ppb	15:33:54
3	As 188.979†	-62.3	-37.6	31.794	ug/L	31.794 ppb	15:34:14
3	B 249.677†	992.7	1546.6	25.343	ug/L	25.343 ppb	15:33:54
3	Ba 233.527†	84328.2	81853.6	793.99	ug/L	793.99 ppb	15:33:54
3	Be 313.107†	-11721.0	-6853.9	5.3600	ug/L	5.3600 ppb	15:33:54
3	Cd 226.502†	422.3	623.3	0.5580	ug/L	0.5580 ppb	15:34:14
3	Co 228.616†	1562.3	1576.1	30.688	ug/L	30.688 ppb	15:34:14
3	Cr 267.716†	4927.2	4691.4	78.266	ug/L	78.266 ppb	15:34:14
3	Cu 324.752†	19537.8	13276.7	48.683	ug/L	48.683 ppb	15:33:54
3	Mn 257.610†	2198400.2	2133464.2	2768.3	ug/L	2768.3 ppb	15:33:49
3	Mo 202.031†	-17.4	-29.4	3.8984	ug/L	3.8984 ppb	15:34:14
3	Ni 231.604†	1595.4	1473.9	48.038	ug/L	48.038 ppb	15:34:14
3	P 214.914†	2735.3	2436.5	1496.3	ug/L	1496.3 ppb	15:34:14
3	Pb 220.353†	465.4	518.8	88.558	ug/L	88.558 ppb	15:34:14
3	S 181.975 Axial†	797.9	734.3	1092.3	ug/L	1092.3 ppb	15:34:14
3	Sb 206.836†	67.6	33.9	-0.7415	ug/L	-0.7415 ppb	15:34:14
3	Se 196.026†	-347.9	-315.6	2.2949	ug/L	2.2949 ppb	15:34:14
3	Si 251.611†	1003571.6	973634.8	35644	ug/L	35644 ppb	15:33:49
3	Sn 189.927†	-111.8	-112.6	-21.011	ug/L	-21.011 ppb	15:34:14
3	Ti 334.940†	2030840.7	1972686.6	3582.7	ug/L	3582.7 ppb	15:33:49
3	Tl 190.801†	-137.8	-95.8	5.5569	ug/L	5.5569 ppb	15:34:14
3	U 409.014†	-6171.9	-3584.3	-147.67	ug/L	-147.67 ppb	15:33:54
3	V 292.402†	16985.0	18203.2	144.49	ug/L	144.49 ppb	15:33:54
3	Zn 213.857†	26935.8	25481.0	278.69	ug/L	278.69 ppb	15:33:54
3	SiO2†	1008289.3	978171.6	77232	ug/L	77232 ppb	15:34:32

Mean Data: 248374006|960819|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	708887.5	102.80	%	0.229				0.22%
Sc Radial	4119.2	107	%	2.0				1.89%
Y 371.029	605218.3	111.70	%	0.328				0.29%
Y RADIAL	4933.3	113.9	%	1.97				1.73%
Ag 328.068†	-4663.2	0.4969	ug/L	0.34054	0.4969	ppb	0.34054	68.54%
Al 396.153Radial†	55658.5	58591	ug/L	122.8	58591	ppb	122.8	0.21%
As 188.979†	-40.8	30.378	ug/L	2.1345	30.378	ppb	2.1345	7.03%
B 249.677†	1521.1	24.632	ug/L	1.8093	24.632	ppb	1.8093	7.35%
Ba 233.527†	81992.1	795.34	ug/L	3.262	795.34	ppb	3.262	0.41%
Be 313.107†	-6732.0	5.4209	ug/L	0.05540	5.4209	ppb	0.05540	1.02%
Ca 317.933Radial†	12539.9	24623	ug/L	129.8	24623	ppb	129.8	0.53%
Cd 226.502†	634.0	0.6678	ug/L	0.09636	0.6678	ppb	0.09636	14.43%
Co 228.616†	1572.1	30.571	ug/L	0.1943	30.571	ppb	0.1943	0.64%
Cr 267.716†	4683.8	78.201	ug/L	0.4904	78.201	ppb	0.4904	0.63%
Cu 324.752†	13255.1	48.635	ug/L	0.1572	48.635	ppb	0.1572	0.32%
Fe 238.204 Radial†	6554.0	83300	ug/L	384.7	83300	ppb	384.7	0.46%
K 766.490 Radial†	65233.5	12122	ug/L	90.7	12122	ppb	90.7	0.75%

Mg 279.077 IEC†	267.0	10912	ug/L	105.1	10912	ppb	105.1	0.96%
Mn 257.610†	2137602.6	2773.7	ug/L	4.87	2773.7	ppb	4.87	0.18%
Mo 202.031†	-31.2	3.7635	ug/L	0.71993	3.7635	ppb	0.71993	19.13%
Na 589.592 Radial†	1249.0	549.74	ug/L	2.261	549.74	ppb	2.261	0.41%
Ni 231.604†	1481.9	48.299	ug/L	0.2913	48.299	ppb	0.2913	0.60%
P 214.914†	2458.0	1509.7	ug/L	13.06	1509.7	ppb	13.06	0.86%
Pb 220.353†	513.3	87.690	ug/L	1.7571	87.690	ppb	1.7571	2.00%
S 181.975 Axial†	747.4	1112.0	ug/L	17.10	1112.0	ppb	17.10	1.54%
Sb 206.836†	30.9	-2.0033	ug/L	1.83157	-2.0033	ppb	1.83157	91.43%
Se 196.026†	-322.3	-1.4273	ug/L	5.91262	-1.4273	ppb	5.91262	414.25%
Si 251.611†	974885.6	35689	ug/L	43.1	35689	ppb	43.1	0.12%
Sn 189.927†	-122.0	-23.143	ug/L	2.1626	-23.143	ppb	2.1626	9.34%
Sr 421.552†	18608.8	178.49	ug/L	1.089	178.49	ppb	1.089	0.61%
Ti 334.940†	1975518.0	3587.8	ug/L	4.79	3587.8	ppb	4.79	0.13%
Tl 190.801†	-99.3	4.2871	ug/L	1.42490	4.2871	ppb	1.42490	33.24%
U 409.014†	-3636.9	-149.74	ug/L	2.527	-149.74	ppb	2.527	1.69%
V 292.402†	18183.9	144.25	ug/L	0.441	144.25	ppb	0.441	0.31%
Zn 213.857†	25514.4	279.01	ug/L	1.264	279.01	ppb	1.264	0.45%
SiO2†	980081.8	77383	ug/L	149.1	77383	ppb	149.1	0.19%

Sequence No.: 17
Sample ID: 248374007|960819|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 4/1/2010 15:36:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248374007|960819|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4151.7	4151.7	108	%			15:38:37
1	Y RADIAL	4887.8	4887.8	112.8	%			15:38:37
1	Al 396.153Radial†	49927.0	46254.0	48691	ug/L	48691	ppb	15:38:37
1	Ca 317.933Radial†	9158.2	8448.9	16590	ug/L	16590	ppb	15:38:37
1	Fe 238.204 Radial†	6089.9	5624.4	71485	ug/L	71485	ppb	15:38:37
1	K 766.490 Radial†	63292.0	55523.0	10319	ug/L	10319	ppb	15:38:37
1	Mg 279.077 IEC†	259.9	237.3	9698.2	ug/L	9698.2	ppb	15:38:57
1	Na 589.592 Radial†	317.0	1370.9	603.40	ug/L	603.40	ppb	15:38:37
1	Sr 421.552†	15398.0	14222.9	136.44	ug/L	136.44	ppb	15:38:37
1	Sc 361.383	707742.2	707742.2	102.63	%			15:39:55
1	Y 371.029	597302.5	597302.5	110.24	%			15:39:55
1	Ag 328.068†	-3875.4	-3875.9	1.1414	ug/L	1.1414	ppb	15:40:00
1	As 188.979†	-56.1	-31.8	27.667	ug/L	27.667	ppb	15:40:20
1	B 249.677†	430.7	1002.7	13.527	ug/L	13.527	ppb	15:40:00
1	Ba 233.527†	79308.4	77273.3	749.31	ug/L	749.31	ppb	15:40:00
1	Be 313.107†	-10123.1	-5340.1	4.8357	ug/L	4.8357	ppb	15:40:00
1	Cd 226.502†	345.5	550.1	0.6771	ug/L	0.6771	ppb	15:40:20
1	Co 228.616†	1248.2	1275.8	24.427	ug/L	24.427	ppb	15:40:20
1	Cr 267.716†	7332.6	7053.2	111.85	ug/L	111.85	ppb	15:40:00
1	Cu 324.752†	17041.6	10916.5	40.208	ug/L	40.208	ppb	15:40:00
1	Mn 257.610†	1959856.6	1909138.9	2477.0	ug/L	2477.0	ppb	15:39:55
1	Mo 202.031†	-6.9	-19.2	3.9034	ug/L	3.9034	ppb	15:40:20
1	Ni 231.604†	2138.5	2009.0	65.492	ug/L	65.492	ppb	15:40:20
1	P 214.914†	1841.8	1576.1	954.68	ug/L	954.68	ppb	15:40:20
1	Pb 220.353†	308.6	367.7	63.334	ug/L	63.334	ppb	15:40:20
1	S 181.975 Axial†	554.1	499.6	741.54	ug/L	741.54	ppb	15:40:20
1	Sb 206.836†	70.7	37.1	2.6988	ug/L	2.6988	ppb	15:40:20
1	Se 196.026†	-295.8	-266.2	6.0446	ug/L	6.0446	ppb	15:40:20
1	Si 251.611†	1000031.4	973882.8	35653	ug/L	35653	ppb	15:39:55
1	Sn 189.927†	-68.7	-71.0	-12.928	ug/L	-12.928	ppb	15:40:20
1	Ti 334.940†	1740262.8	1697044.4	3081.4	ug/L	3081.4	ppb	15:39:55
1	Tl 190.801†	-140.2	-98.6	-0.9519	ug/L	-0.9519	ppb	15:40:20
1	U 409.014†	-5584.1	-3034.4	-125.26	ug/L	-125.26	ppb	15:40:00
1	V 292.402†	13171.7	14550.2	114.49	ug/L	114.49	ppb	15:40:00
1	Zn 213.857†	22933.3	21680.5	236.82	ug/L	236.82	ppb	15:40:00
1	SiO2†	995945.0	969858.6	76576	ug/L	76576	ppb	15:41:28
2	Sc Radial	4127.1	4127.1	108	%			15:39:02
2	Y RADIAL	4892.4	4892.4	112.9	%			15:39:02
2	Al 396.153Radial†	49973.8	46573.4	49027	ug/L	49027	ppb	15:39:02
2	Ca 317.933Radial†	9153.9	8495.4	16681	ug/L	16681	ppb	15:39:02
2	Fe 238.204 Radial†	6071.5	5641.0	71695	ug/L	71695	ppb	15:39:02
2	K 766.490 Radial†	63208.9	55795.4	10369	ug/L	10369	ppb	15:39:02
2	Mg 279.077 IEC†	260.2	239.0	9768.4	ug/L	9768.4	ppb	15:39:22
2	Na 589.592 Radial†	256.7	1316.6	579.47	ug/L	579.47	ppb	15:39:02
2	Sr 421.552†	15238.4	14159.5	135.83	ug/L	135.83	ppb	15:39:02
2	Sc 361.383	703385.3	703385.3	102.00	%			15:40:26
2	Y 371.029	594505.9	594505.9	109.72	%			15:40:26
2	Ag 328.068†	-3824.4	-3849.3	1.3679	ug/L	1.3679	ppb	15:40:31
2	As 188.979†	-57.3	-33.4	26.834	ug/L	26.834	ppb	15:40:51
2	B 249.677†	363.5	939.4	11.900	ug/L	11.900	ppb	15:40:31
2	Ba 233.527†	80153.3	78580.2	761.95	ug/L	761.95	ppb	15:40:31
2	Be 313.107†	-10482.2	-5753.3	4.6424	ug/L	4.6424	ppb	15:40:31
2	Cd 226.502†	333.1	540.0	0.5086	ug/L	0.5086	ppb	15:40:51
2	Co 228.616†	1253.8	1288.9	24.776	ug/L	24.776	ppb	15:40:51
2	Cr 267.716†	7484.2	7246.1	114.72	ug/L	114.72	ppb	15:40:31
2	Cu 324.752†	17323.3	11295.6	41.484	ug/L	41.484	ppb	15:40:31
2	Mn 257.610†	1938241.0	1899775.4	2464.9	ug/L	2464.9	ppb	15:40:26
2	Mo 202.031†	-4.5	-16.8	4.1465	ug/L	4.1465	ppb	15:40:51
2	Ni 231.604†	2168.8	2051.6	66.882	ug/L	66.882	ppb	15:40:51

2	P 214.914†	1850.2	1595.4	966.69	ug/L	966.69 ppb	15:40:51
2	Pb 220.353†	310.4	371.4	63.979	ug/L	63.979 ppb	15:40:51
2	S 181.975 Axial†	552.6	501.6	744.42	ug/L	744.42 ppb	15:40:51
2	Sb 206.836†	57.2	24.4	-2.3449	ug/L	-2.3449 ppb	15:40:51
2	Se 196.026†	-298.8	-270.8	3.2549	ug/L	3.2549 ppb	15:40:51
2	Si 251.611†	988038.2	968160.3	35443	ug/L	35443 ppb	15:40:26
2	Sn 189.927†	-59.6	-62.5	-10.961	ug/L	-10.961 ppb	15:40:51
2	Ti 334.940†	1723007.3	1690630.3	3069.8	ug/L	3069.8 ppb	15:40:26
2	Tl 190.801†	-135.9	-95.3	0.1685	ug/L	0.1685 ppb	15:40:51
2	U 409.014†	-5658.8	-3141.3	-129.41	ug/L	-129.41 ppb	15:40:31
2	V 292.402†	13454.4	14906.9	117.62	ug/L	117.62 ppb	15:40:31
2	Zn 213.857†	23360.0	22237.2	243.15	ug/L	243.15 ppb	15:40:31
2	SiO2†	977452.6	957739.8	75619	ug/L	75619 ppb	15:41:34
3	Sc Radial	4060.1	4060.1	106	%		15:39:27
3	Y RADIAL	4844.7	4844.7	111.8	%		15:39:27
3	Al 396.153Radial†	49277.2	46681.1	49141	ug/L	49141 ppb	15:39:27
3	Ca 317.933Radial†	9040.5	8528.6	16746	ug/L	16746 ppb	15:39:27
3	Fe 238.204 Radial†	5936.3	5606.2	71254	ug/L	71254 ppb	15:39:27
3	K 766.490 Radial†	62353.8	55956.2	10399	ug/L	10399 ppb	15:39:27
3	Mg 279.077 IEC†	262.7	245.4	10033	ug/L	10033 ppb	15:39:47
3	Na 589.592 Radial†	237.8	1302.6	573.32	ug/L	573.32 ppb	15:39:27
3	Sr 421.552†	15074.2	14237.9	136.58	ug/L	136.58 ppb	15:39:27
3	Sc 361.383	703508.6	703508.6	102.02	%		15:40:57
3	Y 371.029	593698.1	593698.1	109.57	%		15:40:57
3	Ag 328.068†	-3938.5	-3960.4	0.6192	ug/L	0.6192 ppb	15:41:02
3	As 188.979†	-67.2	-43.1	22.021	ug/L	22.021 ppb	15:41:22
3	B 249.677†	461.0	1034.9	14.374	ug/L	14.374 ppb	15:41:02
3	Ba 233.527†	80537.0	78942.5	765.44	ug/L	765.44 ppb	15:41:02
3	Be 313.107†	-10703.2	-5968.2	4.5713	ug/L	4.5713 ppb	15:41:02
3	Cd 226.502†	359.7	566.0	0.9329	ug/L	0.9329 ppb	15:41:22
3	Co 228.616†	1268.4	1303.0	25.118	ug/L	25.118 ppb	15:41:22
3	Cr 267.716†	7494.0	7254.4	114.80	ug/L	114.80 ppb	15:41:02
3	Cu 324.752†	17448.0	11414.7	41.857	ug/L	41.857 ppb	15:41:02
3	Mn 257.610†	1944927.9	1905996.9	2472.9	ug/L	2472.9 ppb	15:40:57
3	Mo 202.031†	-7.7	-20.0	3.8061	ug/L	3.8061 ppb	15:41:22
3	Ni 231.604†	2127.8	2011.0	65.557	ug/L	65.557 ppb	15:41:22
3	P 214.914†	1841.6	1586.7	961.42	ug/L	961.42 ppb	15:41:22
3	Pb 220.353†	311.6	372.5	64.226	ug/L	64.226 ppb	15:41:22
3	S 181.975 Axial†	551.8	500.6	742.99	ug/L	742.99 ppb	15:41:22
3	Sb 206.836†	67.3	34.3	1.5330	ug/L	1.5330 ppb	15:41:22
3	Se 196.026†	-299.9	-271.9	1.3103	ug/L	1.3103 ppb	15:41:22
3	Si 251.611†	992699.3	972559.3	35604	ug/L	35604 ppb	15:40:57
3	Sn 189.927†	-75.6	-78.3	-14.563	ug/L	-14.563 ppb	15:41:22
3	Ti 334.940†	1727200.0	1694443.9	3076.7	ug/L	3076.7 ppb	15:40:57
3	Tl 190.801†	-129.2	-88.7	2.7971	ug/L	2.7971 ppb	15:41:22
3	U 409.014†	-5629.3	-3111.4	-128.21	ug/L	-128.21 ppb	15:41:02
3	V 292.402†	13516.3	14965.3	118.19	ug/L	118.19 ppb	15:41:02
3	Zn 213.857†	23494.6	22365.1	244.69	ug/L	244.69 ppb	15:41:02
3	SiO2†	993818.8	973614.1	76873	ug/L	76873 ppb	15:41:40

Mean Data: 248374007|960819|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	704878.7	102.22	%	0.360				0.35%
Sc Radial	4113.0	107	%	1.2				1.15%
Y 371.029	595168.8	109.85	%	0.349				0.32%
Y RADIAL	4875.0	112.5	%	0.61				0.54%
Ag 328.068†	-3895.2	1.0428	ug/L	0.38393	1.0428	ppb	0.38393	36.82%
Al 396.153Radial†	46502.8	48953	ug/L	233.8	48953	ppb	233.8	0.48%
As 188.979†	-36.1	25.508	ug/L	3.0482	25.508	ppb	3.0482	11.95%
B 249.677†	992.3	13.267	ug/L	1.2574	13.267	ppb	1.2574	9.48%
Ba 233.527†	78265.3	758.90	ug/L	8.489	758.90	ppb	8.489	1.12%
Be 313.107†	-5687.2	4.6831	ug/L	0.13681	4.6831	ppb	0.13681	2.92%
Ca 317.933Radial†	8491.0	16672	ug/L	78.6	16672	ppb	78.6	0.47%
Cd 226.502†	552.0	0.7062	ug/L	0.21366	0.7062	ppb	0.21366	30.25%
Co 228.616†	1289.2	24.774	ug/L	0.3455	24.774	ppb	0.3455	1.39%
Cr 267.716†	7184.6	113.79	ug/L	1.682	113.79	ppb	1.682	1.48%
Cu 324.752†	11208.9	41.183	ug/L	0.8646	41.183	ppb	0.8646	2.10%
Fe 238.204 Radial†	5623.9	71478	ug/L	220.9	71478	ppb	220.9	0.31%
K 766.490 Radial†	55758.2	10363	ug/L	40.7	10363	ppb	40.7	0.39%

Mg 279.077 IEC†	240.5	9833.2	ug/L	176.55	9833.2	ppb	176.55	1.80%
Mn 257.610†	1904970.4	2471.6	ug/L	6.15	2471.6	ppb	6.15	0.25%
Mo 202.031†	-18.7	3.9520	ug/L	0.17531	3.9520	ppb	0.17531	4.44%
Na 589.592 Radial†	1330.0	585.40	ug/L	15.892	585.40	ppb	15.892	2.71%
Ni 231.604†	2023.9	65.977	ug/L	0.7845	65.977	ppb	0.7845	1.19%
P 214.914†	1586.0	960.93	ug/L	6.018	960.93	ppb	6.018	0.63%
Pb 220.353†	370.5	63.847	ug/L	0.4605	63.847	ppb	0.4605	0.72%
S 181.975 Axial†	500.6	742.98	ug/L	1.437	742.98	ppb	1.437	0.19%
Sb 206.836†	31.9	0.6289	ug/L	2.64060	0.6289	ppb	2.64060	419.84%
Se 196.026†	-269.6	3.5366	ug/L	2.37968	3.5366	ppb	2.37968	67.29%
Si 251.611†	971534.1	35567	ug/L	109.7	35567	ppb	109.7	0.31%
Sn 189.927†	-70.6	-12.817	ug/L	1.8034	-12.817	ppb	1.8034	14.07%
Sr 421.552†	14206.8	136.28	ug/L	0.399	136.28	ppb	0.399	0.29%
Ti 334.940†	1694039.5	3076.0	ug/L	5.85	3076.0	ppb	5.85	0.19%
Tl 190.801†	-94.2	0.6712	ug/L	1.92439	0.6712	ppb	1.92439	286.71%
U 409.014†	-3095.7	-127.63	ug/L	2.135	-127.63	ppb	2.135	1.67%
V 292.402†	14807.5	116.77	ug/L	1.989	116.77	ppb	1.989	1.70%
Zn 213.857†	22094.3	241.55	ug/L	4.168	241.55	ppb	4.168	1.73%
SiO2†	967070.8	76356	ug/L	655.0	76356	ppb	655.0	0.86%

Sequence No.: 18
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 4/1/2010 15:43:52
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	3676.1	3676.1	95.8	%			15:46:03
1	Y RADIAL	4105.0	4105.0	94.76	%			15:45:43
1	Al 396.153Radial†	4521.6	4813.8	5043.9	ug/L	5043.9	ppb	15:45:43
1	Ca 317.933Radial†	2573.7	2668.9	5240.5	ug/L	5240.5	ppb	15:46:03
1	Fe 238.204 Radial†	385.7	396.5	5055.0	ug/L	5055.0	ppb	15:46:03
1	K 766.490 Radial†	29178.5	27472.8	5102.8	ug/L	5102.8	ppb	15:45:43
1	Mg 279.077 IEC†	123.4	125.9	5184.5	ug/L	5184.5	ppb	15:46:03
1	Na 589.592 Radial†	20073.7	22039.1	9700.2	ug/L	9700.2	ppb	15:45:43
1	Sr 421.552†	47534.0	49621.9	476.41	ug/L	476.41	ppb	15:45:43
1	Sc 361.383	697239.8	697239.8	101.11	%			15:47:01
1	Y 371.029	465465.6	465465.6	85.907	%			15:47:06
1	Ag 328.068†	90259.8	89169.3	494.33	ug/L	494.33	ppb	15:47:06
1	As 188.979†	958.6	970.9	484.98	ug/L	484.98	ppb	15:47:26
1	B 249.677†	18825.7	19202.2	480.85	ug/L	480.85	ppb	15:47:06
1	Ba 233.527†	51288.0	50724.4	491.48	ug/L	491.48	ppb	15:47:06
1	Be 313.107†	1235632.2	1226594.5	496.50	ug/L	496.50	ppb	15:47:01
1	Cd 226.502†	33752.1	33595.1	491.04	ug/L	491.04	ppb	15:47:06
1	Co 228.616†	20520.0	20354.5	504.23	ug/L	504.23	ppb	15:47:06
1	Cr 267.716†	33528.1	33068.8	488.85	ug/L	488.85	ppb	15:47:06
1	Cu 324.752†	153998.4	146620.3	488.35	ug/L	488.35	ppb	15:47:06
1	Mn 257.610†	389371.9	384653.6	498.00	ug/L	498.00	ppb	15:47:01
1	Mo 202.031†	5122.6	5053.9	485.92	ug/L	485.92	ppb	15:47:26
1	Ni 231.604†	15574.3	15328.7	499.54	ug/L	499.54	ppb	15:47:06
1	P 214.914†	4069.7	3806.6	2338.1	ug/L	2338.1	ppb	15:47:26
1	Pb 220.353†	3048.0	3081.5	486.49	ug/L	486.49	ppb	15:47:26
1	S 181.975 Axial†	698.2	650.3	976.19	ug/L	976.19	ppb	15:47:26
1	Sb 206.836†	1267.8	1222.1	506.44	ug/L	506.44	ppb	15:47:26
1	Se 196.026†	638.5	653.6	501.04	ug/L	501.04	ppb	15:47:26
1	Si 251.611†	69089.7	67834.9	2477.4	ug/L	2477.4	ppb	15:47:06
1	Sn 189.927†	2164.3	2136.4	491.74	ug/L	491.74	ppb	15:47:26
1	Ti 334.940†	273336.6	271758.2	493.11	ug/L	493.11	ppb	15:47:06
1	Tl 190.801†	1245.5	1269.8	491.83	ug/L	491.83	ppb	15:47:26
1	U 409.014†	10172.2	12467.1	478.56	ug/L	478.56	ppb	15:47:06
1	V 292.402†	54123.3	55245.7	493.46	ug/L	493.46	ppb	15:47:06
1	Zn 213.857†	44204.3	43054.6	487.87	ug/L	487.87	ppb	15:47:06
1	SiO2†	69945.5	68638.7	5406.2	ug/L	5406.2	ppb	15:48:33
2	Sc Radial	3844.3	3844.3	100	%			15:46:28
2	Y RADIAL	4130.9	4130.9	95.36	%			15:46:08
2	Al 396.153Radial†	4493.9	4579.5	4796.6	ug/L	4796.6	ppb	15:46:08
2	Ca 317.933Radial†	2667.9	2645.3	5194.1	ug/L	5194.1	ppb	15:46:28
2	Fe 238.204 Radial†	396.4	389.7	4967.8	ug/L	4967.8	ppb	15:46:28
2	K 766.490 Radial†	29184.1	26145.3	4856.1	ug/L	4856.1	ppb	15:46:08
2	Mg 279.077 IEC†	131.5	128.2	5282.6	ug/L	5282.6	ppb	15:46:28
2	Na 589.592 Radial†	19795.5	20844.1	9174.2	ug/L	9174.2	ppb	15:46:08
2	Sr 421.552†	47279.7	47196.2	453.12	ug/L	453.12	ppb	15:46:08
2	Sc 361.383	675166.0	675166.0	97.909	%			15:47:31
2	Y 371.029	463037.6	463037.6	85.459	%			15:47:37
2	Ag 328.068†	88284.3	90070.2	499.29	ug/L	499.29	ppb	15:47:37
2	As 188.979†	953.3	996.4	497.64	ug/L	497.64	ppb	15:47:57
2	B 249.677†	18405.5	19381.7	485.36	ug/L	485.36	ppb	15:47:37
2	Ba 233.527†	50561.6	51640.8	500.35	ug/L	500.35	ppb	15:47:37
2	Be 313.107†	1201226.3	1231408.0	498.46	ug/L	498.46	ppb	15:47:31
2	Cd 226.502†	33193.3	34115.8	498.66	ug/L	498.66	ppb	15:47:37
2	Co 228.616†	20223.5	20715.1	513.19	ug/L	513.19	ppb	15:47:37
2	Cr 267.716†	32991.6	33605.0	496.76	ug/L	496.76	ppb	15:47:37
2	Cu 324.752†	150293.5	147815.8	492.32	ug/L	492.32	ppb	15:47:37
2	Mn 257.610†	379211.6	386866.6	500.85	ug/L	500.85	ppb	15:47:31
2	Mo 202.031†	5097.9	5194.3	499.40	ug/L	499.40	ppb	15:47:57
2	Ni 231.604†	15333.6	15586.5	507.94	ug/L	507.94	ppb	15:47:37

2	P 214.914†	4040.3	3908.1	2402.3 ug/L	2402.3 ppb	15:47:57
2	Pb 220.353†	3055.1	3187.4	503.12 ug/L	503.12 ppb	15:47:57
2	S 181.975 Axial†	699.8	674.6	1012.6 ug/L	1012.6 ppb	15:47:57
2	Sb 206.836†	1261.8	1257.1	520.87 ug/L	520.87 ppb	15:47:57
2	Se 196.026†	629.9	665.5	509.61 ug/L	509.61 ppb	15:47:57
2	Si 251.611†	67545.4	68491.6	2501.3 ug/L	2501.3 ppb	15:47:37
2	Sn 189.927†	2139.6	2181.2	502.02 ug/L	502.02 ppb	15:47:57
2	Ti 334.940†	267970.8	275116.2	499.18 ug/L	499.18 ppb	15:47:37
2	Tl 190.801†	1226.0	1290.1	499.64 ug/L	499.64 ppb	15:47:57
2	U 409.014†	9977.6	12597.2	483.56 ug/L	483.56 ppb	15:47:37
2	V 292.402†	53171.2	56023.4	500.52 ug/L	500.52 ppb	15:47:37
2	Zn 213.857†	43372.5	43634.4	494.46 ug/L	494.46 ppb	15:47:37
2	SiO2†	69823.0	70775.3	5574.5 ug/L	5574.5 ppb	15:48:38
3	Sc Radial	3866.3	3866.3	101 %		15:46:54
3	Y RADIAL	4346.6	4346.6	100.3 %		15:46:33
3	Al 396.153Radial†	4772.0	4830.2	5060.3 ug/L	5060.3 ppb	15:46:33
3	Ca 317.933Radial†	2670.0	2632.3	5168.7 ug/L	5168.7 ppb	15:46:54
3	Fe 238.204 Radial†	401.0	391.9	4996.6 ug/L	4996.6 ppb	15:46:54
3	K 766.490 Radial†	30491.4	27277.7	5066.5 ug/L	5066.5 ppb	15:46:33
3	Mg 279.077 IEC†	127.7	123.7	5097.1 ug/L	5097.1 ppb	15:46:54
3	Na 589.592 Radial†	20914.7	21843.1	9613.9 ug/L	9613.9 ppb	15:46:33
3	Sr 421.552†	50071.6	49700.0	477.16 ug/L	477.16 ppb	15:46:33
3	Sc 361.383	687465.4	687465.4	99.692 %		15:48:02
3	Y 371.029	466938.3	466938.3	86.179 %		15:48:07
3	Ag 328.068†	90238.2	90416.9	501.21 ug/L	501.21 ppb	15:48:07
3	As 188.979†	976.7	1002.5	500.66 ug/L	500.66 ppb	15:48:28
3	B 249.677†	18991.9	19633.5	491.69 ug/L	491.69 ppb	15:48:07
3	Ba 233.527†	51454.1	51612.2	500.08 ug/L	500.08 ppb	15:48:07
3	Be 313.107†	1219876.8	1228165.9	497.16 ug/L	497.16 ppb	15:48:02
3	Cd 226.502†	33819.8	34137.6	498.98 ug/L	498.98 ppb	15:48:07
3	Co 228.616†	20636.2	20759.5	514.29 ug/L	514.29 ppb	15:48:07
3	Cr 267.716†	33686.3	33699.0	498.15 ug/L	498.15 ppb	15:48:07
3	Cu 324.752†	154395.9	149184.6	496.88 ug/L	496.88 ppb	15:48:07
3	Mn 257.610†	384306.5	385047.9	498.51 ug/L	498.51 ppb	15:48:02
3	Mo 202.031†	5230.5	5234.2	503.23 ug/L	503.23 ppb	15:48:28
3	Ni 231.604†	15577.0	15550.4	506.77 ug/L	506.77 ppb	15:48:07
3	P 214.914†	4128.2	3922.4	2410.6 ug/L	2410.6 ppb	15:48:28
3	Pb 220.353†	3064.5	3140.9	495.88 ug/L	495.88 ppb	15:48:28
3	S 181.975 Axial†	724.6	686.6	1030.7 ug/L	1030.7 ppb	15:48:28
3	Sb 206.836†	1294.9	1267.2	525.00 ug/L	525.00 ppb	15:48:28
3	Se 196.026†	655.5	679.6	520.28 ug/L	520.28 ppb	15:48:28
3	Si 251.611†	69390.3	69107.9	2523.8 ug/L	2523.8 ppb	15:48:07
3	Sn 189.927†	2180.3	2182.9	502.40 ug/L	502.40 ppb	15:48:28
3	Ti 334.940†	274250.2	276518.3	501.74 ug/L	501.74 ppb	15:48:07
3	Tl 190.801†	1261.6	1303.4	504.77 ug/L	504.77 ppb	15:48:28
3	U 409.014†	10180.7	12618.6	484.38 ug/L	484.38 ppb	15:48:07
3	V 292.402†	54284.7	56168.7	501.85 ug/L	501.85 ppb	15:48:07
3	Zn 213.857†	44274.9	43747.0	495.75 ug/L	495.75 ppb	15:48:07
3	SiO2†	69280.8	68955.5	5430.7 ug/L	5430.7 ppb	15:48:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	686623.7	99.570	%	1.6040				1.61%
Sc Radial	3795.5	98.9	%	2.71				2.74%
Y 371.029	465147.2	85.849	%	0.3635				0.42%
Y RADIAL	4194.2	96.82	%	3.062				3.16%
Ag 328.068†	89885.4	498.28	ug/L	3.552	498.28	ppb	3.552	0.71%
QC value within limits for Ag 328.068 Recovery = 99.66%								
Al 396.153Radial†	4741.2	4966.9	ug/L	147.74	4966.9	ppb	147.74	2.97%
QC value within limits for Al 396.153Radial Recovery = 99.34%								
As 188.979†	989.9	494.43	ug/L	8.321	494.43	ppb	8.321	1.68%
QC value within limits for As 188.979 Recovery = 98.89%								
B 249.677†	19405.8	485.97	ug/L	5.442	485.97	ppb	5.442	1.12%
QC value within limits for B 249.677 Recovery = 97.19%								
Ba 233.527†	51325.8	497.30	ug/L	5.044	497.30	ppb	5.044	1.01%
QC value within limits for Ba 233.527 Recovery = 99.46%								
Be 313.107†	1228722.8	497.37	ug/L	0.997	497.37	ppb	0.997	0.20%
QC value within limits for Be 313.107 Recovery = 99.47%								
Ca 317.933Radial†	2648.8	5201.1	ug/L	36.41	5201.1	ppb	36.41	0.70%

QC value within limits for Ca 317.933Radial Recovery = 104.02%

Cd 226.502†	33949.5	496.23 ug/L	4.498	496.23 ppb	4.498	0.91%

QC value within limits for Cd 226.502 Recovery = 99.25%

Co 228.616†	20609.7	510.57 ug/L	5.516	510.57 ppb	5.516	1.08%

QC value within limits for Co 228.616 Recovery = 102.11%

Cr 267.716†	33457.6	494.59 ug/L	5.015	494.59 ppb	5.015	1.01%

QC value within limits for Cr 267.716 Recovery = 98.92%

Cu 324.752†	147873.6	492.52 ug/L	4.271	492.52 ppb	4.271	0.87%

QC value within limits for Cu 324.752 Recovery = 98.50%

Fe 238.204 Radial†	392.7	5006.5 ug/L	44.39	5006.5 ppb	44.39	0.89%

QC value within limits for Fe 238.204 Radial Recovery = 100.13%

K 766.490 Radial†	26965.3	5008.5 ug/L	133.19	5008.5 ppb	133.19	2.66%

QC value within limits for K 766.490 Radial Recovery = 100.17%

Mg 279.077 IEC†	126.0	5188.1 ug/L	92.79	5188.1 ppb	92.79	1.79%

QC value within limits for Mg 279.077 IEC Recovery = 103.76%

Mn 257.610†	385522.7	499.12 ug/L	1.521	499.12 ppb	1.521	0.30%

QC value within limits for Mn 257.610 Recovery = 99.82%

Mo 202.031†	5160.8	496.18 ug/L	9.094	496.18 ppb	9.094	1.83%

QC value within limits for Mo 202.031 Recovery = 99.24%

Na 589.592 Radial†	21575.4	9496.1 ug/L	282.07	9496.1 ppb	282.07	2.97%

QC value within limits for Na 589.592 Radial Recovery = 94.96%

Ni 231.604†	15488.5	504.75 ug/L	4.548	504.75 ppb	4.548	0.90%

QC value within limits for Ni 231.604 Recovery = 100.95%

P 214.914†	3879.0	2383.7 ug/L	39.69	2383.7 ppb	39.69	1.67%

QC value within limits for P 214.914 Recovery = 95.35%

Pb 220.353†	3136.6	495.17 ug/L	8.338	495.17 ppb	8.338	1.68%

QC value within limits for Pb 220.353 Recovery = 99.03%

S 181.975 Axial†	670.5	1006.5 ug/L	27.76	1006.5 ppb	27.76	2.76%

QC value within limits for S 181.975 Axial Recovery = 100.65%

Sb 206.836†	1248.8	517.44 ug/L	9.741	517.44 ppb	9.741	1.88%

QC value within limits for Sb 206.836 Recovery = 103.49%

Se 196.026†	666.2	510.31 ug/L	9.637	510.31 ppb	9.637	1.89%

QC value within limits for Se 196.026 Recovery = 102.06%

Si 251.611†	68478.1	2500.8 ug/L	23.20	2500.8 ppb	23.20	0.93%

QC value within limits for Si 251.611 Recovery = 100.03%

Sn 189.927†	2166.9	498.72 ug/L	6.046	498.72 ppb	6.046	1.21%

QC value within limits for Sn 189.927 Recovery = 99.74%

Sr 421.552†	48839.4	468.89 ug/L	13.668	468.89 ppb	13.668	2.91%

QC value within limits for Sr 421.552 Recovery = 93.78%

Ti 334.940†	274464.2	498.01 ug/L	4.433	498.01 ppb	4.433	0.89%

QC value within limits for Ti 334.940 Recovery = 99.60%

Tl 190.801†	1287.8	498.75 ug/L	6.515	498.75 ppb	6.515	1.31%

QC value within limits for Tl 190.801 Recovery = 99.75%

U 409.014†	12561.0	482.17 ug/L	3.153	482.17 ppb	3.153	0.65%

QC value within limits for U 409.014 Recovery = 96.43%

V 292.402†	55812.6	498.61 ug/L	4.508	498.61 ppb	4.508	0.90%

QC value within limits for V 292.402 Recovery = 99.72%

Zn 213.857†	43478.7	492.69 ug/L	4.223	492.69 ppb	4.223	0.86%

QC value within limits for Zn 213.857 Recovery = 98.54%

SiO2†	69456.5	5470.5 ug/L	90.93	5470.5 ppb	90.93	1.66%

QC value within limits for SiO2 Recovery = 102.30%

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 4/1/2010 15:50:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	3848.0	3848.0	100	%			15:53:05
1	Y RADIAL	4291.7	4291.7	99.07	%			15:52:45
1	Al 396.153Radial†	-85.6	6.9	7.2339	ug/L	7.2339	ppb	15:52:45
1	Ca 317.933Radial†	10.5	-8.2	-16.026	ug/L	-16.026	ppb	15:53:05
1	Fe 238.204 Radial†	5.7	-0.5	-6.9197	ug/L	-6.9197	ppb	15:53:05
1	K 766.490 Radial†	3035.0	31.8	5.9178	ug/L	5.9178	ppb	15:52:45
1	Mg 279.077 IEC†	-0.2	-3.2	-130.97	ug/L	-130.97	ppb	15:53:05
1	Na 589.592 Radial†	-1118.3	-37.7	-16.608	ug/L	-16.608	ppb	15:52:45
1	Sr 421.552†	13.4	-0.5	-0.0051	ug/L	-0.0051	ppb	15:52:45
1	Sc 361.383	673597.2	673597.2	97.681	%			15:54:02
1	Y 371.029	526905.2	526905.2	97.247	%			15:54:02
1	Ag 328.068†	41.5	-57.4	-0.3167	ug/L	-0.3167	ppb	15:54:02
1	As 188.979†	-21.1	1.2	0.6133	ug/L	0.6133	ppb	15:54:22
1	B 249.677†	-546.5	23.5	0.5941	ug/L	0.5941	ppb	15:54:22
1	Ba 233.527†	-17.6	-18.8	-0.1842	ug/L	-0.1842	ppb	15:54:22
1	Be 313.107†	-4479.8	-62.9	-0.0255	ug/L	-0.0255	ppb	15:54:02
1	Cd 226.502†	-201.8	6.9	0.0997	ug/L	0.0997	ppb	15:54:22
1	Co 228.616†	-75.0	-17.1	-0.4236	ug/L	-0.4236	ppb	15:54:22
1	Cr 267.716†	76.8	-12.7	-0.1862	ug/L	-0.1862	ppb	15:54:22
1	Cu 324.752†	5454.4	-104.1	-0.3431	ug/L	-0.3431	ppb	15:54:02
1	Mn 257.610†	463.9	29.9	0.0434	ug/L	0.0434	ppb	15:54:22
1	Mo 202.031†	11.1	-1.1	-0.1092	ug/L	-0.1092	ppb	15:54:22
1	Ni 231.604†	82.1	9.4	0.3076	ug/L	0.3076	ppb	15:54:22
1	P 214.914†	231.6	18.6	11.940	ug/L	11.940	ppb	15:54:22
1	Pb 220.353†	-72.4	-7.1	-1.1219	ug/L	-1.1219	ppb	15:54:22
1	S 181.975 Axial†	40.5	1.3	1.8846	ug/L	1.8846	ppb	15:54:22
1	Sb 206.836†	42.3	11.5	4.6118	ug/L	4.6118	ppb	15:54:22
1	Se 196.026†	-31.6	-10.2	-7.6149	ug/L	-7.6149	ppb	15:54:22
1	Si 251.611†	539.4	55.6	2.0356	ug/L	2.0356	ppb	15:54:22
1	Sn 189.927†	5.0	1.0	0.2280	ug/L	0.2280	ppb	15:54:22
1	Ti 334.940†	-1406.6	-18.5	-0.0218	ug/L	-0.0218	ppb	15:54:02
1	Tl 190.801†	-37.9	-0.9	-0.3248	ug/L	-0.3248	ppb	15:54:22
1	U 409.014†	-2531.0	-184.6	-7.1080	ug/L	-7.1080	ppb	15:54:02
1	V 292.402†	-1794.3	-120.5	-1.0787	ug/L	-1.0787	ppb	15:54:02
1	Zn 213.857†	620.7	-29.1	-0.3336	ug/L	-0.3336	ppb	15:54:22
1	SiO2†	582.0	56.7	4.4762	ug/L	4.4762	ppb	15:55:18
2	Sc Radial	3831.6	3831.6	99.8	%			15:53:30
2	Y RADIAL	4309.3	4309.3	99.48	%			15:53:10
2	Al 396.153Radial†	-90.3	1.7	1.8297	ug/L	1.8297	ppb	15:53:10
2	Ca 317.933Radial†	15.1	-3.5	-6.9379	ug/L	-6.9379	ppb	15:53:30
2	Fe 238.204 Radial†	7.6	1.4	17.999	ug/L	17.999	ppb	15:53:30
2	K 766.490 Radial†	3064.8	74.6	13.878	ug/L	13.878	ppb	15:53:10
2	Mg 279.077 IEC†	-1.6	-4.7	-191.56	ug/L	-191.56	ppb	15:53:30
2	Na 589.592 Radial†	-1078.5	-2.7	-1.1825	ug/L	-1.1825	ppb	15:53:10
2	Sr 421.552†	16.2	2.3	0.0224	ug/L	0.0224	ppb	15:53:10
2	Sc 361.383	683924.0	683924.0	99.179	%			15:54:27
2	Y 371.029	534713.0	534713.0	98.688	%			15:54:27
2	Ag 328.068†	57.6	-41.8	-0.2175	ug/L	-0.2175	ppb	15:54:27
2	As 188.979†	-24.2	-1.6	-0.7746	ug/L	-0.7746	ppb	15:54:47
2	B 249.677†	-497.4	81.5	2.0465	ug/L	2.0465	ppb	15:54:47
2	Ba 233.527†	-16.4	-17.3	-0.1676	ug/L	-0.1676	ppb	15:54:47
2	Be 313.107†	-4516.8	-30.9	-0.0126	ug/L	-0.0126	ppb	15:54:27
2	Cd 226.502†	-236.4	-24.9	-0.3687	ug/L	-0.3687	ppb	15:54:47
2	Co 228.616†	-58.8	0.4	0.0087	ug/L	0.0087	ppb	15:54:47
2	Cr 267.716†	79.3	-11.4	-0.1624	ug/L	-0.1624	ppb	15:54:47
2	Cu 324.752†	5572.2	-69.6	-0.2249	ug/L	-0.2249	ppb	15:54:27
2	Mn 257.610†	444.2	2.9	0.0133	ug/L	0.0133	ppb	15:54:47
2	Mo 202.031†	12.5	0.2	0.0172	ug/L	0.0172	ppb	15:54:47
2	Ni 231.604†	73.1	-1.0	-0.0319	ug/L	-0.0319	ppb	15:54:47

2	P 214.914†	225.5	8.9	5.6979	ug/L	5.6979 ppb	15:54:47
2	Pb 220.353†	-59.5	7.0	1.0944	ug/L	1.0944 ppb	15:54:47
2	S 181.975 Axial†	38.9	-1.0	-1.4801	ug/L	-1.4801 ppb	15:54:47
2	Sb 206.836†	46.7	15.3	6.1259	ug/L	6.1259 ppb	15:54:47
2	Se 196.026†	-16.5	5.4	4.0751	ug/L	4.0751 ppb	15:54:47
2	Si 251.611†	556.6	64.6	2.3655	ug/L	2.3655 ppb	15:54:47
2	Sn 189.927†	1.9	-2.2	-0.5120	ug/L	-0.5120 ppb	15:54:47
2	Ti 334.940†	-1446.6	-37.1	-0.0477	ug/L	-0.0477 ppb	15:54:27
2	Tl 190.801†	-38.5	-0.9	-0.3482	ug/L	-0.3482 ppb	15:54:47
2	U 409.014†	-2668.3	-283.9	-10.937	ug/L	-10.937 ppb	15:54:27
2	V 292.402†	-1758.2	-56.4	-0.5239	ug/L	-0.5239 ppb	15:54:27
2	Zn 213.857†	614.0	-45.5	-0.5224	ug/L	-0.5224 ppb	15:54:47
2	SiO2†	582.0	47.7	3.7649	ug/L	3.7649 ppb	15:55:23
3	Sc Radial	3874.9	3874.9	101	%		15:53:55
3	Y RADIAL	4382.1	4382.1	101.2	%		15:53:35
3	Al 396.153Radial†	-97.0	-3.8	-4.1026	ug/L	-4.1026 ppb	15:53:35
3	Ca 317.933Radial†	17.3	-1.5	-3.0144	ug/L	-3.0144 ppb	15:53:55
3	Fe 238.204 Radial†	8.6	2.3	29.208	ug/L	29.208 ppb	15:53:55
3	K 766.490 Radial†	3013.8	-10.3	-1.9053	ug/L	-1.9053 ppb	15:53:35
3	Mg 279.077 IEC†	1.8	-1.2	-48.806	ug/L	-48.806 ppb	15:53:55
3	Na 589.592 Radial†	-1157.1	-68.5	-30.143	ug/L	-30.143 ppb	15:53:35
3	Sr 421.552†	9.8	-4.2	-0.0403	ug/L	-0.0403 ppb	15:53:35
3	Sc 361.383	687230.4	687230.4	99.658	%		15:54:53
3	Y 371.029	537507.9	537507.9	99.204	%		15:54:53
3	Ag 328.068†	98.7	-0.9	0.0130	ug/L	0.0130 ppb	15:54:53
3	As 188.979†	-33.5	-10.8	-5.3581	ug/L	-5.3581 ppb	15:55:13
3	B 249.677†	-506.1	75.2	1.8872	ug/L	1.8872 ppb	15:55:13
3	Ba 233.527†	-8.5	-9.3	-0.0893	ug/L	-0.0893 ppb	15:55:13
3	Be 313.107†	-4649.4	-142.0	-0.0573	ug/L	-0.0573 ppb	15:54:53
3	Cd 226.502†	-213.7	-1.0	-0.0200	ug/L	-0.0200 ppb	15:55:13
3	Co 228.616†	-65.1	-5.7	-0.1382	ug/L	-0.1382 ppb	15:55:13
3	Cr 267.716†	78.3	-12.8	-0.1809	ug/L	-0.1809 ppb	15:55:13
3	Cu 324.752†	5492.4	-176.8	-0.5806	ug/L	-0.5806 ppb	15:54:53
3	Mn 257.610†	437.3	-6.2	-0.0032	ug/L	-0.0032 ppb	15:55:13
3	Mo 202.031†	25.3	12.9	1.2428	ug/L	1.2428 ppb	15:55:13
3	Ni 231.604†	62.9	-11.5	-0.3754	ug/L	-0.3754 ppb	15:55:13
3	P 214.914†	230.2	12.5	8.0934	ug/L	8.0934 ppb	15:55:13
3	Pb 220.353†	-80.2	-13.5	-2.1190	ug/L	-2.1190 ppb	15:55:13
3	S 181.975 Axial†	40.4	0.3	0.4472	ug/L	0.4472 ppb	15:55:13
3	Sb 206.836†	41.4	9.8	4.0004	ug/L	4.0004 ppb	15:55:13
3	Se 196.026†	-20.7	1.3	1.0576	ug/L	1.0576 ppb	15:55:13
3	Si 251.611†	541.0	46.3	1.6787	ug/L	1.6787 ppb	15:55:13
3	Sn 189.927†	17.0	12.9	2.9606	ug/L	2.9606 ppb	15:55:13
3	Ti 334.940†	-1406.2	10.4	0.0278	ug/L	0.0278 ppb	15:54:53
3	Tl 190.801†	-29.4	8.4	3.2493	ug/L	3.2493 ppb	15:55:13
3	U 409.014†	-2705.4	-308.2	-11.876	ug/L	-11.876 ppb	15:54:53
3	V 292.402†	-1734.8	-24.3	-0.2250	ug/L	-0.2250 ppb	15:54:53
3	Zn 213.857†	615.6	-46.9	-0.5371	ug/L	-0.5371 ppb	15:55:13
3	SiO2†	605.6	68.5	5.3725	ug/L	5.3725 ppb	15:55:28

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	681583.9	98.839	%	1.0313				1.04%
Sc Radial	3851.5	100	%	0.6				0.57%
Y 371.029	533042.0	98.379	%	1.0142				1.03%
Y RADIAL	4327.7	99.90	%	1.106				1.11%
Ag 328.068†	-33.4	-0.1737	ug/L	0.16914	-0.1737	ppb	0.16914	97.35%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.6	1.6537	ug/L	5.67029	1.6537	ppb	5.67029	342.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.7	-1.8398	ug/L	3.12498	-1.8398	ppb	3.12498	169.85%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	60.1	1.5093	ug/L	0.79654	1.5093	ppb	0.79654	52.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-15.1	-0.1470	ug/L	0.05067	-0.1470	ppb	0.05067	34.46%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-78.6	-0.0318	ug/L	0.02300	-0.0318	ppb	0.02300	72.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-4.4	-8.6593	ug/L	6.67421	-8.6593	ppb	6.67421	77.08%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -6.4     -0.0963 ug/L       0.24334     -0.0963 ppb        0.24334 252.56%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -7.5     -0.1844 ug/L       0.21984     -0.1844 ppb        0.21984 119.24%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -12.3     -0.1765 ug/L       0.01246     -0.1765 ppb        0.01246   7.06%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -116.8     -0.3829 ug/L       0.18117     -0.3829 ppb        0.18117  47.31%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.1      13.429 ug/L       18.4925      13.429 ppb        18.4925 137.70%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        32.0       5.9636 ug/L       7.89199      5.9636 ppb        7.89199 132.34%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -3.0     -123.78 ug/L        71.646     -123.78 ppb         71.646  57.88%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               8.9       0.0178 ug/L       0.02360      0.0178 ppb        0.02360 132.21%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               4.0       0.3836 ug/L       0.74676      0.3836 ppb        0.74676 194.67%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -36.3     -15.978 ug/L       14.4904     -15.978 ppb        14.4904  90.69%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -1.0      -0.0332 ug/L       0.34151     -0.0332 ppb        0.34151 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               13.3       8.5769 ug/L       3.14879      8.5769 ppb        3.14879  36.71%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -4.5      -0.7155 ug/L       1.64480     -0.7155 ppb        1.64480 229.88%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          0.2       0.2839 ug/L       1.68829      0.2839 ppb        1.68829 594.71%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              12.2       4.9127 ug/L       1.09421      4.9127 ppb        1.09421  22.27%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -1.2      -0.8274 ug/L       6.06868     -0.8274 ppb        6.06868 733.45%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              55.5       2.0266 ug/L       0.34350      2.0266 ppb        0.34350  16.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               3.9       0.8922 ug/L       1.82909      0.8922 ppb        1.82909 205.01%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -0.8      -0.0077 ug/L       0.03142     -0.0077 ppb        0.03142 407.73%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -15.1      -0.0139 ug/L       0.03834     -0.0139 ppb        0.03834 275.31%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               2.2       0.8588 ug/L       2.07031      0.8588 ppb        2.07031 241.08%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -258.9      -9.9737 ug/L       2.52568     -9.9737 ppb        2.52568  25.32%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -67.1      -0.6092 ug/L       0.43319     -0.6092 ppb        0.43319  71.11%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -40.5      -0.4643 ug/L       0.11348     -0.4643 ppb        0.11348  24.44%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    57.6       4.5379 ug/L       0.80559      4.5379 ppb        0.80559  17.75%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 20
Sample ID: 248374008|960819|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 4/1/2010 15:57:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248374008|960819|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4030.6	4030.6	105	%			15:59:31
1	Y RADIAL	5100.5	5100.5	117.7	%			15:59:31
1	Al 396.153Radial†	41819.0	39919.5	42023	ug/L	42023	ppb	15:59:31
1	Ca 317.933Radial†	14616.2	13901.4	27296	ug/L	27296	ppb	15:59:31
1	Fe 238.204 Radial†	6138.5	5840.0	74224	ug/L	74224	ppb	15:59:31
1	K 766.490 Radial†	55309.8	49679.6	9228.0	ug/L	9228.0	ppb	15:59:31
1	Mg 279.077 IEC†	245.4	230.7	9426.0	ug/L	9426.0	ppb	15:59:51
1	Na 589.592 Radial†	143.3	1214.2	534.43	ug/L	534.43	ppb	15:59:31
1	Sr 421.552†	17826.5	16963.5	162.67	ug/L	162.67	ppb	15:59:31
1	Sc 361.383	705318.4	705318.4	102.28	%			16:00:49
1	Y 371.029	635168.6	635168.6	117.23	%			16:00:49
1	Ag 328.068†	-3014.0	-3046.6	6.3718	ug/L	6.3718	ppb	16:00:54
1	As 188.979†	-62.9	-38.7	20.974	ug/L	20.974	ppb	16:01:14
1	B 249.677†	1654.3	2200.5	43.243	ug/L	43.243	ppb	16:00:54
1	Ba 233.527†	66982.4	65487.7	635.43	ug/L	635.43	ppb	16:00:54
1	Be 313.107†	-6304.4	-1640.5	5.2985	ug/L	5.2985	ppb	16:00:54
1	Cd 226.502†	405.3	609.7	1.2435	ug/L	1.2435	ppb	16:01:14
1	Co 228.616†	888.6	928.4	16.706	ug/L	16.706	ppb	16:01:14
1	Cr 267.716†	3795.7	3619.7	61.481	ug/L	61.481	ppb	16:01:14
1	Cu 324.752†	21284.5	15121.8	54.394	ug/L	54.394	ppb	16:00:54
1	Mn 257.610†	2988527.3	2921429.2	3787.1	ug/L	3787.1	ppb	16:00:49
1	Mo 202.031†	13.6	0.9	6.1685	ug/L	6.1685	ppb	16:01:14
1	Ni 231.604†	1623.0	1512.1	49.294	ug/L	49.294	ppb	16:01:14
1	P 214.914†	3152.5	2863.7	1771.0	ug/L	1771.0	ppb	16:01:14
1	Pb 220.353†	487.6	543.7	89.223	ug/L	89.223	ppb	16:01:14
1	S 181.975 Axial†	1107.7	1042.7	1558.8	ug/L	1558.8	ppb	16:01:14
1	Sb 206.836†	52.9	19.9	-2.7622	ug/L	-2.7622	ppb	16:01:14
1	Se 196.026†	-304.6	-275.7	4.3724	ug/L	4.3724	ppb	16:01:14
1	Si 251.611†	875468.0	855445.9	31317	ug/L	31317	ppb	16:00:49
1	Sn 189.927†	-123.7	-125.0	-23.422	ug/L	-23.422	ppb	16:01:14
1	Ti 334.940†	1478304.3	1446755.2	2628.7	ug/L	2628.7	ppb	16:00:49
1	Tl 190.801†	-149.7	-108.4	-2.1414	ug/L	-2.1414	ppb	16:01:14
1	U 409.014†	-7226.5	-4658.8	-188.04	ug/L	-188.04	ppb	16:00:49
1	V 292.402†	10517.8	11999.6	92.012	ug/L	92.012	ppb	16:00:54
1	Zn 213.857†	35469.8	34014.1	377.58	ug/L	377.58	ppb	16:00:54
1	SiO2†	870759.7	850800.0	67176	ug/L	67176	ppb	16:02:23
2	Sc Radial	4011.2	4011.2	104	%			15:59:56
2	Y RADIAL	5046.4	5046.4	116.5	%			15:59:56
2	Al 396.153Radial†	41725.4	40022.3	42131	ug/L	42131	ppb	15:59:56
2	Ca 317.933Radial†	14634.0	13985.6	27461	ug/L	27461	ppb	15:59:56
2	Fe 238.204 Radial†	6118.1	5848.7	74335	ug/L	74335	ppb	15:59:56
2	K 766.490 Radial†	55474.4	50091.7	9304.6	ug/L	9304.6	ppb	15:59:56
2	Mg 279.077 IEC†	244.9	231.3	9449.9	ug/L	9449.9	ppb	16:00:16
2	Na 589.592 Radial†	144.9	1216.5	535.40	ug/L	535.40	ppb	15:59:56
2	Sr 421.552†	17813.8	17033.4	163.34	ug/L	163.34	ppb	15:59:56
2	Sc 361.383	703774.6	703774.6	102.06	%			16:01:20
2	Y 371.029	633583.5	633583.5	116.94	%			16:01:20
2	Ag 328.068†	-3062.6	-3100.7	6.1101	ug/L	6.1101	ppb	16:01:25
2	As 188.979†	-42.6	-19.0	30.738	ug/L	30.738	ppb	16:01:45
2	B 249.677†	1696.5	2245.3	44.354	ug/L	44.354	ppb	16:01:25
2	Ba 233.527†	67574.6	66211.7	642.43	ug/L	642.43	ppb	16:01:25
2	Be 313.107†	-6200.3	-1552.0	5.3287	ug/L	5.3287	ppb	16:01:25
2	Cd 226.502†	411.5	616.7	1.3337	ug/L	1.3337	ppb	16:01:45
2	Co 228.616†	876.5	918.5	16.467	ug/L	16.467	ppb	16:01:45
2	Cr 267.716†	3863.9	3694.7	62.602	ug/L	62.602	ppb	16:01:45
2	Cu 324.752†	21382.4	15263.4	54.872	ug/L	54.872	ppb	16:01:25
2	Mn 257.610†	2990970.9	2930233.1	3798.5	ug/L	3798.5	ppb	16:01:20
2	Mo 202.031†	10.1	-2.5	5.8528	ug/L	5.8528	ppb	16:01:45
2	Ni 231.604†	1617.8	1510.5	49.242	ug/L	49.242	ppb	16:01:45

2	P 214.914†	3160.0	2877.8	1779.9	ug/L	1779.9 ppb	16:01:45
2	Pb 220.353†	524.6	581.0	95.109	ug/L	95.109 ppb	16:01:45
2	S 181.975 Axial†	1118.8	1056.0	1578.7	ug/L	1578.7 ppb	16:01:45
2	Sb 206.836†	53.8	21.0	-2.3698	ug/L	-2.3698 ppb	16:01:45
2	Se 196.026†	-312.5	-284.1	-1.5208	ug/L	-1.5208 ppb	16:01:45
2	Si 251.611†	875008.9	856873.6	31369	ug/L	31369 ppb	16:01:20
2	Sn 189.927†	-131.3	-132.8	-25.173	ug/L	-25.173 ppb	16:01:45
2	Ti 334.940†	1473686.3	1445400.8	2626.2	ug/L	2626.2 ppb	16:01:20
2	Tl 190.801†	-152.4	-111.4	-3.2766	ug/L	-3.2766 ppb	16:01:45
2	U 409.014†	-7253.8	-4701.1	-189.68	ug/L	-189.68 ppb	16:01:20
2	V 292.402†	10579.8	12082.9	92.725	ug/L	92.725 ppb	16:01:25
2	Zn 213.857†	35841.4	34454.3	382.59	ug/L	382.59 ppb	16:01:25
2	SiO2†	887580.1	869148.8	68624	ug/L	68624 ppb	16:02:28
3	Sc Radial	4033.4	4033.4	105	%		16:00:21
3	Y RADIAL	5177.8	5177.8	119.5	%		16:00:21
3	Al 396.153Radial†	42164.6	40220.6	42340	ug/L	42340 ppb	16:00:21
3	Ca 317.933Radial†	14699.9	13971.3	27433	ug/L	27433 ppb	16:00:21
3	Fe 238.204 Radial†	6149.4	5846.2	74304	ug/L	74304 ppb	16:00:21
3	K 766.490 Radial†	55671.9	49987.4	9285.2	ug/L	9285.2 ppb	16:00:21
3	Mg 279.077 IEC†	245.7	230.9	9431.1	ug/L	9431.1 ppb	16:00:41
3	Na 589.592 Radial†	157.1	1227.3	540.20	ug/L	540.20 ppb	16:00:21
3	Sr 421.552†	17998.3	17115.2	164.13	ug/L	164.13 ppb	16:00:21
3	Sc 361.383	705838.9	705838.9	102.36	%		16:01:51
3	Y 371.029	635581.5	635581.5	117.30	%		16:01:51
3	Ag 328.068†	-3022.5	-3052.8	6.3631	ug/L	6.3631 ppb	16:01:56
3	As 188.979†	-39.1	-15.4	32.459	ug/L	32.459 ppb	16:02:16
3	B 249.677†	1776.5	2318.6	46.200	ug/L	46.200 ppb	16:01:56
3	Ba 233.527†	67902.2	66338.0	643.65	ug/L	643.65 ppb	16:01:56
3	Be 313.107†	-6197.9	-1531.9	5.3251	ug/L	5.3251 ppb	16:01:56
3	Cd 226.502†	405.4	609.5	1.2327	ug/L	1.2327 ppb	16:02:16
3	Co 228.616†	908.3	947.1	17.186	ug/L	17.186 ppb	16:02:16
3	Cr 267.716†	3831.0	3651.5	61.959	ug/L	61.959 ppb	16:02:16
3	Cu 324.752†	21372.7	15192.7	54.635	ug/L	54.635 ppb	16:01:56
3	Mn 257.610†	2982136.8	2913031.3	3776.2	ug/L	3776.2 ppb	16:01:51
3	Mo 202.031†	12.8	0.0	6.0971	ug/L	6.0971 ppb	16:02:16
3	Ni 231.604†	1653.5	1540.8	50.230	ug/L	50.230 ppb	16:02:16
3	P 214.914†	3161.5	2870.2	1775.2	ug/L	1775.2 ppb	16:02:16
3	Pb 220.353†	519.2	574.3	94.110	ug/L	94.110 ppb	16:02:16
3	S 181.975 Axial†	1105.4	1039.7	1554.3	ug/L	1554.3 ppb	16:02:16
3	Sb 206.836†	60.9	27.8	0.3825	ug/L	0.3825 ppb	16:02:16
3	Se 196.026†	-320.1	-290.6	-6.3572	ug/L	-6.3572 ppb	16:02:16
3	Si 251.611†	873069.1	852471.0	31208	ug/L	31208 ppb	16:01:51
3	Sn 189.927†	-123.7	-125.0	-23.380	ug/L	-23.380 ppb	16:02:16
3	Ti 334.940†	1475094.2	1442553.1	2621.1	ug/L	2621.1 ppb	16:01:51
3	Tl 190.801†	-144.5	-103.2	-0.2656	ug/L	-0.2656 ppb	16:02:16
3	U 409.014†	-7249.8	-4676.4	-188.72	ug/L	-188.72 ppb	16:01:51
3	V 292.402†	10584.4	12057.1	92.513	ug/L	92.513 ppb	16:01:56
3	Zn 213.857†	35860.8	34370.6	381.63	ug/L	381.63 ppb	16:01:56
3	SiO2†	871669.0	851060.6	67196	ug/L	67196 ppb	16:02:34

Mean Data: 248374008|960819|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	704977.3	102.23	%	0.156				0.15%
Sc Radial	4025.1	105	%	0.3				0.30%
Y 371.029	634777.9	117.16	%	0.195				0.17%
Y RADIAL	5108.2	117.9	%	1.52				1.29%
Ag 328.068†	-3066.7	6.2817	ug/L	0.14862	6.2817	ppb	0.14862	2.37%
Al 396.153Radial†	40054.1	42165	ug/L	161.1	42165	ppb	161.1	0.38%
As 188.979†	-24.4	28.057	ug/L	6.1942	28.057	ppb	6.1942	22.08%
B 249.677†	2254.8	44.599	ug/L	1.4941	44.599	ppb	1.4941	3.35%
Ba 233.527†	66012.5	640.51	ug/L	4.437	640.51	ppb	4.437	0.69%
Be 313.107†	-1574.8	5.3174	ug/L	0.01646	5.3174	ppb	0.01646	0.31%
Ca 317.933Radial†	13952.8	27397	ug/L	88.5	27397	ppb	88.5	0.32%
Cd 226.502†	612.0	1.2700	ug/L	0.05549	1.2700	ppb	0.05549	4.37%
Co 228.616†	931.3	16.786	ug/L	0.3666	16.786	ppb	0.3666	2.18%
Cr 267.716†	3655.3	62.014	ug/L	0.5621	62.014	ppb	0.5621	0.91%
Cu 324.752†	15192.6	54.634	ug/L	0.2391	54.634	ppb	0.2391	0.44%
Fe 238.204 Radial†	5845.0	74288	ug/L	57.2	74288	ppb	57.2	0.08%
K 766.490 Radial†	49919.6	9272.6	ug/L	39.81	9272.6	ppb	39.81	0.43%

Mg 279.077 IEC†	231.0	9435.7	ug/L	12.54	9435.7	ppb	12.54	0.13%
Mn 257.610†	2921564.5	3787.3	ug/L	11.13	3787.3	ppb	11.13	0.29%
Mo 202.031†	-0.6	6.0395	ug/L	0.16555	6.0395	ppb	0.16555	2.74%
Na 589.592 Radial†	1219.3	536.68	ug/L	3.085	536.68	ppb	3.085	0.57%
Ni 231.604†	1521.1	49.589	ug/L	0.5557	49.589	ppb	0.5557	1.12%
P 214.914†	2870.6	1775.3	ug/L	4.43	1775.3	ppb	4.43	0.25%
Pb 220.353†	566.3	92.814	ug/L	3.1496	92.814	ppb	3.1496	3.39%
S 181.975 Axial†	1046.1	1563.9	ug/L	12.99	1563.9	ppb	12.99	0.83%
Sb 206.836†	22.9	-1.5832	ug/L	1.71359	-1.5832	ppb	1.71359	108.24%
Se 196.026†	-283.5	-1.1686	ug/L	5.37346	-1.1686	ppb	5.37346	459.83%
Si 251.611†	854930.2	31298	ug/L	82.2	31298	ppb	82.2	0.26%
Sn 189.927†	-127.6	-23.992	ug/L	1.0237	-23.992	ppb	1.0237	4.27%
Sr 421.552†	17037.4	163.38	ug/L	0.728	163.38	ppb	0.728	0.45%
Ti 334.940†	1444903.0	2625.3	ug/L	3.89	2625.3	ppb	3.89	0.15%
Tl 190.801†	-107.7	-1.8945	ug/L	1.52061	-1.8945	ppb	1.52061	80.26%
U 409.014†	-4678.8	-188.81	ug/L	0.825	-188.81	ppb	0.825	0.44%
V 292.402†	12046.5	92.416	ug/L	0.3662	92.416	ppb	0.3662	0.40%
Zn 213.857†	34279.7	380.60	ug/L	2.664	380.60	ppb	2.664	0.70%
SiO2†	857003.1	67665	ug/L	830.6	67665	ppb	830.6	1.23%

Sequence No.: 21
Sample ID: 248374009|960819|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 4/1/2010 16:04:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248374009|960819|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4222.7	4222.7	110	%			16:06:38
1	Y RADIAL	5131.2	5131.2	118.5	%			16:06:38
1	Al 396.153Radial†	59782.9	54437.5	57306	ug/L	57306	ppb	16:06:38
1	Ca 317.933Radial†	11098.5	10070.3	19774	ug/L	19774	ppb	16:06:38
1	Fe 238.204 Radial†	7650.3	6948.2	88311	ug/L	88311	ppb	16:06:38
1	K 766.490 Radial†	67333.5	58213.2	10818	ug/L	10818	ppb	16:06:38
1	Mg 279.077 IEC†	297.5	267.4	10921	ug/L	10921	ppb	16:06:58
1	Na 589.592 Radial†	388.9	1431.3	629.97	ug/L	629.97	ppb	16:06:38
1	Sr 421.552†	17175.8	15599.7	149.63	ug/L	149.63	ppb	16:06:38
1	Sc 361.383	708901.5	708901.5	102.80	%			16:07:55
1	Y 371.029	616293.5	616293.5	113.74	%			16:07:55
1	Ag 328.068†	-5118.5	-5078.9	-0.0800	ug/L	-0.0800	ppb	16:08:01
1	As 188.979†	-75.2	-50.4	30.794	ug/L	30.794	ppb	16:08:21
1	B 249.677†	679.7	1244.2	16.831	ug/L	16.831	ppb	16:08:01
1	Ba 233.527†	90988.8	88509.1	858.52	ug/L	858.52	ppb	16:08:01
1	Be 313.107†	-12457.0	-7594.4	6.1147	ug/L	6.1147	ppb	16:08:01
1	Cd 226.502†	508.0	707.6	1.2431	ug/L	1.2431	ppb	16:08:21
1	Co 228.616†	1840.4	1849.9	36.423	ug/L	36.423	ppb	16:08:21
1	Cr 267.716†	8819.3	8487.7	134.88	ug/L	134.88	ppb	16:08:01
1	Cu 324.752†	18533.5	12340.6	45.867	ug/L	45.867	ppb	16:08:01
1	Mn 257.610†	2544592.3	2474820.4	3210.5	ug/L	3210.5	ppb	16:07:55
1	Mo 202.031†	-24.3	-36.1	3.6243	ug/L	3.6243	ppb	16:08:21
1	Ni 231.604†	2624.5	2478.3	80.788	ug/L	80.788	ppb	16:08:21
1	P 214.914†	2119.1	1842.9	1112.8	ug/L	1112.8	ppb	16:08:21
1	Pb 220.353†	394.5	450.8	76.974	ug/L	76.974	ppb	16:08:21
1	S 181.975 Axial†	621.7	564.5	837.45	ug/L	837.45	ppb	16:08:21
1	Sb 206.836†	71.7	38.0	-0.5425	ug/L	-0.5425	ppb	16:08:21
1	Se 196.026†	-387.3	-354.6	-12.474	ug/L	-12.474	ppb	16:08:21
1	Si 251.611†	944260.9	918038.2	33608	ug/L	33608	ppb	16:07:55
1	Sn 189.927†	-98.2	-99.7	-18.840	ug/L	-18.840	ppb	16:08:21
1	Ti 334.940†	2289372.4	2228420.5	4046.2	ug/L	4046.2	ppb	16:07:55
1	Tl 190.801†	-146.3	-104.3	8.1860	ug/L	8.1860	ppb	16:08:21
1	U 409.014†	-6844.7	-4251.7	-174.12	ug/L	-174.12	ppb	16:08:01
1	V 292.402†	19204.2	20397.4	162.47	ug/L	162.47	ppb	16:08:01
1	Zn 213.857†	28803.3	27354.0	299.10	ug/L	299.10	ppb	16:08:01
1	SiO2†	931173.7	905264.9	71476	ug/L	71476	ppb	16:09:29
2	Sc Radial	4140.3	4140.3	108	%			16:07:03
2	Y RADIAL	5062.2	5062.2	116.9	%			16:07:03
2	Al 396.153Radial†	61502.8	57113.8	60123	ug/L	60123	ppb	16:07:03
2	Ca 317.933Radial†	11377.6	10529.9	20676	ug/L	20676	ppb	16:07:03
2	Fe 238.204 Radial†	7804.8	7230.0	91891	ug/L	91891	ppb	16:07:03
2	K 766.490 Radial†	69060.3	61032.6	11342	ug/L	11342	ppb	16:07:03
2	Mg 279.077 IEC†	301.5	276.5	11294	ug/L	11294	ppb	16:07:23
2	Na 589.592 Radial†	459.9	1504.2	662.05	ug/L	662.05	ppb	16:07:03
2	Sr 421.552†	17608.1	16311.3	156.46	ug/L	156.46	ppb	16:07:03
2	Sc 361.383	700255.7	700255.7	101.55	%			16:08:27
2	Y 371.029	608000.9	608000.9	112.21	%			16:08:27
2	Ag 328.068†	-5048.8	-5071.8	1.0517	ug/L	1.0517	ppb	16:08:32
2	As 188.979†	-68.7	-44.8	34.331	ug/L	34.331	ppb	16:08:52
2	B 249.677†	719.7	1291.8	17.447	ug/L	17.447	ppb	16:08:32
2	Ba 233.527†	90284.6	88908.4	862.50	ug/L	862.50	ppb	16:08:32
2	Be 313.107†	-12025.9	-7319.4	6.2148	ug/L	6.2148	ppb	16:08:32
2	Cd 226.502†	500.2	706.0	0.8510	ug/L	0.8510	ppb	16:08:52
2	Co 228.616†	1824.5	1856.3	36.542	ug/L	36.542	ppb	16:08:52
2	Cr 267.716†	8804.6	8579.2	136.61	ug/L	136.61	ppb	16:08:32
2	Cu 324.752†	18387.6	12419.5	46.316	ug/L	46.316	ppb	16:08:32
2	Mn 257.610†	2517823.4	2479020.9	3216.3	ug/L	3216.3	ppb	16:08:27
2	Mo 202.031†	-23.4	-35.5	3.9691	ug/L	3.9691	ppb	16:08:52
2	Ni 231.604†	2597.4	2483.1	80.944	ug/L	80.944	ppb	16:08:52

2	P 214.914†	2109.9	1859.2	1121.0	ug/L	1121.0 ppb	16:08:52
2	Pb 220.353†	387.5	448.6	76.997	ug/L	76.997 ppb	16:08:52
2	S 181.975 Axial†	613.5	563.9	836.07	ug/L	836.07 ppb	16:08:52
2	Sb 206.836†	72.1	39.2	-0.1710	ug/L	-0.1710 ppb	16:08:52
2	Se 196.026†	-375.4	-347.6	3.0676	ug/L	3.0676 ppb	16:08:52
2	Si 251.611†	930380.4	915709.9	33523	ug/L	33523 ppb	16:08:27
2	Sn 189.927†	-104.1	-106.7	-20.263	ug/L	-20.263 ppb	16:08:52
2	Ti 334.940†	2258765.0	2225775.5	4041.4	ug/L	4041.4 ppb	16:08:27
2	Tl 190.801†	-168.5	-128.0	-0.9138	ug/L	-0.9138 ppb	16:08:52
2	U 409.014†	-6575.1	-4068.5	-167.47	ug/L	-167.47 ppb	16:08:32
2	V 292.402†	19054.3	20480.4	162.71	ug/L	162.71 ppb	16:08:32
2	Zn 213.857†	28529.8	27430.5	299.44	ug/L	299.44 ppb	16:08:32
2	SiO2†	937762.8	922937.4	72871	ug/L	72871 ppb	16:09:35
3	Sc Radial	4203.7	4203.7	110	%		16:07:28
3	Y RADIAL	5141.0	5141.0	118.7	%		16:07:28
3	Al 396.153Radial†	62672.7	57322.1	60343	ug/L	60343 ppb	16:07:28
3	Ca 317.933Radial†	11543.9	10522.7	20662	ug/L	20662 ppb	16:07:28
3	Fe 238.204 Radial†	7906.9	7214.0	91689	ug/L	91689 ppb	16:07:28
3	K 766.490 Radial†	69881.2	60816.5	11302	ug/L	11302 ppb	16:07:28
3	Mg 279.077 IEC†	299.7	270.6	11051	ug/L	11051 ppb	16:07:48
3	Na 589.592 Radial†	399.3	1442.4	634.86	ug/L	634.86 ppb	16:07:28
3	Sr 421.552†	17971.6	16397.0	157.28	ug/L	157.28 ppb	16:07:28
3	Sc 361.383	700330.3	700330.3	101.56	%		16:08:58
3	Y 371.029	608105.3	608105.3	112.23	%		16:08:58
3	Ag 328.068†	-5074.2	-5096.2	0.8511	ug/L	0.8511 ppb	16:09:03
3	As 188.979†	-70.2	-46.4	33.586	ug/L	33.586 ppb	16:09:23
3	B 249.677†	755.7	1327.1	18.367	ug/L	18.367 ppb	16:09:03
3	Ba 233.527†	89484.1	88110.7	854.77	ug/L	854.77 ppb	16:09:03
3	Be 313.107†	-11959.1	-7252.4	6.2595	ug/L	6.2595 ppb	16:09:03
3	Cd 226.502†	502.9	708.6	0.9095	ug/L	0.9095 ppb	16:09:23
3	Co 228.616†	1847.7	1879.0	37.088	ug/L	37.088 ppb	16:09:23
3	Cr 267.716†	8721.0	8496.0	135.36	ug/L	135.36 ppb	16:09:03
3	Cu 324.752†	18100.2	12134.5	45.359	ug/L	45.359 ppb	16:09:03
3	Mn 257.610†	2520385.1	2481278.8	3219.2	ug/L	3219.2 ppb	16:08:58
3	Mo 202.031†	-20.9	-33.0	4.1912	ug/L	4.1912 ppb	16:09:23
3	Ni 231.604†	2649.2	2533.9	82.599	ug/L	82.599 ppb	16:09:23
3	P 214.914†	2127.0	1875.9	1132.1	ug/L	1132.1 ppb	16:09:23
3	Pb 220.353†	394.7	455.7	78.196	ug/L	78.196 ppb	16:09:23
3	S 181.975 Axial†	620.2	570.5	845.86	ug/L	845.86 ppb	16:09:23
3	Sb 206.836†	77.0	44.1	1.7437	ug/L	1.7437 ppb	16:09:23
3	Se 196.026†	-387.0	-359.0	-5.8745	ug/L	-5.8745 ppb	16:09:23
3	Si 251.611†	931721.9	916933.3	33568	ug/L	33568 ppb	16:08:58
3	Sn 189.927†	-100.5	-103.0	-19.435	ug/L	-19.435 ppb	16:09:23
3	Ti 334.940†	2263334.0	2230037.2	4049.2	ug/L	4049.2 ppb	16:08:58
3	Tl 190.801†	-159.1	-118.7	2.7278	ug/L	2.7278 ppb	16:09:23
3	U 409.014†	-6729.0	-4219.3	-173.26	ug/L	-173.26 ppb	16:09:03
3	V 292.402†	18827.6	20255.2	160.73	ug/L	160.73 ppb	16:09:03
3	Zn 213.857†	28217.1	27119.6	295.90	ug/L	295.90 ppb	16:09:03
3	SiO2†	940367.9	925404.0	73066	ug/L	73066 ppb	16:09:41

Mean Data: 248374009|960819|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	703162.5	101.97	%	0.721				0.71%
Sc Radial	4188.9	109	%	1.1				1.03%
Y 371.029	610799.9	112.73	%	0.878				0.78%
Y RADIAL	5111.5	118.0	%	0.99				0.84%
Ag 328.068†	-5082.3	0.6076	ug/L	0.60387	0.6076	ppb	0.60387	99.38%
Al 396.153Radial†	56291.2	59257	ug/L	1693.4	59257	ppb	1693.4	2.86%
As 188.979†	-47.2	32.903	ug/L	1.8644	32.903	ppb	1.8644	5.67%
B 249.677†	1287.7	17.548	ug/L	0.7728	17.548	ppb	0.7728	4.40%
Ba 233.527†	88509.4	858.60	ug/L	3.861	858.60	ppb	3.861	0.45%
Be 313.107†	-7388.7	6.1963	ug/L	0.07415	6.1963	ppb	0.07415	1.20%
Ca 317.933Radial†	10374.3	20370	ug/L	517.0	20370	ppb	517.0	2.54%
Cd 226.502†	707.4	1.0012	ug/L	0.21152	1.0012	ppb	0.21152	21.13%
Co 228.616†	1861.8	36.684	ug/L	0.3546	36.684	ppb	0.3546	0.97%
Cr 267.716†	8521.0	135.62	ug/L	0.892	135.62	ppb	0.892	0.66%
Cu 324.752†	12298.2	45.848	ug/L	0.4786	45.848	ppb	0.4786	1.04%
Fe 238.204 Radial†	7130.7	90630	ug/L	2011.3	90630	ppb	2011.3	2.22%
K 766.490 Radial†	60020.8	11154	ug/L	291.6	11154	ppb	291.6	2.61%

Mg 279.077 IEC†	271.5	11089	ug/L	189.4	11089	ppb	189.4	1.71%
Mn 257.610†	2478373.4	3215.3	ug/L	4.42	3215.3	ppb	4.42	0.14%
Mo 202.031†	-34.9	3.9282	ug/L	0.28568	3.9282	ppb	0.28568	7.27%
Na 589.592 Radial†	1459.3	642.29	ug/L	17.283	642.29	ppb	17.283	2.69%
Ni 231.604†	2498.5	81.443	ug/L	1.0035	81.443	ppb	1.0035	1.23%
P 214.914†	1859.3	1122.0	ug/L	9.68	1122.0	ppb	9.68	0.86%
Pb 220.353†	451.7	77.389	ug/L	0.6986	77.389	ppb	0.6986	0.90%
S 181.975 Axial†	566.3	839.79	ug/L	5.296	839.79	ppb	5.296	0.63%
Sb 206.836†	40.4	0.3434	ug/L	1.22682	0.3434	ppb	1.22682	357.27%
Se 196.026†	-353.7	-5.0936	ug/L	7.80005	-5.0936	ppb	7.80005	153.13%
Si 251.611†	916893.8	33566	ug/L	42.6	33566	ppb	42.6	0.13%
Sn 189.927†	-103.1	-19.513	ug/L	0.7145	-19.513	ppb	0.7145	3.66%
Sr 421.552†	16102.7	154.46	ug/L	4.199	154.46	ppb	4.199	2.72%
Ti 334.940†	2228077.7	4045.6	ug/L	3.91	4045.6	ppb	3.91	0.10%
Tl 190.801†	-117.0	3.3334	ug/L	4.58002	3.3334	ppb	4.58002	137.40%
U 409.014†	-4179.8	-171.62	ug/L	3.614	-171.62	ppb	3.614	2.11%
V 292.402†	20377.7	161.97	ug/L	1.079	161.97	ppb	1.079	0.67%
Zn 213.857†	27301.4	298.15	ug/L	1.951	298.15	ppb	1.951	0.65%
SiO2†	917868.8	72471	ug/L	867.3	72471	ppb	867.3	1.20%

Sequence No.: 22
Sample ID: 248374010|960819|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 4/1/2010 16:11:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248374010|960819|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4118.1	4118.1	107	%			16:13:45
1	Y RADIAL	4975.8	4975.8	114.9	%			16:13:45
1	Al 396.153Radial†	64004.5	59752.5	62901	ug/L	62901	ppb	16:13:45
1	Ca 317.933Radial†	12644.8	11767.9	23107	ug/L	23107	ppb	16:13:45
1	Fe 238.204 Radial†	8609.0	8018.5	101910	ug/L	101910	ppb	16:13:45
1	K 766.490 Radial†	76669.0	68469.3	12724	ug/L	12724	ppb	16:13:45
1	Mg 279.077 IEC†	312.4	288.2	11762	ug/L	11762	ppb	16:14:05
1	Na 589.592 Radial†	478.6	1524.0	670.75	ug/L	670.75	ppb	16:13:45
1	Sr 421.552†	19281.7	17959.1	172.26	ug/L	172.26	ppb	16:13:45
1	Sc 361.383	699792.5	699792.5	101.48	%			16:15:03
1	Y 371.029	605445.1	605445.1	111.74	%			16:15:03
1	Ag 328.068†	-5791.6	-5807.0	0.1198	ug/L	0.1198	ppb	16:15:08
1	As 188.979†	-75.7	-51.8	34.080	ug/L	34.080	ppb	16:15:28
1	B 249.677†	898.4	1468.3	20.259	ug/L	20.259	ppb	16:15:08
1	Ba 233.527†	87735.3	86455.1	839.12	ug/L	839.12	ppb	16:15:08
1	Be 313.107†	-11635.2	-6942.3	6.5877	ug/L	6.5877	ppb	16:15:08
1	Cd 226.502†	546.1	751.6	0.4795	ug/L	0.4795	ppb	16:15:28
1	Co 228.616†	1844.8	1877.6	36.711	ug/L	36.711	ppb	16:15:28
1	Cr 267.716†	8516.9	8301.4	133.59	ug/L	133.59	ppb	16:15:08
1	Cu 324.752†	19134.8	13167.8	49.339	ug/L	49.339	ppb	16:15:08
1	Mn 257.610†	2410710.3	2375110.9	3082.8	ug/L	3082.8	ppb	16:15:03
1	Mo 202.031†	-21.0	-33.1	5.0047	ug/L	5.0047	ppb	16:15:28
1	Ni 231.604†	2479.8	2368.9	77.220	ug/L	77.220	ppb	16:15:28
1	P 214.914†	2957.0	2695.3	1647.6	ug/L	1647.6	ppb	16:15:28
1	Pb 220.353†	477.3	537.3	90.714	ug/L	90.714	ppb	16:15:28
1	S 181.975 Axial†	693.1	642.8	954.01	ug/L	954.01	ppb	16:15:28
1	Sb 206.836†	69.9	37.1	-1.4761	ug/L	-1.4761	ppb	16:15:28
1	Se 196.026†	-427.6	-399.3	-7.9107	ug/L	-7.9107	ppb	16:15:28
1	Si 251.611†	1108936.9	1092269.1	39987	ug/L	39987	ppb	16:15:03
1	Sn 189.927†	-102.8	-105.4	-19.486	ug/L	-19.486	ppb	16:15:28
1	Ti 334.940†	2311602.8	2279315.1	4138.9	ug/L	4138.9	ppb	16:15:03
1	Tl 190.801†	-162.9	-122.6	1.2820	ug/L	1.2820	ppb	16:15:28
1	U 409.014†	-6575.0	-4072.6	-168.77	ug/L	-168.77	ppb	16:15:08
1	V 292.402†	20540.3	21957.1	174.18	ug/L	174.18	ppb	16:15:08
1	Zn 213.857†	31200.9	30081.3	328.28	ug/L	328.28	ppb	16:15:08
1	SiO2†	1107204.8	1090519.7	86103	ug/L	86103	ppb	16:16:36
2	Sc Radial	4035.3	4035.3	105	%			16:14:10
2	Y RADIAL	4910.0	4910.0	113.3	%			16:14:10
2	Al 396.153Radial†	62919.6	59944.8	63103	ug/L	63103	ppb	16:14:10
2	Ca 317.933Radial†	12416.5	11792.6	23155	ug/L	23155	ppb	16:14:10
2	Fe 238.204 Radial†	8466.9	8048.0	102290	ug/L	102290	ppb	16:14:10
2	K 766.490 Radial†	75029.5	68376.3	12707	ug/L	12707	ppb	16:14:10
2	Mg 279.077 IEC†	310.4	292.3	11932	ug/L	11932	ppb	16:14:30
2	Na 589.592 Radial†	400.6	1458.9	642.12	ug/L	642.12	ppb	16:14:10
2	Sr 421.552†	18848.1	17915.4	171.84	ug/L	171.84	ppb	16:14:10
2	Sc 361.383	706885.6	706885.6	102.51	%			16:15:34
2	Y 371.029	611170.9	611170.9	112.80	%			16:15:34
2	Ag 328.068†	-5821.3	-5778.7	0.3945	ug/L	0.3945	ppb	16:15:39
2	As 188.979†	-83.2	-58.4	30.876	ug/L	30.876	ppb	16:15:59
2	B 249.677†	979.0	1538.1	21.954	ug/L	21.954	ppb	16:15:39
2	Ba 233.527†	88552.0	86384.3	838.44	ug/L	838.44	ppb	16:15:39
2	Be 313.107†	-11703.4	-6893.7	6.6028	ug/L	6.6028	ppb	16:15:39
2	Cd 226.502†	561.4	761.1	0.5781	ug/L	0.5781	ppb	16:15:59
2	Co 228.616†	1849.2	1863.6	36.365	ug/L	36.365	ppb	16:15:59
2	Cr 267.716†	8575.3	8274.2	133.23	ug/L	133.23	ppb	16:15:39
2	Cu 324.752†	19313.2	13152.6	49.310	ug/L	49.310	ppb	16:15:39
2	Mn 257.610†	2429048.5	2369163.2	3075.1	ug/L	3075.1	ppb	16:15:34
2	Mo 202.031†	-11.1	-23.3	5.9739	ug/L	5.9739	ppb	16:15:59
2	Ni 231.604†	2460.0	2325.1	75.792	ug/L	75.792	ppb	16:15:59

2	P 214.914†	3020.6	2728.2	1668.4	ug/L	1668.4 ppb	16:15:59
2	Pb 220.353†	470.4	525.9	88.943	ug/L	88.943 ppb	16:15:59
2	S 181.975 Axial†	705.0	647.5	961.04	ug/L	961.04 ppb	16:15:59
2	Sb 206.836†	66.4	33.1	-3.1101	ug/L	-3.1101 ppb	16:15:59
2	Se 196.026†	-421.4	-389.0	0.7931	ug/L	0.7931 ppb	16:15:59
2	Si 251.611†	1119110.5	1091228.6	39949	ug/L	39949 ppb	16:15:34
2	Sn 189.927†	-111.6	-113.0	-21.205	ug/L	-21.205 ppb	16:15:59
2	Ti 334.940†	2333914.0	2278223.1	4136.9	ug/L	4136.9 ppb	16:15:34
2	Tl 190.801†	-167.6	-125.5	0.1097	ug/L	0.1097 ppb	16:15:59
2	U 409.014†	-6735.7	-4164.4	-172.34	ug/L	-172.34 ppb	16:15:39
2	V 292.402†	20764.5	21972.7	174.27	ug/L	174.27 ppb	16:15:39
2	Zn 213.857†	31450.9	30016.7	327.49	ug/L	327.49 ppb	16:15:39
2	SiO2†	1109842.1	1082144.4	85442	ug/L	85442 ppb	16:16:42
3	Sc Radial	4134.7	4134.7	108	%		16:14:35
3	Y RADIAL	5021.1	5021.1	115.9	%		16:14:35
3	Al 396.153Radial†	64220.5	59714.7	62861	ug/L	62861 ppb	16:14:35
3	Ca 317.933Radial†	12594.4	11674.0	22922	ug/L	22922 ppb	16:14:35
3	Fe 238.204 Radial†	8532.3	7915.2	100600	ug/L	100600 ppb	16:14:35
3	K 766.490 Radial†	76225.6	67772.1	12594	ug/L	12594 ppb	16:14:35
3	Mg 279.077 IEC†	311.4	286.1	11678	ug/L	11678 ppb	16:14:55
3	Na 589.592 Radial†	329.0	1383.3	608.84	ug/L	608.84 ppb	16:14:35
3	Sr 421.552†	19256.0	17863.4	171.35	ug/L	171.35 ppb	16:14:35
3	Sc 361.383	703540.5	703540.5	102.02	%		16:16:05
3	Y 371.029	609478.7	609478.7	112.49	%		16:16:05
3	Ag 328.068†	-5827.2	-5811.6	-0.3077	ug/L	-0.3077 ppb	16:16:10
3	As 188.979†	-70.8	-46.6	36.264	ug/L	36.264 ppb	16:16:30
3	B 249.677†	976.7	1540.4	22.285	ug/L	22.285 ppb	16:16:10
3	Ba 233.527†	88094.2	86346.3	838.03	ug/L	838.03 ppb	16:16:10
3	Be 313.107†	-11837.4	-7079.4	6.5198	ug/L	6.5198 ppb	16:16:10
3	Cd 226.502†	569.2	771.4	0.9048	ug/L	0.9048 ppb	16:16:30
3	Co 228.616†	1855.5	1878.4	36.763	ug/L	36.763 ppb	16:16:30
3	Cr 267.716†	8606.8	8344.8	134.09	ug/L	134.09 ppb	16:16:10
3	Cu 324.752†	19505.7	13430.9	50.145	ug/L	50.145 ppb	16:16:10
3	Mn 257.610†	2411217.9	2362952.9	3067.0	ug/L	3067.0 ppb	16:16:05
3	Mo 202.031†	-2.7	-15.1	6.6324	ug/L	6.6324 ppb	16:16:30
3	Ni 231.604†	2477.4	2353.6	76.720	ug/L	76.720 ppb	16:16:30
3	P 214.914†	2997.4	2719.5	1663.9	ug/L	1663.9 ppb	16:16:30
3	Pb 220.353†	465.3	523.1	88.596	ug/L	88.596 ppb	16:16:30
3	S 181.975 Axial†	706.4	652.2	968.16	ug/L	968.16 ppb	16:16:30
3	Sb 206.836†	72.8	39.6	-0.4278	ug/L	-0.4278 ppb	16:16:30
3	Se 196.026†	-425.3	-394.8	-8.0676	ug/L	-8.0676 ppb	16:16:30
3	Si 251.611†	1110445.4	1087926.1	39828	ug/L	39828 ppb	16:16:05
3	Sn 189.927†	-110.1	-112.1	-21.049	ug/L	-21.049 ppb	16:16:30
3	Ti 334.940†	2320863.8	2276257.2	4133.3	ug/L	4133.3 ppb	16:16:05
3	Tl 190.801†	-154.3	-113.3	4.7245	ug/L	4.7245 ppb	16:16:30
3	U 409.014†	-6558.3	-4021.7	-166.66	ug/L	-166.66 ppb	16:16:10
3	V 292.402†	20717.3	22022.9	174.98	ug/L	174.98 ppb	16:16:10
3	Zn 213.857†	31307.1	30021.6	327.79	ug/L	327.79 ppb	16:16:10
3	SiO2†	1116071.7	1093398.2	86330	ug/L	86330 ppb	16:16:48

Mean Data: 248374010|960819|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	703406.2	102.00	%	0.515				0.50%
Sc Radial	4096.0	107	%	1.4				1.30%
Y 371.029	608698.2	112.34	%	0.543				0.48%
Y RADIAL	4969.0	114.7	%	1.29				1.12%
Ag 328.068†	-5799.1	0.0689	ug/L	0.35382	0.0689	ppb	0.35382	513.82%
Al 396.153Radial†	59804.0	62955	ug/L	129.9	62955	ppb	129.9	0.21%
As 188.979†	-52.3	33.740	ug/L	2.7096	33.740	ppb	2.7096	8.03%
B 249.677†	1515.6	21.499	ug/L	1.0869	21.499	ppb	1.0869	5.06%
Ba 233.527†	86395.2	838.53	ug/L	0.550	838.53	ppb	0.550	0.07%
Be 313.107†	-6971.8	6.5701	ug/L	0.04425	6.5701	ppb	0.04425	0.67%
Ca 317.933Radial†	11744.8	23061	ug/L	122.9	23061	ppb	122.9	0.53%
Cd 226.502†	761.3	0.6541	ug/L	0.22265	0.6541	ppb	0.22265	34.04%
Co 228.616†	1873.2	36.613	ug/L	0.2167	36.613	ppb	0.2167	0.59%
Cr 267.716†	8306.8	133.64	ug/L	0.433	133.64	ppb	0.433	0.32%
Cu 324.752†	13250.4	49.598	ug/L	0.4737	49.598	ppb	0.4737	0.96%
Fe 238.204 Radial†	7993.9	101600	ug/L	885.8	101600	ppb	885.8	0.87%
K 766.490 Radial†	68205.9	12675	ug/L	70.3	12675	ppb	70.3	0.55%

Mg 279.077 IEC†	288.8	11791	ug/L	129.7	11791	ppb	129.7	1.10%
Mn 257.610†	2369075.7	3075.0	ug/L	7.93	3075.0	ppb	7.93	0.26%
Mo 202.031†	-23.9	5.8703	ug/L	0.81875	5.8703	ppb	0.81875	13.95%
Na 589.592 Radial†	1455.4	640.57	ug/L	30.984	640.57	ppb	30.984	4.84%
Ni 231.604†	2349.2	76.577	ug/L	0.7244	76.577	ppb	0.7244	0.95%
P 214.914†	2714.3	1660.0	ug/L	10.93	1660.0	ppb	10.93	0.66%
Pb 220.353†	528.8	89.418	ug/L	1.1361	89.418	ppb	1.1361	1.27%
S 181.975 Axial†	647.5	961.07	ug/L	7.073	961.07	ppb	7.073	0.74%
Sb 206.836†	36.6	-1.6713	ug/L	1.35175	-1.6713	ppb	1.35175	80.88%
Se 196.026†	-394.4	-5.0617	ug/L	5.07103	-5.0617	ppb	5.07103	100.18%
Si 251.611†	1090474.6	39921	ug/L	83.0	39921	ppb	83.0	0.21%
Sn 189.927†	-110.2	-20.580	ug/L	0.9508	-20.580	ppb	0.9508	4.62%
Sr 421.552†	17912.7	171.82	ug/L	0.459	171.82	ppb	0.459	0.27%
Ti 334.940†	2277931.8	4136.4	ug/L	2.82	4136.4	ppb	2.82	0.07%
Tl 190.801†	-120.5	2.0387	ug/L	2.39869	2.0387	ppb	2.39869	117.66%
U 409.014†	-4086.2	-169.26	ug/L	2.875	-169.26	ppb	2.875	1.70%
V 292.402†	21984.3	174.48	ug/L	0.439	174.48	ppb	0.439	0.25%
Zn 213.857†	30039.9	327.85	ug/L	0.396	327.85	ppb	0.396	0.12%
SiO2†	1088687.5	85958	ug/L	461.6	85958	ppb	461.6	0.54%

Sequence No.: 23
Sample ID: 248374011|960819|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 4/1/2010 16:18:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248374011|960819|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4130.5	4130.5	108	%			16:21:12
1	Y RADIAL	4938.4	4938.4	114.0	%			16:21:12
1	Al 396.153Radial†	118483.5	110202.2	116010	ug/L	116010	ppb	16:20:52
1	Ca 317.933Radial†	13051.9	12110.8	23780	ug/L	23780	ppb	16:20:52
1	Fe 238.204 Radial†	7217.1	6700.9	85166	ug/L	85166	ppb	16:21:12
1	K 766.490 Radial†	78999.4	70420.4	13087	ug/L	13087	ppb	16:20:52
1	Mg 279.077 IEC†	369.1	340.0	13916	ug/L	13916	ppb	16:21:12
1	Na 589.592 Radial†	1727.7	2683.4	1181.0	ug/L	1181.0	ppb	16:20:52
1	Sr 421.552†	20599.6	19129.9	183.50	ug/L	183.50	ppb	16:20:52
1	Sc 361.383	698023.0	698023.0	101.22	%			16:22:10
1	Y 371.029	595461.1	595461.1	109.90	%			16:22:10
1	Ag 328.068†	-4665.6	-4709.1	0.9138	ug/L	0.9138	ppb	16:22:30
1	As 188.979†	-52.5	-29.1	35.020	ug/L	35.020	ppb	16:22:30
1	B 249.677†	676.5	1251.3	17.551	ug/L	17.551	ppb	16:22:10
1	Ba 233.527†	110648.9	109310.9	1059.5	ug/L	1059.5	ppb	16:22:10
1	Be 313.107†	-3327.4	1236.0	8.2158	ug/L	8.2158	ppb	16:22:10
1	Cd 226.502†	440.1	648.2	0.6953	ug/L	0.6953	ppb	16:22:30
1	Co 228.616†	1393.0	1435.8	27.670	ug/L	27.670	ppb	16:22:30
1	Cr 267.716†	6265.2	6098.2	99.293	ug/L	99.293	ppb	16:22:30
1	Cu 324.752†	16988.8	11095.5	41.545	ug/L	41.545	ppb	16:22:10
1	Mn 257.610†	983239.9	970912.9	1264.1	ug/L	1264.1	ppb	16:22:10
1	Mo 202.031†	-49.6	-61.4	0.9929	ug/L	0.9929	ppb	16:22:30
1	Ni 231.604†	2243.3	2141.5	69.810	ug/L	69.810	ppb	16:22:30
1	P 214.914†	3961.3	3694.9	2314.6	ug/L	2314.6	ppb	16:22:30
1	Pb 220.353†	212.9	277.3	64.807	ug/L	64.807	ppb	16:22:30
1	S 181.975 Axial†	591.3	543.9	795.49	ug/L	795.49	ppb	16:22:30
1	Sb 206.836†	80.2	47.5	3.7098	ug/L	3.7098	ppb	16:22:30
1	Se 196.026†	-364.8	-338.3	7.4883	ug/L	7.4883	ppb	16:22:30
1	Si 251.611†	1106701.6	1092830.9	40007	ug/L	40007	ppb	16:22:10
1	Sn 189.927†	-114.0	-116.7	-22.071	ug/L	-22.071	ppb	16:22:30
1	Ti 334.940†	1894290.3	1872820.0	3401.1	ug/L	3401.1	ppb	16:22:10
1	Tl 190.801†	-117.0	-77.6	3.8528	ug/L	3.8528	ppb	16:22:30
1	U 409.014†	-6289.8	-3807.3	-156.57	ug/L	-156.57	ppb	16:22:10
1	V 292.402†	18819.1	20308.1	162.89	ug/L	162.89	ppb	16:22:30
1	Zn 213.857†	17351.0	16476.7	175.23	ug/L	175.23	ppb	16:22:30
1	SiO2†	1109345.8	1095400.7	86488	ug/L	86488	ppb	16:23:30
2	Sc Radial	4092.5	4092.5	107	%			16:21:37
2	Y RADIAL	4880.7	4880.7	112.7	%			16:21:37
2	Al 396.153Radial†	117079.6	109909.6	115700	ug/L	115700	ppb	16:21:17
2	Ca 317.933Radial†	12924.4	12104.1	23767	ug/L	23767	ppb	16:21:17
2	Fe 238.204 Radial†	7133.9	6685.2	84968	ug/L	84968	ppb	16:21:37
2	K 766.490 Radial†	78497.3	70632.4	13127	ug/L	13127	ppb	16:21:17
2	Mg 279.077 IEC†	361.2	335.8	13743	ug/L	13743	ppb	16:21:37
2	Na 589.592 Radial†	1621.7	2598.9	1143.9	ug/L	1143.9	ppb	16:21:17
2	Sr 421.552†	20294.0	19021.3	182.46	ug/L	182.46	ppb	16:21:17
2	Sc 361.383	702949.1	702949.1	101.94	%			16:22:37
2	Y 371.029	599030.5	599030.5	110.56	%			16:22:37
2	Ag 328.068†	-4635.4	-4647.2	1.1806	ug/L	1.1806	ppb	16:22:57
2	As 188.979†	-57.6	-33.8	32.633	ug/L	32.633	ppb	16:22:57
2	B 249.677†	781.3	1349.5	20.054	ug/L	20.054	ppb	16:22:37
2	Ba 233.527†	111422.6	109303.9	1059.4	ug/L	1059.4	ppb	16:22:37
2	Be 313.107†	-3470.9	1118.3	8.1645	ug/L	8.1645	ppb	16:22:37
2	Cd 226.502†	420.9	626.3	0.3952	ug/L	0.3952	ppb	16:22:57
2	Co 228.616†	1373.7	1407.2	26.972	ug/L	26.972	ppb	16:22:57
2	Cr 267.716†	6191.9	5982.9	97.566	ug/L	97.566	ppb	16:22:57
2	Cu 324.752†	17040.2	11028.4	41.309	ug/L	41.309	ppb	16:22:37
2	Mn 257.610†	991148.8	971864.4	1265.4	ug/L	1265.4	ppb	16:22:37
2	Mo 202.031†	-37.4	-49.2	2.1536	ug/L	2.1536	ppb	16:22:57
2	Ni 231.604†	2183.7	2067.6	67.399	ug/L	67.399	ppb	16:22:57

2	P 214.914†	3925.4	3632.3	2274.8	ug/L	2274.8 ppb	16:22:57
2	Pb 220.353†	220.3	283.1	65.663	ug/L	65.663 ppb	16:22:57
2	S 181.975 Axial†	581.0	529.7	774.26	ug/L	774.26 ppb	16:22:57
2	Sb 206.836†	63.2	30.3	-3.1416	ug/L	-3.1416 ppb	16:22:57
2	Se 196.026†	-360.3	-331.4	12.042	ug/L	12.042 ppb	16:22:57
2	Si 251.611†	1116264.1	1094549.9	40070	ug/L	40070 ppb	16:22:37
2	Sn 189.927†	-112.9	-114.9	-21.640	ug/L	-21.640 ppb	16:22:57
2	Ti 334.940†	1906726.2	1871905.2	3399.4	ug/L	3399.4 ppb	16:22:37
2	Tl 190.801†	-124.2	-83.9	1.4324	ug/L	1.4324 ppb	16:22:57
2	U 409.014†	-6252.8	-3727.5	-153.46	ug/L	-153.46 ppb	16:22:37
2	V 292.402†	18655.2	20017.0	160.38	ug/L	160.38 ppb	16:22:57
2	Zn 213.857†	17182.1	16191.0	172.00	ug/L	172.00 ppb	16:22:57
2	SiO2†	1111574.3	1089906.6	86055	ug/L	86055 ppb	16:23:36
3	Sc Radial	4103.7	4103.7	107	%		16:22:02
3	Y RADIAL	4903.5	4903.5	113.2	%		16:22:02
3	Al 396.153Radial†	116585.1	109145.9	114900	ug/L	114900 ppb	16:21:42
3	Ca 317.933Radial†	12943.8	12089.0	23737	ug/L	23737 ppb	16:21:42
3	Fe 238.204 Radial†	7129.4	6662.7	84681	ug/L	84681 ppb	16:22:02
3	K 766.490 Radial†	77842.9	69818.4	12975	ug/L	12975 ppb	16:21:42
3	Mg 279.077 IEC†	368.2	341.4	13973	ug/L	13973 ppb	16:22:02
3	Na 589.592 Radial†	1648.6	2619.9	1153.1	ug/L	1153.1 ppb	16:21:42
3	Sr 421.552†	20165.7	18849.1	180.80	ug/L	180.80 ppb	16:21:42
3	Sc 361.383	697451.9	697451.9	101.14	%		16:23:03
3	Y 371.029	594417.8	594417.8	109.71	%		16:23:03
3	Ag 328.068†	-4650.6	-4698.0	0.8198	ug/L	0.8198 ppb	16:23:23
3	As 188.979†	-55.5	-32.1	33.382	ug/L	33.382 ppb	16:23:23
3	B 249.677†	660.3	1235.9	17.243	ug/L	17.243 ppb	16:23:03
3	Ba 233.527†	110525.2	109278.1	1059.1	ug/L	1059.1 ppb	16:23:03
3	Be 313.107†	-3305.4	1255.2	8.2203	ug/L	8.2203 ppb	16:23:03
3	Cd 226.502†	397.2	606.2	0.1297	ug/L	0.1297 ppb	16:23:23
3	Co 228.616†	1361.1	1405.4	26.929	ug/L	26.929 ppb	16:23:23
3	Cr 267.716†	6173.8	6012.8	97.980	ug/L	97.980 ppb	16:23:23
3	Cu 324.752†	16947.4	11068.3	41.430	ug/L	41.430 ppb	16:23:03
3	Mn 257.610†	982090.2	970571.6	1263.6	ug/L	1263.6 ppb	16:23:03
3	Mo 202.031†	-37.0	-49.1	2.1414	ug/L	2.1414 ppb	16:23:23
3	Ni 231.604†	2194.2	2094.8	68.288	ug/L	68.288 ppb	16:23:23
3	P 214.914†	3905.7	3643.2	2281.7	ug/L	2281.7 ppb	16:23:23
3	Pb 220.353†	213.0	277.6	64.617	ug/L	64.617 ppb	16:23:23
3	S 181.975 Axial†	575.7	528.9	773.21	ug/L	773.21 ppb	16:23:23
3	Sb 206.836†	78.2	45.6	2.9830	ug/L	2.9830 ppb	16:23:23
3	Se 196.026†	-360.7	-334.5	8.7139	ug/L	8.7139 ppb	16:23:23
3	Si 251.611†	1105374.7	1092414.3	39992	ug/L	39992 ppb	16:23:03
3	Sn 189.927†	-124.5	-127.2	-24.490	ug/L	-24.490 ppb	16:23:23
3	Ti 334.940†	1891944.5	1872033.2	3399.6	ug/L	3399.6 ppb	16:23:03
3	Tl 190.801†	-119.9	-80.6	2.7021	ug/L	2.7021 ppb	16:23:23
3	U 409.014†	-6342.5	-3864.4	-158.71	ug/L	-158.71 ppb	16:23:03
3	V 292.402†	18600.0	20106.6	161.20	ug/L	161.20 ppb	16:23:23
3	Zn 213.857†	17127.8	16270.0	172.94	ug/L	172.94 ppb	16:23:23
3	SiO2†	1113405.5	1100312.0	86876	ug/L	86876 ppb	16:23:42

Mean Data: 248374011|960819|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	699474.7	101.43	%	0.438				0.43%
Sc Radial	4108.9	107	%	0.5				0.48%
Y 371.029	596303.2	110.06	%	0.446				0.41%
Y RADIAL	4907.5	113.3	%	0.67				0.59%
Ag 328.068†	-4684.7	0.9714	ug/L	0.18720	0.9714	ppb	0.18720	19.27%
Al 396.153Radial†	109752.6	115540	ug/L	574.1	115540	ppb	574.1	0.50%
As 188.979†	-31.6	33.678	ug/L	1.2206	33.678	ppb	1.2206	3.62%
B 249.677†	1278.9	18.283	ug/L	1.5417	18.283	ppb	1.5417	8.43%
Ba 233.527†	109297.7	1059.3	ug/L	0.18	1059.3	ppb	0.18	0.02%
Be 313.107†	1203.2	8.2002	ug/L	0.03100	8.2002	ppb	0.03100	0.38%
Ca 317.933Radial†	12101.3	23761	ug/L	21.9	23761	ppb	21.9	0.09%
Cd 226.502†	626.9	0.4067	ug/L	0.28295	0.4067	ppb	0.28295	69.56%
Co 228.616†	1416.1	27.190	ug/L	0.4158	27.190	ppb	0.4158	1.53%
Cr 267.716†	6031.3	98.280	ug/L	0.9014	98.280	ppb	0.9014	0.92%
Cu 324.752†	11064.1	41.428	ug/L	0.1180	41.428	ppb	0.1180	0.28%
Fe 238.204 Radial†	6682.9	84938	ug/L	244.0	84938	ppb	244.0	0.29%
K 766.490 Radial†	70290.4	13063	ug/L	78.5	13063	ppb	78.5	0.60%

Mg 279.077 IEC†	339.1	13877	ug/L	119.8	13877	ppb	119.8	0.86%
Mn 257.610†	971116.3	1264.4	ug/L	0.88	1264.4	ppb	0.88	0.07%
Mo 202.031†	-53.2	1.7626	ug/L	0.66663	1.7626	ppb	0.66663	37.82%
Na 589.592 Radial†	2634.1	1159.4	ug/L	19.34	1159.4	ppb	19.34	1.67%
Ni 231.604†	2101.3	68.499	ug/L	1.2192	68.499	ppb	1.2192	1.78%
P 214.914†	3656.8	2290.4	ug/L	21.30	2290.4	ppb	21.30	0.93%
Pb 220.353†	279.4	65.029	ug/L	0.5568	65.029	ppb	0.5568	0.86%
S 181.975 Axial†	534.2	780.99	ug/L	12.569	780.99	ppb	12.569	1.61%
Sb 206.836†	41.1	1.1837	ug/L	3.76341	1.1837	ppb	3.76341	317.93%
Se 196.026†	-334.7	9.4148	ug/L	2.35646	9.4148	ppb	2.35646	25.03%
Si 251.611†	1093265.0	40023	ug/L	41.4	40023	ppb	41.4	0.10%
Sn 189.927†	-119.6	-22.734	ug/L	1.5363	-22.734	ppb	1.5363	6.76%
Sr 421.552†	19000.1	182.25	ug/L	1.359	182.25	ppb	1.359	0.75%
Ti 334.940†	1872252.8	3400.0	ug/L	0.90	3400.0	ppb	0.90	0.03%
Tl 190.801†	-80.7	2.6624	ug/L	1.21066	2.6624	ppb	1.21066	45.47%
U 409.014†	-3799.7	-156.25	ug/L	2.637	-156.25	ppb	2.637	1.69%
V 292.402†	20143.9	161.49	ug/L	1.282	161.49	ppb	1.282	0.79%
Zn 213.857†	16312.6	173.39	ug/L	1.657	173.39	ppb	1.657	0.96%
SiO2†	1095206.4	86473	ug/L	411.0	86473	ppb	411.0	0.48%

Sequence No.: 24
Sample ID: 248374012|960819|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 4/1/2010 16:25:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248374012|960819|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4132.1	4132.1	108	%			16:28:05
1	Y RADIAL	5090.6	5090.6	117.5	%			16:28:05
1	Al 396.153Radial†	111147.8	103347.2	108790	ug/L	108790	ppb	16:27:45
1	Ca 317.933Radial†	12263.4	11373.9	22333	ug/L	22333	ppb	16:27:45
1	Fe 238.204 Radial†	9610.7	8922.0	113400	ug/L	113400	ppb	16:27:45
1	K 766.490 Radial†	82205.0	73371.6	13636	ug/L	13636	ppb	16:27:45
1	Mg 279.077 IEC†	493.2	455.2	18630	ug/L	18630	ppb	16:28:05
1	Na 589.592 Radial†	2976.1	3842.5	1691.2	ug/L	1691.2	ppb	16:27:45
1	Sr 421.552†	22420.3	20814.3	199.68	ug/L	199.68	ppb	16:27:45
1	Sc 361.383	709810.1	709810.1	102.93	%			16:29:03
1	Y 371.029	626283.7	626283.7	115.59	%			16:29:03
1	Ag 328.068†	-6549.4	-6462.7	0.2688	ug/L	0.2688	ppb	16:29:08
1	As 188.979†	-45.4	-21.3	44.815	ug/L	44.815	ppb	16:29:28
1	B 249.677†	1403.3	1946.3	30.421	ug/L	30.421	ppb	16:29:08
1	Ba 233.527†	103818.0	100859.5	978.77	ug/L	978.77	ppb	16:29:08
1	Be 313.107†	-1750.4	2822.8	8.6855	ug/L	8.6855	ppb	16:29:08
1	Cd 226.502†	608.2	804.3	0.0688	ug/L	0.0688	ppb	16:29:28
1	Co 228.616†	1869.5	1875.9	38.257	ug/L	38.257	ppb	16:29:28
1	Cr 267.716†	10716.4	10319.8	164.66	ug/L	164.66	ppb	16:29:08
1	Cu 324.752†	24206.5	17828.8	65.499	ug/L	65.499	ppb	16:29:08
1	Mn 257.610†	1282287.0	1245309.8	1621.8	ug/L	1621.8	ppb	16:29:03
1	Mo 202.031†	-43.2	-54.5	3.8365	ug/L	3.8365	ppb	16:29:28
1	Ni 231.604†	3197.0	3031.2	98.816	ug/L	98.816	ppb	16:29:28
1	P 214.914†	2674.4	2379.7	1445.0	ug/L	1445.0	ppb	16:29:28
1	Pb 220.353†	374.7	431.0	84.387	ug/L	84.387	ppb	16:29:28
1	S 181.975 Axial†	504.3	449.7	655.30	ug/L	655.30	ppb	16:29:28
1	Sb 206.836†	66.3	32.7	-1.8250	ug/L	-1.8250	ppb	16:29:28
1	Se 196.026†	-482.2	-446.3	0.4172	ug/L	0.4172	ppb	16:29:28
1	Si 251.611†	1024900.5	995204.6	36433	ug/L	36433	ppb	16:29:03
1	Sn 189.927†	-95.7	-97.1	-17.646	ug/L	-17.646	ppb	16:29:28
1	Ti 334.940†	1883527.1	1831287.1	3325.1	ug/L	3325.1	ppb	16:29:03
1	Tl 190.801†	-127.1	-85.5	1.7299	ug/L	1.7299	ppb	16:29:28
1	U 409.014†	-8005.2	-5370.6	-220.14	ug/L	-220.14	ppb	16:29:03
1	V 292.402†	25411.8	26404.2	212.57	ug/L	212.57	ppb	16:29:08
1	Zn 213.857†	25629.6	24234.8	259.53	ug/L	259.53	ppb	16:29:08
1	SiO2†	1033998.5	1004000.8	79272	ug/L	79272	ppb	16:30:36
2	Sc Radial	4182.0	4182.0	109	%			16:28:30
2	Y RADIAL	5145.8	5145.8	118.8	%			16:28:30
2	Al 396.153Radial†	114970.3	105622.5	111190	ug/L	111190	ppb	16:28:10
2	Ca 317.933Radial†	12573.2	11522.2	22624	ug/L	22624	ppb	16:28:10
2	Fe 238.204 Radial†	9867.8	9051.3	115040	ug/L	115040	ppb	16:28:10
2	K 766.490 Radial†	84711.4	74760.0	13894	ug/L	13894	ppb	16:28:10
2	Mg 279.077 IEC†	504.2	459.8	18818	ug/L	18818	ppb	16:28:30
2	Na 589.592 Radial†	3154.4	3973.2	1748.7	ug/L	1748.7	ppb	16:28:10
2	Sr 421.552†	23314.5	21386.3	205.17	ug/L	205.17	ppb	16:28:10
2	Sc 361.383	707395.7	707395.7	102.58	%			16:29:34
2	Y 371.029	623182.8	623182.8	115.02	%			16:29:34
2	Ag 328.068†	-6613.4	-6546.8	0.3114	ug/L	0.3114	ppb	16:29:39
2	As 188.979†	-45.6	-21.7	45.016	ug/L	45.016	ppb	16:29:59
2	B 249.677†	1484.8	2030.4	32.269	ug/L	32.269	ppb	16:29:39
2	Ba 233.527†	104456.8	101826.4	988.17	ug/L	988.17	ppb	16:29:39
2	Be 313.107†	-1669.3	2896.0	8.7180	ug/L	8.7180	ppb	16:29:39
2	Cd 226.502†	606.9	805.1	-0.0880	ug/L	-0.0880	ppb	16:29:59
2	Co 228.616†	1870.5	1883.1	38.414	ug/L	38.414	ppb	16:29:59
2	Cr 267.716†	10680.2	10320.0	164.84	ug/L	164.84	ppb	16:29:39
2	Cu 324.752†	24347.7	18046.8	66.309	ug/L	66.309	ppb	16:29:39
2	Mn 257.610†	1282924.4	1250183.0	1628.2	ug/L	1628.2	ppb	16:29:34
2	Mo 202.031†	-34.9	-46.5	4.7305	ug/L	4.7305	ppb	16:29:59
2	Ni 231.604†	3226.8	3070.9	100.11	ug/L	100.11	ppb	16:29:59

2	P 214.914†	2725.6	2438.5	1481.6	ug/L	1481.6 ppb	16:29:59
2	Pb 220.353†	380.5	437.9	85.922	ug/L	85.922 ppb	16:29:59
2	S 181.975 Axial†	498.2	445.4	648.36	ug/L	648.36 ppb	16:29:59
2	Sb 206.836†	74.7	41.0	1.4024	ug/L	1.4024 ppb	16:29:59
2	Se 196.026†	-471.2	-437.3	12.183	ug/L	12.183 ppb	16:29:59
2	Si 251.611†	1024195.0	997915.4	36533	ug/L	36533 ppb	16:29:34
2	Sn 189.927†	-110.9	-112.2	-21.050	ug/L	-21.050 ppb	16:29:59
2	Ti 334.940†	1877844.2	1831992.9	3326.4	ug/L	3326.4 ppb	16:29:34
2	Tl 190.801†	-128.9	-87.7	0.9513	ug/L	0.9513 ppb	16:29:59
2	U 409.014†	-7858.3	-5254.0	-215.84	ug/L	-215.84 ppb	16:29:34
2	V 292.402†	25473.1	26548.3	213.62	ug/L	213.62 ppb	16:29:39
2	Zn 213.857†	25651.2	24340.9	260.48	ug/L	260.48 ppb	16:29:39
2	SiO2†	1036517.1	1009884.6	79736	ug/L	79736 ppb	16:30:42
3	Sc Radial	4151.0	4151.0	108	%		16:28:55
3	Y RADIAL	5127.0	5127.0	118.4	%		16:28:55
3	Al 396.153Radial†	114719.6	106178.1	111770	ug/L	111770 ppb	16:28:35
3	Ca 317.933Radial†	12603.3	11636.1	22848	ug/L	22848 ppb	16:28:35
3	Fe 238.204 Radial†	9905.8	9154.1	116350	ug/L	116350 ppb	16:28:35
3	K 766.490 Radial†	84556.8	75197.2	13975	ug/L	13975 ppb	16:28:35
3	Mg 279.077 IEC†	496.3	456.0	18660	ug/L	18660 ppb	16:28:55
3	Na 589.592 Radial†	3129.1	3971.4	1748.0	ug/L	1748.0 ppb	16:28:35
3	Sr 421.552†	23171.7	21414.0	205.44	ug/L	205.44 ppb	16:28:35
3	Sc 361.383	723915.1	723915.1	104.98	%		16:30:05
3	Y 371.029	637193.0	637193.0	117.60	%		16:30:05
3	Ag 328.068†	-6638.4	-6423.5	1.3748	ug/L	1.3748 ppb	16:30:10
3	As 188.979†	-45.6	-20.7	45.558	ug/L	45.558 ppb	16:30:30
3	B 249.677†	1471.7	1984.9	30.914	ug/L	30.914 ppb	16:30:10
3	Ba 233.527†	104161.1	99221.1	963.02	ug/L	963.02 ppb	16:30:10
3	Be 313.107†	-1718.9	2885.9	8.6429	ug/L	8.6429 ppb	16:30:10
3	Cd 226.502†	616.9	801.1	-0.2820	ug/L	-0.2820 ppb	16:30:30
3	Co 228.616†	1894.5	1864.3	37.986	ug/L	37.986 ppb	16:30:30
3	Cr 267.716†	10718.5	10118.9	162.00	ug/L	162.00 ppb	16:30:10
3	Cu 324.752†	24297.4	17457.3	64.414	ug/L	64.414 ppb	16:30:10
3	Mn 257.610†	1295849.6	1233956.6	1607.4	ug/L	1607.4 ppb	16:30:05
3	Mo 202.031†	-27.8	-38.9	5.5661	ug/L	5.5661 ppb	16:30:30
3	Ni 231.604†	3240.7	3012.4	98.201	ug/L	98.201 ppb	16:30:30
3	P 214.914†	2721.1	2373.5	1439.6	ug/L	1439.6 ppb	16:30:30
3	Pb 220.353†	363.5	413.3	82.070	ug/L	82.070 ppb	16:30:30
3	S 181.975 Axial†	511.1	446.6	650.08	ug/L	650.08 ppb	16:30:30
3	Sb 206.836†	74.7	39.4	0.8514	ug/L	0.8514 ppb	16:30:30
3	Se 196.026†	-480.9	-436.0	16.760	ug/L	16.760 ppb	16:30:30
3	Si 251.611†	1038640.1	988892.1	36202	ug/L	36202 ppb	16:30:05
3	Sn 189.927†	-107.3	-106.4	-19.654	ug/L	-19.654 ppb	16:30:30
3	Ti 334.940†	1903595.0	1814749.6	3295.2	ug/L	3295.2 ppb	16:30:05
3	Tl 190.801†	-123.1	-79.3	3.8149	ug/L	3.8149 ppb	16:30:30
3	U 409.014†	-7990.6	-5205.2	-214.10	ug/L	-214.10 ppb	16:30:05
3	V 292.402†	25633.2	26134.1	209.82	ug/L	209.82 ppb	16:30:10
3	Zn 213.857†	25660.3	23778.9	253.88	ug/L	253.88 ppb	16:30:10
3	SiO2†	1040689.1	990801.4	78230	ug/L	78230 ppb	16:30:48

Mean Data: 248374012|960819|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	713706.9	103.50	%	1.294				1.25%
Sc Radial	4155.0	108	%	0.7				0.61%
Y 371.029	628886.5	116.07	%	1.358				1.17%
Y RADIAL	5121.2	118.2	%	0.65				0.55%
Ag 328.068†	-6477.7	0.6517	ug/L	0.62665	0.6517	ppb	0.62665	96.16%
Al 396.153Radial†	105049.2	110580	ug/L	1578.9	110580	ppb	1578.9	1.43%
As 188.979†	-21.2	45.130	ug/L	0.3843	45.130	ppb	0.3843	0.85%
B 249.677†	1987.2	31.201	ug/L	0.9573	31.201	ppb	0.9573	3.07%
Ba 233.527†	100635.6	976.65	ug/L	12.708	976.65	ppb	12.708	1.30%
Be 313.107†	2868.2	8.6821	ug/L	0.03768	8.6821	ppb	0.03768	0.43%
Ca 317.933Radial†	11510.7	22602	ug/L	258.2	22602	ppb	258.2	1.14%
Cd 226.502†	803.5	-0.1004	ug/L	0.17572	-0.1004	ppb	0.17572	175.02%
Co 228.616†	1874.4	38.219	ug/L	0.2164	38.219	ppb	0.2164	0.57%
Cr 267.716†	10252.9	163.83	ug/L	1.587	163.83	ppb	1.587	0.97%
Cu 324.752†	17777.6	65.407	ug/L	0.9510	65.407	ppb	0.9510	1.45%
Fe 238.204 Radial†	9042.5	114930	ug/L	1478.3	114930	ppb	1478.3	1.29%
K 766.490 Radial†	74442.9	13835	ug/L	177.2	13835	ppb	177.2	1.28%

Mg 279.077 IEC†	457.0	18703	ug/L	100.9	18703	ppb	100.9	0.54%
Mn 257.610†	1243149.8	1619.1	ug/L	10.68	1619.1	ppb	10.68	0.66%
Mo 202.031†	-46.6	4.7110	ug/L	0.86494	4.7110	ppb	0.86494	18.36%
Na 589.592 Radial†	3929.1	1729.3	ug/L	32.98	1729.3	ppb	32.98	1.91%
Ni 231.604†	3038.1	99.042	ug/L	0.9738	99.042	ppb	0.9738	0.98%
P 214.914†	2397.2	1455.4	ug/L	22.86	1455.4	ppb	22.86	1.57%
Pb 220.353†	427.4	84.127	ug/L	1.9390	84.127	ppb	1.9390	2.30%
S 181.975 Axial†	447.2	651.25	ug/L	3.613	651.25	ppb	3.613	0.55%
Sb 206.836†	37.7	0.1429	ug/L	1.72641	0.1429	ppb	1.72641	>999.9%
Se 196.026†	-439.9	9.7866	ug/L	8.43072	9.7866	ppb	8.43072	86.15%
Si 251.611†	994004.0	36389	ug/L	169.5	36389	ppb	169.5	0.47%
Sn 189.927†	-105.2	-19.450	ug/L	1.7111	-19.450	ppb	1.7111	8.80%
Sr 421.552†	21204.8	203.43	ug/L	3.249	203.43	ppb	3.249	1.60%
Ti 334.940†	1826009.9	3315.6	ug/L	17.68	3315.6	ppb	17.68	0.53%
Tl 190.801†	-84.2	2.1654	ug/L	1.48062	2.1654	ppb	1.48062	68.38%
U 409.014†	-5276.6	-216.69	ug/L	3.110	-216.69	ppb	3.110	1.44%
V 292.402†	26362.2	212.00	ug/L	1.960	212.00	ppb	1.960	0.92%
Zn 213.857†	24118.2	257.96	ug/L	3.571	257.96	ppb	3.571	1.38%
SiO2†	1001562.3	79079	ug/L	771.6	79079	ppb	771.6	0.98%

Sequence No.: 25
Sample ID: 248374013|960819|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 4/1/2010 16:33:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248374013|960819|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4106.1	4106.1	107	%			16:35:12
1	Y RADIAL	5022.6	5022.6	115.9	%			16:35:12
1	Al 396.153Radial†	56950.0	53332.8	56143	ug/L	56143	ppb	16:34:52
1	Ca 317.933Radial†	21957.3	20508.4	40269	ug/L	40269	ppb	16:34:52
1	Fe 238.204 Radial†	5992.7	5596.1	71125	ug/L	71125	ppb	16:35:12
1	K 766.490 Radial†	75973.9	68029.6	12636	ug/L	12636	ppb	16:34:52
1	Mg 279.077 IEC†	335.3	310.5	12714	ug/L	12714	ppb	16:35:12
1	Na 589.592 Radial†	223.7	1286.9	566.43	ug/L	566.43	ppb	16:34:52
1	Sr 421.552†	23723.8	22164.7	212.51	ug/L	212.51	ppb	16:34:52
1	Sc 361.383	709023.8	709023.8	102.82	%			16:36:10
1	Y 371.029	618413.9	618413.9	114.14	%			16:36:10
1	Ag 328.068†	-3837.1	-3831.8	0.9185	ug/L	0.9185	ppb	16:36:15
1	As 188.979†	-32.0	-8.3	29.703	ug/L	29.703	ppb	16:36:35
1	B 249.677†	2594.1	3106.0	66.536	ug/L	66.536	ppb	16:36:15
1	Ba 233.527†	64019.0	62263.3	604.19	ug/L	604.19	ppb	16:36:15
1	Be 313.107†	-2068.0	2511.9	5.5072	ug/L	5.5072	ppb	16:36:15
1	Cd 226.502†	404.0	606.4	1.5212	ug/L	1.5212	ppb	16:36:35
1	Co 228.616†	772.7	811.2	15.182	ug/L	15.182	ppb	16:36:35
1	Cr 267.716†	3825.0	3628.9	61.287	ug/L	61.287	ppb	16:36:35
1	Cu 324.752†	23091.9	16771.0	59.703	ug/L	59.703	ppb	16:36:15
1	Mn 257.610†	2876061.3	2796776.1	3625.3	ug/L	3625.3	ppb	16:36:10
1	Mo 202.031†	-7.8	-20.1	4.0734	ug/L	4.0734	ppb	16:36:35
1	Ni 231.604†	1612.5	1493.6	48.693	ug/L	48.693	ppb	16:36:35
1	P 214.914†	3371.5	3060.6	1901.7	ug/L	1901.7	ppb	16:36:35
1	Pb 220.353†	458.6	513.1	88.429	ug/L	88.429	ppb	16:36:35
1	S 181.975 Axial†	1077.0	1007.3	1502.9	ug/L	1502.9	ppb	16:36:35
1	Sb 206.836†	55.7	22.4	-0.0943	ug/L	-0.0943	ppb	16:36:35
1	Se 196.026†	-303.6	-273.2	1.9400	ug/L	1.9400	ppb	16:36:35
1	Si 251.611†	1100437.5	1069775.1	39163	ug/L	39163	ppb	16:36:10
1	Sn 189.927†	-155.2	-155.0	-28.035	ug/L	-28.035	ppb	16:36:35
1	Ti 334.940†	1119646.3	1090375.4	1983.3	ug/L	1983.3	ppb	16:36:10
1	Tl 190.801†	-145.9	-104.0	-6.5867	ug/L	-6.5867	ppb	16:36:35
1	U 409.014†	-6337.4	-3757.2	-152.95	ug/L	-152.95	ppb	16:36:15
1	V 292.402†	11599.2	12997.6	102.05	ug/L	102.05	ppb	16:36:15
1	Zn 213.857†	33236.3	31660.6	351.11	ug/L	351.11	ppb	16:36:15
1	SiO2†	1101635.4	1070897.6	84554	ug/L	84554	ppb	16:37:44
2	Sc Radial	4075.7	4075.7	106	%			16:35:37
2	Y RADIAL	4974.7	4974.7	114.8	%			16:35:37
2	Al 396.153Radial†	56802.6	53590.8	56415	ug/L	56415	ppb	16:35:17
2	Ca 317.933Radial†	21903.3	20610.5	40470	ug/L	40470	ppb	16:35:17
2	Fe 238.204 Radial†	5920.3	5569.7	70789	ug/L	70789	ppb	16:35:37
2	K 766.490 Radial†	75626.5	68231.6	12674	ug/L	12674	ppb	16:35:17
2	Mg 279.077 IEC†	333.5	311.1	12741	ug/L	12741	ppb	16:35:37
2	Na 589.592 Radial†	243.4	1307.1	575.29	ug/L	575.29	ppb	16:35:17
2	Sr 421.552†	23742.3	22347.4	214.27	ug/L	214.27	ppb	16:35:17
2	Sc 361.383	704479.0	704479.0	102.16	%			16:36:41
2	Y 371.029	614667.7	614667.7	113.44	%			16:36:41
2	Ag 328.068†	-3806.1	-3825.5	0.8499	ug/L	0.8499	ppb	16:36:46
2	As 188.979†	-33.9	-10.4	28.597	ug/L	28.597	ppb	16:37:06
2	B 249.677†	2476.9	3007.6	64.114	ug/L	64.114	ppb	16:36:46
2	Ba 233.527†	63926.8	62574.7	607.19	ug/L	607.19	ppb	16:36:46
2	Be 313.107†	-1920.4	2643.5	5.5664	ug/L	5.5664	ppb	16:36:46
2	Cd 226.502†	394.0	599.2	1.4493	ug/L	1.4493	ppb	16:37:06
2	Co 228.616†	786.6	829.6	15.636	ug/L	15.636	ppb	16:37:06
2	Cr 267.716†	3816.8	3644.8	61.488	ug/L	61.488	ppb	16:37:06
2	Cu 324.752†	22814.3	16644.0	59.265	ug/L	59.265	ppb	16:36:46
2	Mn 257.610†	2856235.0	2795414.6	3623.5	ug/L	3623.5	ppb	16:36:41
2	Mo 202.031†	-20.2	-32.2	2.8829	ug/L	2.8829	ppb	16:37:06
2	Ni 231.604†	1597.3	1488.9	48.538	ug/L	48.538	ppb	16:37:06

2	P 214.914†	3361.5	3072.0	1909.4 ug/L	1909.4 ppb	16:37:06
2	Pb 220.353†	461.9	519.1	89.485 ug/L	89.485 ppb	16:37:06
2	S 181.975 Axial†	1059.6	996.9	1487.4 ug/L	1487.4 ppb	16:37:06
2	Sb 206.836†	62.0	29.0	2.4588 ug/L	2.4588 ppb	16:37:06
2	Se 196.026†	-305.0	-276.5	-1.3107 ug/L	-1.3107 ppb	16:37:06
2	Si 251.611†	1093462.4	1069852.1	39166 ug/L	39166 ppb	16:36:41
2	Sn 189.927†	-162.5	-163.2	-29.865 ug/L	-29.865 ppb	16:37:06
2	Ti 334.940†	1113965.4	1091839.8	1986.0 ug/L	1986.0 ppb	16:36:41
2	Tl 190.801†	-129.0	-88.4	-0.5653 ug/L	-0.5653 ppb	16:37:06
2	U 409.014†	-6415.3	-3873.1	-157.38 ug/L	-157.38 ppb	16:36:46
2	V 292.402†	11516.9	12989.8	102.00 ug/L	102.00 ppb	16:36:46
2	Zn 213.857†	33028.9	31666.1	351.23 ug/L	351.23 ppb	16:36:46
2	SiO2†	1105153.0	1081253.0	85371 ug/L	85371 ppb	16:37:50
3	Sc Radial	4194.5	4194.5	109 %		16:36:03
3	Y RADIAL	5110.7	5110.7	118.0 %		16:36:03
3	Al 396.153Radial†	56731.8	52010.7	54751 ug/L	54751 ppb	16:35:43
3	Ca 317.933Radial†	21969.8	20087.1	39442 ug/L	39442 ppb	16:35:43
3	Fe 238.204 Radial†	6060.7	5540.3	70416 ug/L	70416 ppb	16:36:03
3	K 766.490 Radial†	75637.8	66224.4	12301 ug/L	12301 ppb	16:35:43
3	Mg 279.077 IEC†	338.5	306.8	12563 ug/L	12563 ppb	16:36:03
3	Na 589.592 Radial†	243.0	1300.2	572.27 ug/L	572.27 ppb	16:35:43
3	Sr 421.552†	23639.1	21619.6	207.29 ug/L	207.29 ppb	16:35:43
3	Sc 361.383	708577.0	708577.0	102.75 %		16:37:12
3	Y 371.029	617658.2	617658.2	114.00 %		16:37:12
3	Ag 328.068†	-3801.7	-3799.7	0.8886 ug/L	0.8886 ppb	16:37:17
3	As 188.979†	-38.6	-14.8	26.309 ug/L	26.309 ppb	16:37:37
3	B 249.677†	2500.6	3016.6	64.403 ug/L	64.403 ppb	16:37:17
3	Ba 233.527†	63507.0	61804.3	599.73 ug/L	599.73 ppb	16:37:17
3	Be 313.107†	-1936.7	2638.5	5.5565 ug/L	5.5565 ppb	16:37:17
3	Cd 226.502†	401.1	603.8	1.5552 ug/L	1.5552 ppb	16:37:37
3	Co 228.616†	781.3	820.0	15.414 ug/L	15.414 ppb	16:37:37
3	Cr 267.716†	3817.1	3623.5	61.134 ug/L	61.134 ppb	16:37:37
3	Cu 324.752†	22591.4	16298.0	58.095 ug/L	58.095 ppb	16:37:17
3	Mn 257.610†	2872597.6	2795169.1	3623.2 ug/L	3623.2 ppb	16:37:12
3	Mo 202.031†	9.7	-3.0	5.6448 ug/L	5.6448 ppb	16:37:37
3	Ni 231.604†	1623.3	1505.1	49.068 ug/L	49.068 ppb	16:37:37
3	P 214.914†	3385.2	3076.0	1912.1 ug/L	1912.1 ppb	16:37:37
3	Pb 220.353†	460.9	515.5	88.529 ug/L	88.529 ppb	16:37:37
3	S 181.975 Axial†	1075.1	1006.1	1501.4 ug/L	1501.4 ppb	16:37:37
3	Sb 206.836†	60.5	27.1	1.8360 ug/L	1.8360 ppb	16:37:37
3	Se 196.026†	-297.7	-267.6	3.7858 ug/L	3.7858 ppb	16:37:37
3	Si 251.611†	1099216.8	1069262.0	39144 ug/L	39144 ppb	16:37:12
3	Sn 189.927†	-158.5	-158.4	-28.947 ug/L	-28.947 ppb	16:37:37
3	Ti 334.940†	1118497.9	1089944.4	1982.5 ug/L	1982.5 ppb	16:37:12
3	Tl 190.801†	-124.9	-83.6	1.2470 ug/L	1.2470 ppb	16:37:37
3	U 409.014†	-6556.1	-3973.9	-161.22 ug/L	-161.22 ppb	16:37:17
3	V 292.402†	11438.2	12848.1	100.84 ug/L	100.84 ppb	16:37:17
3	Zn 213.857†	32817.5	31273.4	346.79 ug/L	346.79 ppb	16:37:17
3	SiO2†	1097163.7	1067221.3	84263 ug/L	84263 ppb	16:37:55

Mean Data: 248374013|960819|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	707360.0	102.58	%	0.363				0.35%
Sc Radial	4125.4	107	%	1.6				1.50%
Y 371.029	616913.3	113.86	%	0.366				0.32%
Y RADIAL	5036.0	116.3	%	1.59				1.37%
Ag 328.068†	-3819.0	0.8857	ug/L	0.03443	0.8857	ppb	0.03443	3.89%
Al 396.153Radial†	52978.1	55770	ug/L	892.4	55770	ppb	892.4	1.60%
As 188.979†	-11.2	28.203	ug/L	1.7314	28.203	ppb	1.7314	6.14%
B 249.677†	3043.4	65.018	ug/L	1.3230	65.018	ppb	1.3230	2.03%
Ba 233.527†	62214.1	603.71	ug/L	3.754	603.71	ppb	3.754	0.62%
Be 313.107†	2598.0	5.5434	ug/L	0.03170	5.5434	ppb	0.03170	0.57%
Ca 317.933Radial†	20402.0	40060	ug/L	544.8	40060	ppb	544.8	1.36%
Cd 226.502†	603.1	1.5086	ug/L	0.05407	1.5086	ppb	0.05407	3.58%
Co 228.616†	820.3	15.411	ug/L	0.2271	15.411	ppb	0.2271	1.47%
Cr 267.716†	3632.4	61.303	ug/L	0.1775	61.303	ppb	0.1775	0.29%
Cu 324.752†	16571.0	59.021	ug/L	0.8315	59.021	ppb	0.8315	1.41%
Fe 238.204 Radial†	5568.7	70777	ug/L	354.9	70777	ppb	354.9	0.50%
K 766.490 Radial†	67495.2	12537	ug/L	205.3	12537	ppb	205.3	1.64%

Mg 279.077 IEC†	309.5	12673	ug/L	96.1	12673	ppb	96.1	0.76%
Mn 257.610†	2795786.6	3624.0	ug/L	1.15	3624.0	ppb	1.15	0.03%
Mo 202.031†	-18.4	4.2004	ug/L	1.38531	4.2004	ppb	1.38531	32.98%
Na 589.592 Radial†	1298.1	571.33	ug/L	4.507	571.33	ppb	4.507	0.79%
Ni 231.604†	1495.9	48.766	ug/L	0.2727	48.766	ppb	0.2727	0.56%
P 214.914†	3069.5	1907.7	ug/L	5.38	1907.7	ppb	5.38	0.28%
Pb 220.353†	515.9	88.814	ug/L	0.5828	88.814	ppb	0.5828	0.66%
S 181.975 Axial†	1003.4	1497.2	ug/L	8.57	1497.2	ppb	8.57	0.57%
Sb 206.836†	26.2	1.4002	ug/L	1.33121	1.4002	ppb	1.33121	95.07%
Se 196.026†	-272.4	1.4717	ug/L	2.58031	1.4717	ppb	2.58031	175.33%
Si 251.611†	1069629.7	39158	ug/L	11.8	39158	ppb	11.8	0.03%
Sn 189.927†	-158.9	-28.949	ug/L	0.9152	-28.949	ppb	0.9152	3.16%
Sr 421.552†	22043.9	211.36	ug/L	3.631	211.36	ppb	3.631	1.72%
Ti 334.940†	1090719.9	1983.9	ug/L	1.86	1983.9	ppb	1.86	0.09%
Tl 190.801†	-92.0	-1.9684	ug/L	4.10100	-1.9684	ppb	4.10100	208.35%
U 409.014†	-3868.1	-157.18	ug/L	4.135	-157.18	ppb	4.135	2.63%
V 292.402†	12945.2	101.63	ug/L	0.685	101.63	ppb	0.685	0.67%
Zn 213.857†	31533.4	349.71	ug/L	2.530	349.71	ppb	2.530	0.72%
SiO2†	1073124.0	84729	ug/L	574.5	84729	ppb	574.5	0.68%

Sequence No.: 26
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 4/1/2010 16:40:07
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	3758.8	3758.8	97.9	%			16:42:18
1	Y RADIAL	4204.3	4204.3	97.06	%			16:41:58
1	Al 396.153Radial†	4595.9	4785.8	5014.1	ug/L	5014.1	ppb	16:41:58
1	Ca 317.933Radial†	2595.3	2631.7	5167.5	ug/L	5167.5	ppb	16:42:18
1	Fe 238.204 Radial†	383.6	385.6	4915.5	ug/L	4915.5	ppb	16:42:18
1	K 766.490 Radial†	29604.1	27236.8	5059.0	ug/L	5059.0	ppb	16:41:58
1	Mg 279.077 IEC†	124.5	124.1	5111.3	ug/L	5111.3	ppb	16:42:18
1	Na 589.592 Radial†	20081.6	21585.8	9500.7	ug/L	9500.7	ppb	16:41:58
1	Sr 421.552†	48079.3	49086.2	471.27	ug/L	471.27	ppb	16:41:58
1	Sc 361.383	689089.7	689089.7	99.928	%			16:43:15
1	Y 371.029	463881.6	463881.6	85.615	%			16:43:21
1	Ag 328.068†	88211.3	88175.2	488.79	ug/L	488.79	ppb	16:43:21
1	As 188.979†	966.1	989.6	494.16	ug/L	494.16	ppb	16:43:41
1	B 249.677†	18261.0	18857.2	472.22	ug/L	472.22	ppb	16:43:21
1	Ba 233.527†	50182.3	50217.8	486.57	ug/L	486.57	ppb	16:43:21
1	Be 313.107†	1216738.3	1222140.8	494.69	ug/L	494.69	ppb	16:43:15
1	Cd 226.502†	32918.3	33155.5	484.62	ug/L	484.62	ppb	16:43:21
1	Co 228.616†	20023.4	20097.5	497.89	ug/L	497.89	ppb	16:43:21
1	Cr 267.716†	32844.6	32777.0	484.53	ug/L	484.53	ppb	16:43:21
1	Cu 324.752†	149444.1	143864.1	479.16	ug/L	479.16	ppb	16:43:21
1	Mn 257.610†	372374.3	372198.4	481.87	ug/L	481.87	ppb	16:43:21
1	Mo 202.031†	5115.5	5106.8	490.98	ug/L	490.98	ppb	16:43:41
1	Ni 231.604†	15219.0	15155.3	493.89	ug/L	493.89	ppb	16:43:21
1	P 214.914†	4043.3	3827.7	2353.6	ug/L	2353.6	ppb	16:43:41
1	Pb 220.353†	3014.3	3083.4	486.82	ug/L	486.82	ppb	16:43:41
1	S 181.975 Axial†	697.1	657.3	986.72	ug/L	986.72	ppb	16:43:41
1	Sb 206.836†	1266.5	1235.7	512.00	ug/L	512.00	ppb	16:43:41
1	Se 196.026†	644.2	666.8	510.47	ug/L	510.47	ppb	16:43:41
1	Si 251.611†	67184.2	66736.2	2437.1	ug/L	2437.1	ppb	16:43:21
1	Sn 189.927†	2147.4	2144.9	493.66	ug/L	493.66	ppb	16:43:41
1	Ti 334.940†	266871.6	268485.9	487.17	ug/L	487.17	ppb	16:43:21
1	Tl 190.801†	1241.2	1280.1	495.69	ug/L	495.69	ppb	16:43:41
1	U 409.014†	9946.9	12360.6	474.48	ug/L	474.48	ppb	16:43:21
1	V 292.402†	52968.3	54722.9	488.94	ug/L	488.94	ppb	16:43:21
1	Zn 213.857†	42933.4	42299.9	479.31	ug/L	479.31	ppb	16:43:21
1	SiO2†	67227.6	66737.0	5255.9	ug/L	5255.9	ppb	16:44:47
2	Sc Radial	3889.0	3889.0	101	%			16:42:43
2	Y RADIAL	4317.3	4317.3	99.66	%			16:42:23
2	Al 396.153Radial†	4699.6	4731.0	4956.3	ug/L	4956.3	ppb	16:42:23
2	Ca 317.933Radial†	2672.8	2619.5	5143.6	ug/L	5143.6	ppb	16:42:43
2	Fe 238.204 Radial†	395.2	383.9	4894.4	ug/L	4894.4	ppb	16:42:43
2	K 766.490 Radial†	30076.0	26690.3	4957.4	ug/L	4957.4	ppb	16:42:23
2	Mg 279.077 IEC†	126.3	121.6	5009.2	ug/L	5009.2	ppb	16:42:43
2	Na 589.592 Radial†	20474.4	21286.9	9369.1	ug/L	9369.1	ppb	16:42:23
2	Sr 421.552†	49326.0	48672.9	467.30	ug/L	467.30	ppb	16:42:23
2	Sc 361.383	691873.4	691873.4	100.33	%			16:43:46
2	Y 371.029	465273.1	465273.1	85.872	%			16:43:51
2	Ag 328.068†	89304.8	88909.9	492.84	ug/L	492.84	ppb	16:43:51
2	As 188.979†	964.1	983.7	491.26	ug/L	491.26	ppb	16:44:11
2	B 249.677†	18579.9	19101.5	478.35	ug/L	478.35	ppb	16:43:51
2	Ba 233.527†	50893.8	50724.8	491.48	ug/L	491.48	ppb	16:43:51
2	Be 313.107†	1220438.3	1220929.6	494.21	ug/L	494.21	ppb	16:43:46
2	Cd 226.502†	33360.4	33463.6	489.13	ug/L	489.13	ppb	16:43:51
2	Co 228.616†	20358.8	20351.2	504.17	ug/L	504.17	ppb	16:43:51
2	Cr 267.716†	33223.3	33022.2	488.14	ug/L	488.14	ppb	16:43:51
2	Cu 324.752†	152083.0	145892.6	485.91	ug/L	485.91	ppb	16:43:51
2	Mn 257.610†	377459.9	375767.8	486.50	ug/L	486.50	ppb	16:43:51
2	Mo 202.031†	5169.9	5140.3	494.20	ug/L	494.20	ppb	16:44:11
2	Ni 231.604†	15373.7	15248.3	496.92	ug/L	496.92	ppb	16:43:51

2	P 214.914†	4093.9	3861.8	2374.1 ug/L	2374.1 ppb	16:44:11
2	Pb 220.353†	3059.1	3116.0	491.93 ug/L	491.93 ppb	16:44:11
2	S 181.975 Axial†	710.4	667.9	1002.5 ug/L	1002.5 ppb	16:44:11
2	Sb 206.836†	1282.7	1246.8	516.54 ug/L	516.54 ppb	16:44:11
2	Se 196.026†	661.5	681.4	521.26 ug/L	521.26 ppb	16:44:11
2	Si 251.611†	68396.0	67673.4	2471.4 ug/L	2471.4 ppb	16:43:51
2	Sn 189.927†	2166.1	2154.8	495.94 ug/L	495.94 ppb	16:44:11
2	Ti 334.940†	270978.9	271505.1	492.65 ug/L	492.65 ppb	16:43:51
2	Tl 190.801†	1254.1	1287.9	498.73 ug/L	498.73 ppb	16:44:11
2	U 409.014†	10214.0	12586.8	483.19 ug/L	483.19 ppb	16:43:51
2	V 292.402†	53572.7	55112.1	492.43 ug/L	492.43 ppb	16:43:51
2	Zn 213.857†	43654.1	42845.3	485.52 ug/L	485.52 ppb	16:43:51
2	SiO2†	66384.7	65626.2	5168.1 ug/L	5168.1 ppb	16:44:52
3	Sc Radial	3847.8	3847.8	100 %		16:43:09
3	Y RADIAL	4407.9	4407.9	101.8 %		16:42:48
3	Al 396.153Radial†	4824.5	4905.3	5140.0 ug/L	5140.0 ppb	16:42:48
3	Ca 317.933Radial†	2648.9	2624.0	5152.3 ug/L	5152.3 ppb	16:43:09
3	Fe 238.204 Radial†	394.5	387.4	4939.0 ug/L	4939.0 ppb	16:43:09
3	K 766.490 Radial†	30765.2	27696.4	5144.4 ug/L	5144.4 ppb	16:42:48
3	Mg 279.077 IEC†	125.7	122.4	5041.5 ug/L	5041.5 ppb	16:43:09
3	Na 589.592 Radial†	20898.8	21927.1	9650.9 ug/L	9650.9 ppb	16:42:48
3	Sr 421.552†	50572.1	50438.3	484.25 ug/L	484.25 ppb	16:42:48
3	Sc 361.383	685072.4	685072.4	99.345 %		16:44:17
3	Y 371.029	465957.5	465957.5	85.998 %		16:44:22
3	Ag 328.068†	89528.0	90018.2	498.98 ug/L	498.98 ppb	16:44:22
3	As 188.979†	947.6	976.7	487.86 ug/L	487.86 ppb	16:44:42
3	B 249.677†	18672.0	19378.1	485.29 ug/L	485.29 ppb	16:44:22
3	Ba 233.527†	50761.1	51094.9	495.06 ug/L	495.06 ppb	16:44:22
3	Be 313.107†	1202254.7	1214702.1	491.71 ug/L	491.71 ppb	16:44:17
3	Cd 226.502†	33294.9	33727.7	492.99 ug/L	492.99 ppb	16:44:22
3	Co 228.616†	20317.0	20510.6	508.10 ug/L	508.10 ppb	16:44:22
3	Cr 267.716†	33215.6	33343.2	492.89 ug/L	492.89 ppb	16:44:22
3	Cu 324.752†	152544.0	147861.5	492.47 ug/L	492.47 ppb	16:44:22
3	Mn 257.610†	376959.9	378999.4	490.68 ug/L	490.68 ppb	16:44:22
3	Mo 202.031†	5066.5	5087.4	489.12 ug/L	489.12 ppb	16:44:42
3	Ni 231.604†	15364.8	15391.4	501.59 ug/L	501.59 ppb	16:44:22
3	P 214.914†	3999.4	3807.3	2337.8 ug/L	2337.8 ppb	16:44:42
3	Pb 220.353†	3003.2	3090.0	487.87 ug/L	487.87 ppb	16:44:42
3	S 181.975 Axial†	688.1	652.4	979.31 ug/L	979.31 ppb	16:44:42
3	Sb 206.836†	1258.6	1235.1	511.69 ug/L	511.69 ppb	16:44:42
3	Se 196.026†	637.8	664.1	508.60 ug/L	508.60 ppb	16:44:42
3	Si 251.611†	68303.7	68257.3	2492.8 ug/L	2492.8 ppb	16:44:22
3	Sn 189.927†	2120.7	2130.5	490.36 ug/L	490.36 ppb	16:44:42
3	Ti 334.940†	271056.5	274264.6	497.65 ug/L	497.65 ppb	16:44:22
3	Tl 190.801†	1218.3	1264.3	489.69 ug/L	489.69 ppb	16:44:42
3	U 409.014†	10331.3	12805.9	491.62 ug/L	491.62 ppb	16:44:22
3	V 292.402†	53617.1	55686.9	497.43 ug/L	497.43 ppb	16:44:22
3	Zn 213.857†	43574.9	43197.5	489.51 ug/L	489.51 ppb	16:44:22
3	SiO2†	65947.6	65843.1	5185.4 ug/L	5185.4 ppb	16:44:58

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	688678.5	99.868	%	0.4958				0.50%
Sc Radial	3831.9	99.8	%	1.73				1.74%
Y 371.029	465037.4	85.828	%	0.1952				0.23%
Y RADIAL	4309.8	99.49	%	2.355				2.37%
Ag 328.068†	89034.4	493.54	ug/L	5.126	493.54	ppb	5.126	1.04%
QC value within limits for Ag 328.068 Recovery = 98.71%								
Al 396.153Radial†	4807.3	5036.8	ug/L	93.96	5036.8	ppb	93.96	1.87%
QC value within limits for Al 396.153Radial Recovery = 100.74%								
As 188.979†	983.3	491.09	ug/L	3.156	491.09	ppb	3.156	0.64%
QC value within limits for As 188.979 Recovery = 98.22%								
B 249.677†	19112.3	478.62	ug/L	6.540	478.62	ppb	6.540	1.37%
QC value within limits for B 249.677 Recovery = 95.72%								
Ba 233.527†	50679.2	491.04	ug/L	4.265	491.04	ppb	4.265	0.87%
QC value within limits for Ba 233.527 Recovery = 98.21%								
Be 313.107†	1219257.5	493.54	ug/L	1.601	493.54	ppb	1.601	0.32%
QC value within limits for Be 313.107 Recovery = 98.71%								
Ca 317.933Radial†	2625.1	5154.5	ug/L	12.12	5154.5	ppb	12.12	0.24%

```
   QC value within limits for Ca 317.933Radial  Recovery = 103.09%
Cd 226.502†            33449.0      488.91 ug/L         4.190      488.91 ppb          4.190   0.86%
   QC value within limits for Cd 226.502  Recovery = 97.78%
Co 228.616†            20319.8      503.39 ug/L         5.147      503.39 ppb          5.147   1.02%
   QC value within limits for Co 228.616  Recovery = 100.68%
Cr 267.716†            33047.5      488.52 ug/L         4.192      488.52 ppb          4.192   0.86%
   QC value within limits for Cr 267.716  Recovery = 97.70%
Cu 324.752†           145872.7      485.85 ug/L         6.653      485.85 ppb          6.653   1.37%
   QC value within limits for Cu 324.752  Recovery = 97.17%
Fe 238.204 Radial†       385.6      4916.3 ug/L        22.29      4916.3 ppb         22.29   0.45%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.33%
K 766.490 Radial†      27207.9      5053.6 ug/L        93.61      5053.6 ppb         93.61   1.85%
   QC value within limits for K 766.490 Radial  Recovery = 101.07%
Mg 279.077 IEC†          122.7      5054.0 ug/L        52.18      5054.0 ppb         52.18   1.03%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.08%
Mn 257.610†           375655.2      486.35 ug/L         4.404      486.35 ppb          4.404   0.91%
   QC value within limits for Mn 257.610  Recovery = 97.27%
Mo 202.031†             5111.5      491.44 ug/L         2.571      491.44 ppb          2.571   0.52%
   QC value within limits for Mo 202.031  Recovery = 98.29%
Na 589.592 Radial†     21599.9      9506.9 ug/L       140.98      9506.9 ppb        140.98   1.48%
   QC value within limits for Na 589.592 Radial  Recovery = 95.07%
Ni 231.604†            15265.0      497.47 ug/L         3.875      497.47 ppb          3.875   0.78%
   QC value within limits for Ni 231.604  Recovery = 99.49%
P 214.914†              3832.3      2355.2 ug/L        18.17      2355.2 ppb         18.17   0.77%
   QC value within limits for P 214.914  Recovery = 94.21%
Pb 220.353†             3096.5      488.87 ug/L         2.698      488.87 ppb          2.698   0.55%
   QC value within limits for Pb 220.353  Recovery = 97.77%
S 181.975 Axial†         659.2      989.52 ug/L        11.864      989.52 ppb         11.864   1.20%
   QC value within limits for S 181.975 Axial  Recovery = 98.95%
Sb 206.836†             1239.2      513.41 ug/L         2.716      513.41 ppb          2.716   0.53%
   QC value within limits for Sb 206.836  Recovery = 102.68%
Se 196.026†              670.8      513.44 ug/L         6.831      513.44 ppb          6.831   1.33%
   QC value within limits for Se 196.026  Recovery = 102.69%
Si 251.611†            67555.6      2467.1 ug/L        28.10      2467.1 ppb         28.10   1.14%
   QC value within limits for Si 251.611  Recovery = 98.68%
Sn 189.927†             2143.4      493.32 ug/L         2.805      493.32 ppb          2.805   0.57%
   QC value within limits for Sn 189.927  Recovery = 98.66%
Sr 421.552†            49399.1      474.27 ug/L         8.866      474.27 ppb          8.866   1.87%
   QC value within limits for Sr 421.552  Recovery = 94.85%
Ti 334.940†           271418.5      492.49 ug/L         5.242      492.49 ppb          5.242   1.06%
   QC value within limits for Ti 334.940  Recovery = 98.50%
Tl 190.801†             1277.4      494.70 ug/L         4.599      494.70 ppb          4.599   0.93%
   QC value within limits for Tl 190.801  Recovery = 98.94%
U 409.014†             12584.4      483.10 ug/L         8.567      483.10 ppb          8.567   1.77%
   QC value within limits for U 409.014  Recovery = 96.62%
V 292.402†             55174.0      492.93 ug/L         4.265      492.93 ppb          4.265   0.87%
   QC value within limits for V 292.402  Recovery = 98.59%
Zn 213.857†            42780.9      484.78 ug/L         5.139      484.78 ppb          5.139   1.06%
   QC value within limits for Zn 213.857  Recovery = 96.96%
SiO2†                  66068.8      5203.1 ug/L        46.51      5203.1 ppb         46.51   0.89%
   QC value within limits for SiO2  Recovery = 97.30%
All analyte(s) passed QC.
```

Sequence No.: 27
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 4/1/2010 16:47:07
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	3714.1	3714.1	96.8	%			16:49:19
1	Y RADIAL	4052.2	4052.2	93.54	%			16:48:59
1	Al 396.153Radial†	-96.9	-7.9	-8.3585	ug/L	-8.3585	ppb	16:48:59
1	Ca 317.933Radial†	17.0	-1.1	-2.1432	ug/L	-2.1432	ppb	16:49:19
1	Fe 238.204 Radial†	5.1	-0.9	-11.425	ug/L	-11.425	ppb	16:49:19
1	K 766.490 Radial†	3105.3	213.6	39.735	ug/L	39.735	ppb	16:48:59
1	Mg 279.077 IEC†	0.8	-2.2	-90.554	ug/L	-90.554	ppb	16:49:19
1	Na 589.592 Radial†	-1097.2	-56.2	-24.730	ug/L	-24.730	ppb	16:48:59
1	Sr 421.552†	-12.3	-26.6	-0.2557	ug/L	-0.2557	ppb	16:48:59
1	Sc 361.383	688566.6	688566.6	99.852	%			16:50:16
1	Y 371.029	538828.1	538828.1	99.447	%			16:50:16
1	Ag 328.068†	102.0	2.3	0.0095	ug/L	0.0095	ppb	16:50:16
1	As 188.979†	-29.1	-6.4	-3.1691	ug/L	-3.1691	ppb	16:50:36
1	B 249.677†	-513.5	68.8	1.7330	ug/L	1.7330	ppb	16:50:36
1	Ba 233.527†	-1.2	-2.0	-0.0189	ug/L	-0.0189	ppb	16:50:36
1	Be 313.107†	-4538.6	-22.1	-0.0093	ug/L	-0.0093	ppb	16:50:16
1	Cd 226.502†	-199.5	13.7	0.2015	ug/L	0.2015	ppb	16:50:36
1	Co 228.616†	-59.9	-0.3	-0.0062	ug/L	-0.0062	ppb	16:50:36
1	Cr 267.716†	82.5	-8.7	-0.1290	ug/L	-0.1290	ppb	16:50:36
1	Cu 324.752†	5541.5	-138.3	-0.4613	ug/L	-0.4613	ppb	16:50:16
1	Mn 257.610†	484.1	39.8	0.0541	ug/L	0.0541	ppb	16:50:36
1	Mo 202.031†	17.9	5.5	0.5266	ug/L	0.5266	ppb	16:50:36
1	Ni 231.604†	84.4	9.8	0.3202	ug/L	0.3202	ppb	16:50:36
1	P 214.914†	213.9	-4.2	-2.6227	ug/L	-2.6227	ppb	16:50:36
1	Pb 220.353†	-66.2	0.7	0.1048	ug/L	0.1048	ppb	16:50:36
1	S 181.975 Axial†	34.0	-6.2	-9.2600	ug/L	-9.2600	ppb	16:50:36
1	Sb 206.836†	46.0	14.3	5.7155	ug/L	5.7155	ppb	16:50:36
1	Se 196.026†	-22.5	-0.4	-0.3234	ug/L	-0.3234	ppb	16:50:36
1	Si 251.611†	558.2	62.4	2.2790	ug/L	2.2790	ppb	16:50:36
1	Sn 189.927†	0.5	-3.7	-0.8426	ug/L	-0.8426	ppb	16:50:36
1	Ti 334.940†	-1514.2	-95.0	-0.1654	ug/L	-0.1654	ppb	16:50:16
1	Tl 190.801†	-39.0	-1.1	-0.4269	ug/L	-0.4269	ppb	16:50:36
1	U 409.014†	-2395.7	7.3	0.2814	ug/L	0.2814	ppb	16:50:16
1	V 292.402†	-1692.8	21.1	0.1942	ug/L	0.1942	ppb	16:50:16
1	Zn 213.857†	622.5	-41.2	-0.4704	ug/L	-0.4704	ppb	16:50:36
1	SiO2†	563.7	25.4	1.9916	ug/L	1.9916	ppb	16:51:32
2	Sc Radial	3908.3	3908.3	102	%			16:49:44
2	Y RADIAL	4216.0	4216.0	97.33	%			16:49:24
2	Al 396.153Radial†	-114.6	-20.3	-21.379	ug/L	-21.379	ppb	16:49:24
2	Ca 317.933Radial†	16.3	-2.7	-5.2137	ug/L	-5.2137	ppb	16:49:44
2	Fe 238.204 Radial†	5.0	-1.2	-15.832	ug/L	-15.832	ppb	16:49:44
2	K 766.490 Radial†	3170.1	117.7	21.874	ug/L	21.874	ppb	16:49:24
2	Mg 279.077 IEC†	2.5	-0.6	-23.337	ug/L	-23.337	ppb	16:49:44
2	Na 589.592 Radial†	-1052.8	43.8	19.269	ug/L	19.269	ppb	16:49:24
2	Sr 421.552†	28.5	14.1	0.1356	ug/L	0.1356	ppb	16:49:24
2	Sc 361.383	689663.8	689663.8	100.01	%			16:50:41
2	Y 371.029	539863.9	539863.9	99.639	%			16:50:41
2	Ag 328.068†	49.8	-50.1	-0.2810	ug/L	-0.2810	ppb	16:50:41
2	As 188.979†	-31.3	-8.5	-4.2361	ug/L	-4.2361	ppb	16:51:01
2	B 249.677†	-534.7	48.3	1.2183	ug/L	1.2183	ppb	16:51:01
2	Ba 233.527†	-1.9	-2.6	-0.0266	ug/L	-0.0266	ppb	16:51:01
2	Be 313.107†	-4399.3	124.4	0.0501	ug/L	0.0501	ppb	16:50:41
2	Cd 226.502†	-198.6	14.9	0.2187	ug/L	0.2187	ppb	16:51:01
2	Co 228.616†	-52.9	6.8	0.1707	ug/L	0.1707	ppb	16:51:01
2	Cr 267.716†	64.9	-26.4	-0.3907	ug/L	-0.3907	ppb	16:51:01
2	Cu 324.752†	5449.0	-239.6	-0.7981	ug/L	-0.7981	ppb	16:50:41
2	Mn 257.610†	464.3	19.3	0.0243	ug/L	0.0243	ppb	16:51:01
2	Mo 202.031†	17.0	4.5	0.4330	ug/L	0.4330	ppb	16:51:01
2	Ni 231.604†	68.2	-6.5	-0.2111	ug/L	-0.2111	ppb	16:51:01

2	P 214.914†	219.9	1.4	1.0506 ug/L	1.0506 ppb	16:51:01
2	Pb 220.353†	-72.8	-5.8	-0.9096 ug/L	-0.9096 ppb	16:51:01
2	S 181.975 Axial†	35.2	-5.0	-7.5558 ug/L	-7.5558 ppb	16:51:01
2	Sb 206.836†	33.2	1.5	0.6248 ug/L	0.6248 ppb	16:51:01
2	Se 196.026†	-33.8	-11.7	-8.7439 ug/L	-8.7439 ppb	16:51:01
2	Si 251.611†	532.3	35.6	1.2973 ug/L	1.2973 ppb	16:51:01
2	Sn 189.927†	13.0	8.9	2.0409 ug/L	2.0409 ppb	16:51:01
2	Ti 334.940†	-1465.9	-44.2	-0.0784 ug/L	-0.0784 ppb	16:50:41
2	Tl 190.801†	-33.8	4.2	1.6003 ug/L	1.6003 ppb	16:51:01
2	U 409.014†	-2439.0	-32.2	-1.2384 ug/L	-1.2384 ppb	16:50:41
2	V 292.402†	-1745.5	-28.9	-0.2486 ug/L	-0.2486 ppb	16:50:41
2	Zn 213.857†	633.2	-31.5	-0.3556 ug/L	-0.3556 ppb	16:51:01
2	SiO2†	558.5	19.3	1.5139 ug/L	1.5139 ppb	16:51:37
3	Sc Radial	3860.8	3860.8	101 %		16:50:09
3	Y RADIAL	4238.7	4238.7	97.85 %		16:49:49
3	Al 396.153Radial†	-97.1	-4.2	-4.5052 ug/L	-4.5052 ppb	16:49:49
3	Ca 317.933Radial†	18.8	0.0	0.0860 ug/L	0.0860 ppb	16:50:09
3	Fe 238.204 Radial†	5.2	-1.0	-13.324 ug/L	-13.324 ppb	16:50:09
3	K 766.490 Radial†	3170.2	156.2	29.049 ug/L	29.049 ppb	16:49:49
3	Mg 279.077 IEC†	-1.7	-4.7	-192.71 ug/L	-192.71 ppb	16:50:09
3	Na 589.592 Radial†	-1072.0	12.0	5.2756 ug/L	5.2756 ppb	16:49:49
3	Sr 421.552†	7.2	-6.7	-0.0644 ug/L	-0.0644 ppb	16:49:49
3	Sc 361.383	658120.4	658120.4	95.437 %		16:51:07
3	Y 371.029	515803.9	515803.9	95.198 %		16:51:07
3	Ag 328.068†	149.0	56.2	0.3076 ug/L	0.3076 ppb	16:51:07
3	As 188.979†	-25.9	-4.3	-2.1473 ug/L	-2.1473 ppb	16:51:27
3	B 249.677†	-553.5	3.0	0.0802 ug/L	0.0802 ppb	16:51:27
3	Ba 233.527†	-1.5	-2.4	-0.0254 ug/L	-0.0254 ppb	16:51:27
3	Be 313.107†	-4229.9	91.2	0.0365 ug/L	0.0365 ppb	16:51:07
3	Cd 226.502†	-217.0	-13.9	-0.2038 ug/L	-0.2038 ppb	16:51:27
3	Co 228.616†	-85.3	-29.7	-0.7338 ug/L	-0.7338 ppb	16:51:27
3	Cr 267.716†	87.9	0.8	0.0114 ug/L	0.0114 ppb	16:51:27
3	Cu 324.752†	5320.4	-113.2	-0.3740 ug/L	-0.3740 ppb	16:51:07
3	Mn 257.610†	474.0	51.6	0.0734 ug/L	0.0734 ppb	16:51:27
3	Mo 202.031†	19.5	7.9	0.7586 ug/L	0.7586 ppb	16:51:27
3	Ni 231.604†	70.7	-0.5	-0.0169 ug/L	-0.0169 ppb	16:51:27
3	P 214.914†	223.7	15.8	10.229 ug/L	10.229 ppb	16:51:27
3	Pb 220.353†	-66.6	-2.8	-0.4423 ug/L	-0.4423 ppb	16:51:27
3	S 181.975 Axial†	41.6	3.4	5.0442 ug/L	5.0442 ppb	16:51:27
3	Sb 206.836†	39.1	9.2	3.7302 ug/L	3.7302 ppb	16:51:27
3	Se 196.026†	-23.3	-2.3	-1.7555 ug/L	-1.7555 ppb	16:51:27
3	Si 251.611†	520.5	48.8	1.7777 ug/L	1.7777 ppb	16:51:27
3	Sn 189.927†	11.4	7.8	1.7894 ug/L	1.7894 ppb	16:51:27
3	Ti 334.940†	-1425.5	-72.2	-0.1124 ug/L	-0.1124 ppb	16:51:07
3	Tl 190.801†	-36.5	-0.3	-0.1276 ug/L	-0.1276 ppb	16:51:27
3	U 409.014†	-2460.4	-171.6	-6.6066 ug/L	-6.6066 ppb	16:51:07
3	V 292.402†	-1732.6	-99.0	-0.8766 ug/L	-0.8766 ppb	16:51:07
3	Zn 213.857†	620.9	-14.0	-0.1579 ug/L	-0.1579 ppb	16:51:27
3	SiO2†	545.0	31.9	2.4979 ug/L	2.4979 ppb	16:51:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	678783.6	98.433	%	2.5962				2.64%
Sc Radial	3827.7	99.7	%	2.64				2.65%
Y 371.029	531498.6	98.095	%	2.5104				2.56%
Y RADIAL	4169.0	96.24	%	2.349				2.44%
Ag 328.068†	2.8	0.0121	ug/L	0.29433	0.0121	ppb	0.29433	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-10.8	-11.414	ug/L	8.8420	-11.414	ppb	8.8420	77.47%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-6.4	-3.1842	ug/L	1.04450	-3.1842	ppb	1.04450	32.80%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	40.1	1.0105	ug/L	0.84575	1.0105	ppb	0.84575	83.70%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.3	-0.0236	ug/L	0.00411	-0.0236	ppb	0.00411	17.41%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	64.5	0.0258	ug/L	0.03111	0.0258	ppb	0.03111	120.77%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.2	-2.4236	ug/L	2.66097	-2.4236	ppb	2.66097	109.79%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                4.9      0.0721 ug/L       0.23913      0.0721 ppb        0.23913 331.53%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -7.7     -0.1898 ug/L       0.47940     -0.1898 ppb        0.47940 252.60%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -11.4     -0.1694 ug/L       0.20407     -0.1694 ppb        0.20407 120.47%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -163.7     -0.5444 ug/L       0.22395     -0.5444 ppb        0.22395  41.13%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.1     -13.527 ug/L        2.2107     -13.527 ppb         2.2107  16.34%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        162.5      30.219 ug/L        8.9879      30.219 ppb         8.9879  29.74%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -2.5     -102.20 ug/L        85.284     -102.20 ppb         85.284  83.45%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               36.9      0.0506 ug/L       0.02472      0.0506 ppb        0.02472  48.85%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.0      0.5727 ug/L       0.16763      0.5727 ppb        0.16763  29.27%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -0.1     -0.0617 ug/L      22.48015     -0.0617 ppb       22.48015 >999.9%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                0.9      0.0307 ug/L       0.26885      0.0307 ppb        0.26885 875.56%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 4.3      2.8858 ug/L       6.61960      2.8858 ppb        6.61960 229.39%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -2.6     -0.4157 ug/L       0.50772     -0.4157 ppb        0.50772 122.14%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -2.6     -3.9239 ug/L       7.81316     -3.9239 ppb        7.81316 199.12%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                8.3      3.3568 ug/L       2.56578      3.3568 ppb        2.56578  76.43%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.8     -3.6076 ug/L       4.50542     -3.6076 ppb        4.50542 124.89%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               48.9      1.7847 ug/L       0.49087      1.7847 ppb        0.49087  27.51%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                4.3      0.9959 ug/L       1.59712      0.9959 ppb        1.59712 160.37%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -6.4     -0.0615 ug/L       0.19566     -0.0615 ppb        0.19566 318.33%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -70.5     -0.1187 ug/L       0.04385     -0.1187 ppb        0.04385  36.93%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.9      0.3486 ug/L       1.09428      0.3486 ppb        1.09428 313.94%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -65.5     -2.5212 ug/L       3.61873     -2.5212 ppb        3.61873 143.53%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -35.6     -0.3103 ug/L       0.53805     -0.3103 ppb        0.53805 173.38%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -28.9     -0.3280 ug/L       0.15807     -0.3280 ppb        0.15807  48.19%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     25.5      2.0011 ug/L       0.49211      2.0011 ppb        0.49211  24.59%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: 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 18:56:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\Blank.179

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9		ug/L		19	
>	Sc	45		ug/L		445594	
	Ni	60		ug/L		130	
>	Ge	74		ug/L		254044	
	As	75		ug/L		-12	
	Se	77		ug/L		3810	
	Se	82		ug/L		-3	
	Kr	83		ug/L		86	
>	Lu	175		ug/L		349004	
	Tl	205		ug/L		2870	
	U	238		ug/L		660	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Simple Linear	
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Lu	175	Linear Thru Zero	
Tl	205	Simple Linear	
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
	Be	9					
>	Sc	45					
	Ni	60					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175					
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	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 19:00:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\Standard 1.180

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**10.000**	**ug/L**	0.282	1604	0.004
>	Sc	45		**ug/L**		444363	444363.334
	Ni	60	**10.000**	**ug/L**	1.699	9645	0.021
>	Ge	74		**ug/L**		252669	252669.102
	As	75	**10.000**	**ug/L**	5.043	6831	0.027
	Se	77		**ug/L**		4272	0.002
	Se	82	**10.000**	**ug/L**	1.966	709	0.003
	Kr	83		**ug/L**		75	-0.000
>	Lu	175		**ug/L**		350994	350993.990
	Tl	205	**10.000**	**ug/L**	3.157	164485	0.461
	U	238	**10.000**	**ug/L**	0.649	401696	1.143

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
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
	Be	9					
>	Sc	45					
	Ni	60					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175					
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	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 19:04:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lani soil.mth
Dataset File: C:\elandata\Dataset\100413\Standard 2.181

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**99.972**	**ug/L**	4.421	15744	0.035
>	Sc	45		**ug/L**		453169	453169.172
	Ni	60	**99.954**	**ug/L**	2.681	92801	0.205
>	Ge	74		**ug/L**		253890	253890.125
	As	75	**100.015**	**ug/L**	1.222	69813	0.275
	Se	77		**ug/L**		8695	0.019
	Se	82	**99.957**	**ug/L**	1.179	6855	0.027
	Kr	83		**ug/L**		107	0.000
>	Lu	175		**ug/L**		355412	355412.036
	Tl	205	**99.902**	**ug/L**	2.482	1491556	4.190
	U	238	**99.924**	**ug/L**	1.001	3772659	10.613

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45					
	Ni	60					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175					
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	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 19:08:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 1.182

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**50.493**	ug/L	6.745	7924	0.018
>	Sc	45		ug/L		451255	451254.648
	Ni	60	**51.423**	ug/L	1.981	47617	0.105
>	Ge	74		ug/L		254009	254009.371
	As	75	**50.580**	ug/L	3.327	35310	0.139
	Se	77		ug/L		6322	0.010
	Se	82	**50.364**	ug/L	3.025	3453	0.014
	Kr	83		ug/L		93	0.000
>	Lu	175		ug/L		356880	356880.491
	Tl	205	**50.690**	ug/L	2.329	761378	2.126
	U	238	**49.756**	ug/L	1.818	1886294	5.285

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
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
	Be	9	100.986				
>	Sc	45		101.3			
	Ni	60	102.846				
>	Ge	74		100.0			
	As	75	101.160				
	Se	77					
	Se	82	100.729				
	Kr	83					
>	Lu	175		102.3			
	Tl	205	101.380				
	U	238	99.512				

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 19:12:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 2.183

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.014**	**ug/L**	87.945	21	0.000
>	Sc	45		**ug/L**		448722	448722.472
	Ni	60	**-0.013**	**ug/L**	68.509	119	-0.000
>	Ge	74		**ug/L**		252383	252383.425
	As	75	**0.064**	**ug/L**	175.229	33	0.000
	Se	77		**ug/L**		3928	0.001
	Se	82	**0.249**	**ug/L**	7.710	14	0.000
	Kr	83		**ug/L**		83	-0.000
>	Lu	175		**ug/L**		351120	351119.525
	Tl	205	**0.186**	**ug/L**	3.717	5620	0.008
	U	238	**0.005**	**ug/L**	19.904	865	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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		100.7			
	Ni	60					
>	Ge	74		99.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		100.6			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, April 13, 2010 19:16:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lani soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 3.184

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.662**	ug/L	16.453	122	0.000
>	Sc	45		ug/L		449650	449650.218
	Ni	60	**2.282**	ug/L	3.948	2231	0.005
>	Ge	74		ug/L		251355	251355.187
	As	75	**6.052**	ug/L	2.311	4170	0.017
	Se	77		ug/L		3672	-0.000
	Se	82	**5.772**	ug/L	3.928	389	0.002
	Kr	83		ug/L		79	-0.000
>	Lu	175		ug/L		353165	353165.001
	Tl	205	**1.218**	ug/L	1.671	20948	0.051
	U	238	**0.292**	ug/L	2.945	11636	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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9	132.467				
>	Sc	45		100.9			
	Ni	60	114.112				
>	Ge	74		98.9			
	As	75	121.035				
	Se	77					
	Se	82	115.432				
	Kr	83					
>	Lu	175		101.2			
	Tl	205	121.846				
	U	238	146.242				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Be	9	CRDL is out of limits
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 19:20:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 4.185

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.103**	**ug/L**	50.064	33	0.000
>	Sc	45		**ug/L**		421635	421635.197
	Ni	60	**2.779**	**ug/L**	2.051	2521	0.006
>	Ge	74		**ug/L**		231310	231310.332
	As	75	**-0.361**	**ug/L**	174.402	-243	-0.001
	Se	77		**ug/L**		4201	0.003
	Se	82	**-1.049**	**ug/L**	39.941	-69	-0.000
	Kr	83		**ug/L**		172	0.000
>	Lu	175		**ug/L**		322577	322577.208
	Tl	205	**-0.004**	**ug/L**	70.177	2594	-0.000
	U	238	**-0.012**	**ug/L**	0.726	204	-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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		94.6			
	Ni	60	83.948				
>	Ge	74		91.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		92.4			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, April 13, 2010 19:24:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\Ianl soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 5.186

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**22.051**	**ug/L**	10.901	3216	0.008
>	Sc	45		**ug/L**		418038	418037.921
	Ni	60	**21.668**	**ug/L**	3.166	18655	0.044
>	Ge	74		**ug/L**		233103	233102.772
	As	75	**20.576**	**ug/L**	2.617	13177	0.057
	Se	77		**ug/L**		4507	0.004
	Se	82	**20.866**	**ug/L**	5.343	1311	0.006
	Kr	83		**ug/L**		171	0.000
>	Lu	175		**ug/L**		323073	323072.629
	Tl	205	**19.336**	**ug/L**	1.538	264615	0.811
	U	238	**21.379**	**ug/L**	1.769	734175	2.271

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9	110.256				
>	Sc	45		93.8			
	Ni	60	92.955				
>	Ge	74		91.8			
	As	75	102.879				
	Se	77					
	Se	82	104.331				
	Kr	83					
>	Lu	175		92.6			
	Tl	205	96.680				
	U	238	106.895				

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 6
Sample Date/Time: Tuesday, April 13, 2010 19:28:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lani soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 6.187

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**52.299**	**ug/L**	6.742	8132	0.018
>	Sc	45		**ug/L**		446886	446885.892
	Ni	60	**50.085**	**ug/L**	3.133	45922	0.103
>	Ge	74		**ug/L**		246224	246224.362
	As	75	**50.712**	**ug/L**	2.285	34321	0.139
	Se	77		**ug/L**		5995	0.009
	Se	82	**51.768**	**ug/L**	5.984	3441	0.014
	Kr	83		**ug/L**		84	0.000
>	Lu	175		**ug/L**		349907	349906.710
	Tl	205	**49.372**	**ug/L**	2.445	727303	2.071
	U	238	**49.990**	**ug/L**	1.170	1858636	5.310

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
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
	Be	9	104.597				
>	Sc	45		100.3			
	Ni	60	100.170				
>	Ge	74		96.9			
	As	75	101.424				
	Se	77					
	Se	82	103.536				
	Kr	83					
>	Lu	175		100.3			
	Tl	205	98.744				
	U	238	99.980				

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 19:32:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 7.188

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.034	ug/L	57.982	13	-0.000
>	Sc	45		ug/L		441514	441513.645
	Ni	60	-0.011	ug/L	111.503	119	-0.000
>	Ge	74		ug/L		244978	244978.365
	As	75	-0.092	ug/L	238.142	-72	-0.000
	Se	77		ug/L		3767	0.000
	Se	82	-0.012	ug/L	1142.349	-4	-0.000
	Kr	83		ug/L		83	0.000
>	Lu	175		ug/L		343676	343675.889
	Tl	205	0.324	ug/L	2.992	7490	0.014
	U	238	0.006	ug/L	19.101	885	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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		99.1			
	Ni	60					
>	Ge	74		96.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		98.5			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, April 13, 2010 20:09:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 8.197

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	55.715	ug/L	7.601	8592	0.019
>	Sc	45		ug/L		443949	443949.183
	Ni	60	49.855	ug/L	1.908	45424	0.102
>	Ge	74		ug/L		242696	242696.352
	As	75	51.652	ug/L	1.568	34459	0.142
	Se	77		ug/L		5623	0.008
	Se	82	51.017	ug/L	2.354	3343	0.014
	Kr	83		ug/L		79	-0.000
>	Lu	175		ug/L		346303	346303.461
	Tl	205	50.085	ug/L	1.936	730163	2.100
	U	238	50.668	ug/L	0.998	1864231	5.382

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9	111.430				
>	Sc	45		99.6			
	Ni	60	99.710				
>	Ge	74		95.5			
	As	75	103.304				
	Se	77					
	Se	82	102.033				
	Kr	83					
>	Lu	175		99.2			
	Tl	205	100.170				
	U	238	101.336				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be	9	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, April 13, 2010 20:13:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\ani soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 9.198

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.003	ug/L	1295.742	18	-0.000
>	Sc	45		ug/L		440793	440793.036
	Ni	60	-0.018	ug/L	54.025	113	-0.000
>	Ge	74		ug/L		241228	241227.718
	As	75	0.184	ug/L	46.513	111	0.001
	Se	77		ug/L		3187	-0.002
	Se	82	0.679	ug/L	21.277	41	0.000
	Kr	83		ug/L		74	-0.000
>	Lu	175		ug/L		340351	340351.139
	Tl	205	0.214	ug/L	7.703	5845	0.009
	U	238	0.005	ug/L	31.139	810	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		98.9			
	Ni	60					
>	Ge	74		95.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		97.5			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, April 13, 2010 20:42:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 8.205

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**54.759**	**ug/L**	4.874	8274	0.019
>	Sc	45		**ug/L**		434593	434592.615
	Ni	60	**48.638**	**ug/L**	1.610	43384	0.100
>	Ge	74		**ug/L**		236941	236940.810
	As	75	**51.247**	**ug/L**	3.030	33367	0.141
	Se	77		**ug/L**		5279	0.007
	Se	82	**53.315**	**ug/L**	4.185	3408	0.014
	Kr	83		**ug/L**		91	0.000
>	Lu	175		**ug/L**		339645	339644.555
	Tl	205	**49.628**	**ug/L**	2.432	709571	2.081
	U	238	**50.501**	**ug/L**	1.194	1822195	5.364

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9	109.517				
>	Sc	45		97.5			
	Ni	60	97.277				
>	Ge	74		93.3			
	As	75	102.494				
	Se	77					
	Se	82	106.630				
	Kr	83					
>	Lu	175		97.3			
	Tl	205	99.256				
	U	238	101.002				

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 20:46:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lani soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 9.206

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	0.004	ug/L	872.528	19	0.000
>	Sc	45		ug/L		430488	430487.529
	Ni	60	-0.021	ug/L	62.894	107	-0.000
>	Ge	74		ug/L		235273	235273.278
	As	75	0.335	ug/L	106.950	204	0.001
	Se	77		ug/L		3031	-0.002
	Se	82	1.568	ug/L	42.431	97	0.000
	Kr	83		ug/L		78	-0.000
>	Lu	175		ug/L		338574	338574.449
	Tl	205	0.187	ug/L	6.245	5440	0.008
	U	238	0.005	ug/L	27.419	815	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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		96.6			
	Ni	60					
>	Ge	74		92.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		97.0			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, April 13, 2010 21:19:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 8.214

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**54.357**	**ug/L**	6.822	8443	0.019
>	Sc	45		**ug/L**		446968	446968.450
	Ni	60	**48.657**	**ug/L**	1.021	44640	0.100
>	Ge	74		**ug/L**		244811	244811.344
	As	75	**50.472**	**ug/L**	1.342	33965	0.139
	Se	77		**ug/L**		5438	0.007
	Se	82	**51.092**	**ug/L**	2.757	3377	0.014
	Kr	83		**ug/L**		94	0.000
>	Lu	175		**ug/L**		342022	342021.972
	Tl	205	**50.446**	**ug/L**	1.529	726226	2.116
	U	238	**51.043**	**ug/L**	2.664	1854277	5.421

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9	108.714				
>	Sc	45		100.3			
	Ni	60	97.314				
>	Ge	74		96.4			
	As	75	100.944				
	Se	77					
	Se	82	102.185				
	Kr	83					
>	Lu	175		98.0			
	Tl	205	100.891				
	U	238	102.087				

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 21:23:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lani soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 9.215

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.002	ug/L	878.977	18	-0.000
>	Sc	45		ug/L		446443	446443.357
	Ni	60	-0.024	ug/L	35.726	108	-0.000
>	Ge	74		ug/L		242490	242490.488
	As	75	0.115	ug/L	82.812	65	0.000
	Se	77		ug/L		3054	-0.002
	Se	82	0.436	ug/L	98.704	25	0.000
	Kr	83		ug/L		79	-0.000
>	Lu	175		ug/L		339061	339061.237
	Tl	205	0.169	ug/L	11.493	5192	0.007
	U	238	0.005	ug/L	11.025	815	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
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
	Be	9					
>	Sc	45		100.2			
	Ni	60					
>	Ge	74		95.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		97.2			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202060842
Sample Date/Time: Tuesday, April 13, 2010 21:27:24
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\1202060842.216

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.037	ug/L	18.136	13	-0.000
>	Sc	45		ug/L		449614	449614.147
	Ni	60	0.076	ug/L	16.221	201	0.000
>	Ge	74		ug/L		239650	239650.076
	As	75	0.114	ug/L	118.326	64	0.000
	Se	77		ug/L		2195	-0.006
	Se	82	0.045	ug/L	324.491	-0	0.000
	Kr	83		ug/L		82	0.000
>	Lu	175		ug/L		346208	346207.659
	Tl	205	0.015	ug/L	20.910	3057	0.001
	U	238	-0.012	ug/L	2.639	213	-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
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
	Be	9					
>	Sc	45		100.9			
	Ni	60					
>	Ge	74		94.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		99.2			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202060843
Sample Date/Time: Tuesday, April 13, 2010 21:31:30
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 960822|40|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\1202060843.217

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**23.559**	**ug/L**	5.899	3657	0.008
>	Sc	45		**ug/L**		445423	445422.677
	Ni	60	**37.245**	**ug/L**	1.414	34083	0.076
>	Ge	74		**ug/L**		240992	240991.878
	As	75	**29.344**	**ug/L**	3.686	19431	0.081
	Se	77		**ug/L**		7028	0.014
	Se	82	**82.798**	**ug/L**	0.491	5390	0.022
	Kr	83		**ug/L**		83	0.000
>	Lu	175		**ug/L**		335416	335416.389
	Tl	205	**36.528**	**ug/L**	2.812	516338	1.532
	U	238	**0.547**	**ug/L**	3.884	20094	0.058

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
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
	Be	9					
>	Sc	45		100.0			
	Ni	60					
>	Ge	74		94.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		96.1			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374001
Sample Date/Time: Tuesday, April 13, 2010 21:35:36
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\248374001.218

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	3.583	ug/L	7.684	626	0.001
>	Sc	45		ug/L		487527	487526.748
	Ni	60	24.266	ug/L	2.149	24353	0.050
>	Ge	74		ug/L		237500	237499.587
	As	75	5.462	ug/L	5.073	3554	0.015
	Se	77		ug/L		2255	-0.005
	Se	82	0.575	ug/L	52.427	34	0.000
	Kr	83		ug/L		128	0.000
>	Lu	175		ug/L		364379	364378.515
	Tl	205	0.229	ug/L	4.766	6487	0.010
	U	238	2.617	ug/L	2.024	101969	0.278

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
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
	Be	9					
>	Sc	45		109.4			
	Ni	60					
>	Ge	74		93.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		104.4			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202060844
Sample Date/Time: Tuesday, April 13, 2010 21:39:41
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\1202060844.219

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**3.417**	**ug/L**	12.466	590	0.001
>	Sc	45		**ug/L**		481553	481553.468
	Ni	60	**25.605**	**ug/L**	2.588	25371	0.052
>	Ge	74		**ug/L**		236364	236364.303
	As	75	**5.252**	**ug/L**	6.340	3400	0.014
	Se	77		**ug/L**		2133	-0.006
	Se	82	**0.348**	**ug/L**	46.124	19	0.000
	Kr	83		**ug/L**		150	0.000
>	Lu	175		**ug/L**		364293	364292.700
	Tl	205	**0.211**	**ug/L**	4.851	6211	0.009
	U	238	**2.774**	**ug/L**	2.509	108026	0.295

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		108.1			
	Ni	60					
>	Ge	74		93.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		104.4			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202060845
Sample Date/Time: Tuesday, April 13, 2010 21:43:47
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\1202060845.220

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**27.890**	**ug/L**	3.450	4785	0.010
>	Sc	45		**ug/L**		492520	492520.150
	Ni	60	**46.904**	**ug/L**	1.170	47425	0.096
>	Ge	74		**ug/L**		239827	239827.339
	As	75	**43.450**	**ug/L**	3.288	28636	0.119
	Se	77		**ug/L**		2561	-0.004
	Se	82	**9.584**	**ug/L**	1.928	618	0.003
	Kr	83		**ug/L**		158	0.000
>	Lu	175		**ug/L**		365659	365659.213
	Tl	205	**46.115**	**ug/L**	1.631	710076	1.934
	U	238	**27.270**	**ug/L**	1.498	1059659	2.896

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		110.5			
	Ni	60					
>	Ge	74		94.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		104.8			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202060847
Sample Date/Time: Tuesday, April 13, 2010 21:47:52
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\1202060847.221

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**26.954**	**ug/L**	8.371	4614	0.009
>	Sc	45		**ug/L**		491465	491464.727
	Ni	60	**48.203**	**ug/L**	1.734	48629	0.099
>	Ge	74		**ug/L**		242489	242489.137
	As	75	**41.992**	**ug/L**	0.409	27990	0.115
	Se	77		**ug/L**		2562	-0.004
	Se	82	**8.843**	**ug/L**	2.457	576	0.002
	Kr	83		**ug/L**		163	0.000
>	Lu	175		**ug/L**		363435	363435.181
	Tl	205	**44.014**	**ug/L**	3.374	673549	1.846
	U	238	**26.571**	**ug/L**	1.974	1026212	2.822

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
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
	Be	9					
>	Sc	45		110.3			
	Ni	60					
>	Ge	74		95.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		104.1			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202060846
Sample Date/Time: Tuesday, April 13, 2010 21:51:58
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 960822|10|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\1202060846.222

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	0.742	ug/L	10.189	132	0.000
>	Sc	45		ug/L		442243	442243.398
	Ni	60	5.520	ug/L	2.520	5125	0.011
>	Ge	74		ug/L		237505	237505.361
	As	75	0.960	ug/L	31.312	616	0.003
	Se	77		ug/L		2707	-0.004
	Se	82	-0.011	ug/L	1585.832	-4	-0.000
	Kr	83		ug/L		103	0.000
>	Lu	175		ug/L		340007	340006.571
	Tl	205	0.065	ug/L	17.865	3716	0.003
	U	238	0.570	ug/L	1.840	21235	0.061

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		99.2			
	Ni	60					
>	Ge	74		93.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		97.4			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374002
Sample Date/Time: Tuesday, April 13, 2010 21:56:04
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\248374002.223

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**3.528**	**ug/L**	3.905	617	0.001
>	Sc	45		**ug/L**		488002	488001.788
	Ni	60	**31.097**	**ug/L**	1.893	31198	0.064
>	Ge	74		**ug/L**		237317	237317.118
	As	75	**6.391**	**ug/L**	3.296	4160	0.018
	Se	77		**ug/L**		2171	-0.006
	Se	82	**0.514**	**ug/L**	39.419	30	0.000
	Kr	83		**ug/L**		131	0.000
>	Lu	175		**ug/L**		359275	359274.572
	Tl	205	**0.278**	**ug/L**	0.430	7141	0.012
	U	238	**4.639**	**ug/L**	1.300	177711	0.493

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
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
	Be	9					
>	Sc	45		109.5			
	Ni	60					
>	Ge	74		93.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		102.9			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, April 13, 2010 22:00:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lani soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 8.224

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**54.402**	**ug/L**	9.487	8260	0.019
>	Sc	45		**ug/L**		436956	436955.815
	Ni	60	**49.138**	**ug/L**	0.352	44072	0.101
>	Ge	74		**ug/L**		239779	239779.169
	As	75	**49.880**	**ug/L**	0.813	32877	0.137
	Se	77		**ug/L**		5353	0.007
	Se	82	**50.395**	**ug/L**	4.218	3262	0.014
	Kr	83		**ug/L**		96	0.000
>	Lu	175		**ug/L**		337283	337282.635
	Tl	205	**50.366**	**ug/L**	3.052	714920	2.112
	U	238	**50.940**	**ug/L**	1.128	1825248	5.410

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
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
	Be	9	108.804				
>	Sc	45		98.1			
	Ni	60	98.275				
>	Ge	74		94.4			
	As	75	99.760				
	Se	77					
	Se	82	100.791				
	Kr	83					
>	Lu	175		96.6			
	Tl	205	100.732				
	U	238	101.880				

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 22:04:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lani soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 9.225

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.031	ug/L	50.968	13	-0.000
>	Sc	45		ug/L		429133	429133.032
	Ni	60	-0.025	ug/L	42.376	104	-0.000
>	Ge	74		ug/L		234512	234512.031
	As	75	-0.111	ug/L	238.188	-82	-0.000
	Se	77		ug/L		3018	-0.002
	Se	82	0.012	ug/L	2849.190	-2	0.000
	Kr	83		ug/L		76	-0.000
>	Lu	175		ug/L		333848	333848.305
	Tl	205	0.169	ug/L	10.913	5114	0.007
	U	238	0.005	ug/L	24.888	798	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		96.3			
	Ni	60					
>	Ge	74		92.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		95.7			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374003
Sample Date/Time: Tuesday, April 13, 2010 22:08:23
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\248374003.226

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	3.303	ug/L	2.588	571	0.001
>	Sc	45		ug/L		480470	480470.164
	Ni	60	25.542	ug/L	1.260	25256	0.052
>	Ge	74		ug/L		238312	238312.415
	As	75	9.356	ug/L	1.708	6119	0.026
	Se	77		ug/L		2251	-0.006
	Se	82	0.015	ug/L	366.836	-2	0.000
	Kr	83		ug/L		143	0.000
>	Lu	175		ug/L		347060	347060.293
	Tl	205	0.372	ug/L	4.228	8265	0.016
	U	238	5.521	ug/L	2.814	204099	0.586

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
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
	Be	9					
>	Sc	45		107.8			
	Ni	60					
>	Ge	74		93.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		99.4			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374004
Sample Date/Time: Tuesday, April 13, 2010 22:12:29
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\248374004.227

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**3.099**	**ug/L**	3.777	542	0.001
>	Sc	45		**ug/L**		485141	485140.658
	Ni	60	**24.601**	**ug/L**	3.923	24563	0.050
>	Ge	74		**ug/L**		239933	239932.655
	As	75	**8.498**	**ug/L**	4.134	5596	0.023
	Se	77		**ug/L**		2250	-0.006
	Se	82	**0.532**	**ug/L**	17.040	31	0.000
	Kr	83		**ug/L**		123	0.000
>	Lu	175		**ug/L**		347456	347456.353
	Tl	205	**0.330**	**ug/L**	4.536	7657	0.014
	U	238	**13.346**	**ug/L**	0.576	493170	1.417

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		108.9			
	Ni	60					
>	Ge	74		94.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		99.6			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374005
Sample Date/Time: Tuesday, April 13, 2010 22:16:35
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\248374005.228

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**3.431**	**ug/L**	9.660	612	0.001
>	Sc	45		**ug/L**		496389	496388.714
	Ni	60	**21.906**	**ug/L**	0.643	22400	0.045
>	Ge	74		**ug/L**		242881	242880.527
	As	75	**7.424**	**ug/L**	2.750	4948	0.020
	Se	77		**ug/L**		2164	-0.006
	Se	82	**0.591**	**ug/L**	20.535	35	0.000
	Kr	83		**ug/L**		140	0.000
>	Lu	175		**ug/L**		359186	359185.934
	Tl	205	**0.281**	**ug/L**	2.026	7189	0.012
	U	238	**4.864**	**ug/L**	0.503	186248	0.517

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
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
	Be	9					
>	Sc	45		111.4			
	Ni	60					
>	Ge	74		95.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		102.9			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374006
Sample Date/Time: Tuesday, April 13, 2010 22:20:42
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\248374006.229

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**2.385**	**ug/L**	10.759	424	0.001
>	Sc	45		**ug/L**		488326	488325.796
	Ni	60	**19.018**	**ug/L**	3.597	19144	0.039
>	Ge	74		**ug/L**		239863	239863.033
	As	75	**5.761**	**ug/L**	9.792	3785	0.016
	Se	77		**ug/L**		2137	-0.006
	Se	82	**-0.048**	**ug/L**	535.254	-6	-0.000
	Kr	83		**ug/L**		131	0.000
>	Lu	175		**ug/L**		349331	349331.376
	Tl	205	**0.290**	**ug/L**	0.413	7117	0.012
	U	238	**11.623**	**ug/L**	1.719	431870	1.235

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		109.6			
	Ni	60					
>	Ge	74		94.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		100.1			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374007
Sample Date/Time: Tuesday, April 13, 2010 22:24:48
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\248374007.230

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**2.590**	**ug/L**	5.131	449	0.001
>	Sc	45		**ug/L**		477861	477861.408
	Ni	60	**24.665**	**ug/L**	3.479	24258	0.050
>	Ge	74		**ug/L**		238133	238133.079
	As	75	**6.066**	**ug/L**	6.075	3961	0.017
	Se	77		**ug/L**		2092	-0.006
	Se	82	**0.310**	**ug/L**	82.586	17	0.000
	Kr	83		**ug/L**		140	0.000
>	Lu	175		**ug/L**		347164	347163.776
	Tl	205	**0.296**	**ug/L**	1.552	7167	0.012
	U	238	**9.056**	**ug/L**	0.713	334578	0.962

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
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
	Be	9					
>	Sc	45		107.2			
	Ni	60					
>	Ge	74		93.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		99.5			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374008
Sample Date/Time: Tuesday, April 13, 2010 22:28:54
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\248374008.231

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**2.523**	**ug/L**	10.567	448	0.001
>	Sc	45		**ug/L**		489175	489175.097
	Ni	60	**19.838**	**ug/L**	1.927	20002	0.041
>	Ge	74		**ug/L**		239887	239886.707
	As	75	**6.055**	**ug/L**	2.534	3983	0.017
	Se	77		**ug/L**		2214	-0.006
	Se	82	**0.552**	**ug/L**	32.653	33	0.000
	Kr	83		**ug/L**		125	0.000
>	Lu	175		**ug/L**		355542	355541.836
	Tl	205	**0.201**	**ug/L**	2.395	5924	0.008
	U	238	**7.423**	**ug/L**	1.380	280967	0.788

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		109.8			
	Ni	60					
>	Ge	74		94.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		101.9			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, April 13, 2010 22:33:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 8.232

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**52.990**	ug/L	4.977	8187	0.018
>	Sc	45		ug/L		444298	444297.656
	Ni	60	**48.274**	ug/L	0.454	44030	0.099
>	Ge	74		ug/L		240072	240072.098
	As	75	**51.144**	ug/L	0.458	33751	0.141
	Se	77		ug/L		5197	0.007
	Se	82	**50.406**	ug/L	2.237	3266	0.014
	Kr	83		ug/L		95	0.000
>	Lu	175		ug/L		335587	335586.926
	Tl	205	**49.885**	ug/L	2.060	704626	2.092
	U	238	**50.990**	ug/L	3.121	1817114	5.416

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
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
	Be	9	105.980				
>	Sc	45		99.7			
	Ni	60	96.548				
>	Ge	74		94.5			
	As	75	102.288				
	Se	77					
	Se	82	100.812				
	Kr	83					
>	Lu	175		96.2			
	Tl	205	99.771				
	U	238	101.979				

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 22:37:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 9.233

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.008**	**ug/L**	186.939	20	0.000
>	Sc	45		**ug/L**		441060	441060.407
	Ni	60	**-0.038**	**ug/L**	23.812	95	-0.000
>	Ge	74		**ug/L**		241609	241608.963
	As	75	**-0.125**	**ug/L**	143.084	-94	-0.000
	Se	77		**ug/L**		2927	-0.003
	Se	82	**-0.066**	**ug/L**	474.093	-8	-0.000
	Kr	83		**ug/L**		84	0.000
>	Lu	175		**ug/L**		333904	333904.174
	Tl	205	**0.137**	**ug/L**	5.943	4663	0.006
	U	238	**0.006**	**ug/L**	15.217	832	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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		99.0			
	Ni	60					
>	Ge	74		95.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		95.7			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374009
Sample Date/Time: Tuesday, April 13, 2010 22:41:14
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\248374009.234

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**2.688**	**ug/L**	8.755	474	0.001
>	Sc	45		**ug/L**		486445	486445.268
	Ni	60	**25.627**	**ug/L**	2.128	25658	0.052
>	Ge	74		**ug/L**		237048	237047.714
	As	75	**6.204**	**ug/L**	2.903	4032	0.017
	Se	77		**ug/L**		2231	-0.006
	Se	82	**-0.011**	**ug/L**	3104.427	-4	-0.000
	Kr	83		**ug/L**		138	0.000
>	Lu	175		**ug/L**		349152	349151.930
	Tl	205	**0.403**	**ug/L**	0.411	8775	0.017
	U	238	**7.867**	**ug/L**	2.131	292364	0.836

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		109.2			
	Ni	60					
>	Ge	74		93.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		100.0			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374010
Sample Date/Time: Tuesday, April 13, 2010 22:45:20
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\248374010.235

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**2.767**	**ug/L**	2.516	485	0.001
>	Sc	45		**ug/L**		484732	484732.251
	Ni	60	**21.603**	**ug/L**	2.098	21570	0.044
>	Ge	74		**ug/L**		236717	236717.137
	As	75	**5.572**	**ug/L**	5.566	3616	0.015
	Se	77		**ug/L**		2125	-0.006
	Se	82	**0.083**	**ug/L**	77.442	2	0.000
	Kr	83		**ug/L**		141	0.000
>	Lu	175		**ug/L**		347747	347746.785
	Tl	205	**0.323**	**ug/L**	5.511	7569	0.014
	U	238	**5.472**	**ug/L**	1.864	202742	0.581

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		108.8			
	Ni	60					
>	Ge	74		93.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		99.6			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374011
Sample Date/Time: Tuesday, April 13, 2010 22:49:27
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\248374011.236

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**3.422**	**ug/L**	0.519	613	0.001
>	Sc	45		**ug/L**		498678	498678.295
	Ni	60	**24.492**	**ug/L**	1.885	25141	0.050
>	Ge	74		**ug/L**		236724	236724.254
	As	75	**9.930**	**ug/L**	1.483	6454	0.027
	Se	77		**ug/L**		2026	-0.006
	Se	82	**-0.465**	**ug/L**	63.818	-33	-0.000
	Kr	83		**ug/L**		157	0.000
>	Lu	175		**ug/L**		350424	350424.210
	Tl	205	**0.267**	**ug/L**	2.674	6800	0.011
	U	238	**3.201**	**ug/L**	0.750	119799	0.340

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
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
	Be	9					
>	Sc	45		111.9			
	Ni	60					
>	Ge	74		93.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		100.4			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374012
Sample Date/Time: Tuesday, April 13, 2010 22:53:33
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\248374012.237

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**4.483**	**ug/L**	1.053	844	0.002
>	Sc	45		**ug/L**		528897	528896.573
	Ni	60	**36.207**	**ug/L**	2.149	39338	0.074
>	Ge	74		**ug/L**		240797	240796.859
	As	75	**11.903**	**ug/L**	3.504	7870	0.033
	Se	77		**ug/L**		1956	-0.007
	Se	82	**-0.931**	**ug/L**	33.108	-64	-0.000
	Kr	83		**ug/L**		203	0.001
>	Lu	175		**ug/L**		359009	359009.160
	Tl	205	**0.638**	**ug/L**	0.795	12553	0.027
	U	238	**5.334**	**ug/L**	1.167	204088	0.567

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		118.7			
	Ni	60					
>	Ge	74		94.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		102.9			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374013
Sample Date/Time: Tuesday, April 13, 2010 22:57:40
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\248374013.238

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**2.911**	**ug/L**	3.037	506	0.001
>	Sc	45		**ug/L**		481577	481576.933
	Ni	60	**20.371**	**ug/L**	1.363	20220	0.042
>	Ge	74		**ug/L**		237680	237680.165
	As	75	**8.243**	**ug/L**	3.018	5377	0.023
	Se	77		**ug/L**		2079	-0.006
	Se	82	**-0.077**	**ug/L**	345.077	-8	-0.000
	Kr	83		**ug/L**		152	0.000
>	Lu	175		**ug/L**		350866	350866.367
	Tl	205	**0.235**	**ug/L**	4.553	6344	0.010
	U	238	**9.377**	**ug/L**	0.562	350095	0.996

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		108.1			
	Ni	60					
>	Ge	74		93.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		100.5			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, April 13, 2010 23:01:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 8.239

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**54.091**	**ug/L**	4.108	8245	0.019
>	Sc	45		**ug/L**		438310	438310.405
	Ni	60	**48.393**	**ug/L**	2.466	43529	0.099
>	Ge	74		**ug/L**		235675	235674.556
	As	75	**50.830**	**ug/L**	1.106	32930	0.140
	Se	77		**ug/L**		5179	0.007
	Se	82	**50.535**	**ug/L**	0.979	3216	0.014
	Kr	83		**ug/L**		101	0.000
>	Lu	175		**ug/L**		333946	333945.955
	Tl	205	**49.646**	**ug/L**	2.126	697847	2.082
	U	238	**50.917**	**ug/L**	1.704	1806242	5.408

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
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
	Be	9	108.182				
>	Sc	45		98.4			
	Ni	60	96.786				
>	Ge	74		92.8			
	As	75	101.660				
	Se	77					
	Se	82	101.070				
	Kr	83					
>	Lu	175		95.7			
	Tl	205	99.293				
	U	238	101.833				

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 23:05:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lani soil.mth
Dataset File: C:\elandata\Dataset\100413\QC Std 9.240

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.002**	**ug/L**	482.265	18	0.000
>	Sc	45		**ug/L**		429776	429776.403
	Ni	60	**-0.022**	**ug/L**	61.873	106	-0.000
>	Ge	74		**ug/L**		232179	232178.814
	As	75	**0.214**	**ug/L**	233.343	129	0.001
	Se	77		**ug/L**		2774	-0.003
	Se	82	**0.029**	**ug/L**	525.249	-1	0.000
	Kr	83		**ug/L**		80	0.000
>	Lu	175		**ug/L**		332645	332644.914
	Tl	205	**0.140**	**ug/L**	9.630	4685	0.006
	U	238	**0.006**	**ug/L**	17.652	839	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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		96.5			
	Ni	60					
>	Ge	74		91.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		95.3			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Wednesday, April 14, 2010 12:05:01
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.1060
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	2169.4	2169.365	23.084	1.1
	Mg	24.0	36823.0	36822.997	165.806	0.5
	Co	58.9	56425.0	56425.023	593.950	1.1
	Rh	102.9	111503.3	111503.264	199.521	0.2
	In	114.9	152632.5	152632.456	457.067	0.3
	Pb	208.0	174922.4	174922.448	1202.779	0.7
⌈>	Ba	137.9	144696.1	144696.083	990.201	0.7
⌊	Ba++	69.0	2057.4	0.014	0.000	2.5
⌈>	Ce	139.9	178792.4	178792.364	1775.199	1.0
⌊	CeO	155.9	3254.3	0.018	0.000	1.5
	Bkgd	220.0	21.1	21.100	4.464	21.2

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	8.5	2982.3
Co	59	21	9.3	55960.7
In	115	21	10.5	148671.3

ICPMS #5 Instrument Tuning Report

File Name: 100414.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	607	2072	0.539
Be	9.0	8.9	2041	2088	0.572
Mg	24.0	24.0	5697	2085	0.582
Mg	25.0	25.0	5937	2085	0.556
Mg	26.0	25.9	6174	2100	0.565
Co	58.9	58.9	14191	2125	0.556
Rh	102.9	102.9	24885	2180	0.565
In	114.9	114.9	27801	2200	0.567
Ce	139.9	139.9	33871	2220	0.575
Pb	206.0	206.0	49948	2305	0.578
Pb	207.0	207.0	50171	2240	0.633
Pb	208.0	208.0	50451	2280	0.686
U	238.1	238.0	57725	2295	0.691

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Wednesday, April 14, 2010 13:08:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\Blank.010

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L		23	
Sc	45		ug/L		473060	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Wednesday, April 14, 2010 13:10:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\Standard 1.011

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	3.031	3207	0.007
Sc	45		ug/L		472284	472283.535

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Wednesday, April 14, 2010 13:12:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\Standard 2.012

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	100.016	ug/L	4.689	31356	0.069
Sc	45		ug/L		457471	457470.849

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Wednesday, April 14, 2010 13:13:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\QC Std 1.013

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**51.614**	**ug/L**	5.575	15955	0.035
⌊>	Sc	45		**ug/L**		451203	451203.365

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9	103.228				
⌊>	Sc	45		95.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Wednesday, April 14, 2010 13:15:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\QC Std 2.014

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.014	ug/L	67.718	26	0.000
Sc	45		ug/L		440788	440787.711

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		93.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Wednesday, April 14, 2010 13:17:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\QC Std 3.015

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.582**	**ug/L**	19.029	204	0.000
⌊>	Sc	45		**ug/L**		457026	457025.836

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	116.328				
⌊>	Sc	45		96.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Wednesday, April 14, 2010 13:18:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\QC Std 4.016

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.070**	**ug/L**	36.420	43	0.000
⌊>	Sc	45		**ug/L**		442154	442153.995

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		93.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Wednesday, April 14, 2010 13:20:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\QC Std 5.017

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**19.792**	**ug/L**	4.679	5562	0.014
⌊>	Sc	45		**ug/L**		409085	409084.779

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	98.961				
⌊>	Sc	45		86.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, April 14, 2010 13:22:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\QC Std 6.018

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	49.800	ug/L	0.693	15071	0.034
Sc	45		ug/L		440849	440849.105

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9	99.599				
Sc	45		93.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, April 14, 2010 13:23:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\QC Std 7.019

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.012	ug/L	118.831	24	0.000
Sc	45		ug/L		430478	430478.349

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		91.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202060842
Sample Date/Time: Wednesday, April 14, 2010 13:25:29
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\1202060842.020

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	-0.004	ug/L	73.223	21	-0.000
⌊>	Sc	45		ug/L		456085	456084.935

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		96.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202060843
Sample Date/Time: Wednesday, April 14, 2010 13:27:09
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 960822|40|skj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\1202060843.021

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**22.336**	**ug/L**	5.357	6910	0.015
⌊>	Sc	45		**ug/L**		450706	450705.691

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		95.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374001
Sample Date/Time: Wednesday, April 14, 2010 13:28:48
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|sk|
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\248374001.022

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	3.079	ug/L	1.554	1073	0.002
Sc	45		ug/L		497316	497316.114

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		105.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202060844
Sample Date/Time: Wednesday, April 14, 2010 13:30:28
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\1202060844.023

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**3.130**	**ug/L**	4.902	1070	0.002
⌊>	Sc	45		**ug/L**		488445	488444.735

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		103.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202060845
Sample Date/Time: Wednesday, April 14, 2010 13:32:08
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\1202060845.024

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**24.680**	**ug/L**	8.150	8613	0.017
⌊>	Sc	45		**ug/L**		510202	510201.663

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		107.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202060847
Sample Date/Time: Wednesday, April 14, 2010 13:33:47
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\1202060847.025

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**25.430**	**ug/L**	4.593	8433	0.017
⌊>	Sc	45		**ug/L**		483053	483053.421

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		102.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202060846
Sample Date/Time: Wednesday, April 14, 2010 13:35:27
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 960822|10|skj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\1202060846.026

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.712	ug/L	11.794	247	0.000
⌊>	Sc	45		ug/L		461948	461948.012

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		97.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374002
Sample Date/Time: Wednesday, April 14, 2010 13:37:07
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\248374002.027

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**3.107**	**ug/L**	9.324	1078	0.002
⌊>	Sc	45		**ug/L**		496464	496463.851

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		104.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Wednesday, April 14, 2010 13:38:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\QC Std 8.028

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	49.778	ug/L	6.688	15115	0.034
Sc	45		ug/L		443668	443667.953

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	99.555				
Sc	45		93.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Wednesday, April 14, 2010 13:40:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\QC Std 9.029

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.004	ug/L	286.038	24	0.000
Sc	45		ug/L		457774	457773.830

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		96.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374003
Sample Date/Time: Wednesday, April 14, 2010 13:42:08
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\248374003.030

Concentration Results

Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**2.848**	**ug/L**	5.365	1006	0.002
Sc	45		**ug/L**		502856	502855.703

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		106.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374004
Sample Date/Time: Wednesday, April 14, 2010 13:43:49
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\248374004.031

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	2.653	ug/L	3.152	904	0.002
⌊>	Sc	45		ug/L		484173	484172.775

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		102.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374005
Sample Date/Time: Wednesday, April 14, 2010 13:45:29
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\248374005.032

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	3.085	ug/L	8.382	1041	0.002
Sc	45		ug/L		482426	482425.624

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		102.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374006
Sample Date/Time: Wednesday, April 14, 2010 13:47:09
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\248374006.033

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**2.230**	**ug/L**	6.612	724	0.002
⌊>	Sc	45		**ug/L**		459688	459687.836

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		97.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374007
Sample Date/Time: Wednesday, April 14, 2010 13:48:49
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|sk|
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\248374007.034

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**2.410**	**ug/L**	7.005	763	0.002
⌊>	Sc	45		**ug/L**		449853	449853.152

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		95.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374008
Sample Date/Time: Wednesday, April 14, 2010 13:50:29
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\248374008.035

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**2.219**	**ug/L**	3.490	765	0.002
⌊>	Sc	45		**ug/L**		487288	487287.675

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		103.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Wednesday, April 14, 2010 13:52:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\QC Std 8.036

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	54.246	ug/L	0.704	14794	0.037
Sc	45		ug/L		397339	397338.678

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9	108.492				
Sc	45		84.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Wednesday, April 14, 2010 13:53:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\QC Std 9.037

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.016	ug/L	82.764	16	-0.000
Sc	45		ug/L		426431	426430.547

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		90.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374009
Sample Date/Time: Wednesday, April 14, 2010 13:55:31
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\248374009.038

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**2.554**	**ug/L**	9.859	838	0.002
⌊>	Sc	45		**ug/L**		467907	467906.763

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		98.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374010
Sample Date/Time: Wednesday, April 14, 2010 13:57:11
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\248374010.039

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**2.389**	**ug/L**	4.578	791	0.002
⌊>	Sc	45		**ug/L**		469082	469081.734

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		99.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374011
Sample Date/Time: Wednesday, April 14, 2010 13:58:52
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\248374011.040

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**3.290**	**ug/L**	6.205	1043	0.002
⌊>	Sc	45		**ug/L**		453859	453859.431

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		95.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374012
Sample Date/Time: Wednesday, April 14, 2010 14:00:33
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\248374012.041

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**4.301**	**ug/L**	5.375	1457	0.003
⌊>	Sc	45		**ug/L**		486525	486524.878

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		102.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248374013
Sample Date/Time: Wednesday, April 14, 2010 14:02:13
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960822|2|skj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\248374013.042

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**2.946**	**ug/L**	5.414	915	0.002
⌊>	Sc	45		**ug/L**		443014	443014.081

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		93.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, April 14, 2010 14:03:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\QC Std 6.043

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**51.015**	**ug/L**	5.042	14624	0.035
⌊>	Sc	45		**ug/L**		418304	418303.905

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	102.031				
⌊>	Sc	45		88.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, April 14, 2010 14:05:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100414\QC Std 7.044

Concentration Results

Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**-0.002**	**ug/L**	970.122	21	-0.000
Sc	45		**ug/L**		438550	438550.165

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		92.7			

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: 03/17/2010
Technique:FI-MHS
Calibration Type:
Hg, Calc. Intercept : Linear
Wavelength: 253.7 nm
Sample Info Name: 031710S1.SIF Results Data Set Name: 031710S1

==========
Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 03/17/2010
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0049	0.0049	08:59:52	No
2			0.0047	0.0047	09:00:27	No
Mean:			0.0048			
SD :			0.0001			
%RSD:			2.4597			

Auto-zero performed.

==========
Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 03/17/2010
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0030	0.0078	09:01:50	No
2			0.0029	0.0076	09:02:25	No
Mean:			0.0029			
SD :			0.0001			
%RSD:			3.5886			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.01465
Intercept : 0.00000

==========
Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 03/17/2010
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0068	0.0115	09:03:48	No
2			0.0063	0.0111	09:04:23	No
Mean:			0.0066			
SD :			0.0003			
%RSD:			4.7161			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99854 Slope: 0.01303
Intercept : 0.00012

==========
Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 03/17/2010
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0243	0.0291	09:05:48	No
2			0.0243	0.0291	09:06:23	No
Mean:			0.0243			
SD :			0.0000			
%RSD:			0.1512			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99973 Slope: 0.01203
Intercept : 0.00033

==========

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 03/17/2010
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0582	0.0630	09:07:48	No
2			0.0579	0.0627	09:08:23	No
Mean:			0.0581			
SD :			0.0002			
%RSD:			0.3897			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99982 Slope: 0.01155
Intercept : 0.00059

==========

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 03/17/2010
Sample ID: S10

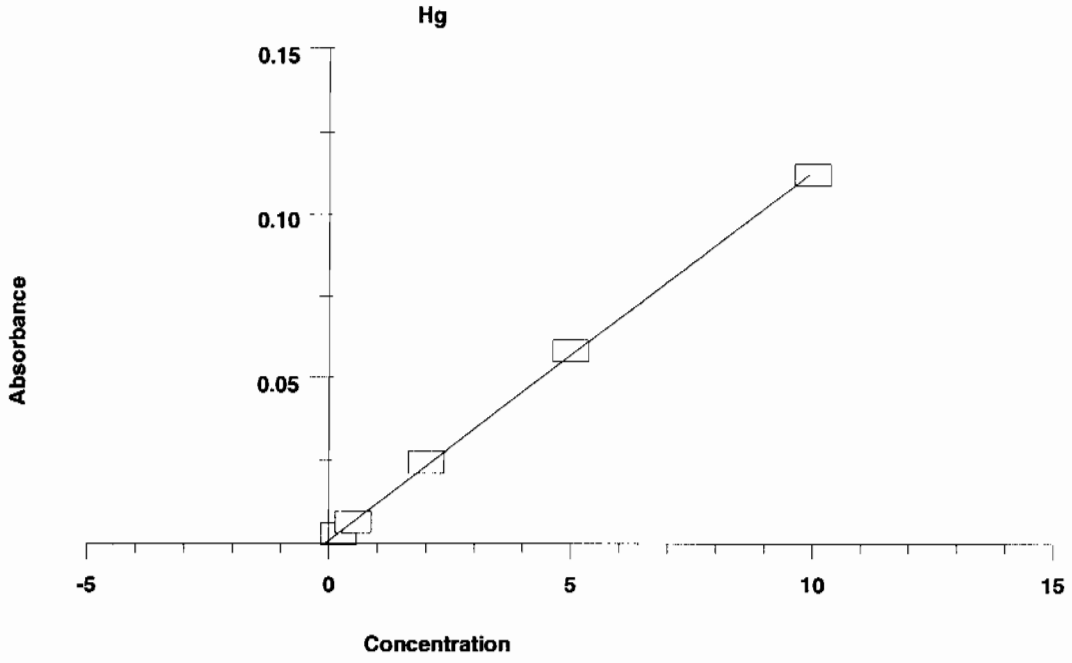
Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.1119	0.1166	09:09:49	No
2			0.1120	0.1168	09:10:23	No
Mean:			0.1120			
SD :			0.0001			
%RSD:						

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99979 Slope: 0.01117
Intercept : 0.00101

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0048	---	----	----	----
S0.2	0.0029	0.200	0.172	0.0001	3.6
S0.5	0.0066	0.500	0.496	0.0003	4.7
S2.0	0.0243	2.000	2.086	0.0000	0.2
S5.0	0.0581	5.000	5.106	0.0002	0.4
S10	0.1120	10.000	9.930	0.0001	----

Correlation Coefficient: 0.99979 Slope: 0.01117 Intercept: 0.0010



Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 03/17/2010
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.255	5.255	0.0597	0.0645	09:11:51	No
2	5.164	5.164	0.0587	0.0635	09:12:25	No
Mean:	5.210	5.210	0.0592			
SD :	0.0645	0.0645	0.0007			
%RSD:	1.2	1.2	1.2174			

QC value within specified limits.

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 03/17/2010
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.051	-0.051	0.0004	0.0052	09:13:47	No
2	-0.072	-0.072	0.0002	0.0050	09:14:22	No
Mean:	-0.061	-0.061	0.0003			
SD :	0.0148	0.0148	0.0002			
%RSD:	24.2	24.2	50.2349			

QC value within specified limits.

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 03/17/2010
Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.258	0.258	0.0039	0.0087	09:15:44	No
2	0.245	0.245	0.0038	0.0085	09:16:19	No
Mean:	0.252	0.252	0.0038			
SD :	0.0092	0.0092	0.0001			
%RSD:	3.7	3.7	2.6999			

QC value within specified limits.

==========

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 03/17/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.131	5.131	0.0583	0.0631	09:17:45	No
2	5.183	5.183	0.0589	0.0637	09:18:20	No
Mean:	5.157	5.157	0.0586			
SD :	0.0371	0.0371	0.0004			
%RSD:	0.7	0.7	0.7062			

QC value within specified limits.

==========

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 03/17/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.038	0.038	0.0014	0.0062	09:19:48	No
2	0.031	0.031	0.0014	0.0061	09:20:23	No
Mean:	0.035	0.035	0.0014			
SD :	0.0044	0.0044	0.0000			
%RSD:	12.7	12.7	3.5081			

QC value within specified limits.

==========

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 03/17/2010
Sample ID: 1202069741|i||964730|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.072	-0.072	0.0002	0.0050	09:21:49	No
2	-0.090	-0.090	0.0000	0.0048	09:22:24	No
Mean:	-0.081	-0.081	0.0001			
SD :	0.0128	0.0128	0.0001			
%RSD:	15.7	15.7	134.7501			

==========

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 03/17/2010
Sample ID: 1202069742|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.764	3.764	0.0431	0.0478	09:23:48	No
2	3.719	3.719	0.0426	0.0473	09:24:23	No
Mean:	3.741	3.741	0.0428			
SD :	0.0321	0.0321	0.0004			
%RSD:	0.9	0.9	0.8387			

==========

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 03/17/2010
Sample ID: 248374001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.501	0.501	0.0066	0.0114	09:25:49	No
2	0.497	0.497	0.0066	0.0113	09:26:24	No
Mean:	0.499	0.499	0.0066			
SD :	0.0023	0.0023	0.0000			
%RSD:	0.5	0.5	0.3931			

==========

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 03/17/2010
Sample ID: 1202069743|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.568	0.568	0.0074	0.0121	09:27:51	No
2	0.537	0.537	0.0070	0.0118	09:28:26	No
Mean:	0.552	0.552	0.0072			
SD :	0.0223	0.0223	0.0002			
%RSD:	4.0	4.0	3.4695			

Element: Hg Seq. No.: 16 AS Loc.: 16 Date: 03/17/2010
Sample ID: 1202069744|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.608	2.608	0.0302	0.0349	09:29:55	No
2	2.613	2.613	0.0302	0.0350	09:30:30	No
Mean:	2.611	2.611	0.0302			
SD :	0.0033	0.0033	0.0000			
%RSD:	0.1	0.1	0.1223			

Element: Hg Seq. No.: 17 AS Loc.: 17 Date: 03/17/2010
Sample ID: 1202069746|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.601	2.601	0.0301	0.0348	09:31:54	No
2	2.602	2.602	0.0301	0.0349	09:32:29	No
Mean:	2.601	2.601	0.0301			
SD :	0.0010	0.0010	0.0000			
%RSD:						

Element: Hg Seq. No.: 18 AS Loc.: 18 Date: 03/17/2010
Sample ID: 1202069745|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.036	-0.036	0.0006	0.0054	09:33:49	No
2	-0.068	-0.068	0.0003	0.0050	09:34:24	No
Mean:	-0.052	-0.052	0.0004			
SD :	0.0225	0.0225	0.0003			
%RSD:	43.4	43.4	57.7549			

Element: Hg Seq. No.: 19 AS Loc.: 19 Date: 03/17/2010
Sample ID: 248374002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.320	2.320	0.0269	0.0317	09:35:45	No
2	2.308	2.308	0.0268	0.0316	09:36:20	No
Mean:	2.314	2.314	0.0269			
SD :	0.0090	0.0090	0.0001			
%RSD:	0.4	0.4	0.3762			

Element: Hg Seq. No.: 20 AS Loc.: 20 Date: 03/17/2010
Sample ID: 248374003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.541	0.541	0.0071	0.0118	09:37:42	No
2	0.529	0.529	0.0069	0.0117	09:38:17	No
Mean:	0.535	0.535	0.0070			
SD :	0.0087	0.0087	0.0001			

%RSD: 1.6 1.6 1.3949

==========

Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 03/17/2010
Sample ID: 248374004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.722	0.722	0.0091	0.0138	09:39:39	No
2	0.719	0.719	0.0090	0.0138	09:40:14	No
Mean:	0.721	0.721	0.0091			
SD :	0.0018	0.0018	0.0000			
%RSD:	0.2	0.2	0.2199			

==========

Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 03/17/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.188	5.188	0.0590	0.0637	09:41:40	No
2	5.152	5.152	0.0586	0.0633	09:42:15	No
Mean:	5.170	5.170	0.0588			
SD :	0.0257	0.0257	0.0003			
%RSD:	0.5	0.5	0.4894			

QC value within specified limits.

==========

Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 03/17/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0011	0.0058	09:43:43	No
2	0.007	0.007	0.0011	0.0059	09:44:18	No
Mean:	0.006	0.006	0.0011			
SD :	0.0013	0.0013	0.0000			
%RSD:	23.6	23.6	1.3705			

QC value within specified limits.

==========

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 03/17/2010
Sample ID: 248374005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	1.088	1.088	0.0132	0.0179	09:45:43	No
2	1.081	1.081	0.0131	0.0179	09:46:18	No
Mean:	1.085	1.085	0.0131			
SD :	0.0049	0.0049	0.0001			
%RSD:	0.4	0.4	0.4141			

==========

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 03/17/2010
Sample ID: 248374006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.273	0.273	0.0041	0.0088	09:47:42	No
2	0.276	0.276	0.0041	0.0089	09:48:17	No
Mean:	0.275	0.275	0.0041			
SD :	0.0017	0.0017	0.0000			
%RSD:	0.6	0.6	0.4697			

==========

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 03/17/2010
Sample ID: 248374007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.169	0.169	0.0029	0.0077	09:49:41	No
2	0.170	0.170	0.0029	0.0077	09:50:16	No
Mean:	0.170	0.170	0.0029			
SD :	0.0003	0.0003	0.0000			
%RSD:	0.2	0.2	0.1137			

Element: Hg Seq. No.: 27 AS Loc.: 25 Date: 03/17/2010
Sample ID: 248374008|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	1.833	1.833	0.0215	0.0263	09:51:40	No
2	1.811	1.811	0.0212	0.0260	09:52:16	No
Mean:	1.822	1.822	0.0214			
SD :	0.0154	0.0154	0.0002			
%RSD:	0.8	0.8	0.8065			

Element: Hg Seq. No.: 28 AS Loc.: 26 Date: 03/17/2010
Sample ID: 248374009|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.182	0.182	0.0030	0.0078	09:53:41	No
2	0.167	0.167	0.0029	0.0076	09:54:16	No
Mean:	0.174	0.174	0.0030			
SD :	0.0108	0.0108	0.0001			
%RSD:	6.2	6.2	4.0922			

Element: Hg Seq. No.: 29 AS Loc.: 27 Date: 03/17/2010
Sample ID: 248374010|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.189	0.189	0.0031	0.0079	09:55:41	No
2	0.196	0.196	0.0032	0.0080	09:56:16	No
Mean:	0.192	0.192	0.0032			
SD :	0.0047	0.0047	0.0001			
%RSD:	2.4	2.4	1.6490			

Element: Hg Seq. No.: 30 AS Loc.: 28 Date: 03/17/2010
Sample ID: 248374011|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.461	0.461	0.0062	0.0109	09:57:42	No
2	0.472	0.472	0.0063	0.0111	09:58:17	No
Mean:	0.466	0.466	0.0062			
SD :	0.0073	0.0073	0.0001			
%RSD:	1.6	1.6	1.3078			

Element: Hg Seq. No.: 31 AS Loc.: 29 Date: 03/17/2010
Sample ID: 248374012|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.273	0.273	0.0041	0.0088	09:59:43	No
2	0.267	0.267	0.0040	0.0088	10:00:18	No
Mean:	0.270	0.270	0.0040			
SD :	0.0039	0.0039	0.0000			

%RSD: 1.5 1.5 1.0876

==========

Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 03/17/2010
Sample ID: 248374013|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.660	0.660	0.0084	0.0132	10:01:44	No
2	0.653	0.653	0.0083	0.0131	10:02:19	No
Mean:	0.656	0.656	0.0083			
SD :	0.0050	0.0050	0.0001			
%RSD:	0.8	0.8	0.6682			

==========

Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 03/17/2010
Sample ID: 1202069773|i||964746|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.076	-0.076	0.0002	0.0049	10:03:46	No
2	-0.094	-0.094	0.0000	0.0047	10:04:20	No
Mean:	-0.085	-0.085	0.0001			
SD :	0.0127	0.0127	0.0001			
%RSD:	15.0	15.0	212.9986			

==========

Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 03/17/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.150	5.150	0.0585	0.0633	10:05:48	No
2	5.135	5.135	0.0584	0.0631	10:06:23	No
Mean:	5.142	5.142	0.0585			
SD :	0.0106	0.0106	0.0001			
%RSD:	0.2	0.2	0.2021			

QC value within specified limits.

==========

Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 03/17/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.028	-0.028	0.0007	0.0055	10:07:51	No
2	-0.027	-0.027	0.0007	0.0055	10:08:26	No
Mean:	-0.028	-0.028	0.0007			
SD :	0.0003	0.0003	0.0000			
%RSD:	1.0	1.0	0.4362			

QC value within specified limits.

==========

Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 03/17/2010
Sample ID: 1202069774|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.666	3.666	0.0420	0.0467	10:09:50	No
2	3.669	3.669	0.0420	0.0468	10:10:25	No
Mean:	3.668	3.668	0.0420			
SD :	0.0019	0.0019	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 03/17/2010
Sample ID: 248511001|i|||

Miscellaneous

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

Batch ID: **960818.0** Verified by: _____

Analyst: Louis Hall

Method: SW846 3050B

Lab SOP: GL-MA-E-009 REV# 19

Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202060837	Metals Soil LCS SRM ICP/Hg	UI062540-I	.521	g
MS	1202060839	Metals Spike Mix I	UI1268741-01	.25	mL
MS	1202060839	Metals Spike Mix II	UI1268744-06	.25	mL
MSD	1202060841	Metals Spike Mix I	UI1268741-01	.25	mL
MSD	1202060841	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
1202060836 MB	12-MAR-2010 10:00:00	Soil	0.567	50	88.18342	<2
1202060837 LCS	12-MAR-2010 10:00:00	Soil	0.521	50	95.96929	<2
248374001	12-MAR-2010 10:00:00	Soil	0.506	50	98.81423	<2
1202060838 DUP (248374001)	12-MAR-2010 10:00:00	Soil	0.508	50	98.4252	<2
1202060839 MS (248374001)	12-MAR-2010 10:00:00	Soil	0.526	50	95.05703	<2
1202060841 MSD (248374001)	12-MAR-2010 10:00:00	Soil	0.509	50	98.23183	<2
1202060840 SDILT (248374001)	12-MAR-2010 10:00:00	Soil	0.506	50	98.81423	<2
248374002	12-MAR-2010 10:00:00	Soil	0.518	50	96.5251	<2
248374003	12-MAR-2010 10:00:00	Soil	0.53	50	94.33962	<2
248374004	12-MAR-2010 10:00:00	Soil	0.505	50	99.0099	<2
248374005	12-MAR-2010 10:00:00	Soil	0.551	50	90.7441	<2
248374006	12-MAR-2010 10:00:00	Soil	0.582	50	85.91065	<2
248374007	12-MAR-2010 10:00:00	Soil	0.507	50	98.61933	<2
248374008	12-MAR-2010 10:00:00	Soil	0.546	50	91.57509	<2
248374009	12-MAR-2010 10:00:00	Soil	0.522	50	95.78544	<2
248374010	12-MAR-2010 10:00:00	Soil	0.544	50	91.91176	<2
248374011	12-MAR-2010 10:00:00	Soil	0.525	50	95.2381	<2
248374012	12-MAR-2010 10:00:00	Soil	0.526	50	95.05703	<2
248374013	12-MAR-2010 10:00:00	Soil	0.529	50	94.51796	<2

Reagent/Solvent Lot ID	Description	Amount
1277916	HYDROCHLORIC ACID	10 mL
1282566	Nitric Acid CONC.	1.25 mL

Comments:

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

Batch ID: 960821.0 **Verified by:**
Analyst: Louis Hall
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
1202060842 MB	12-MAR-2010 10:00:00	0.525	50	95.2381	<2
1202060843 LCS	12-MAR-2010 10:00:00	0.505	50	99.0099	<2
248374001	12-MAR-2010 10:00:00	0.509	50	98.23183	<2
1202060844 DUP (248374001)	12-MAR-2010 10:00:00	0.529	50	94.51796	<2
1202060845 MS (248374001)	12-MAR-2010 10:00:00	0.5	50	100	<2
1202060847 MSD (248374001)	12-MAR-2010 10:00:00	0.508	50	98.4252	<2
1202060846 SDILT (248374001)	12-MAR-2010 10:00:00	0.509	50	98.23183	<2
248374002	12-MAR-2010 10:00:00	0.5	50	100	<2
248374003	12-MAR-2010 10:00:00	0.517	50	96.7118	<2
248374004	12-MAR-2010 10:00:00	0.5	50	100	<2
248374005	12-MAR-2010 10:00:00	0.565	50	88.49558	<2
248374006	12-MAR-2010 10:00:00	0.515	50	97.08738	<2
248374007	12-MAR-2010 10:00:00	0.552	50	90.57971	<2
248374008	12-MAR-2010 10:00:00	0.544	50	91.91176	<2
248374009	12-MAR-2010 10:00:00	0.569	50	87.87346	<2
248374010	12-MAR-2010 10:00:00	0.519	50	96.33911	<2
248374011	12-MAR-2010 10:00:00	0.527	50	94.87666	<2
248374012	12-MAR-2010 10:00:00	0.553	50	90.41591	<2
248374013	12-MAR-2010 10:00:00	0.566	50	88.33922	<2

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1202060843	Metals Soil LCS SRM ICPMS	UI062540-MS	.505	g
MS	1202060845	ICP-MS Spike for soil products.	UI042709-A	.5	mL
MS	1202060845	ICP-MS Spike for Soil Products	UI042709-B	.5	mL
MSD	1202060847	ICP-MS Spike for soil products.	UI042709-A	.5	mL
MSD	1202060847	ICP-MS Spike for Soil Products	UI042709-B	.5	mL
REGNT	All	Hydrogen Peroxide 30%	1250038-02	1.5	mL
REGNT	All	Nitric Acid CONC.	1282566	5	mL

Comments:

Prep Logbook

Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Batch ID: **964729.0** Verified by: _____

Analyst: Tara Griffin

Method: SW846 7471A Prep

Lab SOP: GL-MA-E-010 REV# 23

Instrument: BAL-002

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202069742	Metals LCS Soil SRM	UI031809A	.204	g
MS	1202069744	Mercury soil working intermediate standard for MS	WHG100316-14	.3	mL
MSD	1202069746	Mercury soil working intermediate standard for MS	WHG100316-14	.3	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202069741 MB	16-MAR-2010 14:30:00	Soil	0.591	30	50.76142	
1202069742 LCS	16-MAR-2010 14:30:00	Soil	0.204	30	147.05882	
248374001	16-MAR-2010 14:30:00	Soil	0.525	30	57.14286	
1202069743 DUP (248374001)	16-MAR-2010 14:30:00	Soil	0.545	30	55.04587	
1202069744 MS (248374001)	16-MAR-2010 14:30:00	Soil	0.53	30	56.60377	
1202069746 MSD (248374001)	16-MAR-2010 14:30:00	Soil	0.54	30	55.55556	
1202069745 SDILT (248374001)	16-MAR-2010 14:30:00	Soil	0.525	30	57.14286	
248374002	16-MAR-2010 14:30:00	Soil	0.5	30	60	
248374003	16-MAR-2010 14:30:00	Soil	0.532	30	56.39098	
248374004	16-MAR-2010 14:30:00	Soil	0.507	30	59.1716	
248374005	16-MAR-2010 14:30:00	Soil	0.559	30	53.66726	
248374006	16-MAR-2010 14:30:00	Soil	0.533	30	56.28518	
248374007	16-MAR-2010 14:30:00	Soil	0.56	30	53.57143	
248374008	16-MAR-2010 14:30:00	Soil	0.557	30	53.85996	
248374009	16-MAR-2010 14:30:00	Soil	0.573	30	52.35602	
248374010	16-MAR-2010 14:30:00	Soil	0.535	30	56.07477	
248374011	16-MAR-2010 14:30:00	Soil	0.577	30	51.99307	
248374012	16-MAR-2010 14:30:00	Soil	0.524	30	57.25191	
248374013	16-MAR-2010 14:30:00	Soil	0.593	30	50.59022	

Reagent/Solvent Lot ID	Description	Amount
1255532-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
WHG100316-07	Mercury Working Standard 1st Source CAL S 0.2/CRA	30 uL

Comments:

Sample 248374001 is a dark brown rocky soil.

Digestion Start Date: 16-MAR-10 14:30

Digestion End Date: 16-MAR-10 15:00

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
05-APR-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
960819	See Below		

Potentially affected work order(s)(SDG): 248374(10-2155)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:

1. Failed Recovery for MS/PS:

   QC 1202060839MS

2. Failed Recovery for MSD/PSD:

   QC 1202060841MSD

DER Disposition:

1./2. The matrix spike and matrix spike duplicate recovery failed outside of the control limits for magnesium and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Helen Camello 05-APR-10

Data Validator/Group Leader:

Louise Smith 05-APR-10

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Serial ID: UI042709-A **Opened:** 27-APR-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 27-APR-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 27-APR-10
Employee: Bryan Davis
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI042709-B **Opened:** 27-APR-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 27-APR-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 27-APR-10
Employee: Bryan Davis
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: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 12-JUN-10
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI062540-MS **Opened:** 12-JUN-09 **Lot Number :** D062-540
Name: ICPMS SOIL SRM **Received:** 12-JUN-09
Type: Source Material **Expires:** 12-JAN-10
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICPMS
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	67.4 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.6 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Lithium	10.6 mg/kg
Magnesium	4000 mg/kg	Manganese	558 mg/kg
Mercury	8.46 mg/kg	Molybdenum	48.6 mg/kg
Nickel	134 mg/kg	Phosphorous	755 mg/kg
Potassium	4300 mg/kg	Selenium	286 mg/kg
Silver	30.1 mg/kg	Sodium	1020 mg/kg
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		

Standard Logbook

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		

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L

Analyte	Concentration	Analyte	Concentration
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Standard Logbook

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Standard Logbook

Serial ID:	UI091102-42	**Opened:**	17-NOV-09	**Amount :**	200 mL
Name:	SILICON	**Received:**	02-NOV-09	**Catalog Number :**	HP100050-4F
Type:	Source Material	**Expires:**	17-NOV-10	**Lot Number :**	0921924
Employee:	Helen Camello			**Solvent :**	H20/tr HF
Supplier:	ENVIRNMENTAL EXPRESS				
Description:	SILICON 1000mg/L H20/tr HF				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID:	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:	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

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
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

Standard Logbook

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

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

Analyte	Concentration	Analyte	Concentration
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI100405-13 **Opened:** 05-APR-10 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 05-APR-10 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019467
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

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

Standard Logbook

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
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

Standard Logbook

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		

Serial ID: IHG100316-01 **Opened:** 16-MAR-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 16-MAR-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 17-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: IHG100316-02 **Opened:** 16-MAR-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 16-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Intermediate **Expires:** 17-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

Standard Logbook

Serial ID: WHG100316-07 **Opened:** 16-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 16-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 23-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.
IHG100316-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG100316-08 **Opened:** 16-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 16-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 23-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.
IHG100316-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100316-09 **Opened:** 16-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 16-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 23-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.
IHG100316-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG100316-10 **Opened:** 16-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 16-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 23-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.
IHG100316-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Standard Logbook

Serial ID: WHG100316-11 **Opened:** 16-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 16-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 23-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.
IHG100316-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Serial ID: WHG100316-12 **Opened:** 16-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 16-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 23-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.
IHG100316-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100316-14 **Opened:** 16-MAR-10 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 16-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 23-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: WI100401-42 **Opened:** 01-APR-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 02-APR-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.
WI100401-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100401-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100401-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100401-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100401-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100401-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100401-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100401-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100401-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100401-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100401-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100401-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100401-43 **Opened:** 01-APR-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 02-APR-10 **Solvent :** 3%HCL and 1%HNO3 -1293083
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP O.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI100401-44 **Opened:** 01-APR-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 02-APR-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI100401-45 **Opened:** 01-APR-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 02-APR-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: WI100401-46 **Opened:** 01-APR-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 02-APR-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
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: WI100401-47 **Opened:** 01-APR-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 02-APR-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: 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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: 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

Standard Logbook

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
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

Standard Logbook

Serial ID: WMS100414-04 **Opened:** 14-APR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 14-APR-10 **Balance Id :** 4025216
Type: Working **Expires:** 15-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
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

Standard Logbook

Serial ID: WMS100414-04A **Opened:** 14-APR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 14-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 15-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.
WMS100414-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100414-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100414-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100414-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100414-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100414-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100414-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100414-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100414-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100414-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100414-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Serial ID: WMS100414-05 **Opened:** 14-APR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 14-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 15-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
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: WMS100414-06 **Opened:** 14-APR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 14-APR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 15-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
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: WMS100414-07 **Opened:** 14-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 14-APR-10 **Lot Number :** 1010773
Type: Working **Expires:** 15-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: WMS100414-08 **Opened:** 14-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 14-APR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 15-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
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: 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

Standard Logbook

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: 1282566 **Opened:** 09-MAR-10 **Lot Number :** J 04043 L
Name: I-HNO3 **Received:** 09-MAR-10
Type: Reagent/Solvent **Expires:** 09-MAR-11
Employee: Anthony Green
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: 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 10-2155-1

Sample Analysis

Sample ID	**Client ID**
248375001	RE36-10-7535
248375002	RE36-10-7533
1202060848	Method Blank (MB) **ICP**
1202060849	Laboratory Control Sample (LCS)
1202060852	248375001(RE36-10-7535L) Serial Dilution (SD)
1202060850	248375001(RE36-10-7535D) Sample Duplicate (DUP)
1202060851	248375001(RE36-10-7535S) Matrix Spike (MS)
1202060853	Method Blank (MB) **ICP-MS**
1202060854	Laboratory Control Sample (LCS)
1202060857	248375001(RE36-10-7535L) Serial Dilution (SD)
1202060855	248375001(RE36-10-7535D) Sample Duplicate (DUP)
1202060856	248375001(RE36-10-7535S) Matrix Spike (MS)
1202059702	Method Blank (MB) **CVAA**
1202059703	Laboratory Control Sample (LCS)
1202059706	248419001(RE11-10-1878L) Serial Dilution (SD)
1202059704	248419001(RE11-10-1878D) Sample Duplicate (DUP)
1202059705	248419001(RE11-10-1878S) Matrix Spike (MS)

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

Method/Analysis Information

Analytical Batch:	960825, 960827 and 960265
Prep Batch :	960824, 960826 and 960260
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-006 REV# 9, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3005/6010B, SW846 3005/6020 and SW846 7470A
Prep Method :	SW846 3005A and SW846 7470A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standards met the advisory control limits with the exceptions of iron, thallium and uranium, which recovered outside of the advisory limits of 70-130%.

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

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

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

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

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

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 248375001 (RE36-10-7535) and 248419001 (RE11-10-1878).

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: Kristen Parson **Date:** 4/22/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248375001 **BASIS:** As Received **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7535 **LEVEL:** Low **DATE RECEIVED** 02-MAR-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	04/01/10 17:07	040110-1	960825
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	PRB	04/21/10 19:27	100421-2	960827
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	PRB	04/22/10 11:33	100421-12	960827
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	PRB	04/21/10 19:27	100421-2	960827
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	04/01/10 17:07	040110-1	960825
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	04/01/10 17:07	040110-1	960825
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	PRB	04/21/10 19:27	100421-2	960827
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	04/01/10 17:07	040110-1	960825
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	PRB	04/21/10 19:27	100421-2	960827
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	03/04/10 11:02	030410W1-13	960265
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-09-7	Potassium	199	ug/L		50	150	150	1	P	HSC	04/01/10 17:07	040110-1	960825
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-23-5	Sodium	202	ug/L	J	100	300	300	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	04/21/10 19:27	100421-2	960827
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	04/21/10 19:27	100421-2	960827
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:07	040110-1	960825
7440-66-6	Zinc	4.08	ug/L	J	3.3	10	10	1	P	HSC	04/01/10 17:07	040110-1	960825

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960265	960260	SW846 7470A Prep	20	mL	20	mL	03/03/10	TXB3
960825	960824	SW846 3005A	25	mL	25	mL	04/01/10	AXG2
960827	960826	SW846 3005A	50	mL	50	mL	03/12/10	LYH1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2155-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 248375002 **BASIS:** As Received **DATE COLLECTED** 24-FEB-10

CLIENT ID: RE36-10-7533 **LEVEL:** Low **DATE RECEIVED** 02-MAR-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	04/01/10 17:35	040110-1	960825
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	PRB	04/21/10 19:47	100421-2	960827
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	PRB	04/22/10 11:40	100421-12	960827
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	PRB	04/21/10 19:47	100421-2	960827
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	04/01/10 17:35	040110-1	960825
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	04/01/10 17:35	040110-1	960825
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	PRB	04/21/10 19:47	100421-2	960827
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	04/01/10 17:35	040110-1	960825
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	PRB	04/21/10 19:47	100421-2	960827
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	03/04/10 11:04	030410W1-13	960265
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-09-7	Potassium	173	ug/L		50	150	150	1	P	HSC	04/01/10 17:35	040110-1	960825
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-23-5	Sodium	172	ug/L	J	100	300	300	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-28-0	Thallium	0.524	ug/L	J	0.3	1	1	1	MS	PRB	04/21/10 19:47	100421-2	960827
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	04/21/10 19:47	100421-2	960827
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	04/01/10 17:35	040110-1	960825
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	04/01/10 17:35	040110-1	960825

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960265	960260	SW846 7470A Prep	20	mL	20	mL	03/03/10	TXB3
960825	960824	SW846 3005A	25	mL	25	mL	04/01/10	AXG2
960827	960826	SW846 3005A	50	mL	50	mL	03/12/10	LYH1

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2155-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Mercury	5.14	ug/L	5	ug/L	102.8	90.0 - 110.0	AV	04-MAR-10 09:31	030410W1-13
	Aluminum	5080	ug/L	5000	ug/L	101.6	90.0 - 110.0	P	01-APR-10 07:59	040110-1
	Arsenic	476	ug/L	500	ug/L	95.2	90.0 - 110.0	P	01-APR-10 07:59	040110-1
	Barium	502	ug/L	500	ug/L	100.5	90.0 - 110.0	P	01-APR-10 07:59	040110-1
	Calcium	5080	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	01-APR-10 07:59	040110-1
	Chromium	480	ug/L	500	ug/L	96	90.0 - 110.0	P	01-APR-10 07:59	040110-1
	Cobalt	510	ug/L	500	ug/L	102	90.0 - 110.0	P	01-APR-10 07:59	040110-1
	Copper	495	ug/L	500	ug/L	99.1	90.0 - 110.0	P	01-APR-10 07:59	040110-1
	Iron	5120	ug/L	5000	ug/L	102.3	90.0 - 110.0	P	01-APR-10 07:59	040110-1
	Magnesium	5250	ug/L	5000	ug/L	105.1	90.0 - 110.0	P	01-APR-10 07:59	040110-1
	Nickel	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	01-APR-10 07:59	040110-1
	Potassium	2430	ug/L	2500	ug/L	97.1	90.0 - 110.0	P	01-APR-10 07:59	040110-1
	Selenium	2590	ug/L	2500	ug/L	103.7	90.0 - 110.0	P	01-APR-10 07:59	040110-1
	Silver	255	ug/L	250	ug/L	102	90.0 - 110.0	P	01-APR-10 07:59	040110-1
	Sodium	2400	ug/L	2500	ug/L	96.1	90.0 - 110.0	P	01-APR-10 07:59	040110-1
	Vanadium	505	ug/L	500	ug/L	101	90.0 - 110.0	P	01-APR-10 07:59	040110-1
	Zinc	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	01-APR-10 07:59	040110-1
	Antimony	49.3	ug/L	50	ug/L	98.5	90.0 - 110.0	MS	21-APR-10 16:28	100421-2
	Cadmium	50.6	ug/L	50	ug/L	101.3	90.0 - 110.0	MS	21-APR-10 16:28	100421-2
	Lead	51.3	ug/L	50	ug/L	102.6	90.0 - 110.0	MS	21-APR-10 16:28	100421-2
	Manganese	51.7	ug/L	50	ug/L	103.5	90.0 - 110.0	MS	21-APR-10 16:28	100421-2
	Thallium	50.4	ug/L	50	ug/L	100.9	90.0 - 110.0	MS	21-APR-10 16:28	100421-2
	Uranium	53.6	ug/L	50	ug/L	107.2	90.0 - 110.0	MS	21-APR-10 16:28	100421-2
	Beryllium	51	ug/L	50	ug/L	101.9	90.0 - 110.0	MS	22-APR-10 11:15	100421-12
CCV01										
	Mercury	5.06	ug/L	5	ug/L	101.2	80.0 - 120.0	AV	04-MAR-10 09:37	030410W1-13
	Aluminum	4980	ug/L	5000	ug/L	99.5	90.0 - 110.0	P	01-APR-10 08:47	040110-1
	Arsenic	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	01-APR-10 08:47	040110-1
	Barium	492	ug/L	500	ug/L	98.3	90.0 - 110.0	P	01-APR-10 08:47	040110-1
	Calcium	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	01-APR-10 08:47	040110-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2155-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Chromium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	01-APR-10 08:47	040110-1
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	01-APR-10 08:47	040110-1
	Copper	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	01-APR-10 08:47	040110-1
	Iron	5110	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	01-APR-10 08:47	040110-1
	Magnesium	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	01-APR-10 08:47	040110-1
	Nickel	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	01-APR-10 08:47	040110-1
	Potassium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	01-APR-10 08:47	040110-1
	Selenium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	01-APR-10 08:47	040110-1
	Silver	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	01-APR-10 08:47	040110-1
	Sodium	10200	ug/L	10000	ug/L	102.2	90.0 – 110.0	P	01-APR-10 08:47	040110-1
	Vanadium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	01-APR-10 08:47	040110-1
	Zinc	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	01-APR-10 08:47	040110-1
	Antimony	49.5	ug/L	50	ug/L	99.1	90.0 – 110.0	MS	21-APR-10 16:45	100421-2
	Cadmium	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	21-APR-10 16:45	100421-2
	Lead	50.9	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	21-APR-10 16:45	100421-2
	Manganese	51.7	ug/L	50	ug/L	103.3	90.0 – 110.0	MS	21-APR-10 16:45	100421-2
	Thallium	49.9	ug/L	50	ug/L	99.8	90.0 – 110.0	MS	21-APR-10 16:45	100421-2
	Uranium	52.9	ug/L	50	ug/L	105.7	90.0 – 110.0	MS	21-APR-10 16:45	100421-2
	Beryllium	53.1	ug/L	50	ug/L	106.3	90.0 – 110.0	MS	22-APR-10 11:23	100421-12
CCV02										
	Mercury	5.14	ug/L	5	ug/L	102.8	80.0 – 120.0	AV	04-MAR-10 10:00	030410W1-13
	Aluminum	4980	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	01-APR-10 09:08	040110-1
	Arsenic	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	01-APR-10 09:08	040110-1
	Barium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	01-APR-10 09:08	040110-1
	Calcium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	01-APR-10 09:08	040110-1
	Chromium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	01-APR-10 09:08	040110-1
	Cobalt	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	01-APR-10 09:08	040110-1
	Copper	476	ug/L	500	ug/L	95.2	90.0 – 110.0	P	01-APR-10 09:08	040110-1
	Iron	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	01-APR-10 09:08	040110-1
	Magnesium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	01-APR-10 09:08	040110-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2155-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Nickel	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	01-APR-10 09:08	040110-1
	Potassium	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	01-APR-10 09:08	040110-1
	Selenium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	01-APR-10 09:08	040110-1
	Silver	485	ug/L	500	ug/L	97	90.0 – 110.0	P	01-APR-10 09:08	040110-1
	Sodium	10200	ug/L	10000	ug/L	101.6	90.0 – 110.0	P	01-APR-10 09:08	040110-1
	Vanadium	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	01-APR-10 09:08	040110-1
	Zinc	477	ug/L	500	ug/L	95.4	90.0 – 110.0	P	01-APR-10 09:08	040110-1
	Antimony	49	ug/L	50	ug/L	97.9	90.0 – 110.0	MS	21-APR-10 17:26	100421-2
	Cadmium	50.8	ug/L	50	ug/L	101.5	90.0 – 110.0	MS	21-APR-10 17:26	100421-2
	Lead	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	21-APR-10 17:26	100421-2
	Manganese	50.1	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	21-APR-10 17:26	100421-2
	Thallium	50.1	ug/L	50	ug/L	100.1	90.0 – 110.0	MS	21-APR-10 17:26	100421-2
	Uranium	53.6	ug/L	50	ug/L	107.3	90.0 – 110.0	MS	21-APR-10 17:26	100421-2
	Beryllium	53.1	ug/L	50	ug/L	106.3	90.0 – 110.0	MS	22-APR-10 11:41	100421-12
CCV03										
	Mercury	4.92	ug/L	5	ug/L	98.4	80.0 – 120.0	AV	04-MAR-10 10:23	030410W1-13
	Aluminum	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	01-APR-10 09:49	040110-1
	Arsenic	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	01-APR-10 09:49	040110-1
	Barium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	01-APR-10 09:49	040110-1
	Calcium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	01-APR-10 09:49	040110-1
	Chromium	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	01-APR-10 09:49	040110-1
	Cobalt	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	01-APR-10 09:49	040110-1
	Copper	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	01-APR-10 09:49	040110-1
	Iron	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	01-APR-10 09:49	040110-1
	Magnesium	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	01-APR-10 09:49	040110-1
	Nickel	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	01-APR-10 09:49	040110-1
	Potassium	4960	ug/L	5000	ug/L	99.1	90.0 – 110.0	P	01-APR-10 09:49	040110-1
	Selenium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	01-APR-10 09:49	040110-1
	Silver	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	01-APR-10 09:49	040110-1
	Sodium	10100	ug/L	10000	ug/L	100.9	90.0 – 110.0	P	01-APR-10 09:49	040110-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–2155–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Vanadium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	01–APR–10 09:49	040110–1
	Zinc	482	ug/L	500	ug/L	96.5	90.0 – 110.0	P	01–APR–10 09:49	040110–1
	Antimony	48.8	ug/L	50	ug/L	97.6	90.0 – 110.0	MS	21–APR–10 17:56	100421–2
	Cadmium	51.3	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	21–APR–10 17:56	100421–2
	Lead	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	21–APR–10 17:56	100421–2
	Manganese	49.6	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	21–APR–10 17:56	100421–2
	Thallium	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	21–APR–10 17:56	100421–2
	Uranium	53.7	ug/L	50	ug/L	107.5	90.0 – 110.0	MS	21–APR–10 17:56	100421–2
CCV04										
	Mercury	4.91	ug/L	5	ug/L	98.2	80.0 – 120.0	AV	04–MAR–10 10:47	030410W1–13
	Aluminum	4880	ug/L	5000	ug/L	97.5	90.0 – 110.0	P	01–APR–10 10:49	040110–1
	Arsenic	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	01–APR–10 10:49	040110–1
	Barium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	01–APR–10 10:49	040110–1
	Calcium	5110	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	01–APR–10 10:49	040110–1
	Chromium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	01–APR–10 10:49	040110–1
	Cobalt	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	01–APR–10 10:49	040110–1
	Copper	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	01–APR–10 10:49	040110–1
	Iron	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	01–APR–10 10:49	040110–1
	Magnesium	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	01–APR–10 10:49	040110–1
	Nickel	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	01–APR–10 10:49	040110–1
	Potassium	4920	ug/L	5000	ug/L	98.4	90.0 – 110.0	P	01–APR–10 10:49	040110–1
	Selenium	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	01–APR–10 10:49	040110–1
	Silver	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	01–APR–10 10:49	040110–1
	Sodium	9870	ug/L	10000	ug/L	98.7	90.0 – 110.0	P	01–APR–10 10:49	040110–1
	Vanadium	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	01–APR–10 10:49	040110–1
	Zinc	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	01–APR–10 10:49	040110–1
	Antimony	48.8	ug/L	50	ug/L	97.6	90.0 – 110.0	MS	21–APR–10 18:33	100421–2
	Cadmium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	21–APR–10 18:33	100421–2
	Lead	51.2	ug/L	50	ug/L	102.3	90.0 – 110.0	MS	21–APR–10 18:33	100421–2
	Manganese	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	21–APR–10 18:33	100421–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–2155–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Thallium	49.7	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	21–APR–10 18:33	100421–2
	Uranium	53.4	ug/L	50	ug/L	106.8	90.0 – 110.0	MS	21–APR–10 18:33	100421–2
CCV05										
	Mercury	4.96	ug/L	5	ug/L	99.2	80.0 – 120.0	AV	04–MAR–10 11:10	030410W1–13
	Aluminum	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Arsenic	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Barium	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Calcium	5150	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Chromium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Cobalt	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Copper	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Iron	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Magnesium	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Nickel	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Potassium	5050	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Selenium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Silver	495	ug/L	500	ug/L	99	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Sodium	10400	ug/L	10000	ug/L	103.9	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Zinc	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	01–APR–10 11:59	040110–1
	Antimony	48.7	ug/L	50	ug/L	97.5	90.0 – 110.0	MS	21–APR–10 19:07	100421–2
	Cadmium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	21–APR–10 19:07	100421–2
	Lead	50.6	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	21–APR–10 19:07	100421–2
	Manganese	49.5	ug/L	50	ug/L	98.9	90.0 – 110.0	MS	21–APR–10 19:07	100421–2
	Thallium	49.3	ug/L	50	ug/L	98.6	90.0 – 110.0	MS	21–APR–10 19:07	100421–2
	Uranium	52.6	ug/L	50	ug/L	105.2	90.0 – 110.0	MS	21–APR–10 19:07	100421–2
CCV06										
	Mercury	5.02	ug/L	5	ug/L	100.4	80.0 – 120.0	AV	04–MAR–10 11:33	030410W1–13
	Aluminum	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	01–APR–10 13:09	040110–1
	Arsenic	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	01–APR–10 13:09	040110–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2155-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	01-APR-10 13:09	040110-1
	Calcium	5180	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	01-APR-10 13:09	040110-1
	Chromium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	01-APR-10 13:09	040110-1
	Cobalt	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	01-APR-10 13:09	040110-1
	Copper	485	ug/L	500	ug/L	97	90.0 – 110.0	P	01-APR-10 13:09	040110-1
	Iron	5120	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	01-APR-10 13:09	040110-1
	Magnesium	5250	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	01-APR-10 13:09	040110-1
	Nickel	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	01-APR-10 13:09	040110-1
	Potassium	5050	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	01-APR-10 13:09	040110-1
	Selenium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	01-APR-10 13:09	040110-1
	Silver	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	01-APR-10 13:09	040110-1
	Sodium	10100	ug/L	10000	ug/L	101.4	90.0 – 110.0	P	01-APR-10 13:09	040110-1
	Vanadium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	01-APR-10 13:09	040110-1
	Zinc	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	01-APR-10 13:09	040110-1
	Antimony	49	ug/L	50	ug/L	98	90.0 – 110.0	MS	21-APR-10 19:20	100421-2
	Cadmium	50.9	ug/L	50	ug/L	101.7	90.0 – 110.0	MS	21-APR-10 19:20	100421-2
	Lead	51.2	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	21-APR-10 19:20	100421-2
	Manganese	48.9	ug/L	50	ug/L	97.8	90.0 – 110.0	MS	21-APR-10 19:20	100421-2
	Thallium	50.5	ug/L	50	ug/L	101	90.0 – 110.0	MS	21-APR-10 19:20	100421-2
	Uranium	53.3	ug/L	50	ug/L	106.5	90.0 – 110.0	MS	21-APR-10 19:20	100421-2
CCV07										
	Aluminum	4750	ug/L	5000	ug/L	95	90.0 – 110.0	P	01-APR-10 13:44	040110-1
	Arsenic	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	01-APR-10 13:44	040110-1
	Barium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	01-APR-10 13:44	040110-1
	Calcium	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	01-APR-10 13:44	040110-1
	Chromium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	01-APR-10 13:44	040110-1
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	01-APR-10 13:44	040110-1
	Copper	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	01-APR-10 13:44	040110-1
	Iron	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	01-APR-10 13:44	040110-1
	Magnesium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	01-APR-10 13:44	040110-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2155-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Nickel	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	01-APR-10 13:44	040110-1
	Potassium	4760	ug/L	5000	ug/L	95.1	90.0 – 110.0	P	01-APR-10 13:44	040110-1
	Selenium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	01-APR-10 13:44	040110-1
	Silver	495	ug/L	500	ug/L	99	90.0 – 110.0	P	01-APR-10 13:44	040110-1
	Sodium	9600	ug/L	10000	ug/L	96	90.0 – 110.0	P	01-APR-10 13:44	040110-1
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	01-APR-10 13:44	040110-1
	Zinc	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	01-APR-10 13:44	040110-1
	Antimony	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	21-APR-10 19:50	100421-2
	Cadmium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	21-APR-10 19:50	100421-2
	Lead	50.5	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	21-APR-10 19:50	100421-2
	Manganese	48.7	ug/L	50	ug/L	97.4	90.0 – 110.0	MS	21-APR-10 19:50	100421-2
	Thallium	48.8	ug/L	50	ug/L	97.6	90.0 – 110.0	MS	21-APR-10 19:50	100421-2
	Uranium	52.7	ug/L	50	ug/L	105.4	90.0 – 110.0	MS	21-APR-10 19:50	100421-2
CCV08										
	Aluminum	4770	ug/L	5000	ug/L	95.4	90.0 – 110.0	P	01-APR-10 14:47	040110-1
	Arsenic	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	01-APR-10 14:47	040110-1
	Barium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	01-APR-10 14:47	040110-1
	Calcium	4960	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	01-APR-10 14:47	040110-1
	Chromium	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	01-APR-10 14:47	040110-1
	Cobalt	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	01-APR-10 14:47	040110-1
	Copper	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	01-APR-10 14:47	040110-1
	Iron	4830	ug/L	5000	ug/L	96.5	90.0 – 110.0	P	01-APR-10 14:47	040110-1
	Magnesium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	01-APR-10 14:47	040110-1
	Nickel	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	01-APR-10 14:47	040110-1
	Potassium	4820	ug/L	5000	ug/L	96.3	90.0 – 110.0	P	01-APR-10 14:47	040110-1
	Selenium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	01-APR-10 14:47	040110-1
	Silver	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	01-APR-10 14:47	040110-1
	Sodium	9390	ug/L	10000	ug/L	93.9	90.0 – 110.0	P	01-APR-10 14:47	040110-1
	Vanadium	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	01-APR-10 14:47	040110-1
	Zinc	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	01-APR-10 14:47	040110-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2155-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV09										
	Aluminum	4970	ug/L	5000	ug/L	99.3	90.0 - 110.0	P	01-APR-10 15:43	040110-1
	Arsenic	494	ug/L	500	ug/L	98.9	90.0 - 110.0	P	01-APR-10 15:43	040110-1
	Barium	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	01-APR-10 15:43	040110-1
	Calcium	5200	ug/L	5000	ug/L	104	90.0 - 110.0	P	01-APR-10 15:43	040110-1
	Chromium	495	ug/L	500	ug/L	98.9	90.0 - 110.0	P	01-APR-10 15:43	040110-1
	Cobalt	511	ug/L	500	ug/L	102.1	90.0 - 110.0	P	01-APR-10 15:43	040110-1
	Copper	493	ug/L	500	ug/L	98.5	90.0 - 110.0	P	01-APR-10 15:43	040110-1
	Iron	5010	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	01-APR-10 15:43	040110-1
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 - 110.0	P	01-APR-10 15:43	040110-1
	Nickel	505	ug/L	500	ug/L	101	90.0 - 110.0	P	01-APR-10 15:43	040110-1
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 - 110.0	P	01-APR-10 15:43	040110-1
	Selenium	510	ug/L	500	ug/L	102.1	90.0 - 110.0	P	01-APR-10 15:43	040110-1
	Silver	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	01-APR-10 15:43	040110-1
	Sodium	9500	ug/L	10000	ug/L	95	90.0 - 110.0	P	01-APR-10 15:43	040110-1
	Vanadium	499	ug/L	500	ug/L	99.7	90.0 - 110.0	P	01-APR-10 15:43	040110-1
	Zinc	493	ug/L	500	ug/L	98.5	90.0 - 110.0	P	01-APR-10 15:43	040110-1
CCV10										
	Aluminum	5040	ug/L	5000	ug/L	100.7	90.0 - 110.0	P	01-APR-10 16:40	040110-1
	Arsenic	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	01-APR-10 16:40	040110-1
	Barium	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	01-APR-10 16:40	040110-1
	Calcium	5150	ug/L	5000	ug/L	103.1	90.0 - 110.0	P	01-APR-10 16:40	040110-1
	Chromium	489	ug/L	500	ug/L	97.7	90.0 - 110.0	P	01-APR-10 16:40	040110-1
	Cobalt	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	01-APR-10 16:40	040110-1
	Copper	486	ug/L	500	ug/L	97.2	90.0 - 110.0	P	01-APR-10 16:40	040110-1
	Iron	4920	ug/L	5000	ug/L	98.3	90.0 - 110.0	P	01-APR-10 16:40	040110-1
	Magnesium	5050	ug/L	5000	ug/L	101.1	90.0 - 110.0	P	01-APR-10 16:40	040110-1
	Nickel	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	01-APR-10 16:40	040110-1
	Potassium	5050	ug/L	5000	ug/L	101.1	90.0 - 110.0	P	01-APR-10 16:40	040110-1
	Selenium	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	01-APR-10 16:40	040110-1
	Silver	494	ug/L	500	ug/L	98.7	90.0 - 110.0	P	01-APR-10 16:40	040110-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–2155–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Sodium	9510	ug/L	10000	ug/L	95.1	90.0 – 110.0	P	01–APR–10 16:40	040110–1
	Vanadium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	01–APR–10 16:40	040110–1
	Zinc	485	ug/L	500	ug/L	97	90.0 – 110.0	P	01–APR–10 16:40	040110–1
CCV11										
	Aluminum	4920	ug/L	5000	ug/L	98.5	90.0 – 110.0	P	01–APR–10 17:41	040110–1
	Arsenic	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	01–APR–10 17:41	040110–1
	Barium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	01–APR–10 17:41	040110–1
	Calcium	5150	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	01–APR–10 17:41	040110–1
	Chromium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	01–APR–10 17:41	040110–1
	Cobalt	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	01–APR–10 17:41	040110–1
	Copper	480	ug/L	500	ug/L	96.1	90.0 – 110.0	P	01–APR–10 17:41	040110–1
	Iron	4910	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	01–APR–10 17:41	040110–1
	Magnesium	5110	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	01–APR–10 17:41	040110–1
	Nickel	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	01–APR–10 17:41	040110–1
	Potassium	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	01–APR–10 17:41	040110–1
	Selenium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	01–APR–10 17:41	040110–1
	Silver	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	01–APR–10 17:41	040110–1
	Sodium	9370	ug/L	10000	ug/L	93.7	90.0 – 110.0	P	01–APR–10 17:41	040110–1
	Vanadium	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	01–APR–10 17:41	040110–1
	Zinc	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	01–APR–10 17:41	040110–1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-2155-1

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS3,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.169	ug/L	.2	ug/L	84.5	70.0 – 130.0	AV	04-MAR-10 09:35	030410W1-13
	Lead	2.39	ug/L	2	ug/L	119.4	70.0 – 130.0	MS	21-APR-10 16:35	100421-2
	Manganese	5.93	ug/L	5	ug/L	118.6	70.0 – 130.0	MS	21-APR-10 16:35	100421-2
	Antimony	2.94	ug/L	3	ug/L	98	70.0 – 130.0	MS	21-APR-10 16:35	100421-2
	Thallium	1.32	ug/L	1	ug/L	131.6	70.0 – 130.0	MS	21-APR-10 16:35	100421-2
	Cadmium	1.23	ug/L	1	ug/L	123.2	70.0 – 130.0	MS	21-APR-10 16:35	100421-2
	Uranium	.291	ug/L	.2	ug/L	145.5	70.0 – 130.0	MS	21-APR-10 16:35	100421-2
	Beryllium	.58	ug/L	.5	ug/L	116	70.0 – 130.0	MS	22-APR-10 11:18	100421-12
PQL01										
	Silver	5.2	ug/L	5	ug/L	104.1	70.0 – 130.0	P	01-APR-10 08:13	040110-1
	Sodium	264	ug/L	300	ug/L	88.2	70.0 – 130.0	P	01-APR-10 08:13	040110-1
	Arsenic	31.6	ug/L	30	ug/L	105.4	70.0 – 130.0	P	01-APR-10 08:13	040110-1
	Barium	5.12	ug/L	5	ug/L	102.3	70.0 – 130.0	P	01-APR-10 08:13	040110-1
	Potassium	130	ug/L	150	ug/L	86.5	70.0 – 130.0	P	01-APR-10 08:13	040110-1
	Nickel	5.05	ug/L	5	ug/L	101.1	70.0 – 130.0	P	01-APR-10 08:13	040110-1
	Magnesium	266	ug/L	300	ug/L	88.8	70.0 – 130.0	P	01-APR-10 08:13	040110-1
	Iron	142	ug/L	100	ug/L	142.2	70.0 – 130.0	P	01-APR-10 08:13	040110-1
	Aluminum	195	ug/L	200	ug/L	97.3	70.0 – 130.0	P	01-APR-10 08:13	040110-1
	Chromium	4.75	ug/L	5	ug/L	95	70.0 – 130.0	P	01-APR-10 08:13	040110-1
	Cobalt	5.04	ug/L	5	ug/L	100.7	70.0 – 130.0	P	01-APR-10 08:13	040110-1
	Copper	9.92	ug/L	10	ug/L	99.2	70.0 – 130.0	P	01-APR-10 08:13	040110-1
	Vanadium	4.69	ug/L	5	ug/L	93.8	70.0 – 130.0	P	01-APR-10 08:13	040110-1
	Zinc	9.72	ug/L	10	ug/L	97.2	70.0 – 130.0	P	01-APR-10 08:13	040110-1
	Calcium	196	ug/L	200	ug/L	98	70.0 – 130.0	P	01-APR-10 08:13	040110-1
	Selenium	30.4	ug/L	30	ug/L	101.3	70.0 – 130.0	P	01-APR-10 08:13	040110-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–2155–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	04–MAR–10 09:33	030410W1–13
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	01–APR–10 08:06	040110–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	01–APR–10 08:06	040110–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 08:06	040110–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	01–APR–10 08:06	040110–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 08:06	040110–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 08:06	040110–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	01–APR–10 08:06	040110–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	01–APR–10 08:06	040110–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	01–APR–10 08:06	040110–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	01–APR–10 08:06	040110–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	01–APR–10 08:06	040110–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	01–APR–10 08:06	040110–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 08:06	040110–1
	Sodium	100	+/–300	U	100	300	LIQ	P	01–APR–10 08:06	040110–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 08:06	040110–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	01–APR–10 08:06	040110–1
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	21–APR–10 16:32	100421–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	21–APR–10 16:32	100421–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	21–APR–10 16:32	100421–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	21–APR–10 16:32	100421–2
	Thallium	0.473	+/–1	J	0.3	1.0	LIQ	MS	21–APR–10 16:32	100421–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	21–APR–10 16:32	100421–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	22–APR–10 11:17	100421–12
CCB01										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	04–MAR–10 09:39	030410W1–13
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	01–APR–10 08:54	040110–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	01–APR–10 08:54	040110–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 08:54	040110–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	01–APR–10 08:54	040110–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 08:54	040110–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2155-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 08:54	040110-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	01-APR-10 08:54	040110-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	01-APR-10 08:54	040110-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	01-APR-10 08:54	040110-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	01-APR-10 08:54	040110-1
	Potassium	133.51	+/-150	J	50.0	150	LIQ	P	01-APR-10 08:54	040110-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	01-APR-10 08:54	040110-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 08:54	040110-1
	Sodium	100	+/-300	U	100	300	LIQ	P	01-APR-10 08:54	040110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 08:54	040110-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	01-APR-10 08:54	040110-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	21-APR-10 16:49	100421-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	21-APR-10 16:49	100421-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	21-APR-10 16:49	100421-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	21-APR-10 16:49	100421-2
	Thallium	0.444	+/-1	J	0.3	1.0	LIQ	MS	21-APR-10 16:49	100421-2
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	21-APR-10 16:49	100421-2
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	22-APR-10 11:25	100421-12
CCB02										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	04-MAR-10 10:02	030410W1-13
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	01-APR-10 09:15	040110-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	01-APR-10 09:15	040110-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 09:15	040110-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	01-APR-10 09:15	040110-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 09:15	040110-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 09:15	040110-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	01-APR-10 09:15	040110-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	01-APR-10 09:15	040110-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	01-APR-10 09:15	040110-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	01-APR-10 09:15	040110-1
	Potassium	65.6	+/-150	J	50.0	150	LIQ	P	01-APR-10 09:15	040110-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2155-1

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	01-APR-10 09:15	040110-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 09:15	040110-1
	Sodium	100	+/-300	U	100	300	LIQ	P	01-APR-10 09:15	040110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 09:15	040110-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	01-APR-10 09:15	040110-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	21-APR-10 17:29	100421-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	21-APR-10 17:29	100421-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	21-APR-10 17:29	100421-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	21-APR-10 17:29	100421-2
	Thallium	0.733	+/-1	J	0.3	1.0	LIQ	MS	21-APR-10 17:29	100421-2
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	21-APR-10 17:29	100421-2
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	22-APR-10 11:43	100421-12
CCB03										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	04-MAR-10 10:25	030410W1-13
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	01-APR-10 09:56	040110-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	01-APR-10 09:56	040110-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 09:56	040110-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	01-APR-10 09:56	040110-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 09:56	040110-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 09:56	040110-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	01-APR-10 09:56	040110-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	01-APR-10 09:56	040110-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	01-APR-10 09:56	040110-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	01-APR-10 09:56	040110-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	01-APR-10 09:56	040110-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	01-APR-10 09:56	040110-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 09:56	040110-1
	Sodium	100	+/-300	U	100	300	LIQ	P	01-APR-10 09:56	040110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 09:56	040110-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	01-APR-10 09:56	040110-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	21-APR-10 17:59	100421-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–2155–1

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	21–APR–10 17:59	100421–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	21–APR–10 17:59	100421–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	21–APR–10 17:59	100421–2
	Thallium	1.26	+/–1		0.3	1.0	LIQ	MS	21–APR–10 17:59	100421–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	21–APR–10 17:59	100421–2
CCB04										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	04–MAR–10 10:48	030410W1–13
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	01–APR–10 10:56	040110–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	01–APR–10 10:56	040110–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 10:56	040110–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	01–APR–10 10:56	040110–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 10:56	040110–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 10:56	040110–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	01–APR–10 10:56	040110–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	01–APR–10 10:56	040110–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	01–APR–10 10:56	040110–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	01–APR–10 10:56	040110–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	01–APR–10 10:56	040110–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	01–APR–10 10:56	040110–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 10:56	040110–1
	Sodium	100	+/–300	U	100	300	LIQ	P	01–APR–10 10:56	040110–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 10:56	040110–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	01–APR–10 10:56	040110–1
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	21–APR–10 18:37	100421–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	21–APR–10 18:37	100421–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	21–APR–10 18:37	100421–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	21–APR–10 18:37	100421–2
	Thallium	0.552	+/–1	J	0.3	1.0	LIQ	MS	21–APR–10 18:37	100421–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	21–APR–10 18:37	100421–2
CCB05										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	04–MAR–10 11:12	030410W1–13

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2155-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	01-APR-10 12:06	040110-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	01-APR-10 12:06	040110-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 12:06	040110-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	01-APR-10 12:06	040110-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 12:06	040110-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 12:06	040110-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	01-APR-10 12:06	040110-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	01-APR-10 12:06	040110-1
	Magnesium	-100.06	+/-300	J	85.0	300	LIQ	P	01-APR-10 12:06	040110-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	01-APR-10 12:06	040110-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	01-APR-10 12:06	040110-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	01-APR-10 12:06	040110-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 12:06	040110-1
	Sodium	100	+/-300	U	100	300	LIQ	P	01-APR-10 12:06	040110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 12:06	040110-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	01-APR-10 12:06	040110-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	21-APR-10 19:10	100421-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	21-APR-10 19:10	100421-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	21-APR-10 19:10	100421-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	21-APR-10 19:10	100421-2
	Thallium	0.406	+/-1	J	0.3	1.0	LIQ	MS	21-APR-10 19:10	100421-2
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	21-APR-10 19:10	100421-2
CCB06										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	04-MAR-10 11:35	030410W1-13
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	01-APR-10 13:16	040110-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	01-APR-10 13:16	040110-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 13:16	040110-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	01-APR-10 13:16	040110-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 13:16	040110-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 13:16	040110-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	01-APR-10 13:16	040110-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–2155–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	01–APR–10 13:16	040110–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	01–APR–10 13:16	040110–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	01–APR–10 13:16	040110–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	01–APR–10 13:16	040110–1
	Selenium	–5.83	+/–30	J	5.0	30.0	LIQ	P	01–APR–10 13:16	040110–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 13:16	040110–1
	Sodium	100	+/–300	U	100	300	LIQ	P	01–APR–10 13:16	040110–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 13:16	040110–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	01–APR–10 13:16	040110–1
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	21–APR–10 19:24	100421–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	21–APR–10 19:24	100421–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	21–APR–10 19:24	100421–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	21–APR–10 19:24	100421–2
	Thallium	0.602	+/–1	J	0.3	1.0	LIQ	MS	21–APR–10 19:24	100421–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	21–APR–10 19:24	100421–2
CCB07										
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	01–APR–10 13:51	040110–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	01–APR–10 13:51	040110–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 13:51	040110–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	01–APR–10 13:51	040110–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 13:51	040110–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 13:51	040110–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	01–APR–10 13:51	040110–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	01–APR–10 13:51	040110–1
	Magnesium	–95.97	+/–300	J	85.0	300	LIQ	P	01–APR–10 13:51	040110–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	01–APR–10 13:51	040110–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	01–APR–10 13:51	040110–1
	Selenium	–5.55	+/–30	J	5.0	30.0	LIQ	P	01–APR–10 13:51	040110–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 13:51	040110–1
	Sodium	100	+/–300	U	100	300	LIQ	P	01–APR–10 13:51	040110–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 13:51	040110–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2155-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	01-APR-10 13:51	040110-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	21-APR-10 19:53	100421-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	21-APR-10 19:53	100421-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	21-APR-10 19:53	100421-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	21-APR-10 19:53	100421-2
	Thallium	0.729	+/-1	J	0.3	1.0	LIQ	MS	21-APR-10 19:53	100421-2
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	21-APR-10 19:53	100421-2
CCB08										
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	01-APR-10 14:54	040110-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	01-APR-10 14:54	040110-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 14:54	040110-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	01-APR-10 14:54	040110-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 14:54	040110-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 14:54	040110-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	01-APR-10 14:54	040110-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	01-APR-10 14:54	040110-1
	Magnesium	-87.84	+/-300	J	85.0	300	LIQ	P	01-APR-10 14:54	040110-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	01-APR-10 14:54	040110-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	01-APR-10 14:54	040110-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	01-APR-10 14:54	040110-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 14:54	040110-1
	Sodium	100	+/-300	U	100	300	LIQ	P	01-APR-10 14:54	040110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 14:54	040110-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	01-APR-10 14:54	040110-1
CCB09										
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	01-APR-10 15:50	040110-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	01-APR-10 15:50	040110-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 15:50	040110-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	01-APR-10 15:50	040110-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 15:50	040110-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 15:50	040110-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2155-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	01-APR-10 15:50	040110-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	01-APR-10 15:50	040110-1
	Magnesium	-123.78	+/-300	J	85.0	300	LIQ	P	01-APR-10 15:50	040110-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	01-APR-10 15:50	040110-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	01-APR-10 15:50	040110-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	01-APR-10 15:50	040110-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 15:50	040110-1
	Sodium	100	+/-300	U	100	300	LIQ	P	01-APR-10 15:50	040110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 15:50	040110-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	01-APR-10 15:50	040110-1
CCB10										
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	01-APR-10 16:47	040110-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	01-APR-10 16:47	040110-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 16:47	040110-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	01-APR-10 16:47	040110-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 16:47	040110-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 16:47	040110-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	01-APR-10 16:47	040110-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	01-APR-10 16:47	040110-1
	Magnesium	-102.2	+/-300	J	85.0	300	LIQ	P	01-APR-10 16:47	040110-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	01-APR-10 16:47	040110-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	01-APR-10 16:47	040110-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	01-APR-10 16:47	040110-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 16:47	040110-1
	Sodium	100	+/-300	U	100	300	LIQ	P	01-APR-10 16:47	040110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 16:47	040110-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	01-APR-10 16:47	040110-1
CCB11										
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	01-APR-10 17:48	040110-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	01-APR-10 17:48	040110-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	01-APR-10 17:48	040110-1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–2155–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	01–APR–10 17:48	040110–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 17:48	040110–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 17:48	040110–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	01–APR–10 17:48	040110–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	01–APR–10 17:48	040110–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	01–APR–10 17:48	040110–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	01–APR–10 17:48	040110–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	01–APR–10 17:48	040110–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	01–APR–10 17:48	040110–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 17:48	040110–1
	Sodium	100	+/–300	U	100	300	LIQ	P	01–APR–10 17:48	040110–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	01–APR–10 17:48	040110–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	01–APR–10 17:48	040110–1

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-2155-1

Contract: LANL01004

Matrix: WATER

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1202059702								
	Mercury	0.066	ug/L	+/-0.2	U	AV	0.066	0.2
1202060848								
	Aluminum	68	ug/L	+/-200	U	P	68	200
	Arsenic	5	ug/L	+/-30	U	P	5	30
	Barium	1	ug/L	+/-5	U	P	1	5
	Calcium	50	ug/L	+/-200	U	P	50	200
	Chromium	1	ug/L	+/-5	U	P	1	5
	Cobalt	1	ug/L	+/-5	U	P	1	5
	Copper	3	ug/L	+/-10	U	P	3	10
	Iron	30	ug/L	+/-100	U	P	30	100
	Magnesium	85	ug/L	+/-300	U	P	85	300
	Nickel	1.5	ug/L	+/-5	U	P	1.5	5
	Potassium	50	ug/L	+/-150	U	P	50	150
	Selenium	5	ug/L	+/-30	U	P	5	30
	Silver	1	ug/L	+/-5	U	P	1	5
	Sodium	100	ug/L	+/-300	U	P	100	300
	Vanadium	1	ug/L	+/-5	U	P	1	5
	Zinc	3.3	ug/L	+/-10	U	P	3.3	10
1202060853								
	Antimony	1	ug/L	+/-3	U	MS	1	3
	Beryllium	0.1	ug/L	+/-0.5	U	MS	0.1	0.5
	Cadmium	0.11	ug/L	+/-1	U	MS	0.11	1
	Lead	0.5	ug/L	+/-2	U	MS	0.5	2
	Manganese	1	ug/L	+/-5	U	MS	1	5
	Thallium	0.3	ug/L	+/-1	U	MS	0.3	1
	Uranium	0.05	ug/L	+/-0.2	U	MS	0.05	0.2

METALS
–4–
Interference Check Sample

SDG No: 10–2155–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	517000	ug/L	500000	ug/L	103	80.0 – 120.0	01–APR–10 08:20	040110–1
	Arsenic	8.78	ug/L					01–APR–10 08:20	040110–1
	Barium	4.85	ug/L					01–APR–10 08:20	040110–1
	Calcium	481000	ug/L	500000	ug/L	96.1	80.0 – 120.0	01–APR–10 08:20	040110–1
	Chromium	–6.14	ug/L					01–APR–10 08:20	040110–1
	Cobalt	–1.12	ug/L					01–APR–10 08:20	040110–1
	Copper	1.99	ug/L					01–APR–10 08:20	040110–1
	Iron	186000	ug/L	200000	ug/L	93	80.0 – 120.0	01–APR–10 08:20	040110–1
	Magnesium	490000	ug/L	500000	ug/L	97.9	80.0 – 120.0	01–APR–10 08:20	040110–1
	Nickel	4.74	ug/L					01–APR–10 08:20	040110–1
	Potassium	–182.0	ug/L					01–APR–10 08:20	040110–1
	Selenium	15.7	ug/L					01–APR–10 08:20	040110–1
	Silver	–3.08	ug/L					01–APR–10 08:20	040110–1
	Sodium	19.5	ug/L					01–APR–10 08:20	040110–1
	Vanadium	–1.47	ug/L					01–APR–10 08:20	040110–1
	Zinc	–0.523	ug/L					01–APR–10 08:20	040110–1
ICSAB01									
	Aluminum	516000	ug/L	500000	ug/L	103	80.0 – 120.0	01–APR–10 08:27	040110–1
	Arsenic	528	ug/L	500	ug/L	106	80.0 – 120.0	01–APR–10 08:27	040110–1
	Barium	489	ug/L	500	ug/L	97.8	80.0 – 120.0	01–APR–10 08:27	040110–1
	Calcium	480000	ug/L	500000	ug/L	96.1	80.0 – 120.0	01–APR–10 08:27	040110–1
	Chromium	486	ug/L	500	ug/L	97.2	80.0 – 120.0	01–APR–10 08:27	040110–1
	Cobalt	458	ug/L	500	ug/L	91.7	80.0 – 120.0	01–APR–10 08:27	040110–1
	Copper	547	ug/L	500	ug/L	109	80.0 – 120.0	01–APR–10 08:27	040110–1
	Iron	185000	ug/L	200000	ug/L	92.7	80.0 – 120.0	01–APR–10 08:27	040110–1
	Magnesium	494000	ug/L	500000	ug/L	98.7	80.0 – 120.0	01–APR–10 08:27	040110–1
	Nickel	477	ug/L	500	ug/L	95.5	80.0 – 120.0	01–APR–10 08:27	040110–1
	Potassium	5180	ug/L	5000	ug/L	104	80.0 – 120.0	01–APR–10 08:27	040110–1
	Selenium	2620	ug/L	2500	ug/L	105	80.0 – 120.0	01–APR–10 08:27	040110–1

METALS
–4–
Interference Check Sample

SDG No: 10–2155–1

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Silver	275	ug/L	250	ug/L	110	80.0 – 120.0	01–APR–10 08:27	040110–1
	Sodium	5270	ug/L	5000	ug/L	105	80.0 – 120.0	01–APR–10 08:27	040110–1
	Vanadium	511	ug/L	500	ug/L	102	80.0 – 120.0	01–APR–10 08:27	040110–1
	Zinc	495	ug/L	500	ug/L	99.1	80.0 – 120.0	01–APR–10 08:27	040110–1

METALS
-4-
Interference Check Sample

SDG No: 10-2155-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.069	ug/L					22-APR-10 11:20	100421-12
ICSAB01									
	Beryllium	17.6	ug/L	20	ug/L	87.9	80.0 - 120.0	22-APR-10 11:22	100421-12

METALS
–4–
Interference Check Sample

SDG No: 10–2155–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	0.12	ug/L					21–APR–10 16:38	100421–2
	Cadmium	0.481	ug/L					21–APR–10 16:38	100421–2
	Lead	0.217	ug/L					21–APR–10 16:38	100421–2
	Manganese	5.87	ug/L					21–APR–10 16:38	100421–2
	Thallium	0.119	ug/L					21–APR–10 16:38	100421–2
	Uranium	0.003	ug/L					21–APR–10 16:38	100421–2
ICSAB01									
	Antimony	19.5	ug/L	20	ug/L	97.3	80.0 – 120.0	21–APR–10 16:42	100421–2
	Cadmium	20.1	ug/L	20.44	ug/L	98.5	80.0 – 120.0	21–APR–10 16:42	100421–2
	Lead	19.9	ug/L	20.19	ug/L	98.5	80.0 – 120.0	21–APR–10 16:42	100421–2
	Manganese	27.1	ug/L	25.8	ug/L	105	80.0 – 120.0	21–APR–10 16:42	100421–2
	Thallium	18.9	ug/L	20	ug/L	94.6	80.0 – 120.0	21–APR–10 16:42	100421–2
	Uranium	21.9	ug/L	20	ug/L	109	80.0 – 120.0	21–APR–10 16:42	100421–2

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-2155-1 **Client ID** RE11-10-1878S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 248419001 **Spike ID:** 1202059705

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75-125	2.07		0.066	U	2	103		AV

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-2155-1 **Client ID** RE36-10-7535S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 248375001 **Spike ID:** 1202060851

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75-125	4990		68	U	5000	99.5		P
Arsenic	ug/L	75-125	492		5	U	500	98.3		P
Barium	ug/L	75-125	496		1	U	500	99.2		P
Calcium	ug/L	75-125	5160		50	U	5000	103		P
Chromium	ug/L	75-125	481		1	U	500	96.2		P
Cobalt	ug/L	75-125	488		1	U	500	97.7		P
Copper	ug/L	75-125	483		3	U	500	96.6		P
Iron	ug/L	75-125	5030		30	U	5000	100		P
Magnesium	ug/L	75-125	5090		85	U	5000	102		P
Nickel	ug/L	75-125	490		1.5	U	500	97.9		P
Potassium	ug/L	75-125	5160		199		5000	99.2		P
Selenium	ug/L	75-125	494		5	U	500	98.9		P
Silver	ug/L	75-125	483		1	U	500	96.6		P
Sodium	ug/L	75-125	5060		202	J	5000	97.1		P
Vanadium	ug/L	75-125	488		1	U	500	97.7		P
Zinc	ug/L	75-125	477		4.08	J	500	94.5		P

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-2155-1 **Client ID** RE36-10-7535S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 248375001 **Spike ID:** 1202060856

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Thallium	ug/L	75-125	86.5		0.3	U	100	86.2		MS
Antimony	ug/L	75-125	199		1	U	200	99.6		MS
Beryllium	ug/L	75-125	55.8		0.1	U	50	112		MS
Cadmium	ug/L	75-125	11.3		0.11	U	10	113		MS
Lead	ug/L	75-125	42.1		0.5	U	40	105		MS
Manganese	ug/L	75-125	50.3		1	U	50	99.3		MS
Uranium	ug/L	75-125	54		0.05	U	50	108		MS

Metals
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Duplicate Sample Summary

SDG No.: 10-2155-1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE11-10-1878D

Sample ID: 248419001 **Duplicate ID:** 1202059704 **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.: 10–2155–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE36–10–7535D

Sample ID: 248375001 **Duplicate ID:** 1202060850 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68	U	68	U			P
Arsenic	ug/L		5	U	5	U			P
Barium	ug/L		1	U	1	U			P
Calcium	ug/L		50	U	50	U			P
Chromium	ug/L		1	U	1	U			P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L		3	U	3	U			P
Iron	ug/L		30	U	30	U			P
Magnesium	ug/L		85	U	85	U			P
Nickel	ug/L		1.5	U	1.5	U			P
Potassium	ug/L	+/–150	199		178		11.1		P
Selenium	ug/L		5	U	5	U			P
Silver	ug/L		1	U	1	U			P
Sodium	ug/L	+/–300	202	J	162	J	21.9		P
Vanadium	ug/L		1	U	1	U			P
Zinc	ug/L		4.08	J	3.3	U	200		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–2155–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE36–10–7535D

Sample ID: 248375001 **Duplicate ID:** 1202060855 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		1	U	1	U			MS
Beryllium	ug/L		0.1	U	0.1	U			MS
Cadmium	ug/L		0.11	U	0.11	U			MS
Lead	ug/L		0.5	U	0.5	U			MS
Manganese	ug/L		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. 10-2155-1

Contract: LANL01004

Aqueous LCS Source: GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202059703								
	Mercury	ug/L	2	1.98		99	80-120	AV

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–2155–1

Contract: LANL01004

Aqueous LCS Source:OS2I **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202060849								
	Arsenic	ug/L	500	497		99.5	80–120	P
	Barium	ug/L	500	503		101	80–120	P
	Calcium	ug/L	5000	5190		104	80–120	P
	Chromium	ug/L	500	489		97.8	80–120	P
	Cobalt	ug/L	500	491		98.2	80–120	P
	Copper	ug/L	500	496		99.1	80–120	P
	Iron	ug/L	5000	4950		99.1	80–120	P
	Magnesium	ug/L	5000	5080		102	80–120	P
	Nickel	ug/L	500	496		99.2	80–120	P
	Potassium	ug/L	5000	5030		101	80–120	P
	Selenium	ug/L	500	507		101	80–120	P
	Silver	ug/L	500	488		97.6	80–120	P
	Sodium	ug/L	5000	4720		94.3	80–120	P
	Vanadium	ug/L	500	498		99.6	80–120	P
	Zinc	ug/L	500	485		97.1	80–120	P
	Aluminum	ug/L	5000	5040		101	80–120	P

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–2155–1

Contract: LANL01004

Aqueous LCS Source: O2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202060854								
	Antimony	ug/L	25	26.9		108	80–120	MS
	Beryllium	ug/L	25	26.9		108	80–120	MS
	Cadmium	ug/L	25	27.8		111	80–120	MS
	Lead	ug/L	25	26.8		107	80–120	MS
	Manganese	ug/L	25	25.7		103	80–120	MS
	Thallium	ug/L	25	24.8		99.1	80–120	MS
	Uranium	ug/L	25	27.8		111	80–120	MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-2155-1 **Client ID** RE11-10-1878L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 248419001 **Serial Dilution ID:** 1202059706

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. 10-2155-1 **Client ID** RE36-10-7535L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 248375001 **Serial Dilution ID:** 1202060852

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	199		250	U	100			P
Selenium	5	U	25	U				P
Silver	1	U	5	U				P
Sodium	202	J	500	U	100			P
Vanadium	1	U	5	U				P
Zinc	4.08	J	16.5	U	100			P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-2155-1 **Client ID** RE36-10-7535L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 248375001 **Serial Dilution ID:** 1202060857

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	1	U	5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	.5	U	2.5	U				MS
Manganese	1	U	5	U				MS
Thallium	.3	U	11.4					MS
Uranium	.05	U	.25	U				MS

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2155-1 **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 960824							
1202060848	MB for batch 960824	MB	W	01-APR-10	25mL	25mL	
1202060849	LCS for batch 960824	LCS	W	01-APR-10	25mL	25mL	
1202060851	RE36-10-7535S	MS	W	01-APR-10	25mL	25mL	
1202060850	RE36-10-7535D	DUP	W	01-APR-10	25mL	25mL	
248375001	RE36-10-7535	SAMPLE	W	01-APR-10	25mL	25mL	
248375002	RE36-10-7533	SAMPLE	W	01-APR-10	25mL	25mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2155-1 **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 960826							
1202060853	MB for batch 960826	MB	W	12-MAR-10	50mL	50mL	
1202060854	LCS for batch 960826	LCS	W	12-MAR-10	50mL	50mL	
1202060856	RE36-10-7535S	MS	W	12-MAR-10	50mL	50mL	
1202060855	RE36-10-7535D	DUP	W	12-MAR-10	50mL	50mL	
248375001	RE36-10-7535	SAMPLE	W	12-MAR-10	50mL	50mL	
248375002	RE36-10-7533	SAMPLE	W	12-MAR-10	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2155-1 **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	960260						
1202059702	MB for batch 960260	MB	W	03-MAR-10	20mL	20mL	
1202059703	LCS for batch 960260	LCS	W	03-MAR-10	20mL	20mL	
1202059705	RE11-10-1878S	MS	W	03-MAR-10	20mL	20mL	
1202059704	RE11-10-1878D	DUP	W	03-MAR-10	20mL	20mL	
248375001	RE36-10-7535	SAMPLE	W	03-MAR-10	20mL	20mL	
248375002	RE36-10-7533	SAMPLE	W	03-MAR-10	20mL	20mL	

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 01–APR–10 **End Date:** 01–APR–10

Client Sdg: 10–2155–1
Method P
Data File: 040110–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	07:26:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S0.1	1	07:33:00			X	X				X	X	X						X	X	X	X				X	X
S0.5	1	07:40:00	X		X	X			X	X	X	X			X			X	X	X	X				X	X
SCAL	1	07:47:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S10	1	07:54:00	X						X				X		X							X				
ICV01	1	07:59:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICB01	1	08:06:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
PQL01	1	08:13:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSA01	1	08:20:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSAB01	1	08:27:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR01	1	08:33:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR02	1	08:40:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV01	1	08:47:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB01	1	08:54:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR03	1	09:01:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV02	1	09:08:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB02	1	09:15:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	10	09:22:00																								
ZZZZZZ	10	09:29:00																								
ZZZZZZ	10	09:35:00																								
ZZZZZZ	10	09:42:00																								
CCV03	1	09:49:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB03	1	09:56:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	10:01:00																								
ZZZZZZ	1	10:08:00																								
ZZZZZZ	1	10:15:00																								
ZZZZZZ	1	10:22:00																								
ZZZZZZ	1	10:29:00																								
ZZZZZZ	1	10:36:00																								
ZZZZZZ	5	10:43:00																								
CCV04	1	10:49:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB04	1	10:56:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	11:03:00																								
ZZZZZZ	1	11:10:00																								
ZZZZZZ	1	11:17:00																								
ZZZZZZ	1	11:24:00																								
ZZZZZZ	1	11:31:00																								
ZZZZZZ	1	11:39:00																								
ZZZZZZ	1	11:46:00																								
ZZZZZZ	1	11:52:00																								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																								
CCV05	1	11:59:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB05	1	12:06:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	12:13:00																								
ZZZZZZ	1	12:20:00																								
ZZZZZZ	1	12:27:00																								
ZZZZZZ	1	12:34:00																								
ZZZZZZ	1	12:41:00																								
ZZZZZZ	1	12:48:00																								
ZZZZZZ	1	12:55:00																								
ZZZZZZ	1	13:02:00																								
CCV06	1	13:09:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB06	1	13:16:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV07	1	13:44:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB07	1	13:51:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	13:58:00																								
ZZZZZZ	1	14:05:00																								
ZZZZZZ	1	14:11:00																								
ZZZZZZ	1	14:18:00																								
ZZZZZZ	1	14:25:00																								
ZZZZZZ	1	14:33:00																								
ZZZZZZ	5	14:40:00																								
CCV08	1	14:47:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB08	1	14:54:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	15:01:00																								
ZZZZZZ	1	15:08:00																								
ZZZZZZ	1	15:15:00																								
ZZZZZZ	1	15:22:00																								
ZZZZZZ	1	15:29:00																								
ZZZZZZ	1	15:36:00																								
CCV09	1	15:43:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB09	1	15:50:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	15:57:00																								
ZZZZZZ	1	16:04:00																								
ZZZZZZ	1	16:11:00																								
ZZZZZZ	1	16:18:00																								
ZZZZZZ	1	16:25:00																								
ZZZZZZ	1	16:33:00																								
CCV10	1	16:40:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB10	1	16:47:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202060848	1	16:53:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
1202060849	1	17:00:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
248375001	1	17:07:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202060850	1	17:14:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202060851	1	17:21:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202060852	5	17:28:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
248375002	1	17:35:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV11	1	17:41:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB11	1	17:48:00	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: HG3
Start Date: 04–MAR–10 **End Date:** 04–MAR–10

Client Sdg: 10–2155–1
Method AV
Data File: 030410W1–13

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	09:20:00															X									
S0.2	1	09:22:00															X									
S0.5	1	09:24:00															X									
S2.0	1	09:26:00															X									
S5.0	1	09:28:00															X									
S10.0	1	09:30:00															X									
ICV01	1	09:31:00															X									
ICB01	1	09:33:00															X									
CRDL01	1	09:35:00															X									
CCV01	1	09:37:00															X									
CCB01	1	09:39:00															X									
ZZZZZZ	1	09:41:00																								
ZZZZZZ	1	09:43:00																								
ZZZZZZ	1	09:45:00																								
ZZZZZZ	1	09:47:00																								
ZZZZZZ	1	09:49:00																								
ZZZZZZ	1	09:51:00																								
ZZZZZZ	1	09:53:00																								
ZZZZZZ	1	09:55:00																								
ZZZZZZ	1	09:56:00																								
ZZZZZZ	5	09:58:00																								
CCV02	1	10:00:00															X									
CCB02	1	10:02:00															X									
ZZZZZZ	1	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	10:14:00																								
ZZZZZZ	1	10:16:00																								
ZZZZZZ	1	10:18:00																								
ZZZZZZ	1	10:20:00																								
ZZZZZZ	1	10:21:00																								
CCV03	1	10:23:00															X									
CCB03	1	10:25:00															X									
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																								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																							
ZZZZZZ	1	10:37:00																							
ZZZZZZ	1	10:39:00																							
ZZZZZZ	1	10:41:00																							
ZZZZZZ	1	10:43:00																							
ZZZZZZ	1	10:45:00																							
CCV04	1	10:47:00														X									
CCB04	1	10:48:00														X									
ZZZZZZ	1	10:50:00																							
ZZZZZZ	1	10:52:00																							
ZZZZZZ	1	10:54:00																							
ZZZZZZ	5	10:56:00																							
1202059702	1	10:58:00														X									
1202059703	1	11:00:00														X									
248375001	1	11:02:00														X									
248375002	1	11:04:00														X									
ZZZZZZ	1	11:06:00																							
ZZZZZZ	1	11:08:00																							
CCV05	1	11:10:00														X									
CCB05	1	11:12:00														X									
ZZZZZZ	1	11:14:00																							
ZZZZZZ	1	11:15:00																							
1202059704	1	11:17:00														X									
1202059705	1	11:19:00														X									
1202059706	5	11:21:00														X									
ZZZZZZ	1	11:23:00																							
ZZZZZZ	1	11:25:00																							
ZZZZZZ	1	11:27:00																							
ZZZZZZ	1	11:29:00																							
ZZZZZZ	1	11:31:00																							
CCV06	1	11:33:00														X									
CCB06	1	11:35:00														X									

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS3
Start Date: 21–APR–10 **End Date:** 22–APR–10

Client Sdg: 10–2155–1
Method MS
Data File: 100421–12

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	11:10:00					X																			
S10	1	11:12:00					X																			
S100	1	11:13:00					X																			
ICV01	1	11:15:00					X																			
ICB01	1	11:17:00					X																			
CRDL01	1	11:18:00					X																			
ICSA01	1	11:20:00					X																			
ICSAB01	1	11:22:00					X																			
CCV01	1	11:23:00					X																			
CCB01	1	11:25:00					X																			
1202060853	1	11:27:00					X																			
1202060854	1	11:29:00					X																			
ZZZZZZ	1	11:31:00																								
248375001	1	11:33:00					X																			
1202060855	1	11:34:00					X																			
1202060856	1	11:36:00					X																			
1202060857	5	11:38:00					X																			
248375002	1	11:40:00					X																			
CCV02	1	11:41:00					X																			
CCB02	1	11:43:00					X																			

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS3
Start Date: 21-APR-10 **End Date:** 22-APR-10

Client Sdg: 10-2155-1
Method MS
Data File: 100421-2

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	16:18:00		X				X						X		X							X	X		
S10	1	16:22:00		X				X						X		X							X	X		
S100	1	16:25:00		X				X						X		X							X	X		
ICV01	1	16:28:00		X				X						X		X							X	X		
ICB01	1	16:32:00		X				X						X		X							X	X		
CRDL01	1	16:35:00		X				X						X		X							X	X		
ICSA01	1	16:38:00		X				X						X		X							X	X		
ICSAB01	1	16:42:00		X				X						X		X							X	X		
CCV01	1	16:45:00		X				X						X		X							X	X		
CCB01	1	16:49:00		X				X						X		X							X	X		
ZZZZZZ	1	16:52:00																								
ZZZZZZ	1	16:55:00																								
ZZZZZZ	1	16:59:00																								
ZZZZZZ	1	17:02:00																								
ZZZZZZ	1	17:05:00																								
ZZZZZZ	1	17:09:00																								
ZZZZZZ	1	17:12:00																								
ZZZZZZ	1	17:15:00																								
ZZZZZZ	5	17:19:00																								
ZZZZZZ	1	17:22:00																								
CCV02	1	17:26:00		X				X						X		X							X	X		
CCB02	1	17:29:00		X				X						X		X							X	X		
ZZZZZZ	1	17:32:00																								
ZZZZZZ	1	17:36:00																								
ZZZZZZ	1	17:39:00																								
ZZZZZZ	1	17:43:00																								
ZZZZZZ	1	17:46:00																								
ZZZZZZ	5	17:49:00																								
ZZZZZZ	2	17:53:00																								
CCV03	1	17:56:00		X				X						X		X							X	X		
CCB03	1	17:59:00		X				X						X		X							X	X		
ZZZZZZ	2	18:03:00																								
ZZZZZZ	40	18:06:00																								
ZZZZZZ	2	18:10:00																								
ZZZZZZ	2	18:13:00																								
ZZZZZZ	2	18:16:00																								
ZZZZZZ	2	18:20:00																								
ZZZZZZ	10	18:23:00																								
ZZZZZZ	2	18:27:00																								
ZZZZZZ	2	18:30:00																								

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																						
CCV04	1	18:33:00		X				X						X		X						X	X		
CCB04	1	18:37:00		X				X						X		X						X	X		
ZZZZZZ	2	18:40:00																							
ZZZZZZ	2	18:44:00																							
ZZZZZZ	2	18:56:00																							
ZZZZZZ	2	19:00:00																							
ZZZZZZ	2	19:03:00																							
CCV05	1	19:07:00		X				X						X		X						X	X		
CCB05	1	19:10:00		X				X						X		X						X	X		
1202060853	1	19:13:00		X				X						X		X						X	X		
1202060854	1	19:17:00		X				X						X		X						X	X		
CCV06	1	19:20:00		X				X						X		X						X	X		
CCB06	1	19:24:00		X				X						X		X						X	X		
248375001	1	19:27:00		X				X						X		X						X	X		
1202060855	1	19:30:00		X				X						X		X						X	X		
1202060856	1	19:34:00		X				X						X		X						X	X		
1202060857	5	19:38:00		X				X						X		X						X	X		
ZZZZZZ	1	19:42:00																							
248375002	1	19:47:00		X				X						X		X						X	X		
CCV07	1	19:50:00		X				X						X		X						X	X		
CCB07	1	19:53:00		X				X						X		X						X	X		

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-2155-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

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

METALS
-10-
Instrument Detection Limits

SDG NO. 10-2155-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

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

METALS
–10–
Instrument Detection Limits

SDG NO. 10–2155–1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.0	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	50.0	200
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.752	3.0	10
	Iron	238.204	30.0	100
	Lead	220.353	3.3	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	50.0	150
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	100	300
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-2155-1
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-FEB-10
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02697	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.48147	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.21356	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05186	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.18741	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-2155-1
Effective Dates: 01-FEB-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	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.85580	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.44491	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-29.9151	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.57616
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.60374	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	198.62
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.37985	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.36147	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	2.23785	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.36818	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.35273

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-2155-1
Effective Dates: 01-FEB-10

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	48.4946
Antimony	206.836	-0.02515	0.00000	0.00000	0.00000	-20.5057
Arsenic	188.979	-0.23424	0.00000	0.00000	0.00000	2.41902
Barium	233.527	-0.03042	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.16240	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.10329	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01944	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01444	0.00000	0.00000	0.00000	-2.33100
Copper	324.752	-0.05293	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09554	0.00000	0.00000	0.00000	-2.48774
Magnesium	279.077	1.04597	0.00000	0.00000	0.00000	-10.4683
Manganese	257.61	-0.09877	0.00000	0.04089	0.00000	0.00000
Molybdenum	202.031	-0.07763	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80543	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.39429	1.18725
Selenium	196.026	-3.27508	0.00000	0.00000	0.00000	-3.07287
Silica	251.611	0.00000	0.00000	0.00000	0.00000	27.2377
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	12.3082
Silver	328.068	-0.32385	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.77918	0.00000
Tin	189.927	-0.01682	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.08168	0.00000	0.00000
Uranium	409.014	0.11400	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.14564	0.00000	-0.01931	0.00000	-14.1293
Zinc	213.857	0.09701	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-2155-1
Effective Dates: 01-FEB-10

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silica
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-0.84443	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.63547	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.37026	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-2155-1
Effective Dates: 01-FEB-10

Parmname	Wavelength	Silicon	Silver	Strontium	Sulfur	Thallium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-2155-1
Effective Dates: 01-FEB-10

Parmname	Wavelength	Tin	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-15.4932	3.30431	0.00000	-2.81282	0.00000
Arsenic	188.979	0.00000	-8.66313	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	-2.20293	0.00000
Beryllium	313.107	0.00000	-2.27027	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	-0.19473	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.39645	-1.41250	0.00000
Cobalt	228.616	0.00000	2.09497	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.55360	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-9.37529	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.81635	-4.04400	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	-8.29801	0.00000	1.88584	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.43915	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	1.05947	-1.91382	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
–12–
Linear Ranges

SDG NO. 10–2155–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
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
Antimony	20	10000	ug/L	01–FEB–10
Aluminum	20	500000	ug/L	01–FEB–10

METALS
-12-
Linear Ranges

SDG NO. 10-2155-1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS3

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Antimony	1000	250	ug/L	01-FEB-10
Arsenic	1000	1000	ug/L	01-FEB-10
Aluminum	1	50000	ug/L	01-FEB-10
Barium	1000	1000	ug/L	01-FEB-10
Beryllium	1000	1000	ug/L	01-FEB-10
Cadmium	1000	1000	ug/L	01-FEB-10
Calcium	500	50000	ug/L	01-FEB-10
Chromium	1000	1000	ug/L	01-FEB-10
Cobalt	1000	1000	ug/L	01-FEB-10
Copper	1000	1000	ug/L	01-FEB-10
Iron	500	50000	ug/L	01-FEB-10
Lead	1000	5000	ug/L	01-FEB-10
Magnesium	1	50000	ug/L	01-FEB-10
Manganese	1000	1000	ug/L	01-FEB-10
Nickel	1000	1000	ug/L	01-FEB-10
Potassium	1	50000	ug/L	01-FEB-10
Selenium	1000	500	ug/L	01-FEB-10
Silver	1000	250	ug/L	01-FEB-10
Sodium	1	50000	ug/L	01-FEB-10
Thallium	1000	500	ug/L	01-FEB-10
Uranium	1000	5000	ug/L	01-FEB-10
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10

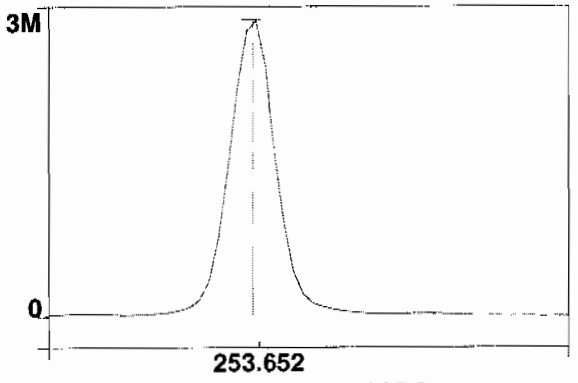
Raw Data

Method: Hg_ReAlign
Result: 042210

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



Intensity: 2877905.3 cps
Conc:

1

4/1/2010 07:23:14 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): 0.001 Slit adjustment: 3

Analysis Begun

Start Time: 4/1/2010 07:26:39 **Plasma On Time: 3/30/2010 17:10:22**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\040110.sif
Batch ID:
Results Data Set: 040110
Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 3/31/2010 08:16:02**
IEC File: 011110.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 4/1/2010 07:26:41**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

	Net	Corrected	Calib.	Analysis

Repl#	Analyte	Intensity	Intensity	Conc.	Units	Time
1	Sc Radial	3803.0	3803.0	0.000	%	07:28:53
1	Y RADIAL	4323.7	4323.7	0.000	%	07:28:33
1	Al 396.153Radial†	-97.7	-98.6	[0.00]	ug/L	07:28:33
1	Ca 317.933Radial†	19.4	19.6	[0.00]	ug/L	07:28:53
1	Fe 238.204 Radial†	3.8	3.8	[0.00]	ug/L	07:28:53
1	K 766.490 Radial†	2959.4	2987.1	[0.00]	ug/L	07:28:33
1	Mg 279.077 IEC†	3.0	3.0	[0.00]	ug/L	07:28:53
1	Na 589.592 Radial†	-1107.3	-1117.6	[0.00]	ug/L	07:28:33
1	Sr 421.552†	23.8	24.0	[0.00]	ug/L	07:28:33
1	Sc 361.383	689962.9	689962.9	0.0000	%	07:29:50
1	Y 371.029	543188.3	543188.3	0.0000	%	07:29:50
1	Ag 328.068†	95.4	95.3	[0.00]	ug/L	07:29:50
1	As 188.979†	-20.8	-20.8	[0.00]	ug/L	07:30:10
1	B 249.677†	-560.1	-559.8	[0.00]	ug/L	07:30:10
1	Ba 233.527†	8.6	8.6	[0.00]	ug/L	07:30:10
1	Be 313.107†	-4490.1	-4487.6	[0.00]	ug/L	07:29:50
1	Cd 226.502†	-219.3	-219.2	[0.00]	ug/L	07:30:10
1	Co 228.616†	-60.1	-60.1	[0.00]	ug/L	07:30:10
1	Cr 267.716†	96.6	96.5	[0.00]	ug/L	07:30:10
1	Cu 324.752†	5638.4	5635.4	[0.00]	ug/L	07:29:50
1	Mn 257.610†	460.8	460.6	[0.00]	ug/L	07:30:10
1	Mo 202.031†	7.9	7.9	[0.00]	ug/L	07:30:10
1	Ni 231.604†	76.8	76.8	[0.00]	ug/L	07:30:10
1	P 214.914†	213.4	213.3	[0.00]	ug/L	07:30:10
1	Pb 220.353†	-67.6	-67.6	[0.00]	ug/L	07:30:10
1	S 181.975 Axial†	40.4	40.3	[0.00]	ug/L	07:30:10
1	Sb 206.836†	29.0	29.0	[0.00]	ug/L	07:30:10
1	Se 196.026†	-30.1	-30.1	[0.00]	ug/L	07:30:10
1	Si 251.611†	497.0	496.8	[0.00]	ug/L	07:30:10
1	Sn 189.927†	2.0	2.0	[0.00]	ug/L	07:30:10
1	Ti 334.940†	-1414.7	-1413.9	[0.00]	ug/L	07:29:50
1	Tl 190.801†	-34.9	-34.9	[0.00]	ug/L	07:30:10
1	U 409.014†	-2398.6	-2397.3	[0.00]	ug/L	07:29:50
1	V 292.402†	-1715.4	-1714.5	[0.00]	ug/L	07:29:50
1	Zn 213.857†	673.0	672.6	[0.00]	ug/L	07:30:10
1	SiO2†	521.3	521.0	[0.00]	ug/L	07:31:06
2	Sc Radial	3847.1	3847.1	0.000	%	07:29:18
2	Y RADIAL	4320.2	4320.2	0.000	%	07:28:58
2	Al 396.153Radial†	-86.1	-85.9	[0.00]	ug/L	07:28:58
2	Ca 317.933Radial†	20.6	20.6	[0.00]	ug/L	07:29:18
2	Fe 238.204 Radial†	7.8	7.8	[0.00]	ug/L	07:29:18
2	K 766.490 Radial†	3070.9	3064.1	[0.00]	ug/L	07:28:58
2	Mg 279.077 IEC†	1.5	1.5	[0.00]	ug/L	07:29:18
2	Na 589.592 Radial†	-1029.2	-1026.9	[0.00]	ug/L	07:28:58
2	Sr 421.552†	13.2	13.2	[0.00]	ug/L	07:28:58
2	Sc 361.383	686890.2	686890.2	0.0000	%	07:30:15
2	Y 371.029	539232.9	539232.9	0.0000	%	07:30:15
2	Ag 328.068†	97.2	97.6	[0.00]	ug/L	07:30:15
2	As 188.979†	-24.2	-24.3	[0.00]	ug/L	07:30:35
2	B 249.677†	-604.4	-606.8	[0.00]	ug/L	07:30:35
2	Ba 233.527†	-4.2	-4.2	[0.00]	ug/L	07:30:35
2	Be 313.107†	-4466.3	-4483.8	[0.00]	ug/L	07:30:15
2	Cd 226.502†	-208.2	-209.0	[0.00]	ug/L	07:30:35
2	Co 228.616†	-52.7	-52.9	[0.00]	ug/L	07:30:35
2	Cr 267.716†	75.4	75.7	[0.00]	ug/L	07:30:35
2	Cu 324.752†	5681.1	5703.4	[0.00]	ug/L	07:30:15
2	Mn 257.610†	434.4	436.1	[0.00]	ug/L	07:30:35
2	Mo 202.031†	19.9	20.0	[0.00]	ug/L	07:30:35
2	Ni 231.604†	70.2	70.5	[0.00]	ug/L	07:30:35
2	P 214.914†	220.6	221.4	[0.00]	ug/L	07:30:35
2	Pb 220.353†	-79.7	-80.1	[0.00]	ug/L	07:30:35
2	S 181.975 Axial†	39.2	39.3	[0.00]	ug/L	07:30:35
2	Sb 206.836†	32.7	32.8	[0.00]	ug/L	07:30:35
2	Se 196.026†	-15.6	-15.6	[0.00]	ug/L	07:30:35
2	Si 251.611†	499.0	501.0	[0.00]	ug/L	07:30:35
2	Sn 189.927†	4.7	4.8	[0.00]	ug/L	07:30:35
2	Ti 334.940†	-1436.4	-1442.1	[0.00]	ug/L	07:30:15
2	Tl 190.801†	-39.8	-39.9	[0.00]	ug/L	07:30:35
2	U 409.014†	-2533.4	-2543.3	[0.00]	ug/L	07:30:15
2	V 292.402†	-1707.7	-1714.4	[0.00]	ug/L	07:30:15

2	Zn 213.857†	662.7	665.3	[0.00]	ug/L	07:30:35
2	SiO2†	525.6	527.7	[0.00]	ug/L	07:31:11
3	Sc Radial	3865.7	3865.7	0.000	%	07:29:43
3	Y RADIAL	4351.6	4351.6	0.000	%	07:29:23
3	Al 396.153Radial†	-92.9	-92.2	[0.00]	ug/L	07:29:23
3	Ca 317.933Radial†	15.9	15.8	[0.00]	ug/L	07:29:43
3	Fe 238.204 Radial†	7.0	7.0	[0.00]	ug/L	07:29:43
3	K 766.490 Radial†	2957.1	2936.4	[0.00]	ug/L	07:29:23
3	Mg 279.077 IEC†	4.5	4.5	[0.00]	ug/L	07:29:43
3	Na 589.592 Radial†	-1096.6	-1088.9	[0.00]	ug/L	07:29:23
3	Sr 421.552†	4.4	4.4	[0.00]	ug/L	07:29:23
3	Sc 361.383	691910.0	691910.0	0.0000	%	07:30:41
3	Y 371.029	543045.6	543045.6	0.0000	%	07:30:41
3	Ag 328.068†	107.1	106.8	[0.00]	ug/L	07:30:41
3	As 188.979†	-23.3	-23.3	[0.00]	ug/L	07:31:01
3	B 249.677†	-584.5	-582.5	[0.00]	ug/L	07:31:01
3	Ba 233.527†	-2.0	-2.0	[0.00]	ug/L	07:31:01
3	Be 313.107†	-4613.8	-4598.3	[0.00]	ug/L	07:30:41
3	Cd 226.502†	-212.8	-212.1	[0.00]	ug/L	07:31:01
3	Co 228.616†	-66.2	-66.0	[0.00]	ug/L	07:31:01
3	Cr 267.716†	102.1	101.7	[0.00]	ug/L	07:31:01
3	Cu 324.752†	5744.4	5725.1	[0.00]	ug/L	07:30:41
3	Mn 257.610†	439.8	438.3	[0.00]	ug/L	07:31:01
3	Mo 202.031†	9.5	9.5	[0.00]	ug/L	07:31:01
3	Ni 231.604†	77.0	76.7	[0.00]	ug/L	07:31:01
3	P 214.914†	221.5	220.8	[0.00]	ug/L	07:31:01
3	Pb 220.353†	-53.6	-53.4	[0.00]	ug/L	07:31:01
3	S 181.975 Axial†	41.2	41.0	[0.00]	ug/L	07:31:01
3	Sb 206.836†	33.5	33.4	[0.00]	ug/L	07:31:01
3	Se 196.026†	-20.6	-20.6	[0.00]	ug/L	07:31:01
3	Si 251.611†	493.8	492.1	[0.00]	ug/L	07:31:01
3	Sn 189.927†	5.6	5.6	[0.00]	ug/L	07:31:01
3	Ti 334.940†	-1413.2	-1408.5	[0.00]	ug/L	07:30:41
3	Tl 190.801†	-39.2	-39.0	[0.00]	ug/L	07:31:01
3	U 409.014†	-2286.6	-2278.9	[0.00]	ug/L	07:30:41
3	V 292.402†	-1726.1	-1720.3	[0.00]	ug/L	07:30:41
3	Zn 213.857†	658.1	655.9	[0.00]	ug/L	07:31:01
3	SiO2†	570.7	568.8	[0.00]	ug/L	07:31:16

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	689587.7	2530.82	0.37%	0.0000	%
Sc Radial	3838.6	32.20	0.84%	0.000	%
Y 371.029	541822.3	2243.56	0.41%	0.0000	%
Y RADIAL	4331.8	17.23	0.40%	0.000	%
Ag 328.068†	99.9	6.05	6.06%	[0.00]	ug/L
Al 396.153Radial†	-92.3	6.33	6.86%	[0.00]	ug/L
As 188.979†	-22.8	1.82	7.98%	[0.00]	ug/L
B 249.677†	-583.0	23.53	4.04%	[0.00]	ug/L
Ba 233.527†	0.8	6.84	875.05%	[0.00]	ug/L
Be 313.107†	-4523.3	65.05	1.44%	[0.00]	ug/L
Ca 317.933Radial†	18.7	2.51	13.46%	[0.00]	ug/L
Cd 226.502†	-213.5	5.24	2.45%	[0.00]	ug/L
Co 228.616†	-59.7	6.57	11.01%	[0.00]	ug/L
Cr 267.716†	91.3	13.80	15.11%	[0.00]	ug/L
Cu 324.752†	5688.0	46.83	0.82%	[0.00]	ug/L
Fe 238.204 Radial†	6.2	2.07	33.50%	[0.00]	ug/L
K 766.490 Radial†	2995.9	64.29	2.15%	[0.00]	ug/L
Mg 279.077 IEC†	3.0	1.47	48.66%	[0.00]	ug/L
Mn 257.610†	445.0	13.53	3.04%	[0.00]	ug/L
Mo 202.031†	12.5	6.59	52.82%	[0.00]	ug/L
Na 589.592 Radial†	-1077.8	46.37	4.30%	[0.00]	ug/L
Ni 231.604†	74.7	3.62	4.84%	[0.00]	ug/L
P 214.914†	218.5	4.52	2.07%	[0.00]	ug/L
Pb 220.353†	-67.0	13.34	19.90%	[0.00]	ug/L
S 181.975 Axial†	40.2	0.84	2.10%	[0.00]	ug/L
Sb 206.836†	31.7	2.41	7.59%	[0.00]	ug/L
Se 196.026†	-22.1	7.34	33.24%	[0.00]	ug/L
Si 251.611†	496.6	4.42	0.89%	[0.00]	ug/L

Sn 189.927†	4.1	1.88	45.56%	[0.00]	ug/L
Sr 421.552†	13.9	9.84	70.95%	[0.00]	ug/L
Ti 334.940†	-1421.5	18.03	1.27%	[0.00]	ug/L
Tl 190.801†	-37.9	2.71	7.13%	[0.00]	ug/L
U 409.014†	-2406.5	132.43	5.50%	[0.00]	ug/L
V 292.402†	-1716.4	3.37	0.20%	[0.00]	ug/L
Zn 213.857†	664.6	8.36	1.26%	[0.00]	ug/L
SiO2†	539.2	25.90	4.80%	[0.00]	ug/L

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

Autosampler Location: 2
Date Collected: 4/1/2010 07:33:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	3951.2	3951.2	103	%	07:35:40
1	Y RADIAL	4319.1	4319.1	99.71	%	07:35:40
1	K 766.490 Radial†	8313.5	5080.9	[1000]	ug/L	07:35:20
1	Sr 421.552†	10736.2	10416.6	[100]	ug/L	07:35:40
1	Sc 361.383	678854.2	678854.2	98.443	%	07:36:37
1	Y 371.029	532635.2	532635.2	98.304	%	07:36:37
1	Ag 328.068†	17924.2	18107.7	[100]	ug/L	07:36:37
1	As 188.979†	173.6	199.1	[100]	ug/L	07:36:57
1	B 249.677†	3161.5	3794.5	[100]	ug/L	07:36:37
1	Ba 233.527†	10470.3	10635.0	[100]	ug/L	07:36:37
1	Be 313.107†	242161.7	250513.8	[100]	ug/L	07:36:37
1	Cd 226.502†	6638.3	6956.7	[100]	ug/L	07:36:37
1	Co 228.616†	4075.8	4200.0	[100]	ug/L	07:36:57
1	Cr 267.716†	6869.6	6886.9	[100]	ug/L	07:36:37
1	Cu 324.752†	35131.3	29998.8	[100]	ug/L	07:36:37
1	Mn 257.610†	79423.8	80234.6	[100]	ug/L	07:36:37
1	Mo 202.031†	1073.9	1078.4	[100]	ug/L	07:36:57
1	Ni 231.604†	3172.4	3147.9	[100]	ug/L	07:36:57
1	P 214.914†	1014.5	812.0	[500]	ug/L	07:36:57
1	Pb 220.353†	560.2	636.0	[100]	ug/L	07:36:57
1	S 181.975 Axial†	175.4	137.9	[200]	ug/L	07:36:57
1	Sb 206.836†	282.5	255.2	[100]	ug/L	07:36:57
1	Se 196.026†	111.0	134.9	[100]	ug/L	07:36:57
1	Si 251.611†	14006.3	13731.2	[500]	ug/L	07:36:37
1	Sn 189.927†	449.3	452.2	[100]	ug/L	07:36:57
1	Ti 334.940†	54139.5	56417.0	[100]	ug/L	07:36:37
1	Tl 190.801†	231.9	273.5	[100]	ug/L	07:36:57
1	U 409.014†	327.4	2739.1	[100]	ug/L	07:36:37
1	V 292.402†	9466.5	11332.5	[100]	ug/L	07:36:37
1	Zn 213.857†	9371.6	8855.2	[100]	ug/L	07:36:37
1	SiO2†	13809.1	13488.3	[1069.5]	ug/L	07:37:53
2	Sc Radial	3987.0	3987.0	104	%	07:36:05
2	Y RADIAL	4349.1	4349.1	100.4	%	07:36:05
2	K 766.490 Radial†	8604.4	5288.4	[1000]	ug/L	07:35:45
2	Sr 421.552†	10805.9	10389.9	[100]	ug/L	07:36:05
2	Sc 361.383	691193.9	691193.9	100.23	%	07:37:02
2	Y 371.029	540889.2	540889.2	99.828	%	07:37:02
2	Ag 328.068†	18340.1	18197.5	[100]	ug/L	07:37:02
2	As 188.979†	171.3	193.7	[100]	ug/L	07:37:22
2	B 249.677†	3308.1	3883.4	[100]	ug/L	07:37:02
2	Ba 233.527†	10633.6	10608.1	[100]	ug/L	07:37:02
2	Be 313.107†	247195.2	251144.0	[100]	ug/L	07:37:02
2	Cd 226.502†	6729.2	6927.1	[100]	ug/L	07:37:02
2	Co 228.616†	4013.3	4063.7	[100]	ug/L	07:37:22
2	Cr 267.716†	6957.7	6850.2	[100]	ug/L	07:37:02
2	Cu 324.752†	35859.2	30087.9	[100]	ug/L	07:37:02
2	Mn 257.610†	80838.7	80205.9	[100]	ug/L	07:37:02
2	Mo 202.031†	1059.5	1044.6	[100]	ug/L	07:37:22
2	Ni 231.604†	3111.5	3029.6	[100]	ug/L	07:37:22
2	P 214.914†	993.3	772.4	[500]	ug/L	07:37:22
2	Pb 220.353†	579.7	645.4	[100]	ug/L	07:37:22
2	S 181.975 Axial†	171.2	130.6	[200]	ug/L	07:37:22
2	Sb 206.836†	280.4	248.0	[100]	ug/L	07:37:22
2	Se 196.026†	105.7	127.6	[100]	ug/L	07:37:22
2	Si 251.611†	14265.9	13736.2	[500]	ug/L	07:37:02
2	Sn 189.927†	433.5	428.3	[100]	ug/L	07:37:22
2	Ti 334.940†	55283.9	56576.9	[100]	ug/L	07:37:02
2	Tl 190.801†	233.6	271.0	[100]	ug/L	07:37:22
2	U 409.014†	303.6	2709.4	[100]	ug/L	07:37:02

2	V 292.402†	9585.8	11280.0	[100]	ug/L	07:37:02
2	Zn 213.857†	9566.0	8879.2	[100]	ug/L	07:37:02
2	SiO2†	13882.5	13311.0	[1069.5]	ug/L	07:37:58
3	Sc Radial	3982.1	3982.1	104	%	07:36:30
3	Y RADIAL	4336.8	4336.8	100.1	%	07:36:30
3	K 766.490 Radial†	8345.3	5048.8	[1000]	ug/L	07:36:10
3	Sr 421.552†	10790.7	10388.0	[100]	ug/L	07:36:30
3	Sc 361.383	679932.0	679932.0	98.600	%	07:37:28
3	Y 371.029	532580.6	532580.6	98.294	%	07:37:28
3	Ag 328.068†	18123.8	18281.3	[100]	ug/L	07:37:28
3	As 188.979†	178.1	203.5	[100]	ug/L	07:37:48
3	B 249.677†	3189.1	3817.4	[100]	ug/L	07:37:28
3	Ba 233.527†	10527.5	10676.2	[100]	ug/L	07:37:28
3	Be 313.107†	243139.5	251115.6	[100]	ug/L	07:37:28
3	Cd 226.502†	6653.8	6961.7	[100]	ug/L	07:37:28
3	Co 228.616†	4054.6	4171.8	[100]	ug/L	07:37:48
3	Cr 267.716†	6847.0	6852.9	[100]	ug/L	07:37:28
3	Cu 324.752†	35361.1	30175.3	[100]	ug/L	07:37:28
3	Mn 257.610†	79975.7	80666.5	[100]	ug/L	07:37:28
3	Mo 202.031†	1054.8	1057.3	[100]	ug/L	07:37:48
3	Ni 231.604†	3142.1	3112.1	[100]	ug/L	07:37:48
3	P 214.914†	997.3	793.0	[500]	ug/L	07:37:48
3	Pb 220.353†	571.9	647.1	[100]	ug/L	07:37:48
3	S 181.975 Axial†	167.8	130.0	[200]	ug/L	07:37:48
3	Sb 206.836†	284.1	256.4	[100]	ug/L	07:37:48
3	Se 196.026†	116.6	140.4	[100]	ug/L	07:37:48
3	Si 251.611†	14050.7	13753.7	[500]	ug/L	07:37:28
3	Sn 189.927†	449.2	451.5	[100]	ug/L	07:37:48
3	Ti 334.940†	54453.0	56647.8	[100]	ug/L	07:37:28
3	Tl 190.801†	228.3	269.5	[100]	ug/L	07:37:48
3	U 409.014†	-17.5	2388.8	[100]	ug/L	07:37:28
3	V 292.402†	9523.2	11374.8	[100]	ug/L	07:37:28
3	Zn 213.857†	9418.1	8887.2	[100]	ug/L	07:37:28
3	SiO2†	13994.1	13653.7	[1069.5]	ug/L	07:38:03

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	683326.7	6834.51	1.00%	99.092	%
Sc Radial	3973.4	19.44	0.49%	104	%
Y 371.029	535368.3	4781.30	0.89%	98.809	%
Y RADIAL	4335.0	15.05	0.35%	100.1	%
Ag 328.068†	18195.5	86.80	0.48%	[100]	ug/L
As 188.979†	198.8	4.87	2.45%	[100]	ug/L
B 249.677†	3831.8	46.13	1.20%	[100]	ug/L
Ba 233.527†	10639.8	34.31	0.32%	[100]	ug/L
Be 313.107†	250924.4	355.90	0.14%	[100]	ug/L
Cd 226.502†	6948.5	18.73	0.27%	[100]	ug/L
Co 228.616†	4145.2	71.95	1.74%	[100]	ug/L
Cr 267.716†	6863.3	20.45	0.30%	[100]	ug/L
Cu 324.752†	30087.3	88.28	0.29%	[100]	ug/L
K 766.490 Radial†	5139.3	130.08	2.53%	[1000]	ug/L
Mn 257.610†	80369.0	258.04	0.32%	[100]	ug/L
Mo 202.031†	1060.1	17.06	1.61%	[100]	ug/L
Ni 231.604†	3096.5	60.66	1.96%	[100]	ug/L
P 214.914†	792.5	19.80	2.50%	[500]	ug/L
Pb 220.353†	642.8	5.95	0.93%	[100]	ug/L
S 181.975 Axial†	132.8	4.41	3.32%	[200]	ug/L
Sb 206.836†	253.2	4.56	1.80%	[100]	ug/L
Se 196.026†	134.3	6.44	4.79%	[100]	ug/L
Si 251.611†	13740.3	11.81	0.09%	[500]	ug/L
Sn 189.927†	444.0	13.58	3.06%	[100]	ug/L
Sr 421.552†	10398.2	15.97	0.15%	[100]	ug/L
Ti 334.940†	56547.2	118.25	0.21%	[100]	ug/L
Tl 190.801†	271.3	2.02	0.74%	[100]	ug/L
U 409.014†	2612.4	194.25	7.44%	[100]	ug/L
V 292.402†	11329.1	47.51	0.42%	[100]	ug/L
Zn 213.857†	8873.9	16.70	0.19%	[100]	ug/L
SiO2†	13484.3	171.34	1.27%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 4/1/2010 07:40:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	3804.2	3804.2	99.1	%	07:42:27
1	Y RADIAL	4303.5	4303.5	99.35	%	07:42:07
1	Al 396.153Radial†	4713.5	4848.3	[5000]	ug/L	07:42:07
1	Ca 317.933Radial†	2579.6	2584.3	[5000]	ug/L	07:42:27
1	K 766.490 Radial†	29237.8	26506.2	[5000]	ug/L	07:42:07
1	Mg 279.077 IEC†	128.4	126.5	[5000]	ug/L	07:42:27
1	Sr 421.552†	50993.1	51440.2	[500]	ug/L	07:42:07
1	Sc 361.383	682923.3	682923.3	99.034	%	07:43:24
1	Y 371.029	465548.5	465548.5	85.923	%	07:43:29
1	Ag 328.068†	89139.8	89909.8	[500]	ug/L	07:43:29
1	As 188.979†	946.4	978.4	[500]	ug/L	07:43:49
1	B 249.677†	18544.1	19308.1	[500]	ug/L	07:43:29
1	Ba 233.527†	51067.3	51564.8	[500]	ug/L	07:43:29
1	Be 313.107†	1214307.4	1230680.7	[500]	ug/L	07:43:24
1	Cd 226.502†	33502.5	34042.9	[500]	ug/L	07:43:29
1	Co 228.616†	20348.6	20606.8	[500]	ug/L	07:43:29
1	Cr 267.716†	33366.9	33601.2	[500]	ug/L	07:43:29
1	Cu 324.752†	151202.8	146990.3	[500]	ug/L	07:43:29
1	Mn 257.610†	383249.8	386544.8	[500]	ug/L	07:43:24
1	Mo 202.031†	5127.0	5164.5	[500]	ug/L	07:43:49
1	Ni 231.604†	15502.3	15579.0	[500]	ug/L	07:43:29
1	P 214.914†	3985.6	3806.0	[2500]	ug/L	07:43:49
1	Pb 220.353†	3031.0	3127.5	[500]	ug/L	07:43:49
1	S 181.975 Axial†	690.8	657.3	[1000]	ug/L	07:43:49
1	Sb 206.836†	1253.0	1233.5	[500]	ug/L	07:43:49
1	Se 196.026†	627.5	655.8	[500]	ug/L	07:43:49
1	Si 251.611†	67837.3	68002.7	[2500]	ug/L	07:43:29
1	Sn 189.927†	2139.5	2156.2	[500]	ug/L	07:43:49
1	Ti 334.940†	270171.6	274229.6	[500]	ug/L	07:43:29
1	Tl 190.801†	1237.7	1287.7	[500]	ug/L	07:43:49
1	U 409.014†	10016.3	12520.5	[500]	ug/L	07:43:29
1	V 292.402†	53725.5	55966.2	[500]	ug/L	07:43:29
1	Zn 213.857†	43577.5	43338.2	[500]	ug/L	07:43:29
1	SiO2†	68347.5	68475.3	[5347.5]	ug/L	07:44:56
2	Sc Radial	3706.1	3706.1	96.5	%	07:42:52
2	Y RADIAL	4194.1	4194.1	96.82	%	07:42:32
2	Al 396.153Radial†	4669.1	4928.3	[5000]	ug/L	07:42:32
2	Ca 317.933Radial†	2563.6	2636.6	[5000]	ug/L	07:42:52
2	K 766.490 Radial†	29486.7	27545.3	[5000]	ug/L	07:42:32
2	Mg 279.077 IEC†	127.7	129.2	[5000]	ug/L	07:42:52
2	Sr 421.552†	50490.5	52282.1	[500]	ug/L	07:42:32
2	Sc 361.383	693170.4	693170.4	100.52	%	07:43:55
2	Y 371.029	471422.9	471422.9	87.007	%	07:44:00
2	Ag 328.068†	91642.5	91069.0	[500]	ug/L	07:44:00
2	As 188.979†	983.6	1001.3	[500]	ug/L	07:44:20
2	B 249.677†	19212.9	19696.6	[500]	ug/L	07:44:00
2	Ba 233.527†	52109.4	51839.2	[500]	ug/L	07:44:00
2	Be 313.107†	1230692.8	1228855.1	[500]	ug/L	07:43:55
2	Cd 226.502†	34016.5	34054.1	[500]	ug/L	07:44:00
2	Co 228.616†	20676.8	20629.6	[500]	ug/L	07:44:00
2	Cr 267.716†	34026.2	33759.0	[500]	ug/L	07:44:00
2	Cu 324.752†	156660.7	150163.0	[500]	ug/L	07:44:00
2	Mn 257.610†	387546.7	385098.6	[500]	ug/L	07:43:55
2	Mo 202.031†	5244.4	5204.8	[500]	ug/L	07:44:20
2	Ni 231.604†	15742.7	15586.7	[500]	ug/L	07:44:00
2	P 214.914†	4123.3	3883.5	[2500]	ug/L	07:44:20
2	Pb 220.353†	3112.1	3163.0	[500]	ug/L	07:44:20
2	S 181.975 Axial†	711.9	668.0	[1000]	ug/L	07:44:20
2	Sb 206.836†	1295.6	1257.2	[500]	ug/L	07:44:20

2	Se 196.026†	649.0	667.7	[500]	ug/L	07:44:20
2	Si 251.611†	69778.0	68920.8	[2500]	ug/L	07:44:00
2	Sn 189.927†	2194.0	2178.5	[500]	ug/L	07:44:20
2	Ti 334.940†	277195.5	277184.2	[500]	ug/L	07:44:00
2	Tl 190.801†	1260.1	1291.5	[500]	ug/L	07:44:20
2	U 409.014†	10748.3	13099.2	[500]	ug/L	07:44:00
2	V 292.402†	55164.2	56595.5	[500]	ug/L	07:44:00
2	Zn 213.857†	44481.2	43586.7	[500]	ug/L	07:44:00
2	SiO2†	68221.7	67329.9	[5347.5]	ug/L	07:45:01
3	Sc Radial	3785.3	3785.3	98.6	%	07:43:17
3	Y RADIAL	4215.2	4215.2	97.31	%	07:42:57
3	Al 396.153Radial†	4653.2	4811.0	[5000]	ug/L	07:42:57
3	Ca 317.933Radial†	2607.9	2625.9	[5000]	ug/L	07:43:17
3	K 766.490 Radial†	29397.7	26815.7	[5000]	ug/L	07:42:57
3	Mg 279.077 IEC†	127.5	126.3	[5000]	ug/L	07:43:17
3	Sr 421.552†	50457.8	51154.2	[500]	ug/L	07:42:57
3	Sc 361.383	692185.4	692185.4	100.38	%	07:44:25
3	Y 371.029	470890.1	470890.1	86.909	%	07:44:31
3	Ag 328.068†	91277.7	90835.2	[500]	ug/L	07:44:31
3	As 188.979†	985.7	1004.8	[500]	ug/L	07:44:51
3	B 249.677†	19150.0	19661.2	[500]	ug/L	07:44:31
3	Ba 233.527†	51826.4	51631.1	[500]	ug/L	07:44:31
3	Be 313.107†	1231035.1	1230938.4	[500]	ug/L	07:44:25
3	Cd 226.502†	34035.6	34121.4	[500]	ug/L	07:44:31
3	Co 228.616†	20655.5	20637.7	[500]	ug/L	07:44:31
3	Cr 267.716†	34025.5	33806.5	[500]	ug/L	07:44:31
3	Cu 324.752†	155511.1	149239.6	[500]	ug/L	07:44:31
3	Mn 257.610†	387298.8	385400.3	[500]	ug/L	07:44:25
3	Mo 202.031†	5248.3	5216.1	[500]	ug/L	07:44:51
3	Ni 231.604†	15722.4	15588.8	[500]	ug/L	07:44:31
3	P 214.914†	4100.7	3866.8	[2500]	ug/L	07:44:51
3	Pb 220.353†	3091.3	3146.7	[500]	ug/L	07:44:51
3	S 181.975 Axial†	710.9	668.0	[1000]	ug/L	07:44:51
3	Sb 206.836†	1289.3	1252.7	[500]	ug/L	07:44:51
3	Se 196.026†	654.3	673.9	[500]	ug/L	07:44:51
3	Si 251.611†	69298.0	68541.3	[2500]	ug/L	07:44:31
3	Sn 189.927†	2193.6	2181.2	[500]	ug/L	07:44:51
3	Ti 334.940†	275714.2	276100.9	[500]	ug/L	07:44:31
3	Tl 190.801†	1263.5	1296.7	[500]	ug/L	07:44:51
3	U 409.014†	10632.2	12998.8	[500]	ug/L	07:44:31
3	V 292.402†	54906.4	56416.8	[500]	ug/L	07:44:31
3	Zn 213.857†	44374.9	43543.7	[500]	ug/L	07:44:31
3	SiO2†	68204.9	67409.8	[5347.5]	ug/L	07:45:06

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	689426.4	5653.33	0.82%	99.977	%
Sc Radial	3765.2	52.07	1.38%	98.1	%
Y 371.029	469287.2	3248.73	0.69%	86.613	%
Y RADIAL	4237.6	58.03	1.37%	97.82	%
Ag 328.068†	90604.7	613.01	0.68%	[500]	ug/L
Al 396.153Radial†	4862.6	59.96	1.23%	[5000]	ug/L
As 188.979†	994.9	14.32	1.44%	[500]	ug/L
B 249.677†	19555.3	214.82	1.10%	[500]	ug/L
Ba 233.527†	51678.4	143.18	0.28%	[500]	ug/L
Be 313.107†	1230158.0	1135.74	0.09%	[500]	ug/L
Ca 317.933Radial†	2615.6	27.65	1.06%	[5000]	ug/L
Cd 226.502†	34072.8	42.43	0.12%	[500]	ug/L
Co 228.616†	20624.7	15.99	0.08%	[500]	ug/L
Cr 267.716†	33722.2	107.48	0.32%	[500]	ug/L
Cu 324.752†	148797.6	1631.86	1.10%	[500]	ug/L
K 766.490 Radial†	26955.7	533.50	1.98%	[5000]	ug/L
Mg 279.077 IEC†	127.3	1.62	1.27%	[5000]	ug/L
Mn 257.610†	385681.2	762.91	0.20%	[500]	ug/L
Mo 202.031†	5195.1	27.10	0.52%	[500]	ug/L
Ni 231.604†	15584.8	5.16	0.03%	[500]	ug/L
P 214.914†	3852.1	40.79	1.06%	[2500]	ug/L
Pb 220.353†	3145.8	17.77	0.56%	[500]	ug/L
S 181.975 Axial†	664.4	6.18	0.93%	[1000]	ug/L

Sb 206.836†	1247.8	12.59	1.01%	[500]	ug/L
Se 196.026†	665.8	9.22	1.39%	[500]	ug/L
Si 251.611†	68488.3	461.32	0.67%	[2500]	ug/L
Sn 189.927†	2172.0	13.71	0.63%	[500]	ug/L
Sr 421.552†	51625.5	586.32	1.14%	[500]	ug/L
Ti 334.940†	275838.3	1494.72	0.54%	[500]	ug/L
Tl 190.801†	1292.0	4.51	0.35%	[500]	ug/L
U 409.014†	12872.9	309.23	2.40%	[500]	ug/L
V 292.402†	56326.2	324.28	0.58%	[500]	ug/L
Zn 213.857†	43489.5	132.85	0.31%	[500]	ug/L
SiO2†	67738.3	639.52	0.94%	[5347.5]	ug/L

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

Autosampler Location: 4
Date Collected: 4/1/2010 07:47:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	3817.3	3817.3	99.4	%	07:49:31
1	Y RADIAL	4303.6	4303.6	99.35	%	07:49:11
1	Al 396.153Radial†	9705.6	9852.1	[10000]	ug/L	07:49:11
1	Ca 317.933Radial†	5394.8	5406.3	[10000]	ug/L	07:49:11
1	Fe 238.204 Radial†	816.7	815.1	[10000]	ug/L	07:49:31
1	K 766.490 Radial†	57250.9	54574.9	[10000]	ug/L	07:49:11
1	Mg 279.077 IEC†	255.4	253.8	[10000]	ug/L	07:49:31
1	Na 589.592 Radial†	21889.0	23089.1	[10000]	ug/L	07:49:11
1	Sr 421.552†	105637.9	106214.3	[1000]	ug/L	07:49:11
1	Sc 361.383	688201.7	688201.7	99.799	%	07:50:34
1	Y 371.029	536988.6	536988.6	99.108	%	07:50:34
1	Ag 328.068†	180436.1	180699.6	[1000]	ug/L	07:50:34
1	As 188.979†	1997.8	2024.6	[1000]	ug/L	07:50:54
1	B 249.677†	39026.1	39687.7	[1000]	ug/L	07:50:34
1	Ba 233.527†	102647.1	102853.0	[1000]	ug/L	07:50:34
1	Be 313.107†	2449494.4	2458950.7	[1000]	ug/L	07:50:29
1	Cd 226.502†	67631.4	67981.0	[1000]	ug/L	07:50:34
1	Co 228.616†	39783.8	39923.6	[1000]	ug/L	07:50:54
1	Cr 267.716†	67316.6	67360.9	[1000]	ug/L	07:50:34
1	Cu 324.752†	304602.8	299528.3	[1000]	ug/L	07:50:34
1	Mn 257.610†	766179.9	767277.9	[1000]	ug/L	07:50:29
1	Mo 202.031†	10368.3	10376.7	[1000]	ug/L	07:50:54
1	Ni 231.604†	30372.8	30359.3	[1000]	ug/L	07:50:54
1	P 214.914†	8008.8	7806.5	[5000]	ug/L	07:50:54
1	Pb 220.353†	6257.8	6337.4	[1000]	ug/L	07:50:54
1	S 181.975 Axial†	1369.1	1331.6	[2000]	ug/L	07:50:54
1	Sb 206.836†	2520.4	2493.7	[1000]	ug/L	07:50:54
1	Se 196.026†	1323.5	1348.3	[1000]	ug/L	07:50:54
1	Si 251.611†	135891.8	135668.9	[5000]	ug/L	07:50:34
1	Sn 189.927†	4327.3	4331.8	[1000]	ug/L	07:50:54
1	Ti 334.940†	545223.8	547743.3	[1000]	ug/L	07:50:34
1	Tl 190.801†	2558.8	2601.9	[1000]	ug/L	07:50:54
1	U 409.014†	23612.7	26066.8	[1000]	ug/L	07:50:34
1	V 292.402†	111113.4	113053.5	[1000]	ug/L	07:50:34
1	Zn 213.857†	87367.5	86878.8	[1000]	ug/L	07:50:34
1	SiO2†	134999.1	134731.9	[10695]	ug/L	07:52:03
2	Sc Radial	3782.3	3782.3	98.5	%	07:49:56
2	Y RADIAL	4270.3	4270.3	98.58	%	07:49:36
2	Al 396.153Radial†	9662.7	9898.9	[10000]	ug/L	07:49:36
2	Ca 317.933Radial†	5346.2	5407.2	[10000]	ug/L	07:49:36
2	Fe 238.204 Radial†	804.4	810.2	[10000]	ug/L	07:49:56
2	K 766.490 Radial†	56862.3	54713.7	[10000]	ug/L	07:49:36
2	Mg 279.077 IEC†	253.9	254.7	[10000]	ug/L	07:49:56
2	Na 589.592 Radial†	21730.5	23132.1	[10000]	ug/L	07:49:36
2	Sr 421.552†	104564.0	106108.2	[1000]	ug/L	07:49:36
2	Sc 361.383	676877.1	676877.1	98.157	%	07:51:06
2	Y 371.029	528277.4	528277.4	97.500	%	07:51:06
2	Ag 328.068†	178040.5	181283.9	[1000]	ug/L	07:51:06
2	As 188.979†	1943.8	2003.1	[1000]	ug/L	07:51:26
2	B 249.677†	38456.2	39761.4	[1000]	ug/L	07:51:06
2	Ba 233.527†	101598.1	103505.1	[1000]	ug/L	07:51:06
2	Be 313.107†	2450457.3	2500995.8	[1000]	ug/L	07:51:00
2	Cd 226.502†	66961.9	68432.8	[1000]	ug/L	07:51:06
2	Co 228.616†	39242.0	40038.5	[1000]	ug/L	07:51:26
2	Cr 267.716†	66761.3	67923.6	[1000]	ug/L	07:51:06
2	Cu 324.752†	300241.4	300191.4	[1000]	ug/L	07:51:06
2	Mn 257.610†	765541.3	779471.8	[1000]	ug/L	07:51:00
2	Mo 202.031†	10201.4	10380.5	[1000]	ug/L	07:51:26
2	Ni 231.604†	29993.1	30481.7	[1000]	ug/L	07:51:26

2	P 214.914†	7868.4	7797.7	[5000]	ug/L	07:51:26
2	Pb 220.353†	6173.6	6356.6	[1000]	ug/L	07:51:26
2	S 181.975 Axial†	1329.5	1314.2	[2000]	ug/L	07:51:26
2	Sb 206.836†	2476.2	2490.9	[1000]	ug/L	07:51:26
2	Se 196.026†	1300.8	1347.3	[1000]	ug/L	07:51:26
2	Si 251.611†	134213.5	136237.2	[5000]	ug/L	07:51:06
2	Sn 189.927†	4274.1	4350.2	[1000]	ug/L	07:51:26
2	Ti 334.940†	538432.0	549964.2	[1000]	ug/L	07:51:06
2	Tl 190.801†	2505.5	2590.5	[1000]	ug/L	07:51:26
2	U 409.014†	23110.4	25950.9	[1000]	ug/L	07:51:06
2	V 292.402†	109807.7	113586.1	[1000]	ug/L	07:51:06
2	Zn 213.857†	86480.3	87439.6	[1000]	ug/L	07:51:06
2	SiO2†	134373.1	136357.2	[10695]	ug/L	07:52:08
3	Sc Radial	3848.5	3848.5	100	%	07:50:21
3	Y RADIAL	4159.1	4159.1	96.01	%	07:50:01
3	Al 396.153Radial†	9328.7	9397.1	[10000]	ug/L	07:50:01
3	Ca 317.933Radial†	5215.7	5183.7	[10000]	ug/L	07:50:01
3	Fe 238.204 Radial†	809.5	801.2	[10000]	ug/L	07:50:21
3	K 766.490 Radial†	55133.3	51996.1	[10000]	ug/L	07:50:01
3	Mg 279.077 IEC†	255.9	252.2	[10000]	ug/L	07:50:21
3	Na 589.592 Radial†	20876.6	21901.0	[10000]	ug/L	07:50:01
3	Sr 421.552†	101079.1	100806.2	[1000]	ug/L	07:50:01
3	Sc 361.383	685426.9	685426.9	99.397	%	07:51:37
3	Y 371.029	534740.6	534740.6	98.693	%	07:51:37
3	Ag 328.068†	181754.7	182758.1	[1000]	ug/L	07:51:37
3	As 188.979†	2019.8	2054.8	[1000]	ug/L	07:51:57
3	B 249.677†	39488.5	40311.2	[1000]	ug/L	07:51:37
3	Ba 233.527†	103406.5	104033.4	[1000]	ug/L	07:51:37
3	Be 313.107†	2459556.7	2479010.3	[1000]	ug/L	07:51:32
3	Cd 226.502†	68322.1	68950.3	[1000]	ug/L	07:51:37
3	Co 228.616†	40155.4	40458.9	[1000]	ug/L	07:51:57
3	Cr 267.716†	67993.3	68314.8	[1000]	ug/L	07:51:37
3	Cu 324.752†	306787.0	302961.3	[1000]	ug/L	07:51:37
3	Mn 257.610†	767730.3	771945.7	[1000]	ug/L	07:51:32
3	Mo 202.031†	10432.7	10483.5	[1000]	ug/L	07:51:57
3	Ni 231.604†	30661.6	30773.1	[1000]	ug/L	07:51:57
3	P 214.914†	8115.7	7946.4	[5000]	ug/L	07:51:57
3	Pb 220.353†	6320.3	6425.7	[1000]	ug/L	07:51:57
3	S 181.975 Axial†	1381.2	1349.3	[2000]	ug/L	07:51:57
3	Sb 206.836†	2532.8	2516.4	[1000]	ug/L	07:51:57
3	Se 196.026†	1331.6	1361.8	[1000]	ug/L	07:51:57
3	Si 251.611†	137171.9	137507.9	[5000]	ug/L	07:51:37
3	Sn 189.927†	4359.3	4381.6	[1000]	ug/L	07:51:57
3	Ti 334.940†	549563.5	554321.0	[1000]	ug/L	07:51:37
3	Tl 190.801†	2560.8	2614.3	[1000]	ug/L	07:51:57
3	U 409.014†	23472.5	26021.5	[1000]	ug/L	07:51:37
3	V 292.402†	111867.9	114263.4	[1000]	ug/L	07:51:37
3	Zn 213.857†	88380.7	88252.6	[1000]	ug/L	07:51:37
3	SiO2†	134999.9	135280.2	[10695]	ug/L	07:52:13

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	683501.9	5902.59	0.86%	99.117	%
Sc Radial	3816.0	33.13	0.87%	99.4	%
Y 371.029	533335.5	4522.43	0.85%	98.434	%
Y RADIAL	4244.3	75.69	1.78%	97.98	%
Ag 328.068†	181580.5	1060.84	0.58%	[1000]	ug/L
Al 396.153Radial†	9716.0	277.20	2.85%	[10000]	ug/L
As 188.979†	2027.5	26.00	1.28%	[1000]	ug/L
B 249.677†	39920.1	340.71	0.85%	[1000]	ug/L
Ba 233.527†	103463.8	591.27	0.57%	[1000]	ug/L
Be 313.107†	2479652.3	21029.87	0.85%	[1000]	ug/L
Ca 317.933Radial†	5332.4	128.78	2.42%	[10000]	ug/L
Cd 226.502†	68454.7	485.00	0.71%	[1000]	ug/L
Co 228.616†	40140.3	281.76	0.70%	[1000]	ug/L
Cr 267.716†	67866.4	479.50	0.71%	[1000]	ug/L
Cu 324.752†	300893.7	1821.10	0.61%	[1000]	ug/L
Fe 238.204 Radial†	808.9	7.03	0.87%	[10000]	ug/L
K 766.490 Radial†	53761.6	1530.50	2.85%	[10000]	ug/L

Mg 279.077 IEC†	253.6	1.24	0.49%	[10000]	ug/L
Mn 257.610†	772898.5	6152.50	0.80%	[1000]	ug/L
Mo 202.031†	10413.6	60.60	0.58%	[1000]	ug/L
Na 589.592 Radial†	22707.4	698.73	3.08%	[10000]	ug/L
Ni 231.604†	30538.0	212.54	0.70%	[1000]	ug/L
P 214.914†	7850.2	83.46	1.06%	[5000]	ug/L
Pb 220.353†	6373.2	46.46	0.73%	[1000]	ug/L
S 181.975 Axial†	1331.7	17.56	1.32%	[2000]	ug/L
Sb 206.836†	2500.4	13.98	0.56%	[1000]	ug/L
Se 196.026†	1352.5	8.09	0.60%	[1000]	ug/L
Si 251.611†	136471.3	941.61	0.69%	[5000]	ug/L
Sn 189.927†	4354.6	25.18	0.58%	[1000]	ug/L
Sr 421.552†	104376.2	3092.17	2.96%	[1000]	ug/L
Ti 334.940†	550676.2	3346.15	0.61%	[1000]	ug/L
Tl 190.801†	2602.2	11.92	0.46%	[1000]	ug/L
U 409.014†	26013.1	58.40	0.22%	[1000]	ug/L
V 292.402†	113634.3	606.36	0.53%	[1000]	ug/L
Zn 213.857†	87523.7	690.76	0.79%	[1000]	ug/L
SiO2†	135456.4	826.89	0.61%	[10695]	ug/L

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

Autosampler Location: 5
Date Collected: 4/1/2010 07:54:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	3770.3	3770.3	98.2	%	07:56:38
1	Y RADIAL	4104.7	4104.7	94.76	%	07:56:38
1	Al 396.153Radial†	46848.1	47789.6	[50000]	ug/L	07:56:18
1	Ca 317.933Radial†	25201.9	25640.1	[50000]	ug/L	07:56:18
1	Fe 238.204 Radial†	1541.7	1563.5	[20000]	ug/L	07:56:38
1	Mg 279.077 IEC†	1197.0	1215.6	[50000]	ug/L	07:56:38
1	Na 589.592 Radial†	44179.1	46057.8	[20000]	ug/L	07:56:18
1	Sc 361.383	663441.9	663441.9	96.208	%	07:57:35
1	Y 371.029	515232.3	515232.3	95.092	%	07:57:35
2	Sc Radial	3870.3	3870.3	101	%	07:57:03
2	Y RADIAL	4219.7	4219.7	97.41	%	07:57:03
2	Al 396.153Radial†	47395.7	47099.5	[50000]	ug/L	07:56:43
2	Ca 317.933Radial†	25388.9	25162.2	[50000]	ug/L	07:56:43
2	Fe 238.204 Radial†	1578.7	1559.5	[20000]	ug/L	07:57:03
2	Mg 279.077 IEC†	1217.8	1204.8	[50000]	ug/L	07:57:03
2	Na 589.592 Radial†	44234.9	44950.2	[20000]	ug/L	07:56:43
2	Sc 361.383	664895.2	664895.2	96.419	%	07:57:41
2	Y 371.029	515942.9	515942.9	95.224	%	07:57:41
3	Sc Radial	3865.1	3865.1	101	%	07:57:28
3	Y RADIAL	4190.7	4190.7	96.74	%	07:57:28
3	Al 396.153Radial†	47673.9	47439.3	[50000]	ug/L	07:57:08
3	Ca 317.933Radial†	25620.0	25425.7	[50000]	ug/L	07:57:08
3	Fe 238.204 Radial†	1581.8	1564.8	[20000]	ug/L	07:57:28
3	Mg 279.077 IEC†	1224.4	1213.0	[50000]	ug/L	07:57:28
3	Na 589.592 Radial†	44560.7	45333.0	[20000]	ug/L	07:57:08
3	Sc 361.383	665276.1	665276.1	96.474	%	07:57:46
3	Y 371.029	517114.3	517114.3	95.440	%	07:57:46

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	664537.7	967.97	0.15%	96.367	%
Sc Radial	3835.3	56.33	1.47%	99.9	%
Y 371.029	516096.5	950.36	0.18%	95.252	%
Y RADIAL	4171.7	59.80	1.43%	96.30	%
Al 396.153Radial†	47442.8	345.05	0.73%	[50000]	ug/L
Ca 317.933Radial†	25409.3	239.37	0.94%	[50000]	ug/L
Fe 238.204 Radial†	1562.6	2.73	0.17%	[20000]	ug/L
Mg 279.077 IEC†	1211.1	5.62	0.46%	[50000]	ug/L
Na 589.592 Radial†	45447.0	562.54	1.24%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	181.5	0.00000	1.000000	
Al 396.153Radial	3	Lin Thru 0	0.0	0.9499	0.00000	0.999987	
As 188.979	3	Lin Thru 0	0.0	2.020	0.00000	0.999971	
B 249.677	3	Lin Thru 0	0.0	39.75	0.00000	0.999962	
Ba 233.527	3	Lin Thru 0	0.0	103.5	0.00000	0.999997	
Be 313.107	3	Lin Thru 0	0.0	2476	0.00000	0.999994	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5093	0.00000	0.999952	
Cd 226.502	3	Lin Thru 0	0.0	68.40	0.00000	0.999997	
Co 228.616	3	Lin Thru 0	0.0	40.37	0.00000	0.999937	
Cr 267.716	3	Lin Thru 0	0.0	67.79	0.00000	0.999996	
Cu 324.752	3	Lin Thru 0	0.0	300.2	0.00000	0.999990	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0787	0.00000	0.999902	
K 766.490 Radial	3	Lin Thru 0	0.0	5.377	0.00000	0.999992	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0243	0.00000	0.999948
Mn 257.610	3	Lin Thru 0	0.0	772.8	0.00000	0.999993
Mo 202.031	3	Lin Thru 0	0.0	10.41	0.00000	0.999998
Na 589.592 Radia	2	Lin Thru 0	0.0	2.272	0.00000	1.000000
Ni 231.604	3	Lin Thru 0	0.0	30.67	0.00000	0.999966
P 214.914	3	Lin Thru 0	0.0	1.564	0.00000	0.999972
Pb 220.353	3	Lin Thru 0	0.0	6.357	0.00000	0.999986
S 181.975 Axial	3	Lin Thru 0	0.0	0.6655	0.00000	1.000000
Sb 206.836	3	Lin Thru 0	0.0	2.500	0.00000	0.999999
Se 196.026	3	Lin Thru 0	0.0	1.348	0.00000	0.999981
Si 251.611	3	Lin Thru 0	0.0	27.32	0.00000	0.999999
Sn 189.927	3	Lin Thru 0	0.0	4.353	0.00000	0.999998
Sr 421.552	3	Lin Thru 0	0.0	104.1	0.00000	0.999991
Ti 334.940	3	Lin Thru 0	0.0	551.0	0.00000	0.999997
Tl 190.801	3	Lin Thru 0	0.0	2.600	0.00000	0.999988
U 409.014	3	Lin Thru 0	0.0	25.96	0.00000	0.999991
V 292.402	3	Lin Thru 0	0.0	113.4	0.00000	0.999994
Zn 213.857	3	Lin Thru 0	0.0	87.43	0.00000	0.999996
SiO2	3	Lin Thru 0	0.0	12.67	0.00000	1.000000

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 4/1/2010 07:59:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3913.5	3913.5	102	%			08:02:11
1	Y RADIAL	4303.9	4303.9	99.35	%			08:01:51
1	Al 396.153Radial†	4791.6	4792.2	5018.9	ug/L	5018.9	ppb	08:01:51
1	Ca 317.933Radial†	2655.1	2585.7	5077.1	ug/L	5077.1	ppb	08:02:11
1	Fe 238.204 Radial†	413.7	399.6	5094.0	ug/L	5094.0	ppb	08:02:11
1	K 766.490 Radial†	16242.4	12935.8	2402.2	ug/L	2402.2	ppb	08:01:51
1	Mg 279.077 IEC†	134.7	129.1	5318.4	ug/L	5318.4	ppb	08:02:11
1	Na 589.592 Radial†	4444.0	5436.8	2392.9	ug/L	2392.9	ppb	08:01:51
1	Sr 421.552†	54347.7	53294.3	511.67	ug/L	511.67	ppb	08:01:51
1	Sc 361.383	683250.3	683250.3	99.081	%			08:03:08
1	Y 371.029	532648.7	532648.7	98.307	%			08:03:08
1	Ag 328.068†	45371.6	45692.5	254.86	ug/L	254.86	ppb	08:03:08
1	As 188.979†	912.7	943.9	471.58	ug/L	471.58	ppb	08:03:28
1	B 249.677†	19297.2	20059.2	502.40	ug/L	502.40	ppb	08:03:08
1	Ba 233.527†	51468.0	51944.6	503.30	ug/L	503.30	ppb	08:03:08
1	Be 313.107†	627392.4	637735.0	258.69	ug/L	258.69	ppb	08:03:08
1	Cd 226.502†	32480.6	32995.3	482.26	ug/L	482.26	ppb	08:03:28
1	Co 228.616†	20214.3	20461.4	506.99	ug/L	506.99	ppb	08:03:28
1	Cr 267.716†	32246.4	32454.2	479.81	ug/L	479.81	ppb	08:03:08
1	Cu 324.752†	152577.3	148304.5	493.96	ug/L	493.96	ppb	08:03:08
1	Mn 257.610†	390557.3	393734.8	509.75	ug/L	509.75	ppb	08:03:08
1	Mo 202.031†	5505.6	5544.2	533.02	ug/L	533.02	ppb	08:03:28
1	Ni 231.604†	15258.0	15324.8	499.42	ug/L	499.42	ppb	08:03:28
1	P 214.914†	4056.9	3876.0	2381.7	ug/L	2381.7	ppb	08:03:28
1	Pb 220.353†	3046.3	3141.5	496.04	ug/L	496.04	ppb	08:03:28
1	S 181.975 Axial†	1655.9	1631.0	2449.7	ug/L	2449.7	ppb	08:03:28
1	Sb 206.836†	1256.1	1236.0	513.65	ug/L	513.65	ppb	08:03:28
1	Se 196.026†	3374.0	3427.4	2558.6	ug/L	2558.6	ppb	08:03:28
1	Si 251.611†	134051.0	134797.8	4928.2	ug/L	4928.2	ppb	08:03:08
1	Sn 189.927†	2309.7	2327.0	535.49	ug/L	535.49	ppb	08:03:28
1	Ti 334.940†	270828.4	274761.9	498.53	ug/L	498.53	ppb	08:03:08
1	Tl 190.801†	1319.6	1369.8	530.37	ug/L	530.37	ppb	08:03:28
1	U 409.014†	10056.2	12556.0	482.00	ug/L	482.00	ppb	08:03:08
1	V 292.402†	54342.7	56563.2	505.74	ug/L	505.74	ppb	08:03:08
1	Zn 213.857†	44203.2	43948.6	498.09	ug/L	498.09	ppb	08:03:08
1	SiO2†	136717.3	137446.2	10838	ug/L	10838	ppb	08:04:26
2	Sc Radial	3859.8	3859.8	101	%			08:02:36
2	Y RADIAL	4335.4	4335.4	100.1	%			08:02:16
2	Al 396.153Radial†	4824.9	4890.6	5122.0	ug/L	5122.0	ppb	08:02:16
2	Ca 317.933Radial†	2618.3	2585.2	5076.2	ug/L	5076.2	ppb	08:02:36
2	Fe 238.204 Radial†	411.2	402.8	5134.8	ug/L	5134.8	ppb	08:02:36
2	K 766.490 Radial†	16296.3	13211.0	2453.3	ug/L	2453.3	ppb	08:02:16
2	Mg 279.077 IEC†	128.7	125.0	5150.1	ug/L	5150.1	ppb	08:02:36
2	Na 589.592 Radial†	4471.8	5525.1	2431.8	ug/L	2431.8	ppb	08:02:16
2	Sr 421.552†	54985.8	54670.0	524.88	ug/L	524.88	ppb	08:02:16
2	Sc 361.383	684067.1	684067.1	99.199	%			08:03:34
2	Y 371.029	532832.2	532832.2	98.341	%			08:03:34
2	Ag 328.068†	45366.1	45632.4	254.53	ug/L	254.53	ppb	08:03:34
2	As 188.979†	933.3	963.6	481.33	ug/L	481.33	ppb	08:03:54
2	B 249.677†	19333.4	20072.4	502.70	ug/L	502.70	ppb	08:03:34
2	Ba 233.527†	51399.4	51813.5	502.03	ug/L	502.03	ppb	08:03:34
2	Be 313.107†	624738.8	634303.8	257.31	ug/L	257.31	ppb	08:03:34
2	Cd 226.502†	33064.5	33544.8	490.30	ug/L	490.30	ppb	08:03:54
2	Co 228.616†	20594.8	20820.7	515.91	ug/L	515.91	ppb	08:03:54
2	Cr 267.716†	32299.7	32469.0	480.03	ug/L	480.03	ppb	08:03:34
2	Cu 324.752†	153109.3	148656.9	495.13	ug/L	495.13	ppb	08:03:34
2	Mn 257.610†	390520.2	393226.8	509.10	ug/L	509.10	ppb	08:03:34
2	Mo 202.031†	5615.5	5648.3	543.02	ug/L	543.02	ppb	08:03:54
2	Ni 231.604†	15549.0	15599.8	508.38	ug/L	508.38	ppb	08:03:54

2	P 214.914†	4160.2	3975.3	2445.1 ug/L	2445.1 ppb	08:03:54
2	Pb 220.353†	3087.4	3179.3	502.03 ug/L	502.03 ppb	08:03:54
2	S 181.975 Axial†	1702.7	1676.2	2517.6 ug/L	2517.6 ppb	08:03:54
2	Sb 206.836†	1305.8	1284.6	533.45 ug/L	533.45 ppb	08:03:54
2	Se 196.026†	3483.8	3534.0	2637.9 ug/L	2637.9 ppb	08:03:54
2	Si 251.611†	134129.4	134715.2	4925.1 ug/L	4925.1 ppb	08:03:34
2	Sn 189.927†	2352.9	2367.8	544.86 ug/L	544.86 ppb	08:03:54
2	Ti 334.940†	271154.5	274764.3	498.55 ug/L	498.55 ppb	08:03:34
2	Tl 190.801†	1345.7	1394.6	539.84 ug/L	539.84 ppb	08:03:54
2	U 409.014†	10049.6	12537.2	481.27 ug/L	481.27 ppb	08:03:34
2	V 292.402†	54213.3	56367.2	504.14 ug/L	504.14 ppb	08:03:34
2	Zn 213.857†	44330.8	44024.0	498.88 ug/L	498.88 ppb	08:03:34
2	SiO2†	136881.8	137447.3	10837 ug/L	10837 ppb	08:04:31
3	Sc Radial	3836.3	3836.3	99.9 %		08:03:01
3	Y RADIAL	4305.5	4305.5	99.39 %		08:02:41
3	Al 396.153Radial†	4773.3	4868.5	5099.2 ug/L	5099.2 ppb	08:02:41
3	Ca 317.933Radial†	2603.0	2586.0	5077.7 ug/L	5077.7 ppb	08:03:01
3	Fe 238.204 Radial†	407.4	401.4	5117.4 ug/L	5117.4 ppb	08:03:01
3	K 766.490 Radial†	16065.6	13079.6	2428.9 ug/L	2428.9 ppb	08:02:41
3	Mg 279.077 IEC†	131.4	128.5	5292.7 ug/L	5292.7 ppb	08:03:01
3	Na 589.592 Radial†	4337.3	5417.8	2384.6 ug/L	2384.6 ppb	08:02:41
3	Sr 421.552†	54165.1	54184.4	520.22 ug/L	520.22 ppb	08:02:41
3	Sc 361.383	696613.6	696613.6	101.02 %		08:04:00
3	Y 371.029	542348.1	542348.1	100.10 %		08:04:00
3	Ag 328.068†	46386.8	45819.1	255.56 ug/L	255.56 ppb	08:04:00
3	As 188.979†	938.8	952.1	475.67 ug/L	475.67 ppb	08:04:20
3	B 249.677†	19811.7	20194.9	505.81 ug/L	505.81 ppb	08:04:00
3	Ba 233.527†	52294.9	51766.6	501.58 ug/L	501.58 ppb	08:04:00
3	Be 313.107†	638695.6	636777.2	258.31 ug/L	258.31 ppb	08:04:00
3	Cd 226.502†	33111.4	32990.9	482.20 ug/L	482.20 ppb	08:04:20
3	Co 228.616†	20596.9	20448.8	506.68 ug/L	506.68 ppb	08:04:20
3	Cr 267.716†	32880.8	32457.8	479.86 ug/L	479.86 ppb	08:04:00
3	Cu 324.752†	156445.4	149179.5	496.87 ug/L	496.87 ppb	08:04:00
3	Mn 257.610†	397497.2	393043.2	508.86 ug/L	508.86 ppb	08:04:00
3	Mo 202.031†	5611.1	5542.0	532.81 ug/L	532.81 ppb	08:04:20
3	Ni 231.604†	15537.6	15306.2	498.81 ug/L	498.81 ppb	08:04:20
3	P 214.914†	4139.9	3879.7	2383.5 ug/L	2383.5 ppb	08:04:20
3	Pb 220.353†	3090.5	3126.3	493.66 ug/L	493.66 ppb	08:04:20
3	S 181.975 Axial†	1706.4	1648.9	2476.6 ug/L	2476.6 ppb	08:04:20
3	Sb 206.836†	1296.2	1251.4	519.78 ug/L	519.78 ppb	08:04:20
3	Se 196.026†	3466.0	3453.1	2577.8 ug/L	2577.8 ppb	08:04:20
3	Si 251.611†	137146.6	135266.8	4945.4 ug/L	4945.4 ppb	08:04:00
3	Sn 189.927†	2347.0	2319.2	533.70 ug/L	533.70 ppb	08:04:20
3	Ti 334.940†	276309.9	274944.6	498.86 ug/L	498.86 ppb	08:04:00
3	Tl 190.801†	1350.6	1374.9	532.33 ug/L	532.33 ppb	08:04:20
3	U 409.014†	10330.5	12632.8	484.96 ug/L	484.96 ppb	08:04:00
3	V 292.402†	55348.1	56506.3	505.24 ug/L	505.24 ppb	08:04:00
3	Zn 213.857†	45167.5	44047.3	499.21 ug/L	499.21 ppb	08:04:00
3	SiO2†	135525.3	133619.2	10536 ug/L	10536 ppb	08:04:36

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	687977.0	99.766	%	1.0862				1.09%
Sc Radial	3869.9	101	%	1.0				1.02%
Y 371.029	535943.0	98.915	%	1.0239				1.04%
Y RADIAL	4314.9	99.61	%	0.410				0.41%
Ag 328.068†	45714.7	254.98	ug/L	0.524	254.98	ppb	0.524	0.21%
QC value within limits for Ag 328.068 Recovery = 101.99%								
Al 396.153Radial†	4850.5	5080.0	ug/L	54.16	5080.0	ppb	54.16	1.07%
QC value within limits for Al 396.153Radial Recovery = 101.60%								
As 188.979†	953.2	476.19	ug/L	4.896	476.19	ppb	4.896	1.03%
QC value within limits for As 188.979 Recovery = 95.24%								
B 249.677†	20108.8	503.64	ug/L	1.888	503.64	ppb	1.888	0.37%
QC value within limits for B 249.677 Recovery = 100.73%								
Ba 233.527†	51841.6	502.30	ug/L	0.892	502.30	ppb	0.892	0.18%
QC value within limits for Ba 233.527 Recovery = 100.46%								
Be 313.107†	636272.0	258.10	ug/L	0.715	258.10	ppb	0.715	0.28%
QC value within limits for Be 313.107 Recovery = 103.24%								
Ca 317.933Radial†	2585.6	5077.0	ug/L	0.73	5077.0	ppb	0.73	0.01%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.54%
Cd 226.502†            33177.0      484.92 ug/L         4.658      484.92 ppb          4.658   0.96%
   QC value within limits for Cd 226.502  Recovery = 96.98%
Co 228.616†            20577.0      509.86 ug/L         5.244      509.86 ppb          5.244   1.03%
   QC value within limits for Co 228.616  Recovery = 101.97%
Cr 267.716†            32460.3      479.90 ug/L         0.115      479.90 ppb          0.115   0.02%
   QC value within limits for Cr 267.716  Recovery = 95.98%
Cu 324.752†           148713.7      495.32 ug/L         1.466      495.32 ppb          1.466   0.30%
   QC value within limits for Cu 324.752  Recovery = 99.06%
Fe 238.204 Radial†       401.3      5115.4 ug/L        20.48      5115.4 ppb         20.48   0.40%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.31%
K 766.490 Radial†      13075.5      2428.2 ug/L        25.58      2428.2 ppb         25.58   1.05%
   QC value within limits for K 766.490 Radial  Recovery = 97.13%
Mg 279.077 IEC†          127.5      5253.8 ug/L        90.65      5253.8 ppb         90.65   1.73%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.08%
Mn 257.610†           393334.9      509.24 ug/L         0.461      509.24 ppb          0.461   0.09%
   QC value within limits for Mn 257.610  Recovery = 101.85%
Mo 202.031†             5578.2      536.28 ug/L         5.839      536.28 ppb          5.839   1.09%
   QC value within limits for Mo 202.031  Recovery = 107.26%
Na 589.592 Radial†      5459.9      2403.1 ug/L        25.19      2403.1 ppb         25.19   1.05%
   QC value within limits for Na 589.592 Radial  Recovery = 96.12%
Ni 231.604†            15410.3      502.20 ug/L         5.357      502.20 ppb          5.357   1.07%
   QC value within limits for Ni 231.604  Recovery = 100.44%
P 214.914†              3910.3      2403.4 ug/L        36.06      2403.4 ppb         36.06   1.50%
   QC value within limits for P 214.914  Recovery = 96.14%
Pb 220.353†             3149.1      497.24 ug/L         4.312      497.24 ppb          4.312   0.87%
   QC value within limits for Pb 220.353  Recovery = 99.45%
S 181.975 Axial†        1652.1      2481.3 ug/L        34.21      2481.3 ppb         34.21   1.38%
   QC value within limits for S 181.975 Axial  Recovery = 99.25%
Sb 206.836†             1257.3      522.29 ug/L        10.136      522.29 ppb         10.136   1.94%
   QC value within limits for Sb 206.836  Recovery = 104.46%
Se 196.026†             3471.5      2591.5 ug/L        41.36      2591.5 ppb         41.36   1.60%
   QC value within limits for Se 196.026  Recovery = 103.66%
Si 251.611†           134926.6      4932.9 ug/L        10.94      4932.9 ppb         10.94   0.22%
   QC value within limits for Si 251.611  Recovery = 98.66%
Sn 189.927†             2338.0      538.02 ug/L         5.990      538.02 ppb          5.990   1.11%
   QC value within limits for Sn 189.927  Recovery = 107.60%
Sr 421.552†            54049.6      518.92 ug/L         6.699      518.92 ppb          6.699   1.29%
   QC value within limits for Sr 421.552  Recovery = 103.78%
Ti 334.940†           274823.6      498.65 ug/L         0.187      498.65 ppb          0.187   0.04%
   QC value within limits for Ti 334.940  Recovery = 99.73%
Tl 190.801†             1379.8      534.18 ug/L         5.003      534.18 ppb          5.003   0.94%
   QC value within limits for Tl 190.801  Recovery = 106.84%
U 409.014†             12575.3      482.74 ug/L         1.953      482.74 ppb          1.953   0.40%
   QC value within limits for U 409.014  Recovery = 96.55%
V 292.402†             56478.9      505.04 ug/L         0.816      505.04 ppb          0.816   0.16%
   QC value within limits for V 292.402  Recovery = 101.01%
Zn 213.857†            44006.6      498.73 ug/L         0.579      498.73 ppb          0.579   0.12%
   QC value within limits for Zn 213.857  Recovery = 99.75%
SiO2†                 136170.9       10737 ug/L         174.4       10737 ppb          174.4   1.62%
   QC value within limits for SiO2  Recovery = 100.39%
All analyte(s) passed QC.
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Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 4/1/2010 08:06:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3683.5	3683.5	96.0	%			08:09:01
1	Y RADIAL	4183.3	4183.3	96.57	%			08:08:41
1	Al 396.153Radial†	-83.3	5.5	5.7353	ug/L	5.7353	ppb	08:08:41
1	Ca 317.933Radial†	11.9	-6.2	-12.197	ug/L	-12.197	ppb	08:09:01
1	Fe 238.204 Radial†	9.1	3.3	41.576	ug/L	41.576	ppb	08:09:01
1	K 766.490 Radial†	3039.8	172.0	32.004	ug/L	32.004	ppb	08:08:41
1	Mg 279.077 IEC†	2.6	-0.3	-11.227	ug/L	-11.227	ppb	08:09:01
1	Na 589.592 Radial†	-1138.2	-108.3	-47.663	ug/L	-47.663	ppb	08:08:41
1	Sr 421.552†	26.7	14.0	0.1341	ug/L	0.1341	ppb	08:08:41
1	Sc 361.383	681539.1	681539.1	98.833	%			08:09:57
1	Y 371.029	536223.3	536223.3	98.967	%			08:09:57
1	Ag 328.068†	126.4	28.0	0.1709	ug/L	0.1709	ppb	08:09:57
1	As 188.979†	-16.5	6.1	3.0096	ug/L	3.0096	ppb	08:10:17
1	B 249.677†	-217.5	362.9	9.1235	ug/L	9.1235	ppb	08:10:17
1	Ba 233.527†	-11.6	-12.6	-0.1211	ug/L	-0.1211	ppb	08:10:17
1	Be 313.107†	-4393.1	78.3	0.0315	ug/L	0.0315	ppb	08:09:57
1	Cd 226.502†	-201.2	9.8	0.1383	ug/L	0.1383	ppb	08:10:17
1	Co 228.616†	-56.7	2.3	0.0578	ug/L	0.0578	ppb	08:10:17
1	Cr 267.716†	80.5	-9.9	-0.1396	ug/L	-0.1396	ppb	08:10:17
1	Cu 324.752†	5548.2	-74.3	-0.2418	ug/L	-0.2418	ppb	08:09:57
1	Mn 257.610†	447.5	7.7	0.0146	ug/L	0.0146	ppb	08:10:17
1	Mo 202.031†	13.9	1.6	0.1559	ug/L	0.1559	ppb	08:10:17
1	Ni 231.604†	75.0	1.2	0.0392	ug/L	0.0392	ppb	08:10:17
1	P 214.914†	216.5	0.6	0.4063	ug/L	0.4063	ppb	08:10:17
1	Pb 220.353†	-80.2	-14.2	-2.2301	ug/L	-2.2301	ppb	08:10:17
1	S 181.975 Axial†	37.2	-2.6	-3.8934	ug/L	-3.8934	ppb	08:10:17
1	Sb 206.836†	32.6	1.3	0.5384	ug/L	0.5384	ppb	08:10:17
1	Se 196.026†	-17.6	4.3	3.3275	ug/L	3.3275	ppb	08:10:17
1	Si 251.611†	503.3	12.7	0.4621	ug/L	0.4621	ppb	08:10:17
1	Sn 189.927†	13.4	9.5	2.1753	ug/L	2.1753	ppb	08:10:17
1	Ti 334.940†	-1435.8	-31.3	-0.0547	ug/L	-0.0547	ppb	08:09:57
1	Tl 190.801†	-20.8	16.9	6.5109	ug/L	6.5109	ppb	08:10:17
1	U 409.014†	-2536.0	-159.4	-6.1463	ug/L	-6.1463	ppb	08:09:57
1	V 292.402†	-1741.8	-46.0	-0.4209	ug/L	-0.4209	ppb	08:09:57
1	Zn 213.857†	621.9	-35.3	-0.4103	ug/L	-0.4103	ppb	08:10:17
1	SiO2†	515.0	-18.1	-1.4351	ug/L	-1.4351	ppb	08:11:13
2	Sc Radial	3855.5	3855.5	100	%			08:09:26
2	Y RADIAL	4113.8	4113.8	94.97	%			08:09:06
2	Al 396.153Radial†	-69.6	23.0	24.199	ug/L	24.199	ppb	08:09:06
2	Ca 317.933Radial†	13.6	-5.1	-10.015	ug/L	-10.015	ppb	08:09:26
2	Fe 238.204 Radial†	7.7	1.4	18.145	ug/L	18.145	ppb	08:09:26
2	K 766.490 Radial†	2944.9	-63.8	-11.850	ug/L	-11.850	ppb	08:09:06
2	Mg 279.077 IEC†	3.9	0.8	34.390	ug/L	34.390	ppb	08:09:26
2	Na 589.592 Radial†	-1197.6	-114.5	-50.417	ug/L	-50.417	ppb	08:09:06
2	Sr 421.552†	41.4	27.3	0.2621	ug/L	0.2621	ppb	08:09:06
2	Sc 361.383	684098.7	684098.7	99.204	%			08:10:23
2	Y 371.029	538356.7	538356.7	99.360	%			08:10:23
2	Ag 328.068†	68.3	-31.0	-0.1643	ug/L	-0.1643	ppb	08:10:23
2	As 188.979†	-30.6	-8.1	-4.0048	ug/L	-4.0048	ppb	08:10:43
2	B 249.677†	-212.6	368.7	9.2736	ug/L	9.2736	ppb	08:10:43
2	Ba 233.527†	-9.9	-10.8	-0.1056	ug/L	-0.1056	ppb	08:10:43
2	Be 313.107†	-4407.1	80.8	0.0322	ug/L	0.0322	ppb	08:10:23
2	Cd 226.502†	-214.3	-2.5	-0.0399	ug/L	-0.0399	ppb	08:10:43
2	Co 228.616†	-67.3	-8.2	-0.2011	ug/L	-0.2011	ppb	08:10:43
2	Cr 267.716†	97.7	7.2	0.1091	ug/L	0.1091	ppb	08:10:43
2	Cu 324.752†	5574.2	-69.0	-0.2263	ug/L	-0.2263	ppb	08:10:23
2	Mn 257.610†	447.4	5.9	0.0081	ug/L	0.0081	ppb	08:10:43
2	Mo 202.031†	16.3	4.0	0.3824	ug/L	0.3824	ppb	08:10:43
2	Ni 231.604†	72.8	-1.3	-0.0428	ug/L	-0.0428	ppb	08:10:43

2	P 214.914†	214.0	-2.8	-1.7171 ug/L	-1.7171 ppb	08:10:43
2	Pb 220.353†	-78.0	-11.6	-1.8146 ug/L	-1.8146 ppb	08:10:43
2	S 181.975 Axial†	38.6	-1.3	-1.9362 ug/L	-1.9362 ppb	08:10:43
2	Sb 206.836†	38.4	6.9	2.8176 ug/L	2.8176 ppb	08:10:43
2	Se 196.026†	-31.8	-10.0	-7.3513 ug/L	-7.3513 ppb	08:10:43
2	Si 251.611†	486.8	-5.9	-0.2191 ug/L	-0.2191 ppb	08:10:43
2	Sn 189.927†	14.3	10.3	2.3689 ug/L	2.3689 ppb	08:10:43
2	Ti 334.940†	-1518.8	-109.5	-0.2007 ug/L	-0.2007 ppb	08:10:23
2	Tl 190.801†	-36.1	1.6	0.6060 ug/L	0.6060 ppb	08:10:43
2	U 409.014†	-2513.3	-127.0	-4.8932 ug/L	-4.8932 ppb	08:10:23
2	V 292.402†	-1790.1	-88.1	-0.7820 ug/L	-0.7820 ppb	08:10:23
2	Zn 213.857†	630.1	-29.4	-0.3385 ug/L	-0.3385 ppb	08:10:43
2	SiO2†	502.3	-32.9	-2.6053 ug/L	-2.6053 ppb	08:11:18
3	Sc Radial	3920.1	3920.1	102 %		08:09:51
3	Y RADIAL	4338.1	4338.1	100.1 %		08:09:31
3	Al 396.153Radial†	-87.1	7.0	7.3491 ug/L	7.3491 ppb	08:09:31
3	Ca 317.933Radial†	14.0	-4.9	-9.6932 ug/L	-9.6932 ppb	08:09:51
3	Fe 238.204 Radial†	7.1	0.8	9.9517 ug/L	9.9517 ppb	08:09:51
3	K 766.490 Radial†	2976.3	-81.4	-15.124 ug/L	-15.124 ppb	08:09:31
3	Mg 279.077 IEC†	2.1	-1.0	-40.339 ug/L	-40.339 ppb	08:09:51
3	Na 589.592 Radial†	-1132.8	-31.5	-13.862 ug/L	-13.862 ppb	08:09:31
3	Sr 421.552†	31.6	17.1	0.1643 ug/L	0.1643 ppb	08:09:31
3	Sc 361.383	689607.2	689607.2	100.00 %		08:10:48
3	Y 371.029	542431.1	542431.1	100.11 %		08:10:48
3	Ag 328.068†	148.7	48.8	0.2785 ug/L	0.2785 ppb	08:10:48
3	As 188.979†	-21.6	1.2	0.5933 ug/L	0.5933 ppb	08:11:08
3	B 249.677†	-219.7	363.4	9.1394 ug/L	9.1394 ppb	08:11:08
3	Ba 233.527†	-1.2	-2.0	-0.0204 ug/L	-0.0204 ppb	08:11:08
3	Be 313.107†	-4458.7	64.7	0.0262 ug/L	0.0262 ppb	08:10:48
3	Cd 226.502†	-204.3	9.2	0.1313 ug/L	0.1313 ppb	08:11:08
3	Co 228.616†	-48.0	11.7	0.2889 ug/L	0.2889 ppb	08:11:08
3	Cr 267.716†	80.6	-10.7	-0.1531 ug/L	-0.1531 ppb	08:11:08
3	Cu 324.752†	5597.4	-90.7	-0.2955 ug/L	-0.2955 ppb	08:10:48
3	Mn 257.610†	444.8	-0.2	0.0023 ug/L	0.0023 ppb	08:11:08
3	Mo 202.031†	11.4	-1.1	-0.1052 ug/L	-0.1052 ppb	08:11:08
3	Ni 231.604†	73.2	-1.5	-0.0478 ug/L	-0.0478 ppb	08:11:08
3	P 214.914†	215.4	-3.1	-1.9431 ug/L	-1.9431 ppb	08:11:08
3	Pb 220.353†	-67.1	-0.1	-0.0155 ug/L	-0.0155 ppb	08:11:08
3	S 181.975 Axial†	33.9	-6.3	-9.4953 ug/L	-9.4953 ppb	08:11:08
3	Sb 206.836†	45.9	14.2	5.6845 ug/L	5.6845 ppb	08:11:08
3	Se 196.026†	-28.8	-6.7	-4.9355 ug/L	-4.9355 ppb	08:11:08
3	Si 251.611†	493.0	-3.7	-0.1331 ug/L	-0.1331 ppb	08:11:08
3	Sn 189.927†	9.1	4.9	1.1319 ug/L	1.1319 ppb	08:11:08
3	Ti 334.940†	-1396.5	25.0	0.0523 ug/L	0.0523 ppb	08:10:48
3	Tl 190.801†	-39.4	-1.4	-0.5477 ug/L	-0.5477 ppb	08:11:08
3	U 409.014†	-2695.1	-288.5	-11.115 ug/L	-11.115 ppb	08:10:48
3	V 292.402†	-1792.7	-76.2	-0.6967 ug/L	-0.6967 ppb	08:10:48
3	Zn 213.857†	635.6	-29.1	-0.3333 ug/L	-0.3333 ppb	08:11:08
3	SiO2†	491.1	-48.1	-3.7943 ug/L	-3.7943 ppb	08:11:24

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	685081.7	99.347	%	0.5979				0.60%
Sc Radial	3819.7	99.5	%	3.19				3.20%
Y 371.029	539003.7	99.480	%	0.5821				0.59%
Y RADIAL	4211.8	97.23	%	2.651				2.73%
Ag 328.068†	15.3	0.0950	ug/L	0.23094	0.0950	ppb	0.23094	243.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.8	12.428	ug/L	10.2263	12.428	ppb	10.2263	82.28%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.3	-0.1340	ug/L	3.56332	-0.1340	ppb	3.56332	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	365.0	9.1788	ug/L	0.08246	9.1788	ppb	0.08246	0.90%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-8.5	-0.0824	ug/L	0.05421	-0.0824	ppb	0.05421	65.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	74.6	0.0300	ug/L	0.00324	0.0300	ppb	0.00324	10.81%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-5.4	-10.635	ug/L	1.3621	-10.635	ppb	1.3621	12.81%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 5.5      0.0766 ug/L       0.10091      0.0766 ppb        0.10091 131.76%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 2.0      0.0485 ug/L       0.24510      0.0485 ppb        0.24510 505.02%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -4.5     -0.0612 ug/L       0.14765     -0.0612 ppb        0.14765 241.26%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -78.0     -0.2545 ug/L       0.03633     -0.2545 ppb        0.03633  14.27%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.8      23.224 ug/L       16.4127      23.224 ppb        16.4127  70.67%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†           8.9      1.6768 ug/L      26.31515      1.6768 ppb       26.31515 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.1     -5.7252 ug/L      37.66701     -5.7252 ppb       37.66701 657.91%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 4.5      0.0083 ug/L       0.00613      0.0083 ppb        0.00613  73.52%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.5      0.1444 ug/L       0.24401      0.1444 ppb        0.24401 168.98%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -84.8     -37.314 ug/L       20.3569     -37.314 ppb        20.3569  54.56%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -0.5     -0.0171 ug/L       0.04885     -0.0171 ppb        0.04885 284.95%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -1.8     -1.0847 ug/L       1.29613     -1.0847 ppb        1.29613 119.50%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -8.6     -1.3534 ug/L       1.17717     -1.3534 ppb        1.17717  86.98%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.4     -5.1083 ug/L       3.92328     -5.1083 ppb        3.92328  76.80%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 7.5      3.0135 ug/L       2.57866      3.0135 ppb        2.57866  85.57%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.1     -2.9864 ug/L       5.59983     -2.9864 ppb        5.59983 187.51%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                 1.0      0.0366 ug/L       0.37097      0.0366 ppb        0.37097 >999.9%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 8.2      1.8920 ug/L       0.66536      1.8920 ppb        0.66536  35.17%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                19.5      0.1868 ug/L       0.06693      0.1868 ppb        0.06693  35.82%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -38.6     -0.0677 ug/L       0.12702     -0.0677 ppb        0.12702 187.62%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 5.7      2.1897 ug/L       3.78644      2.1897 ppb        3.78644 172.92%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -191.6     -7.3847 ug/L       3.29050     -7.3847 ppb        3.29050  44.56%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -70.1     -0.6332 ug/L       0.18873     -0.6332 ppb        0.18873  29.81%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -31.3     -0.3607 ug/L       0.04307     -0.3607 ppb        0.04307  11.94%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -33.0     -2.6116 ug/L       1.17961     -2.6116 ppb        1.17961  45.17%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 4/1/2010 08:13:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4011.5	4011.5	105	%			08:15:47
1	Y RADIAL	4410.9	4410.9	101.8	%			08:15:27
1	Al 396.153Radial†	93.6	181.8	190.92	ug/L	190.92	ppb	08:15:27
1	Ca 317.933Radial†	120.2	96.4	189.23	ug/L	189.23	ppb	08:15:47
1	Fe 238.204 Radial†	17.8	10.8	137.85	ug/L	137.85	ppb	08:15:47
1	K 766.490 Radial†	3736.1	579.3	107.54	ug/L	107.54	ppb	08:15:27
1	Mg 279.077 IEC†	7.7	4.4	179.25	ug/L	179.25	ppb	08:15:47
1	Na 589.592 Radial†	-499.2	600.1	264.12	ug/L	264.12	ppb	08:15:27
1	Sr 421.552†	543.0	505.7	4.8545	ug/L	4.8545	ppb	08:15:27
1	Sc 361.383	687043.5	687043.5	99.631	%			08:16:44
1	Y 371.029	540360.7	540360.7	99.730	%			08:16:44
1	Ag 328.068†	1055.1	959.2	5.2986	ug/L	5.2986	ppb	08:16:44
1	As 188.979†	42.7	65.6	32.549	ug/L	32.549	ppb	08:17:04
1	B 249.677†	1469.6	2058.1	51.744	ug/L	51.744	ppb	08:16:44
1	Ba 233.527†	518.4	519.6	5.0339	ug/L	5.0339	ppb	08:17:04
1	Be 313.107†	7804.9	12357.1	5.0023	ug/L	5.0023	ppb	08:16:44
1	Cd 226.502†	143.5	357.4	5.2242	ug/L	5.2242	ppb	08:17:04
1	Co 228.616†	147.0	207.2	5.1429	ug/L	5.1429	ppb	08:17:04
1	Cr 267.716†	408.2	318.4	4.6964	ug/L	4.6964	ppb	08:17:04
1	Cu 324.752†	8679.1	3023.3	10.049	ug/L	10.049	ppb	08:16:44
1	Mn 257.610†	8372.7	7958.7	10.304	ug/L	10.304	ppb	08:16:44
1	Mo 202.031†	110.3	98.3	9.4533	ug/L	9.4533	ppb	08:17:04
1	Ni 231.604†	229.6	155.8	5.0771	ug/L	5.0771	ppb	08:17:04
1	P 214.914†	440.3	223.4	140.83	ug/L	140.83	ppb	08:17:04
1	Pb 220.353†	-3.6	63.4	10.026	ug/L	10.026	ppb	08:17:04
1	S 181.975 Axial†	99.4	59.5	89.396	ug/L	89.396	ppb	08:17:04
1	Sb 206.836†	47.8	16.2	6.8345	ug/L	6.8345	ppb	08:17:04
1	Se 196.026†	13.7	35.8	27.003	ug/L	27.003	ppb	08:17:04
1	Si 251.611†	3235.1	2750.5	100.58	ug/L	100.58	ppb	08:17:04
1	Sn 189.927†	49.0	45.0	10.374	ug/L	10.374	ppb	08:17:04
1	Ti 334.940†	1411.5	2838.2	5.1382	ug/L	5.1382	ppb	08:16:44
1	Tl 190.801†	23.5	61.5	23.723	ug/L	23.723	ppb	08:17:04
1	U 409.014†	-1109.9	1292.5	49.761	ug/L	49.761	ppb	08:16:44
1	V 292.402†	-1295.1	416.5	3.8769	ug/L	3.8769	ppb	08:16:44
1	Zn 213.857†	1510.7	851.7	9.6754	ug/L	9.6754	ppb	08:17:04
1	SiO2†	3379.0	2852.4	224.96	ug/L	224.96	ppb	08:18:01
2	Sc Radial	3859.5	3859.5	101	%			08:16:13
2	Y RADIAL	4267.7	4267.7	98.52	%			08:15:52
2	Al 396.153Radial†	95.6	187.3	196.75	ug/L	196.75	ppb	08:15:52
2	Ca 317.933Radial†	121.9	102.6	201.47	ug/L	201.47	ppb	08:16:13
2	Fe 238.204 Radial†	18.5	12.2	155.67	ug/L	155.67	ppb	08:16:13
2	K 766.490 Radial†	3813.4	797.0	148.02	ug/L	148.02	ppb	08:15:52
2	Mg 279.077 IEC†	11.1	8.0	331.41	ug/L	331.41	ppb	08:16:13
2	Na 589.592 Radial†	-477.6	602.8	265.32	ug/L	265.32	ppb	08:15:52
2	Sr 421.552†	528.9	512.2	4.9162	ug/L	4.9162	ppb	08:15:52
2	Sc 361.383	688773.4	688773.4	99.882	%			08:17:10
2	Y 371.029	541148.4	541148.4	99.876	%			08:17:10
2	Ag 328.068†	1011.1	912.4	5.0559	ug/L	5.0559	ppb	08:17:10
2	As 188.979†	40.4	63.3	31.389	ug/L	31.389	ppb	08:17:30
2	B 249.677†	1558.8	2143.6	53.893	ug/L	53.893	ppb	08:17:10
2	Ba 233.527†	533.5	533.4	5.1714	ug/L	5.1714	ppb	08:17:30
2	Be 313.107†	7733.3	12265.8	4.9652	ug/L	4.9652	ppb	08:17:10
2	Cd 226.502†	113.8	327.4	4.7825	ug/L	4.7825	ppb	08:17:30
2	Co 228.616†	138.2	198.1	4.9145	ug/L	4.9145	ppb	08:17:30
2	Cr 267.716†	405.3	314.4	4.6440	ug/L	4.6440	ppb	08:17:30
2	Cu 324.752†	8665.2	2987.5	9.9331	ug/L	9.9331	ppb	08:17:10
2	Mn 257.610†	8404.7	7969.6	10.314	ug/L	10.314	ppb	08:17:10
2	Mo 202.031†	105.2	92.9	8.9368	ug/L	8.9368	ppb	08:17:30
2	Ni 231.604†	227.5	153.1	4.9889	ug/L	4.9889	ppb	08:17:30

2	P 214.914†	455.0	237.0	149.55 ug/L	149.55 ppb	08:17:30
2	Pb 220.353†	-17.9	49.1	7.7746 ug/L	7.7746 ppb	08:17:30
2	S 181.975 Axial†	107.4	67.2	101.00 ug/L	101.00 ppb	08:17:30
2	Sb 206.836†	61.1	29.5	12.149 ug/L	12.149 ppb	08:17:30
2	Se 196.026†	21.9	44.0	33.144 ug/L	33.144 ppb	08:17:30
2	Si 251.611†	3216.4	2723.6	99.600 ug/L	99.600 ppb	08:17:30
2	Sn 189.927†	55.4	51.3	11.823 ug/L	11.823 ppb	08:17:30
2	Ti 334.940†	1347.8	2770.8	5.0068 ug/L	5.0068 ppb	08:17:10
2	Tl 190.801†	22.4	60.3	23.269 ug/L	23.269 ppb	08:17:30
2	U 409.014†	-1206.8	1198.3	46.130 ug/L	46.130 ppb	08:17:10
2	V 292.402†	-1117.2	597.9	5.4618 ug/L	5.4618 ppb	08:17:10
2	Zn 213.857†	1513.2	850.4	9.6582 ug/L	9.6582 ppb	08:17:30
2	SiO2†	3384.0	2848.8	224.69 ug/L	224.69 ppb	08:18:06
3	Sc Radial	3809.7	3809.7	99.2 %		08:16:38
3	Y RADIAL	4337.5	4337.5	100.1 %		08:16:18
3	Al 396.153Radial†	93.6	186.6	195.95 ug/L	195.95 ppb	08:16:18
3	Ca 317.933Radial†	118.1	100.4	197.07 ug/L	197.07 ppb	08:16:38
3	Fe 238.204 Radial†	16.5	10.5	133.07 ug/L	133.07 ppb	08:16:38
3	K 766.490 Radial†	3687.8	719.9	133.70 ug/L	133.70 ppb	08:16:18
3	Mg 279.077 IEC†	9.9	7.0	288.06 ug/L	288.06 ppb	08:16:38
3	Na 589.592 Radial†	-474.4	599.8	264.01 ug/L	264.01 ppb	08:16:18
3	Sr 421.552†	523.5	513.5	4.9294 ug/L	4.9294 ppb	08:16:18
3	Sc 361.383	668953.4	668953.4	97.008 %		08:17:35
3	Y 371.029	526207.8	526207.8	97.118 %		08:17:35
3	Ag 328.068†	1018.8	950.3	5.2551 ug/L	5.2551 ppb	08:17:35
3	As 188.979†	38.4	62.4	30.954 ug/L	30.954 ppb	08:17:55
3	B 249.677†	1460.4	2088.4	52.508 ug/L	52.508 ppb	08:17:35
3	Ba 233.527†	515.8	530.9	5.1456 ug/L	5.1456 ppb	08:17:55
3	Be 313.107†	7538.6	12294.4	4.9764 ug/L	4.9764 ppb	08:17:35
3	Cd 226.502†	116.7	333.8	4.8783 ug/L	4.8783 ppb	08:17:55
3	Co 228.616†	139.5	203.5	5.0517 ug/L	5.0517 ppb	08:17:55
3	Cr 267.716†	411.6	333.0	4.9142 ug/L	4.9142 ppb	08:17:55
3	Cu 324.752†	8369.3	2939.4	9.7721 ug/L	9.7721 ppb	08:17:35
3	Mn 257.610†	8225.2	8034.0	10.397 ug/L	10.397 ppb	08:17:35
3	Mo 202.031†	108.9	99.7	9.5932 ug/L	9.5932 ppb	08:17:55
3	Ni 231.604†	224.1	156.4	5.0957 ug/L	5.0957 ppb	08:17:55
3	P 214.914†	439.3	234.4	147.92 ug/L	147.92 ppb	08:17:55
3	Pb 220.353†	-0.9	66.1	10.450 ug/L	10.450 ppb	08:17:55
3	S 181.975 Axial†	102.0	64.9	97.475 ug/L	97.475 ppb	08:17:55
3	Sb 206.836†	49.6	19.4	8.1181 ug/L	8.1181 ppb	08:17:55
3	Se 196.026†	18.5	41.2	30.980 ug/L	30.980 ppb	08:17:55
3	Si 251.611†	3166.0	2767.0	101.18 ug/L	101.18 ppb	08:17:55
3	Sn 189.927†	49.8	47.2	10.876 ug/L	10.876 ppb	08:17:55
3	Ti 334.940†	1238.2	2697.9	4.8775 ug/L	4.8775 ppb	08:17:35
3	Tl 190.801†	19.8	58.4	22.530 ug/L	22.530 ppb	08:17:55
3	U 409.014†	-1185.2	1184.7	45.608 ug/L	45.608 ppb	08:17:35
3	V 292.402†	-1166.6	513.8	4.7317 ug/L	4.7317 ppb	08:17:35
3	Zn 213.857†	1483.9	865.1	9.8293 ug/L	9.8293 ppb	08:17:55
3	SiO2†	3358.7	2923.1	230.54 ug/L	230.54 ppb	08:18:11

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	681590.1	98.840	%	1.5919				1.61%
Sc Radial	3893.6	101	%	2.7				2.70%
Y 371.029	535905.6	98.908	%	1.5518				1.57%
Y RADIAL	4338.7	100.2	%	1.65				1.65%
Ag 328.068†	940.6	5.2032	ug/L	0.12939	5.2032	ppb	0.12939	2.49%
QC value within limits for Ag 328.068 Recovery = 104.06%								
Al 396.153Radial†	185.2	194.54	ug/L	3.159	194.54	ppb	3.159	1.62%
QC value within limits for Al 396.153Radial Recovery = 97.27%								
As 188.979†	63.8	31.631	ug/L	0.8242	31.631	ppb	0.8242	2.61%
QC value within limits for As 188.979 Recovery = 105.44%								
B 249.677†	2096.7	52.715	ug/L	1.0895	52.715	ppb	1.0895	2.07%
QC value within limits for B 249.677 Recovery = 105.43%								
Ba 233.527†	528.0	5.1170	ug/L	0.07307	5.1170	ppb	0.07307	1.43%
QC value within limits for Ba 233.527 Recovery = 102.34%								
Be 313.107†	12305.7	4.9813	ug/L	0.01905	4.9813	ppb	0.01905	0.38%
QC value within limits for Be 313.107 Recovery = 99.63%								
Ca 317.933Radial†	99.8	195.92	ug/L	6.199	195.92	ppb	6.199	3.16%

```
   QC value within limits for Ca 317.933Radial  Recovery = 97.96%
Cd 226.502†              339.5      4.9617 ug/L       0.23237      4.9617 ppb        0.23237   4.68%
   QC value within limits for Cd 226.502  Recovery = 99.23%
Co 228.616†              202.9      5.0364 ug/L       0.11497      5.0364 ppb        0.11497   2.28%
   QC value within limits for Co 228.616  Recovery = 100.73%
Cr 267.716†              321.9      4.7515 ug/L       0.14330      4.7515 ppb        0.14330   3.02%
   QC value within limits for Cr 267.716  Recovery = 95.03%
Cu 324.752†             2983.4      9.9182 ug/L       0.13926      9.9182 ppb        0.13926   1.40%
   QC value within limits for Cu 324.752  Recovery = 99.18%
Fe 238.204 Radial†        11.2      142.20 ug/L        11.910      142.20 ppb         11.910   8.38%
   QC value greater than the upper limit for Fe 238.204 Radial  Recovery = 142.20%
K 766.490 Radial†        698.7      129.75 ug/L        20.526      129.75 ppb         20.526  15.82%
   QC value within limits for K 766.490 Radial  Recovery = 86.50%
Mg 279.077 IEC†           6.5       266.24 ug/L        78.388      266.24 ppb         78.388  29.44%
   QC value within limits for Mg 279.077 IEC  Recovery = 88.75%
Mn 257.610†             7987.4      10.338 ug/L        0.0508      10.338 ppb         0.0508   0.49%
   QC value within limits for Mn 257.610  Recovery = 103.38%
Mo 202.031†               97.0      9.3278 ug/L       0.34571      9.3278 ppb        0.34571   3.71%
   QC value within limits for Mo 202.031  Recovery = 93.28%
Na 589.592 Radial†       600.9      264.48 ug/L         0.729      264.48 ppb          0.729   0.28%
   QC value within limits for Na 589.592 Radial  Recovery = 88.16%
Ni 231.604†              155.1      5.0539 ug/L       0.05707      5.0539 ppb        0.05707   1.13%
   QC value within limits for Ni 231.604  Recovery = 101.08%
P 214.914†               231.6      146.10 ug/L         4.636      146.10 ppb          4.636   3.17%
   QC value within limits for P 214.914  Recovery = 97.40%
Pb 220.353†               59.5      9.4168 ug/L       1.43784      9.4168 ppb        1.43784  15.27%
   QC value within limits for Pb 220.353  Recovery = 94.17%
S 181.975 Axial†          63.9      95.956 ug/L        5.9479      95.956 ppb         5.9479   6.20%
   QC value within limits for S 181.975 Axial  Recovery = 95.96%
Sb 206.836†               21.7      9.0340 ug/L       2.77335      9.0340 ppb        2.77335  30.70%
   QC value within limits for Sb 206.836  Recovery = 90.34%
Se 196.026†               40.3      30.376 ug/L        3.1146      30.376 ppb         3.1146  10.25%
   QC value within limits for Se 196.026  Recovery = 101.25%
Si 251.611†             2747.0      100.45 ug/L         0.797      100.45 ppb          0.797   0.79%
   QC value within limits for Si 251.611  Recovery = 100.45%
Sn 189.927†               47.8      11.025 ug/L        0.7358      11.025 ppb         0.7358   6.67%
   QC value within limits for Sn 189.927  Recovery = 110.25%
Sr 421.552†              510.5      4.9001 ug/L       0.03998      4.9001 ppb        0.03998   0.82%
   QC value within limits for Sr 421.552  Recovery = 98.00%
Ti 334.940†             2769.0      5.0075 ug/L       0.13037      5.0075 ppb        0.13037   2.60%
   QC value within limits for Ti 334.940  Recovery = 100.15%
Tl 190.801†               60.1      23.174 ug/L        0.6020      23.174 ppb         0.6020   2.60%
   QC value within limits for Tl 190.801  Recovery = 115.87%
U 409.014†              1225.2      47.167 ug/L        2.2621      47.167 ppb         2.2621   4.80%
   QC value within limits for U 409.014  Recovery = 94.33%
V 292.402†               509.4      4.6901 ug/L       0.79326      4.6901 ppb        0.79326  16.91%
   QC value within limits for V 292.402  Recovery = 93.80%
Zn 213.857†              855.7      9.7210 ug/L       0.09422      9.7210 ppb        0.09422   0.97%
   QC value within limits for Zn 213.857  Recovery = 97.21%
SiO2†                   2874.8      226.73 ug/L         3.302      226.73 ppb          3.302   1.46%
   QC value within limits for SiO2  Recovery = 106.44%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 4/1/2010 08:20:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3724.9	3724.9	97.0	%			08:22:36
1	Y RADIAL	4072.0	4072.0	94.00	%			08:22:36
1	Al 396.153Radial†	468134.5	482523.2	507950	ug/L	507950	ppb	08:22:15
1	Ca 317.933Radial†	234012.2	241140.1	473490	ug/L	473490	ppb	08:22:15
1	Fe 238.204 Radial†	13911.6	14330.3	182130	ug/L	182130	ppb	08:22:36
1	K 766.490 Radial†	2858.2	-50.3	-167.73	ug/L	-167.73	ppb	08:22:15
1	Mg 279.077 IEC†	11280.4	11621.9	478510	ug/L	478510	ppb	08:22:36
1	Na 589.592 Radial†	-1005.3	41.8	18.396	ug/L	18.396	ppb	08:22:36
1	Sr 421.552†	407.0	405.6	0.3584	ug/L	0.3584	ppb	08:22:36
1	Sc 361.383	592755.3	592755.3	85.958	%			08:23:33
1	Y 371.029	462058.5	462058.5	85.279	%			08:23:33
1	Ag 328.068†	-8358.5	-9823.9	-4.2053	ug/L	-4.2053	ppb	08:23:33
1	As 188.979†	-83.9	-74.8	5.4738	ug/L	5.4738	ppb	08:23:53
1	B 249.677†	73.8	668.9	-12.752	ug/L	-12.752	ppb	08:23:33
1	Ba 233.527†	-30.2	-35.9	5.2300	ug/L	5.2300	ppb	08:23:53
1	Be 313.107†	-4511.1	-724.8	-0.3382	ug/L	-0.3382	ppb	08:23:33
1	Cd 226.502†	866.5	1221.5	-0.9444	ug/L	-0.9444	ppb	08:23:53
1	Co 228.616†	-2.0	57.3	-1.1931	ug/L	-1.1931	ppb	08:23:53
1	Cr 267.716†	-1454.9	-1783.9	-7.0129	ug/L	-7.0129	ppb	08:23:53
1	Cu 324.752†	2840.6	-2383.3	1.6788	ug/L	1.6788	ppb	08:23:33
1	Mn 257.610†	273.7	-126.5	-1.7479	ug/L	-1.7479	ppb	08:23:33
1	Mo 202.031†	-128.0	-161.4	4.2680	ug/L	4.2680	ppb	08:23:53
1	Ni 231.604†	189.0	145.2	4.7327	ug/L	4.7327	ppb	08:23:53
1	P 214.914†	214.3	30.9	0.4311	ug/L	0.4311	ppb	08:23:53
1	Pb 220.353†	-738.8	-792.5	-8.1148	ug/L	-8.1148	ppb	08:23:53
1	S 181.975 Axial†	44.6	11.7	-77.691	ug/L	-77.691	ppb	08:23:53
1	Sb 206.836†	70.4	50.2	2.7915	ug/L	2.7915	ppb	08:23:53
1	Se 196.026†	-743.5	-842.9	-0.6501	ug/L	-0.6501	ppb	08:23:53
1	Si 251.611†	510.6	97.3	3.7546	ug/L	3.7546	ppb	08:23:53
1	Sn 189.927†	-323.6	-380.6	-2.3735	ug/L	-2.3735	ppb	08:23:53
1	Ti 334.940†	-10704.8	-11032.1	4.3767	ug/L	4.3767	ppb	08:23:33
1	Tl 190.801†	-80.3	-55.5	-21.562	ug/L	-21.562	ppb	08:23:53
1	U 409.014†	-1128.0	1094.2	21.444	ug/L	21.444	ppb	08:23:33
1	V 292.402†	100.7	1833.5	-1.2250	ug/L	-1.2250	ppb	08:23:53
1	Zn 213.857†	2645.9	2413.5	0.3312	ug/L	0.3312	ppb	08:23:53
1	SiO2†	538.2	86.9	7.2872	ug/L	7.2872	ppb	08:24:49
2	Sc Radial	3660.5	3660.5	95.4	%			08:23:01
2	Y RADIAL	4019.6	4019.6	92.79	%			08:23:01
2	Al 396.153Radial†	465348.2	488081.7	513800	ug/L	513800	ppb	08:22:41
2	Ca 317.933Radial†	231856.9	243119.1	477380	ug/L	477380	ppb	08:22:41
2	Fe 238.204 Radial†	14057.1	14734.8	187270	ug/L	187270	ppb	08:23:01
2	K 766.490 Radial†	2694.5	-170.3	-191.35	ug/L	-191.35	ppb	08:22:41
2	Mg 279.077 IEC†	11418.5	11971.1	492890	ug/L	492890	ppb	08:23:01
2	Na 589.592 Radial†	-962.5	68.5	30.135	ug/L	30.135	ppb	08:23:01
2	Sr 421.552†	414.8	421.1	0.4785	ug/L	0.4785	ppb	08:23:01
2	Sc 361.383	591980.3	591980.3	85.846	%			08:23:58
2	Y 371.029	461552.8	461552.8	85.185	%			08:23:58
2	Ag 328.068†	-8304.3	-9773.4	-2.3864	ug/L	-2.3864	ppb	08:23:58
2	As 188.979†	-74.2	-63.7	12.202	ug/L	12.202	ppb	08:24:18
2	B 249.677†	102.9	702.9	-12.733	ug/L	-12.733	ppb	08:23:58
2	Ba 233.527†	-73.4	-86.3	4.8992	ug/L	4.8992	ppb	08:24:18
2	Be 313.107†	-4567.0	-796.8	-0.3668	ug/L	-0.3668	ppb	08:23:58
2	Cd 226.502†	861.3	1216.7	-1.5453	ug/L	-1.5453	ppb	08:24:18
2	Co 228.616†	-2.1	57.3	-1.2724	ug/L	-1.2724	ppb	08:24:18
2	Cr 267.716†	-1406.2	-1729.4	-5.6629	ug/L	-5.6629	ppb	08:24:18
2	Cu 324.752†	2838.1	-2381.9	1.9586	ug/L	1.9586	ppb	08:23:58
2	Mn 257.610†	400.9	22.1	-1.6359	ug/L	-1.6359	ppb	08:23:58
2	Mo 202.031†	-137.8	-173.0	3.6002	ug/L	3.6002	ppb	08:24:18
2	Ni 231.604†	197.6	155.6	5.0716	ug/L	5.0716	ppb	08:24:18

2	P 214.914†	202.6	17.5	-10.818	ug/L	-10.818 ppb	08:24:18
2	Pb 220.353†	-713.6	-764.2	-2.6461	ug/L	-2.6461 ppb	08:24:18
2	S 181.975 Axial†	44.6	11.7	-78.700	ug/L	-78.700 ppb	08:24:18
2	Sb 206.836†	61.0	39.3	-1.8387	ug/L	-1.8387 ppb	08:24:18
2	Se 196.026†	-728.4	-826.4	26.860	ug/L	26.860 ppb	08:24:18
2	Si 251.611†	483.0	66.1	2.6228	ug/L	2.6228 ppb	08:24:18
2	Sn 189.927†	-331.3	-390.1	-3.8459	ug/L	-3.8459 ppb	08:24:18
2	Ti 334.940†	-10603.9	-10930.8	3.9090	ug/L	3.9090 ppb	08:23:58
2	Tl 190.801†	-79.4	-54.6	-21.191	ug/L	-21.191 ppb	08:24:18
2	U 409.014†	-1242.0	959.7	15.674	ug/L	15.674 ppb	08:23:58
2	V 292.402†	92.7	1824.4	-1.8032	ug/L	-1.8032 ppb	08:24:18
2	Zn 213.857†	2614.7	2381.3	-0.8093	ug/L	-0.8093 ppb	08:24:18
2	SiO2†	474.6	13.7	1.5379	ug/L	1.5379 ppb	08:24:54
3	Sc Radial	3608.7	3608.7	94.0	%		08:23:26
3	Y RADIAL	3966.7	3966.7	91.57	%		08:23:26
3	Al 396.153Radial†	472234.6	502419.5	528890	ug/L	528890 ppb	08:23:06
3	Ca 317.933Radial†	235177.5	250145.2	491170	ug/L	491170 ppb	08:23:06
3	Fe 238.204 Radial†	13950.5	14833.3	188530	ug/L	188530 ppb	08:23:26
3	K 766.490 Radial†	2700.1	-123.7	-187.30	ug/L	-187.30 ppb	08:23:06
3	Mg 279.077 IEC†	11360.4	12081.4	497430	ug/L	497430 ppb	08:23:26
3	Na 589.592 Radial†	-992.1	22.5	9.9175	ug/L	9.9175 ppb	08:23:26
3	Sr 421.552†	402.9	414.7	0.3140	ug/L	0.3140 ppb	08:23:26
3	Sc 361.383	589395.9	589395.9	85.471	%		08:24:24
3	Y 371.029	459829.4	459829.4	84.867	%		08:24:24
3	Ag 328.068†	-8338.1	-9855.3	-2.6450	ug/L	-2.6450 ppb	08:24:24
3	As 188.979†	-80.5	-71.4	8.6736	ug/L	8.6736 ppb	08:24:44
3	B 249.677†	99.5	699.4	-13.024	ug/L	-13.024 ppb	08:24:24
3	Ba 233.527†	-119.4	-140.5	4.4147	ug/L	4.4147 ppb	08:24:44
3	Be 313.107†	-4518.1	-762.9	-0.3525	ug/L	-0.3525 ppb	08:24:24
3	Cd 226.502†	877.6	1240.2	-1.3300	ug/L	-1.3300 ppb	08:24:44
3	Co 228.616†	11.8	73.5	-0.8892	ug/L	-0.8892 ppb	08:24:44
3	Cr 267.716†	-1411.6	-1742.9	-5.7326	ug/L	-5.7326 ppb	08:24:44
3	Cu 324.752†	2903.7	-2290.7	2.3226	ug/L	2.3226 ppb	08:24:24
3	Mn 257.610†	393.6	15.5	-1.7065	ug/L	-1.7065 ppb	08:24:24
3	Mo 202.031†	-140.4	-176.7	3.5055	ug/L	3.5055 ppb	08:24:44
3	Ni 231.604†	179.9	135.8	4.4266	ug/L	4.4266 ppb	08:24:44
3	P 214.914†	181.0	-6.7	-23.600	ug/L	-23.600 ppb	08:24:44
3	Pb 220.353†	-719.5	-774.8	-0.4543	ug/L	-0.4543 ppb	08:24:44
3	S 181.975 Axial†	55.8	25.1	-61.471	ug/L	-61.471 ppb	08:24:44
3	Sb 206.836†	51.8	28.8	-6.4491	ug/L	-6.4491 ppb	08:24:44
3	Se 196.026†	-740.9	-844.7	20.771	ug/L	20.771 ppb	08:24:44
3	Si 251.611†	514.2	105.0	4.0529	ug/L	4.0529 ppb	08:24:44
3	Sn 189.927†	-329.5	-389.6	-1.2749	ug/L	-1.2749 ppb	08:24:44
3	Ti 334.940†	-10421.0	-10771.0	5.6737	ug/L	5.6737 ppb	08:24:24
3	Tl 190.801†	-75.0	-49.9	-19.379	ug/L	-19.379 ppb	08:24:44
3	U 409.014†	-991.8	1246.1	26.563	ug/L	26.563 ppb	08:24:24
3	V 292.402†	141.7	1882.2	-1.3719	ug/L	-1.3719 ppb	08:24:44
3	Zn 213.857†	2596.1	2372.9	-1.0892	ug/L	-1.0892 ppb	08:24:44
3	SiO2†	566.7	123.8	10.241	ug/L	10.241 ppb	08:24:59

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	591377.2	85.758	%	0.2551				0.30%
Sc Radial	3664.7	95.5	%	1.52				1.59%
Y 371.029	461146.9	85.110	%	0.2157				0.25%
Y RADIAL	4019.4	92.79	%	1.215				1.31%
Ag 328.068†	-9817.5	-3.0789	ug/L	0.98402	-3.0789	ppb	0.98402	31.96%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	491008.1	516880	ug/L	10806.8	516880	ppb	10806.8	2.09%
QC value within limits for Al 396.153Radial Recovery = 103.38%								
As 188.979†	-70.0	8.7830	ug/L	3.36531	8.7830	ppb	3.36531	38.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	690.4	-12.836	ug/L	0.1629	-12.836	ppb	0.1629	1.27%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-87.6	4.8480	ug/L	0.41007	4.8480	ppb	0.41007	8.46%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-761.5	-0.3525	ug/L	0.01434	-0.3525	ppb	0.01434	4.07%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	244801.5	480680	ug/L	9292.3	480680	ppb	9292.3	1.93%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.14%
Cd 226.502†            1226.1     -1.2733 ug/L       0.30442     -1.2733 ppb        0.30442  23.91%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              62.7     -1.1182 ug/L       0.20225     -1.1182 ppb        0.20225  18.09%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†           -1752.1     -6.1361 ug/L       0.76013     -6.1361 ppb        0.76013  12.39%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -2352.0      1.9867 ug/L       0.32279      1.9867 ppb        0.32279  16.25%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    14632.8      185980 ug/L        3388.2      185980 ppb         3388.2   1.82%
   QC value within limits for Fe 238.204 Radial  Recovery = 92.99%
K 766.490 Radial†      -114.8     -182.13 ug/L        12.628     -182.13 ppb         12.628   6.93%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       11891.4      489610 ug/L        9876.1      489610 ppb         9876.1   2.02%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.92%
Mn 257.610†             -29.7     -1.6967 ug/L       0.05663     -1.6967 ppb        0.05663   3.34%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -170.4      3.7912 ug/L       0.41560      3.7912 ppb        0.41560  10.96%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       44.3      19.483 ug/L       10.1522      19.483 ppb        10.1522  52.11%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             145.5      4.7436 ug/L       0.32262      4.7436 ppb        0.32262   6.80%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               13.9     -11.329 ug/L       12.0238     -11.329 ppb        12.0238 106.13%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -777.2     -3.7384 ug/L       3.94532     -3.7384 ppb        3.94532 105.54%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         16.1     -72.621 ug/L        9.6692     -72.621 ppb         9.6692  13.31%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              39.4     -1.8321 ug/L       4.62033     -1.8321 ppb        4.62033 252.19%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -838.0      15.660 ug/L       14.4495      15.660 ppb        14.4495  92.27%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              89.5      3.4768 ug/L       0.75447      3.4768 ppb        0.75447  21.70%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -386.7     -2.4981 ug/L       1.29001     -2.4981 ppb        1.29001  51.64%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             413.8      0.3836 ug/L       0.08508      0.3836 ppb        0.08508  22.18%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†          -10911.3      4.6531 ug/L       0.91423      4.6531 ppb        0.91423  19.65%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -53.3     -20.710 ug/L        1.1679     -20.710 ppb         1.1679   5.64%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             1100.0      21.227 ug/L        5.4480      21.227 ppb         5.4480  25.67%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             1846.7     -1.4667 ug/L       0.30054     -1.4667 ppb        0.30054  20.49%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            2389.2     -0.5225 ug/L       0.75240     -0.5225 ppb        0.75240 144.01%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    74.8      6.3553 ug/L       4.42559      6.3553 ppb        4.42559  69.64%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 4/1/2010 08:27:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3573.1	3573.1	93.1	%			08:29:24
1	Y RADIAL	3942.3	3942.3	91.01	%			08:29:24
1	Al 396.153Radial†	453414.3	487195.0	512840	ug/L	512840	ppb	08:29:04
1	Ca 317.933Radial†	226697.0	243521.8	478170	ug/L	478170	ppb	08:29:04
1	Fe 238.204 Radial†	13612.5	14617.8	185800	ug/L	185800	ppb	08:29:24
1	K 766.490 Radial†	29374.1	28560.7	5148.6	ug/L	5148.6	ppb	08:29:04
1	Mg 279.077 IEC†	11185.7	12013.7	494650	ug/L	494650	ppb	08:29:24
1	Na 589.592 Radial†	10174.9	12008.7	5285.4	ug/L	5285.4	ppb	08:29:24
1	Sr 421.552†	47346.5	50850.5	484.67	ug/L	484.67	ppb	08:29:04
1	Sc 361.383	614044.0	614044.0	89.045	%			08:30:22
1	Y 371.029	476817.2	476817.2	88.003	%			08:30:22
1	Ag 328.068†	36120.9	40464.9	275.53	ug/L	275.53	ppb	08:30:22
1	As 188.979†	835.9	961.5	522.67	ug/L	522.67	ppb	08:30:42
1	B 249.677†	18387.6	21232.8	502.72	ug/L	502.72	ppb	08:30:22
1	Ba 233.527†	44288.4	49736.3	487.50	ug/L	487.50	ppb	08:30:22
1	Be 313.107†	541143.1	612241.3	248.37	ug/L	248.37	ppb	08:30:22
1	Cd 226.502†	29776.1	33652.8	473.21	ug/L	473.21	ppb	08:30:42
1	Co 228.616†	16393.4	18469.9	454.92	ug/L	454.92	ppb	08:30:42
1	Cr 267.716†	28171.1	31545.6	485.55	ug/L	485.55	ppb	08:30:22
1	Cu 324.752†	149339.5	162024.3	549.17	ug/L	549.17	ppb	08:30:22
1	Mn 257.610†	331492.3	371829.6	479.24	ug/L	479.24	ppb	08:30:22
1	Mo 202.031†	4360.2	4884.2	489.27	ug/L	489.27	ppb	08:30:42
1	Ni 231.604†	13031.3	14559.8	474.50	ug/L	474.50	ppb	08:30:42
1	P 214.914†	3731.1	3971.6	2413.7	ug/L	2413.7	ppb	08:30:42
1	Pb 220.353†	1933.4	2238.2	470.44	ug/L	470.44	ppb	08:30:42
1	S 181.975 Axial†	1626.3	1786.1	2587.6	ug/L	2587.6	ppb	08:30:42
1	Sb 206.836†	1200.8	1316.8	527.24	ug/L	527.24	ppb	08:30:42
1	Se 196.026†	2363.3	2676.1	2622.0	ug/L	2622.0	ppb	08:30:42
1	Si 251.611†	126961.2	142084.1	5195.8	ug/L	5195.8	ppb	08:30:22
1	Sn 189.927†	1618.1	1813.1	502.40	ug/L	502.40	ppb	08:30:42
1	Ti 334.940†	237234.0	267841.6	509.41	ug/L	509.41	ppb	08:30:22
1	Tl 190.801†	993.5	1153.7	447.15	ug/L	447.15	ppb	08:30:42
1	U 409.014†	10823.7	14561.8	538.69	ug/L	538.69	ppb	08:30:22
1	V 292.402†	50968.3	58955.2	509.23	ug/L	509.23	ppb	08:30:22
1	Zn 213.857†	41552.1	45999.5	494.60	ug/L	494.60	ppb	08:30:22
1	SiO2†	127289.8	142410.6	11231	ug/L	11231	ppb	08:31:39
2	Sc Radial	3581.0	3581.0	93.3	%			08:29:49
2	Y RADIAL	3936.1	3936.1	90.86	%			08:29:49
2	Al 396.153Radial†	467596.5	501335.2	527730	ug/L	527730	ppb	08:29:29
2	Ca 317.933Radial†	232284.4	248980.1	488880	ug/L	488880	ppb	08:29:29
2	Fe 238.204 Radial†	13599.7	14572.1	185220	ug/L	185220	ppb	08:29:49
2	K 766.490 Radial†	30092.4	29261.8	5275.4	ug/L	5275.4	ppb	08:29:29
2	Mg 279.077 IEC†	11159.6	11959.6	492420	ug/L	492420	ppb	08:29:49
2	Na 589.592 Radial†	10163.9	11973.0	5269.8	ug/L	5269.8	ppb	08:29:49
2	Sr 421.552†	48446.6	51918.8	494.85	ug/L	494.85	ppb	08:29:29
2	Sc 361.383	604054.6	604054.6	87.596	%			08:30:48
2	Y 371.029	468752.7	468752.7	86.514	%			08:30:48
2	Ag 328.068†	35380.7	40290.7	274.26	ug/L	274.26	ppb	08:30:48
2	As 188.979†	825.6	965.3	524.44	ug/L	524.44	ppb	08:31:08
2	B 249.677†	18017.9	21152.2	500.79	ug/L	500.79	ppb	08:30:48
2	Ba 233.527†	43681.2	49865.6	488.74	ug/L	488.74	ppb	08:30:48
2	Be 313.107†	533415.1	613469.1	248.87	ug/L	248.87	ppb	08:30:48
2	Cd 226.502†	29304.0	33666.9	473.47	ug/L	473.47	ppb	08:31:08
2	Co 228.616†	16118.3	18460.3	454.69	ug/L	454.69	ppb	08:31:08
2	Cr 267.716†	27719.6	31553.4	485.61	ug/L	485.61	ppb	08:30:48
2	Cu 324.752†	146051.2	161043.8	545.88	ug/L	545.88	ppb	08:30:48
2	Mn 257.610†	327243.9	373136.1	480.96	ug/L	480.96	ppb	08:30:48
2	Mo 202.031†	4291.5	4886.7	489.59	ug/L	489.59	ppb	08:31:08
2	Ni 231.604†	12795.5	14532.6	473.61	ug/L	473.61	ppb	08:31:08

2	P 214.914†	3658.1	3957.6	2409.6 ug/L	2409.6 ppb	08:31:08
2	Pb 220.353†	1911.6	2249.3	476.13 ug/L	476.13 ppb	08:31:08
2	S 181.975 Axial†	1595.0	1780.6	2576.5 ug/L	2576.5 ppb	08:31:08
2	Sb 206.836†	1199.3	1337.4	534.97 ug/L	534.97 ppb	08:31:08
2	Se 196.026†	2288.6	2634.8	2593.9 ug/L	2593.9 ppb	08:31:08
2	Si 251.611†	125024.2	142230.8	5201.1 ug/L	5201.1 ppb	08:30:48
2	Sn 189.927†	1570.7	1789.0	498.77 ug/L	498.77 ppb	08:31:08
2	Ti 334.940†	234221.3	268808.1	512.79 ug/L	512.79 ppb	08:30:48
2	Tl 190.801†	976.1	1152.3	446.65 ug/L	446.65 ppb	08:31:08
2	U 409.014†	10352.5	14224.9	525.78 ug/L	525.78 ppb	08:30:48
2	V 292.402†	50278.2	59113.9	510.65 ug/L	510.65 ppb	08:30:48
2	Zn 213.857†	40949.0	46082.7	495.65 ug/L	495.65 ppb	08:30:48
2	SiO2†	126626.7	144017.7	11358 ug/L	11358 ppb	08:31:44
3	Sc Radial	3591.4	3591.4	93.6 %		08:30:15
3	Y RADIAL	3931.0	3931.0	90.75 %		08:30:15
3	Al 396.153Radial†	450942.4	482074.1	507450 ug/L	507450 ppb	08:29:55
3	Ca 317.933Radial†	225852.3	241379.6	473960 ug/L	473960 ppb	08:29:55
3	Fe 238.204 Radial†	13646.6	14579.7	185320 ug/L	185320 ppb	08:30:15
3	K 766.490 Radial†	29335.7	28359.1	5112.5 ug/L	5112.5 ppb	08:29:55
3	Mg 279.077 IEC†	11230.3	12000.3	494100 ug/L	494100 ppb	08:30:15
3	Na 589.592 Radial†	10176.6	11954.9	5261.8 ug/L	5261.8 ppb	08:30:15
3	Sr 421.552†	46676.5	49875.5	475.34 ug/L	475.34 ppb	08:29:55
3	Sc 361.383	602349.7	602349.7	87.349 %		08:31:14
3	Y 371.029	467099.5	467099.5	86.209 %		08:31:14
3	Ag 328.068†	35264.5	40271.9	274.39 ug/L	274.39 ppb	08:31:14
3	As 188.979†	845.5	990.7	537.01 ug/L	537.01 ppb	08:31:34
3	B 249.677†	17911.6	21088.8	499.15 ug/L	499.15 ppb	08:31:14
3	Ba 233.527†	43733.6	50066.8	490.68 ug/L	490.68 ppb	08:31:14
3	Be 313.107†	532112.8	613701.7	248.96 ug/L	248.96 ppb	08:31:14
3	Cd 226.502†	29869.9	34409.4	484.32 ug/L	484.32 ppb	08:31:34
3	Co 228.616†	16440.1	18880.8	465.13 ug/L	465.13 ppb	08:31:34
3	Cr 267.716†	27731.3	31656.3	487.13 ug/L	487.13 ppb	08:31:14
3	Cu 324.752†	145465.1	160844.8	545.23 ug/L	545.23 ppb	08:31:14
3	Mn 257.610†	326981.1	373892.6	481.88 ug/L	481.88 ppb	08:31:14
3	Mo 202.031†	4359.6	4978.5	498.25 ug/L	498.25 ppb	08:31:34
3	Ni 231.604†	13047.3	14862.3	484.36 ug/L	484.36 ppb	08:31:34
3	P 214.914†	3747.1	4071.3	2477.4 ug/L	2477.4 ppb	08:31:34
3	Pb 220.353†	1953.7	2303.7	479.40 ug/L	479.40 ppb	08:31:34
3	S 181.975 Axial†	1630.4	1826.3	2648.9 ug/L	2648.9 ppb	08:31:34
3	Sb 206.836†	1209.7	1353.2	542.26 ug/L	542.26 ppb	08:31:34
3	Se 196.026†	2361.4	2725.4	2655.8 ug/L	2655.8 ppb	08:31:34
3	Si 251.611†	124540.1	142080.6	5195.5 ug/L	5195.5 ppb	08:31:14
3	Sn 189.927†	1624.1	1855.2	511.32 ug/L	511.32 ppb	08:31:34
3	Ti 334.940†	233265.5	268470.7	510.04 ug/L	510.04 ppb	08:31:14
3	Tl 190.801†	984.4	1164.9	451.46 ug/L	451.46 ppb	08:31:34
3	U 409.014†	10395.1	14307.1	528.93 ug/L	528.93 ppb	08:31:14
3	V 292.402†	50227.3	59218.1	511.72 ug/L	511.72 ppb	08:31:14
3	Zn 213.857†	40862.1	46115.6	495.94 ug/L	495.94 ppb	08:31:14
3	SiO2†	126462.4	144238.7	11375 ug/L	11375 ppb	08:31:50

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	606816.1	87.997	%	0.9161				1.04%
Sc Radial	3581.8	93.3	%	0.24				0.26%
Y 371.029	470889.8	86.909	%	0.9596				1.10%
Y RADIAL	3936.5	90.87	%	0.131				0.14%
Ag 328.068†	40342.5	274.73	ug/L	0.698	274.73	ppb	0.698	0.25%
QC value within limits for Ag 328.068 Recovery = 109.89%								
Al 396.153Radial†	490201.4	516010	ug/L	10502.1	516010	ppb	10502.1	2.04%
QC value within limits for Al 396.153Radial Recovery = 103.20%								
As 188.979†	972.5	528.04	ug/L	7.817	528.04	ppb	7.817	1.48%
QC value within limits for As 188.979 Recovery = 105.61%								
B 249.677†	21157.9	500.89	ug/L	1.789	500.89	ppb	1.789	0.36%
QC value within limits for B 249.677 Recovery = 100.18%								
Ba 233.527†	49889.6	488.97	ug/L	1.606	488.97	ppb	1.606	0.33%
QC value within limits for Ba 233.527 Recovery = 97.79%								
Be 313.107†	613137.3	248.73	ug/L	0.319	248.73	ppb	0.319	0.13%
QC value within limits for Be 313.107 Recovery = 99.49%								
Ca 317.933Radial†	244627.2	480340	ug/L	7695.0	480340	ppb	7695.0	1.60%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.07%
Cd 226.502†            33909.7      477.00 ug/L         6.343      477.00 ppb          6.343   1.33%
   QC value within limits for Cd 226.502  Recovery = 95.40%
Co 228.616†            18603.6      458.25 ug/L         5.959      458.25 ppb          5.959   1.30%
   QC value within limits for Co 228.616  Recovery = 91.65%
Cr 267.716†            31585.1      486.10 ug/L         0.900      486.10 ppb          0.900   0.19%
   QC value within limits for Cr 267.716  Recovery = 97.22%
Cu 324.752†           161304.3      546.76 ug/L         2.115      546.76 ppb          2.115   0.39%
   QC value within limits for Cu 324.752  Recovery = 109.35%
Fe 238.204 Radial†     14589.8      185440 ug/L         311.0      185440 ppb          311.0   0.17%
   QC value within limits for Fe 238.204 Radial  Recovery = 92.72%
K 766.490 Radial†      28727.2      5178.9 ug/L         85.56      5178.9 ppb          85.56   1.65%
   QC value within limits for K 766.490 Radial  Recovery = 103.58%
Mg 279.077 IEC†        11991.2      493720 ug/L        1160.3      493720 ppb         1160.3   0.24%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.74%
Mn 257.610†           372952.8      480.70 ug/L         1.342      480.70 ppb          1.342   0.28%
   QC value within limits for Mn 257.610  Recovery = 96.14%
Mo 202.031†             4916.4      492.37 ug/L         5.092      492.37 ppb          5.092   1.03%
   QC value within limits for Mo 202.031  Recovery = 98.47%
Na 589.592 Radial†     11978.9      5272.3 ug/L         12.04      5272.3 ppb          12.04   0.23%
   QC value within limits for Na 589.592 Radial  Recovery = 105.45%
Ni 231.604†            14651.6      477.49 ug/L         5.964      477.49 ppb          5.964   1.25%
   QC value within limits for Ni 231.604  Recovery = 95.50%
P 214.914†              4000.2      2433.6 ug/L         38.00      2433.6 ppb          38.00   1.56%
   QC value within limits for P 214.914  Recovery = 97.34%
Pb 220.353†             2263.7      475.32 ug/L         4.532      475.32 ppb          4.532   0.95%
   QC value within limits for Pb 220.353  Recovery = 95.06%
S 181.975 Axial†        1797.7      2604.3 ug/L         39.02      2604.3 ppb          39.02   1.50%
   QC value within limits for S 181.975 Axial  Recovery = 104.17%
Sb 206.836†             1335.8      534.82 ug/L         7.515      534.82 ppb          7.515   1.41%
   QC value within limits for Sb 206.836  Recovery = 106.96%
Se 196.026†             2678.8      2623.9 ug/L         31.00      2623.9 ppb          31.00   1.18%
   QC value within limits for Se 196.026  Recovery = 104.96%
Si 251.611†           142131.8      5197.5 ug/L          3.17      5197.5 ppb           3.17   0.06%
   QC value within limits for Si 251.611  Recovery = 103.95%
Sn 189.927†             1819.1      504.16 ug/L         6.459      504.16 ppb          6.459   1.28%
   QC value within limits for Sn 189.927  Recovery = 100.83%
Sr 421.552†            50881.6      484.96 ug/L         9.757      484.96 ppb          9.757   2.01%
   QC value within limits for Sr 421.552  Recovery = 96.99%
Ti 334.940†           268373.4      510.75 ug/L         1.798      510.75 ppb          1.798   0.35%
   QC value within limits for Ti 334.940  Recovery = 102.15%
Tl 190.801†             1157.0      448.42 ug/L         2.647      448.42 ppb          2.647   0.59%
   QC value within limits for Tl 190.801  Recovery = 89.68%
U 409.014†             14364.6      531.13 ug/L         6.732      531.13 ppb          6.732   1.27%
   QC value within limits for U 409.014  Recovery = 106.23%
V 292.402†             59095.8      510.53 ug/L         1.247      510.53 ppb          1.247   0.24%
   QC value within limits for V 292.402  Recovery = 102.11%
Zn 213.857†            46065.9      495.40 ug/L         0.706      495.40 ppb          0.706   0.14%
   QC value within limits for Zn 213.857  Recovery = 99.08%
SiO2†                 143555.7       11322 ug/L          78.7       11322 ppb           78.7   0.70%
   QC value within limits for SiO2  Recovery = 105.86%
All analyte(s) passed QC.
```

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

Autosampler Location: 15
Date Collected: 4/1/2010 08:33:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3558.0	3558.0	92.7	%			08:36:12
1	Y RADIAL	3900.1	3900.1	90.03	%			08:36:12
1	Al 396.153Radial†	448460.7	483919.2	509420	ug/L	509420	ppb	08:35:52
1	Ca 317.933Radial†	227078.5	244967.5	481000	ug/L	481000	ppb	08:35:52
1	Fe 238.204 Radial†	30936.0	33369.5	424110	ug/L	424110	ppb	08:36:12
1	K 766.490 Radial†	2952.4	189.4	-329.96	ug/L	-329.96	ppb	08:35:52
1	Mg 279.077 IEC†	10792.7	11640.8	479040	ug/L	479040	ppb	08:36:12
1	Na 589.592 Radial†	1102189.4	1190187.4	523840	ug/L	523840	ppb	08:35:52
1	Sr 421.552†	1195.3	1275.6	8.6565	ug/L	8.6565	ppb	08:36:12
1	Sc 361.383	600824.1	600824.1	87.128	%			08:37:10
1	Y 371.029	470191.8	470191.8	86.780	%			08:37:10
1	Ag 328.068†	-19658.5	-22662.7	-12.541	ug/L	-12.541	ppb	08:37:10
1	As 188.979†	-171.6	-174.2	13.071	ug/L	13.071	ppb	08:37:30
1	B 249.677†	899.3	1615.2	-28.258	ug/L	-28.258	ppb	08:37:10
1	Ba 233.527†	-1379.7	-1584.4	-2.3434	ug/L	-2.3434	ppb	08:37:30
1	Be 313.107†	-9296.4	-6146.6	-2.5212	ug/L	-2.5212	ppb	08:37:10
1	Cd 226.502†	2410.6	2980.2	2.7288	ug/L	2.7288	ppb	08:37:30
1	Co 228.616†	218.6	310.6	1.5030	ug/L	1.5030	ppb	08:37:30
1	Cr 267.716†	-1402.3	-1700.8	13.853	ug/L	13.853	ppb	08:37:30
1	Cu 324.752†	545.5	-5061.9	-2.8355	ug/L	-2.8355	ppb	08:37:10
1	Mn 257.610†	-19158.3	-22433.6	-6.7441	ug/L	-6.7441	ppb	08:37:10
1	Mo 202.031†	-398.0	-469.3	-6.4345	ug/L	-6.4345	ppb	08:37:30
1	Ni 231.604†	233.8	193.7	6.3116	ug/L	6.3116	ppb	08:37:30
1	P 214.914†	495.5	350.2	11.810	ug/L	11.810	ppb	08:37:30
1	Pb 220.353†	-540.5	-553.3	6.3973	ug/L	6.3973	ppb	08:37:30
1	S 181.975 Axial†	59.1	27.6	-53.991	ug/L	-53.991	ppb	08:37:30
1	Sb 206.836†	68.9	47.3	-1.7245	ug/L	-1.7245	ppb	08:37:30
1	Se 196.026†	-1732.8	-1966.8	-190.77	ug/L	-190.77	ppb	08:37:30
1	Si 251.611†	-353.9	-902.8	-32.496	ug/L	-32.496	ppb	08:37:30
1	Sn 189.927†	-338.9	-393.1	-2.4164	ug/L	-2.4164	ppb	08:37:30
1	Ti 334.940†	-9434.3	-9406.6	1.6067	ug/L	1.6067	ppb	08:37:10
1	Tl 190.801†	-85.6	-60.4	-23.587	ug/L	-23.587	ppb	08:37:30
1	U 409.014†	342106.5	395054.6	15169	ug/L	15169	ppb	08:37:10
1	V 292.402†	1461.7	3394.0	5.9247	ug/L	5.9247	ppb	08:37:30
1	Zn 213.857†	4431.1	4421.1	-12.916	ug/L	-12.916	ppb	08:37:30
1	SiO2†	-408.0	-1007.4	-78.312	ug/L	-78.312	ppb	08:38:27
2	Sc Radial	3528.3	3528.3	91.9	%			08:36:38
2	Y RADIAL	3889.4	3889.4	89.79	%			08:36:38
2	Al 396.153Radial†	434157.0	472433.6	497330	ug/L	497330	ppb	08:36:18
2	Ca 317.933Radial†	220951.3	240365.4	471970	ug/L	471970	ppb	08:36:18
2	Fe 238.204 Radial†	31012.4	33733.7	428740	ug/L	428740	ppb	08:36:38
2	K 766.490 Radial†	3085.0	360.5	-290.36	ug/L	-290.36	ppb	08:36:18
2	Mg 279.077 IEC†	10835.9	11785.9	485010	ug/L	485010	ppb	08:36:38
2	Na 589.592 Radial†	1067454.6	1162415.7	511620	ug/L	511620	ppb	08:36:18
2	Sr 421.552†	1213.4	1306.2	9.0177	ug/L	9.0177	ppb	08:36:38
2	Sc 361.383	593863.9	593863.9	86.119	%			08:37:36
2	Y 371.029	465206.1	465206.1	85.860	%			08:37:36
2	Ag 328.068†	-19442.5	-22676.3	-11.087	ug/L	-11.087	ppb	08:37:36
2	As 188.979†	-170.1	-174.7	13.867	ug/L	13.867	ppb	08:37:56
2	B 249.677†	918.8	1650.0	-28.136	ug/L	-28.136	ppb	08:37:36
2	Ba 233.527†	-1401.9	-1628.7	-2.6331	ug/L	-2.6331	ppb	08:37:56
2	Be 313.107†	-9256.8	-6225.7	-2.5556	ug/L	-2.5556	ppb	08:37:36
2	Cd 226.502†	2378.3	2975.1	2.1826	ug/L	2.1826	ppb	08:37:56
2	Co 228.616†	220.0	315.1	1.5585	ug/L	1.5585	ppb	08:37:56
2	Cr 267.716†	-1375.7	-1688.8	14.509	ug/L	14.509	ppb	08:37:56
2	Cu 324.752†	543.2	-5057.2	-2.5887	ug/L	-2.5887	ppb	08:37:36
2	Mn 257.610†	-19090.6	-22612.8	-6.7630	ug/L	-6.7630	ppb	08:37:36
2	Mo 202.031†	-361.9	-432.7	-2.6671	ug/L	-2.6671	ppb	08:37:56
2	Ni 231.604†	289.7	261.8	8.5313	ug/L	8.5313	ppb	08:37:56

2	P 214.914†	507.7	371.0	18.250	ug/L	18.250 ppb	08:37:56
2	Pb 220.353†	-538.6	-558.4	1.9958	ug/L	1.9958 ppb	08:37:56
2	S 181.975 Axial†	49.2	16.9	-67.778	ug/L	-67.778 ppb	08:37:56
2	Sb 206.836†	77.2	57.9	2.7637	ug/L	2.7637 ppb	08:37:56
2	Se 196.026†	-1714.4	-1968.6	-183.15	ug/L	-183.15 ppb	08:37:56
2	Si 251.611†	-351.2	-904.5	-32.600	ug/L	-32.600 ppb	08:37:56
2	Sn 189.927†	-361.4	-423.8	-11.022	ug/L	-11.022 ppb	08:37:56
2	Ti 334.940†	-9847.4	-10013.2	-1.2056	ug/L	-1.2056 ppb	08:37:36
2	Tl 190.801†	-85.1	-60.9	-23.799	ug/L	-23.799 ppb	08:37:56
2	U 409.014†	338702.2	395703.4	15193	ug/L	15193 ppb	08:37:36
2	V 292.402†	1338.1	3270.2	4.3726	ug/L	4.3726 ppb	08:37:56
2	Zn 213.857†	4410.5	4456.8	-13.214	ug/L	-13.214 ppb	08:37:56
2	SiO2†	-330.1	-922.5	-71.702	ug/L	-71.702 ppb	08:38:32
3	Sc Radial	3543.6	3543.6	92.3	%		08:37:03
3	Y RADIAL	3894.1	3894.1	89.89	%		08:37:03
3	Al 396.153Radial†	450239.9	487820.5	513530	ug/L	513530 ppb	08:36:43
3	Ca 317.933Radial†	226316.7	245141.9	481350	ug/L	481350 ppb	08:36:43
3	Fe 238.204 Radial†	30974.0	33546.8	426370	ug/L	426370 ppb	08:37:03
3	K 766.490 Radial†	3054.2	312.6	-308.09	ug/L	-308.09 ppb	08:36:43
3	Mg 279.077 IEC†	10822.4	11720.4	482310	ug/L	482310 ppb	08:37:03
3	Na 589.592 Radial†	1102683.6	1195574.3	526210	ug/L	526210 ppb	08:36:43
3	Sr 421.552†	1194.2	1279.8	8.6938	ug/L	8.6938 ppb	08:37:03
3	Sc 361.383	594304.4	594304.4	86.183	%		08:38:02
3	Y 371.029	466650.0	466650.0	86.126	%		08:38:02
3	Ag 328.068†	-19425.3	-22639.6	-11.706	ug/L	-11.706 ppb	08:38:02
3	As 188.979†	-177.5	-183.1	9.1401	ug/L	9.1401 ppb	08:38:22
3	B 249.677†	805.0	1517.0	-31.093	ug/L	-31.093 ppb	08:38:02
3	Ba 233.527†	-1410.4	-1637.3	-2.7879	ug/L	-2.7879 ppb	08:38:22
3	Be 313.107†	-9219.6	-6174.5	-2.5362	ug/L	-2.5362 ppb	08:38:02
3	Cd 226.502†	2412.9	3013.2	2.9747	ug/L	2.9747 ppb	08:38:22
3	Co 228.616†	203.8	296.2	1.1174	ug/L	1.1174 ppb	08:38:22
3	Cr 267.716†	-1428.2	-1748.4	13.397	ug/L	13.397 ppb	08:38:22
3	Cu 324.752†	463.3	-5150.4	-2.9987	ug/L	-2.9987 ppb	08:38:02
3	Mn 257.610†	-19154.3	-22670.3	-6.9618	ug/L	-6.9618 ppb	08:38:02
3	Mo 202.031†	-391.4	-466.7	-6.0017	ug/L	-6.0017 ppb	08:38:22
3	Ni 231.604†	236.5	199.8	6.5092	ug/L	6.5092 ppb	08:38:22
3	P 214.914†	519.9	384.8	33.128	ug/L	33.128 ppb	08:38:22
3	Pb 220.353†	-585.0	-611.8	-1.9749	ug/L	-1.9749 ppb	08:38:22
3	S 181.975 Axial†	52.1	20.2	-65.840	ug/L	-65.840 ppb	08:38:22
3	Sb 206.836†	55.3	32.4	-7.8408	ug/L	-7.8408 ppb	08:38:22
3	Se 196.026†	-1766.1	-2027.1	-228.42	ug/L	-228.42 ppb	08:38:22
3	Si 251.611†	-427.3	-992.4	-35.780	ug/L	-35.780 ppb	08:38:22
3	Sn 189.927†	-347.0	-406.7	-5.4611	ug/L	-5.4611 ppb	08:38:22
3	Ti 334.940†	-10109.9	-10309.3	-0.2436	ug/L	-0.2436 ppb	08:38:02
3	Tl 190.801†	-100.0	-78.1	-30.423	ug/L	-30.423 ppb	08:38:22
3	U 409.014†	337891.6	394471.4	15146	ug/L	15146 ppb	08:38:02
3	V 292.402†	1380.2	3317.9	4.9510	ug/L	4.9510 ppb	08:38:22
3	Zn 213.857†	4484.2	4538.5	-11.911	ug/L	-11.911 ppb	08:38:22
3	SiO2†	-375.3	-974.6	-75.732	ug/L	-75.732 ppb	08:38:37

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	596330.8	86.476	%	0.5652				0.65%
Sc Radial	3543.3	92.3	%	0.39				0.42%
Y 371.029	467349.3	86.255	%	0.4735				0.55%
Y RADIAL	3894.5	89.90	%	0.123				0.14%
Ag 328.068†	-22659.5	-11.778	ug/L	0.7300	-11.778	ppb	0.7300	6.20%
Al 396.153Radial†	481391.1	506760	ug/L	8420.4	506760	ppb	8420.4	1.66%
QC value within limits for Al 396.153Radial Recovery = 101.35%								
As 188.979†	-177.3	12.026	ug/L	2.5308	12.026	ppb	2.5308	21.04%
B 249.677†	1594.1	-29.162	ug/L	1.6734	-29.162	ppb	1.6734	5.74%
Ba 233.527†	-1616.8	-2.5881	ug/L	0.22566	-2.5881	ppb	0.22566	8.72%
Be 313.107†	-6182.3	-2.5377	ug/L	0.01726	-2.5377	ppb	0.01726	0.68%
Ca 317.933Radial†	243491.6	478110	ug/L	5318.8	478110	ppb	5318.8	1.11%
QC value within limits for Ca 317.933Radial Recovery = 95.62%								
Cd 226.502†	2989.5	2.6287	ug/L	0.40543	2.6287	ppb	0.40543	15.42%
Co 228.616†	307.3	1.3930	ug/L	0.24022	1.3930	ppb	0.24022	17.25%
Cr 267.716†	-1712.7	13.920	ug/L	0.5592	13.920	ppb	0.5592	4.02%
Cu 324.752†	-5089.9	-2.8076	ug/L	0.20640	-2.8076	ppb	0.20640	7.35%

Fe 238.204 Radial†	33550.0	426410	ug/L	2315.1	426410	ppb	2315.1	0.54%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 85.28%								
K 766.490 Radial†	287.5	-309.47	ug/L	19.839	-309.47	ppb	19.839	6.41%
Mg 279.077 IEC†	11715.7	482120	ug/L	2990.6	482120	ppb	2990.6	0.62%
QC value within limits for Mg 279.077 IEC Recovery = 96.42%								
Mn 257.610†	-22572.2	-6.8230	ug/L	0.12061	-6.8230	ppb	0.12061	1.77%
Mo 202.031†	-456.2	-5.0345	ug/L	2.06156	-5.0345	ppb	2.06156	40.95%
Na 589.592 Radial†	1182725.8	520560	ug/L	7831.8	520560	ppb	7831.8	1.50%
QC value within limits for Na 589.592 Radial Recovery = 104.11%								
Ni 231.604†	218.4	7.1174	ug/L	1.22848	7.1174	ppb	1.22848	17.26%
P 214.914†	368.7	21.062	ug/L	10.9339	21.062	ppb	10.9339	51.91%
Pb 220.353†	-574.5	2.1394	ug/L	4.18795	2.1394	ppb	4.18795	195.75%
S 181.975 Axial†	21.6	-62.536	ug/L	7.4640	-62.536	ppb	7.4640	11.94%
Sb 206.836†	45.9	-2.2672	ug/L	5.32305	-2.2672	ppb	5.32305	234.79%
Se 196.026†	-1987.5	-200.78	ug/L	24.240	-200.78	ppb	24.240	12.07%
Si 251.611†	-933.2	-33.625	ug/L	1.8664	-33.625	ppb	1.8664	5.55%
Sn 189.927†	-407.9	-6.2997	ug/L	4.36350	-6.2997	ppb	4.36350	69.26%
Sr 421.552†	1287.2	8.7893	ug/L	0.19866	8.7893	ppb	0.19866	2.26%
Ti 334.940†	-9909.7	0.0525	ug/L	1.42932	0.0525	ppb	1.42932	>999.9%
Tl 190.801†	-66.4	-25.936	ug/L	3.8868	-25.936	ppb	3.8868	14.99%
U 409.014†	395076.5	15170	ug/L	23.6	15170	ppb	23.6	0.16%
QC value within limits for U 409.014 Recovery = 101.13%								
V 292.402†	3327.4	5.0828	ug/L	0.78439	5.0828	ppb	0.78439	15.43%
Zn 213.857†	4472.1	-12.680	ug/L	0.6827	-12.680	ppb	0.6827	5.38%
SiO2†	-968.2	-75.249	ug/L	3.3317	-75.249	ppb	3.3317	4.43%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 4/1/2010 08:40:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3717.0	3717.0	96.8	%			08:43:06
1	Y RADIAL	4154.3	4154.3	95.90	%			08:42:46
1	Al 396.153Radial†	375.1	479.7	48.612	ug/L	48.612	ppb	08:42:46
1	Ca 317.933Radial†	28.0	10.3	20.208	ug/L	20.208	ppb	08:43:06
1	Fe 238.204 Radial†	-13.7	-20.4	21.898	ug/L	21.898	ppb	08:43:06
1	K 766.490 Radial†	1546560.6	1594182.6	296450	ug/L	296450	ppb	08:42:40
1	Mg 279.077 IEC†	-4.4	-7.6	-212.59	ug/L	-212.59	ppb	08:43:06
1	Na 589.592 Radial†	-806.0	245.4	108.00	ug/L	108.00	ppb	08:42:46
1	Sr 421.552†	989028.5	1021384.9	9806.9	ug/L	9806.9	ppb	08:42:40
1	Sc 361.383	663211.3	663211.3	96.175	%			08:44:23
1	Y 371.029	517721.9	517721.9	95.552	%			08:44:23
1	Ag 328.068†	-5919.1	-6254.4	5.4302	ug/L	5.4302	ppb	08:44:28
1	As 188.979†	19042.5	19822.6	9875.8	ug/L	9875.8	ppb	08:44:28
1	B 249.677†	186999.2	195019.3	4879.8	ug/L	4879.8	ppb	08:44:23
1	Ba 233.527†	1384850.1	1439925.7	13939	ug/L	13939	ppb	08:44:23
1	Be 313.107†	6604342.4	6871524.7	2797.2	ug/L	2797.2	ppb	08:44:16
1	Cd 226.502†	623439.2	648447.3	9486.3	ug/L	9486.3	ppb	08:44:23
1	Co 228.616†	364234.4	378779.9	9380.4	ug/L	9380.4	ppb	08:44:23
1	Cr 267.716†	1538770.2	1599876.8	23615	ug/L	23615	ppb	08:44:23
1	Cu 324.752†	5551301.0	5766391.9	19206	ug/L	19206	ppb	08:44:16
1	Mn 257.610†	6804088.3	7074246.3	9153.6	ug/L	9153.6	ppb	08:44:16
1	Mo 202.031†	94228.1	97963.2	9410.1	ug/L	9410.1	ppb	08:44:28
1	Ni 231.604†	288200.7	299588.0	9763.5	ug/L	9763.5	ppb	08:44:23
1	P 214.914†	25843.0	26652.3	13316	ug/L	13316	ppb	08:44:28
1	Pb 220.353†	140452.0	146104.9	22994	ug/L	22994	ppb	08:44:28
1	S 181.975 Axial†	31846.1	33072.4	49692	ug/L	49692	ppb	08:44:28
1	Sb 206.836†	23836.6	24752.9	10253	ug/L	10253	ppb	08:44:28
1	Se 196.026†	12665.7	13191.5	9812.7	ug/L	9812.7	ppb	08:44:28
1	Si 251.611†	1243664.0	1292628.7	47206	ug/L	47206	ppb	08:44:23
1	Sn 189.927†	41544.0	43192.1	9922.1	ug/L	9922.1	ppb	08:44:28
1	Ti 334.940†	5132871.7	5338430.8	9680.2	ug/L	9680.2	ppb	08:44:16
1	Tl 190.801†	23479.8	24451.6	9470.6	ug/L	9470.6	ppb	08:44:28
1	U 409.014†	-1464.2	884.1	-18.733	ug/L	-18.733	ppb	08:44:23
1	V 292.402†	1077350.8	1121914.1	10004	ug/L	10004	ppb	08:44:23
1	Zn 213.857†	1147728.7	1192710.0	13554	ug/L	13554	ppb	08:44:23
1	SiO2†	1270951.6	1320959.0	104040	ug/L	104040	ppb	08:45:14
2	Sc Radial	3730.3	3730.3	97.2	%			08:43:36
2	Y RADIAL	4162.1	4162.1	96.08	%			08:43:16
2	Al 396.153Radial†	337.7	439.8	2.7015	ug/L	2.7015	ppb	08:43:16
2	Ca 317.933Radial†	25.6	7.7	15.171	ug/L	15.171	ppb	08:43:36
2	Fe 238.204 Radial†	-13.1	-19.6	30.871	ug/L	30.871	ppb	08:43:36
2	K 766.490 Radial†	1493652.5	1534030.9	285270	ug/L	285270	ppb	08:43:11
2	Mg 279.077 IEC†	-0.7	-3.8	-55.873	ug/L	-55.873	ppb	08:43:36
2	Na 589.592 Radial†	-839.1	214.3	94.318	ug/L	94.318	ppb	08:43:16
2	Sr 421.552†	954202.0	981897.3	9427.7	ug/L	9427.7	ppb	08:43:11
2	Sc 361.383	676652.0	676652.0	98.124	%			08:44:43
2	Y 371.029	528534.6	528534.6	97.548	%			08:44:43
2	Ag 328.068†	-6119.6	-6336.5	4.9802	ug/L	4.9802	ppb	08:44:48
2	As 188.979†	19789.9	20191.0	10057	ug/L	10057	ppb	08:44:48
2	B 249.677†	191944.5	196197.0	4909.5	ug/L	4909.5	ppb	08:44:43
2	Ba 233.527†	1408224.1	1435144.6	13892	ug/L	13892	ppb	08:44:43
2	Be 313.107†	6669866.3	6801898.7	2768.7	ug/L	2768.7	ppb	08:44:36
2	Cd 226.502†	635766.0	648133.6	9481.7	ug/L	9481.7	ppb	08:44:43
2	Co 228.616†	371238.0	378394.7	9371.3	ug/L	9371.3	ppb	08:44:43
2	Cr 267.716†	1567651.9	1597529.7	23580	ug/L	23580	ppb	08:44:43
2	Cu 324.752†	5577250.4	5678183.8	18912	ug/L	18912	ppb	08:44:36
2	Mn 257.610†	6833233.3	6963420.6	9010.2	ug/L	9010.2	ppb	08:44:36
2	Mo 202.031†	96956.5	98797.6	9490.2	ug/L	9490.2	ppb	08:44:48
2	Ni 231.604†	294138.7	299687.2	9766.7	ug/L	9766.7	ppb	08:44:43

2	P 214.914†	26742.8	27035.5	13620	ug/L	13620 ppb	08:44:48
2	Pb 220.353†	144557.0	147387.5	23196	ug/L	23196 ppb	08:44:48
2	S 181.975 Axial†	33312.5	33909.1	50949	ug/L	50949 ppb	08:44:48
2	Sb 206.836†	24732.2	25173.3	10425	ug/L	10425 ppb	08:44:48
2	Se 196.026†	13170.0	13443.8	10000	ug/L	10000 ppb	08:44:48
2	Si 251.611†	1271019.4	1294821.1	47285	ug/L	47285 ppb	08:44:43
2	Sn 189.927†	42716.8	43529.3	9999.5	ug/L	9999.5 ppb	08:44:48
2	Ti 334.940†	5155846.1	5255832.9	9530.3	ug/L	9530.3 ppb	08:44:36
2	Tl 190.801†	24212.4	24713.2	9569.4	ug/L	9569.4 ppb	08:44:48
2	U 409.014†	-1613.7	761.9	-23.361	ug/L	-23.361 ppb	08:44:43
2	V 292.402†	1099060.7	1121788.1	10005	ug/L	10005 ppb	08:44:43
2	Zn 213.857†	1169681.4	1191377.8	13540	ug/L	13540 ppb	08:44:43
2	SiO2†	1259385.6	1282922.4	101040	ug/L	101040 ppb	08:45:20
3	Sc Radial	3709.3	3709.3	96.6	%		08:44:07
3	Y RADIAL	4143.8	4143.8	95.66	%		08:43:46
3	Al 396.153Radial†	361.3	466.2	29.354	ug/L	29.354 ppb	08:43:46
3	Ca 317.933Radial†	31.7	14.1	27.747	ug/L	27.747 ppb	08:44:07
3	Fe 238.204 Radial†	-14.3	-21.0	14.029	ug/L	14.029 ppb	08:44:07
3	K 766.490 Radial†	1543614.1	1594442.7	296500	ug/L	296500 ppb	08:43:41
3	Mg 279.077 IEC†	-0.9	-3.9	-61.806	ug/L	-61.806 ppb	08:44:07
3	Na 589.592 Radial†	-834.5	214.2	94.293	ug/L	94.293 ppb	08:43:46
3	Sr 421.552†	988242.5	1022687.8	9819.4	ug/L	9819.4 ppb	08:43:41
3	Sc 361.383	674380.2	674380.2	97.795	%		08:45:03
3	Y 371.029	526094.5	526094.5	97.097	%		08:45:03
3	Ag 328.068†	-6290.7	-6532.4	3.8646	ug/L	3.8646 ppb	08:45:08
3	As 188.979†	19762.4	20230.9	10078	ug/L	10078 ppb	08:45:08
3	B 249.677†	191164.8	196058.6	4906.0	ug/L	4906.0 ppb	08:45:03
3	Ba 233.527†	1405274.2	1436962.9	13910	ug/L	13910 ppb	08:45:03
3	Be 313.107†	6754031.9	6910861.1	2813.2	ug/L	2813.2 ppb	08:44:56
3	Cd 226.502†	633161.4	647652.9	9474.6	ug/L	9474.6 ppb	08:45:03
3	Co 228.616†	370255.3	378664.4	9377.7	ug/L	9377.7 ppb	08:45:03
3	Cr 267.716†	1561380.4	1596498.8	23565	ug/L	23565 ppb	08:45:03
3	Cu 324.752†	5682061.0	5804505.6	19333	ug/L	19333 ppb	08:44:56
3	Mn 257.610†	6927319.4	7083088.0	9165.0	ug/L	9165.0 ppb	08:44:56
3	Mo 202.031†	96871.3	99043.4	9513.8	ug/L	9513.8 ppb	08:45:08
3	Ni 231.604†	292884.7	299414.7	9757.8	ug/L	9757.8 ppb	08:45:03
3	P 214.914†	26665.5	27048.3	13544	ug/L	13544 ppb	08:45:08
3	Pb 220.353†	143797.1	147106.7	23152	ug/L	23152 ppb	08:45:08
3	S 181.975 Axial†	33224.4	33933.4	50986	ug/L	50986 ppb	08:45:08
3	Sb 206.836†	24765.9	25292.7	10472	ug/L	10472 ppb	08:45:08
3	Se 196.026†	13253.3	13574.2	10097	ug/L	10097 ppb	08:45:08
3	Si 251.611†	1267757.3	1295849.0	47322	ug/L	47322 ppb	08:45:03
3	Sn 189.927†	42546.1	43501.4	9993.1	ug/L	9993.1 ppb	08:45:08
3	Ti 334.940†	5238771.2	5358328.9	9716.4	ug/L	9716.4 ppb	08:44:56
3	Tl 190.801†	24162.5	24745.3	9584.0	ug/L	9584.0 ppb	08:45:08
3	U 409.014†	-1433.7	940.4	-16.448	ug/L	-16.448 ppb	08:45:03
3	V 292.402†	1094682.8	1121084.7	9998.5	ug/L	9998.5 ppb	08:45:03
3	Zn 213.857†	1166105.1	1191736.6	13543	ug/L	13543 ppb	08:45:03
3	SiO2†	1253503.7	1281231.5	100900	ug/L	100900 ppb	08:45:26

Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	671414.5	97.365	%	1.0433				1.07%
Sc Radial	3718.9	96.9	%	0.28				0.29%
Y 371.029	524117.0	96.732	%	1.0467				1.08%
Y RADIAL	4153.4	95.88	%	0.211				0.22%
Ag 328.068†	-6374.5	4.7583	ug/L	0.80604	4.7583	ppb	0.80604	16.94%
Al 396.153Radial†	461.9	26.889	ug/L	23.0545	26.889	ppb	23.0545	85.74%
As 188.979†	20081.5	10004	ug/L	111.1	10004	ppb	111.1	1.11%
QC value within limits for As 188.979 Recovery = 100.04%								
B 249.677†	195758.3	4898.4	ug/L	16.21	4898.4	ppb	16.21	0.33%
QC value within limits for B 249.677 Recovery = 97.97%								
Ba 233.527†	1437344.4	13914	ug/L	23.3	13914	ppb	23.3	0.17%
QC value within limits for Ba 233.527 Recovery = 92.76%								
Be 313.107†	6861428.2	2793.0	ug/L	22.51	2793.0	ppb	22.51	0.81%
QC value within limits for Be 313.107 Recovery = 93.10%								
Ca 317.933Radial†	10.7	21.042	ug/L	6.3292	21.042	ppb	6.3292	30.08%
Cd 226.502†	648077.9	9480.9	ug/L	5.85	9480.9	ppb	5.85	0.06%
QC value within limits for Cd 226.502 Recovery = 94.81%								

Co 228.616†	378613.0	9376.5 ug/L	4.65	9376.5 ppb	4.65	0.05%
QC value within limits for Co 228.616 Recovery = 93.76%						
Cr 267.716†	1597968.4	23587 ug/L	25.5	23587 ppb	25.5	0.11%
QC value within limits for Cr 267.716 Recovery = 94.35%						
Cu 324.752†	5749693.7	19150 ug/L	215.8	19150 ppb	215.8	1.13%
QC value within limits for Cu 324.752 Recovery = 95.75%						
Fe 238.204 Radial†	-20.3	22.266 ug/L	8.4271	22.266 ppb	8.4271	37.85%
K 766.490 Radial†	1574218.7	292740 ug/L	6472.4	292740 ppb	6472.4	2.21%
QC value within limits for K 766.490 Radial Recovery = 97.58%						
Mg 279.077 IEC†	-5.1	-110.09 ug/L	88.819	-110.09 ppb	88.819	80.68%
Mn 257.610†	7040251.6	9109.6 ug/L	86.29	9109.6 ppb	86.29	0.95%
QC value within limits for Mn 257.610 Recovery = 91.10%						
Mo 202.031†	98601.4	9471.4 ug/L	54.39	9471.4 ppb	54.39	0.57%
QC value within limits for Mo 202.031 Recovery = 94.71%						
Na 589.592 Radial†	224.6	98.871 ug/L	7.9087	98.871 ppb	7.9087	8.00%
Ni 231.604†	299563.3	9762.7 ug/L	4.50	9762.7 ppb	4.50	0.05%
QC value within limits for Ni 231.604 Recovery = 97.63%						
P 214.914†	26912.0	13493 ug/L	158.3	13493 ppb	158.3	1.17%
QC value less than the lower limit for P 214.914 Recovery = 89.96%						
Pb 220.353†	146866.4	23114 ug/L	106.2	23114 ppb	106.2	0.46%
QC value within limits for Pb 220.353 Recovery = 92.46%						
S 181.975 Axial†	33638.3	50542 ug/L	736.6	50542 ppb	736.6	1.46%
QC value within limits for S 181.975 Axial Recovery = 101.08%						
Sb 206.836†	25072.9	10383 ug/L	115.2	10383 ppb	115.2	1.11%
QC value within limits for Sb 206.836 Recovery = 103.83%						
Se 196.026†	13403.2	9969.8 ug/L	144.45	9969.8 ppb	144.45	1.45%
QC value within limits for Se 196.026 Recovery = 99.70%						
Si 251.611†	1294433.0	47271 ug/L	59.6	47271 ppb	59.6	0.13%
QC value within limits for Si 251.611 Recovery = 94.54%						
Sn 189.927†	43407.6	9971.6 ug/L	42.98	9971.6 ppb	42.98	0.43%
QC value within limits for Sn 189.927 Recovery = 99.72%						
Sr 421.552†	1008656.6	9684.7 ug/L	222.60	9684.7 ppb	222.60	2.30%
QC value within limits for Sr 421.552 Recovery = 96.85%						
Ti 334.940†	5317530.9	9642.3 ug/L	98.64	9642.3 ppb	98.64	1.02%
QC value within limits for Ti 334.940 Recovery = 96.42%						
Tl 190.801†	24636.7	9541.3 ug/L	61.68	9541.3 ppb	61.68	0.65%
QC value within limits for Tl 190.801 Recovery = 95.41%						
U 409.014†	862.1	-19.514 ug/L	3.5219	-19.514 ppb	3.5219	18.05%
V 292.402†	1121595.6	10002 ug/L	3.4	10002 ppb	3.4	0.03%
QC value within limits for V 292.402 Recovery = 100.02%						
Zn 213.857†	1191941.5	13546 ug/L	7.8	13546 ppb	7.8	0.06%
QC value within limits for Zn 213.857 Recovery = 90.30%						
SiO2†	1295037.6	101990 ug/L	1775.2	101990 ppb	1775.2	1.74%
QC value within limits for SiO2 Recovery = 95.32%						

QC Failed. Continue with analysis.

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 4/1/2010 08:47:36
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	3792.7	3792.7	98.8	%			08:49:49
1	Y RADIAL	4251.7	4251.7	98.15	%			08:49:29
1	Al 396.153Radial†	4652.3	4800.9	5029.9	ug/L	5029.9	ppb	08:49:29
1	Ca 317.933Radial†	2609.5	2622.4	5149.3	ug/L	5149.3	ppb	08:49:49
1	Fe 238.204 Radial†	403.0	401.6	5119.8	ug/L	5119.8	ppb	08:49:49
1	K 766.490 Radial†	30575.6	27950.4	5191.4	ug/L	5191.4	ppb	08:49:29
1	Mg 279.077 IEC†	128.0	126.5	5211.7	ug/L	5211.7	ppb	08:49:49
1	Na 589.592 Radial†	22104.0	23449.8	10321	ug/L	10321	ppb	08:49:29
1	Sr 421.552†	51179.8	51786.3	497.19	ug/L	497.19	ppb	08:49:29
1	Sc 361.383	680861.9	680861.9	98.735	%			08:50:46
1	Y 371.029	529510.3	529510.3	97.728	%			08:50:46
1	Ag 328.068†	87706.2	88730.3	491.94	ug/L	491.94	ppb	08:50:51
1	As 188.979†	969.1	1004.3	501.49	ug/L	501.49	ppb	08:51:11
1	B 249.677†	19604.7	20438.9	511.96	ug/L	511.96	ppb	08:50:51
1	Ba 233.527†	50238.0	50881.0	493.00	ug/L	493.00	ppb	08:50:51
1	Be 313.107†	1201915.3	1221842.0	494.58	ug/L	494.58	ppb	08:50:46
1	Cd 226.502†	32942.4	33578.0	490.78	ug/L	490.78	ppb	08:50:51
1	Co 228.616†	19989.7	20305.5	503.04	ug/L	503.04	ppb	08:50:51
1	Cr 267.716†	32884.6	33214.7	491.01	ug/L	491.01	ppb	08:50:51
1	Cu 324.752†	148933.7	145154.4	483.47	ug/L	483.47	ppb	08:50:51
1	Mn 257.610†	378611.4	383018.6	495.89	ug/L	495.89	ppb	08:50:46
1	Mo 202.031†	5083.8	5136.4	493.85	ug/L	493.85	ppb	08:51:11
1	Ni 231.604†	15146.6	15266.0	497.50	ug/L	497.50	ppb	08:50:51
1	P 214.914†	3963.5	3795.8	2332.2	ug/L	2332.2	ppb	08:51:11
1	Pb 220.353†	3005.7	3111.2	491.18	ug/L	491.18	ppb	08:51:11
1	S 181.975 Axial†	680.9	649.4	974.80	ug/L	974.80	ppb	08:51:11
1	Sb 206.836†	1242.6	1226.7	508.59	ug/L	508.59	ppb	08:51:11
1	Se 196.026†	630.4	660.6	506.44	ug/L	506.44	ppb	08:51:11
1	Si 251.611†	66808.2	67167.7	2452.9	ug/L	2452.9	ppb	08:50:51
1	Sn 189.927†	2148.5	2171.9	499.87	ug/L	499.87	ppb	08:51:11
1	Ti 334.940†	265329.3	270151.2	490.18	ug/L	490.18	ppb	08:50:51
1	Tl 190.801†	1241.1	1295.0	501.48	ug/L	501.48	ppb	08:51:11
1	U 409.014†	9882.7	12415.9	476.57	ug/L	476.57	ppb	08:50:51
1	V 292.402†	52907.4	55301.8	494.06	ug/L	494.06	ppb	08:50:51
1	Zn 213.857†	43039.2	42926.1	486.41	ug/L	486.41	ppb	08:50:51
1	SiO2†	66618.4	66933.0	5271.3	ug/L	5271.3	ppb	08:52:19
2	Sc Radial	3825.4	3825.4	99.7	%			08:50:14
2	Y RADIAL	4251.3	4251.3	98.14	%			08:49:54
2	Al 396.153Radial†	4612.0	4720.2	4944.9	ug/L	4944.9	ppb	08:49:54
2	Ca 317.933Radial†	2630.4	2620.8	5146.1	ug/L	5146.1	ppb	08:50:14
2	Fe 238.204 Radial†	405.6	400.9	5109.7	ug/L	5109.7	ppb	08:50:14
2	K 766.490 Radial†	30524.2	27634.0	5132.6	ug/L	5132.6	ppb	08:49:54
2	Mg 279.077 IEC†	130.4	127.8	5265.5	ug/L	5265.5	ppb	08:50:14
2	Na 589.592 Radial†	21855.5	23008.9	10127	ug/L	10127	ppb	08:49:54
2	Sr 421.552†	50934.6	51096.9	490.57	ug/L	490.57	ppb	08:49:54
2	Sc 361.383	683443.2	683443.2	99.109	%			08:51:17
2	Y 371.029	532591.3	532591.3	98.296	%			08:51:17
2	Ag 328.068†	88020.2	88711.7	491.83	ug/L	491.83	ppb	08:51:22
2	As 188.979†	972.8	1004.3	501.50	ug/L	501.50	ppb	08:51:42
2	B 249.677†	19774.3	20535.1	514.39	ug/L	514.39	ppb	08:51:22
2	Ba 233.527†	50365.7	50817.8	492.39	ug/L	492.39	ppb	08:51:22
2	Be 313.107†	1209923.9	1225325.0	495.98	ug/L	495.98	ppb	08:51:17
2	Cd 226.502†	33046.7	33557.3	490.48	ug/L	490.48	ppb	08:51:22
2	Co 228.616†	19983.5	20222.8	501.00	ug/L	501.00	ppb	08:51:22
2	Cr 267.716†	33100.8	33307.1	492.38	ug/L	492.38	ppb	08:51:22
2	Cu 324.752†	149820.2	145479.2	484.55	ug/L	484.55	ppb	08:51:22
2	Mn 257.610†	378579.7	381538.3	493.97	ug/L	493.97	ppb	08:51:17
2	Mo 202.031†	5131.2	5164.9	496.58	ug/L	496.58	ppb	08:51:42
2	Ni 231.604†	15268.8	15331.4	499.63	ug/L	499.63	ppb	08:51:22

2	P 214.914†	4029.7	3847.4	2365.0 ug/L	2365.0 ppb	08:51:42
2	Pb 220.353†	3065.0	3159.5	498.76 ug/L	498.76 ppb	08:51:42
2	S 181.975 Axial†	691.6	657.6	987.13 ug/L	987.13 ppb	08:51:42
2	Sb 206.836†	1255.2	1234.8	511.86 ug/L	511.86 ppb	08:51:42
2	Se 196.026†	640.2	668.1	511.95 ug/L	511.95 ppb	08:51:42
2	Si 251.611†	66910.0	67014.9	2447.2 ug/L	2447.2 ppb	08:51:22
2	Sn 189.927†	2156.0	2171.3	499.73 ug/L	499.73 ppb	08:51:42
2	Ti 334.940†	266292.7	270108.3	490.09 ug/L	490.09 ppb	08:51:22
2	Tl 190.801†	1249.1	1298.3	502.75 ug/L	502.75 ppb	08:51:42
2	U 409.014†	9975.0	12471.2	478.70 ug/L	478.70 ppb	08:51:22
2	V 292.402†	53268.7	55464.0	495.53 ug/L	495.53 ppb	08:51:22
2	Zn 213.857†	43135.8	42859.1	485.63 ug/L	485.63 ppb	08:51:22
2	SiO2†	66247.3	66303.7	5221.5 ug/L	5221.5 ppb	08:52:24
3	Sc Radial	3791.2	3791.2	98.8 %		08:50:39
3	Y RADIAL	4219.9	4219.9	97.42 %		08:50:19
3	Al 396.153Radial†	4576.5	4726.0	4951.2 ug/L	4951.2 ppb	08:50:19
3	Ca 317.933Radial†	2611.6	2625.6	5155.5 ug/L	5155.5 ppb	08:50:39
3	Fe 238.204 Radial†	402.3	401.2	5113.8 ug/L	5113.8 ppb	08:50:39
3	K 766.490 Radial†	30206.3	27588.1	5124.0 ug/L	5124.0 ppb	08:50:19
3	Mg 279.077 IEC†	128.6	127.2	5240.7 ug/L	5240.7 ppb	08:50:39
3	Na 589.592 Radial†	21836.2	23187.1	10205 ug/L	10205 ppb	08:50:19
3	Sr 421.552†	50630.6	51249.9	492.04 ug/L	492.04 ppb	08:50:19
3	Sc 361.383	686865.0	686865.0	99.605 %		08:51:48
3	Y 371.029	534422.6	534422.6	98.634 %		08:51:48
3	Ag 328.068†	88294.7	88544.8	490.91 ug/L	490.91 ppb	08:51:53
3	As 188.979†	956.2	982.8	490.86 ug/L	490.86 ppb	08:52:13
3	B 249.677†	19688.8	20349.9	509.74 ug/L	509.74 ppb	08:51:53
3	Ba 233.527†	50334.2	50532.9	489.63 ug/L	489.63 ppb	08:51:53
3	Be 313.107†	1210353.8	1219674.8	493.70 ug/L	493.70 ppb	08:51:48
3	Cd 226.502†	33097.4	33442.0	488.79 ug/L	488.79 ppb	08:51:53
3	Co 228.616†	19968.7	20107.5	498.13 ug/L	498.13 ppb	08:51:53
3	Cr 267.716†	33059.2	33098.9	489.31 ug/L	489.31 ppb	08:51:53
3	Cu 324.752†	150379.9	145288.0	483.92 ug/L	483.92 ppb	08:51:53
3	Mn 257.610†	379688.7	380748.8	492.95 ug/L	492.95 ppb	08:51:48
3	Mo 202.031†	5100.6	5108.3	491.15 ug/L	491.15 ppb	08:52:13
3	Ni 231.604†	15258.4	15244.3	496.79 ug/L	496.79 ppb	08:51:53
3	P 214.914†	3988.0	3785.3	2325.3 ug/L	2325.3 ppb	08:52:13
3	Pb 220.353†	3015.9	3094.8	488.57 ug/L	488.57 ppb	08:52:13
3	S 181.975 Axial†	687.0	649.5	974.94 ug/L	974.94 ppb	08:52:13
3	Sb 206.836†	1246.5	1219.7	505.58 ug/L	505.58 ppb	08:52:13
3	Se 196.026†	638.1	662.7	507.99 ug/L	507.99 ppb	08:52:13
3	Si 251.611†	67353.1	67123.4	2451.3 ug/L	2451.3 ppb	08:51:53
3	Sn 189.927†	2125.1	2129.4	490.12 ug/L	490.12 ppb	08:52:13
3	Ti 334.940†	267100.8	269581.0	489.14 ug/L	489.14 ppb	08:51:53
3	Tl 190.801†	1239.4	1282.3	496.60 ug/L	496.60 ppb	08:52:13
3	U 409.014†	9787.4	12232.7	469.52 ug/L	469.52 ppb	08:51:53
3	V 292.402†	53195.6	55122.9	492.43 ug/L	492.43 ppb	08:51:53
3	Zn 213.857†	43211.5	42718.2	484.04 ug/L	484.04 ppb	08:51:53
3	SiO2†	65819.7	65541.4	5161.5 ug/L	5161.5 ppb	08:52:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	683723.4	99.150	%	0.4367				0.44%
Sc Radial	3803.1	99.1	%	0.50				0.51%
Y 371.029	532174.7	98.219	%	0.4582				0.47%
Y RADIAL	4241.0	97.90	%	0.421				0.43%
Ag 328.068†	88662.3	491.56	ug/L	0.565	491.56	ppb	0.565	0.11%
QC value within limits for Ag 328.068 Recovery = 98.31%								
Al 396.153Radial†	4749.0	4975.3	ug/L	47.41	4975.3	ppb	47.41	0.95%
QC value within limits for Al 396.153Radial Recovery = 99.51%								
As 188.979†	997.1	497.95	ug/L	6.141	497.95	ppb	6.141	1.23%
QC value within limits for As 188.979 Recovery = 99.59%								
B 249.677†	20441.3	512.03	ug/L	2.328	512.03	ppb	2.328	0.45%
QC value within limits for B 249.677 Recovery = 102.41%								
Ba 233.527†	50743.9	491.67	ug/L	1.795	491.67	ppb	1.795	0.37%
QC value within limits for Ba 233.527 Recovery = 98.33%								
Be 313.107†	1222280.6	494.75	ug/L	1.152	494.75	ppb	1.152	0.23%
QC value within limits for Be 313.107 Recovery = 98.95%								
Ca 317.933Radial†	2623.0	5150.3	ug/L	4.78	5150.3	ppb	4.78	0.09%

```
   QC value within limits for Ca 317.933Radial  Recovery = 103.01%
Cd 226.502†          33525.8      490.01 ug/L        1.072      490.01 ppb        1.072   0.22%
   QC value within limits for Cd 226.502  Recovery = 98.00%
Co 228.616†          20212.0      500.73 ug/L        2.466      500.73 ppb        2.466   0.49%
   QC value within limits for Co 228.616  Recovery = 100.15%
Cr 267.716†          33206.9      490.90 ug/L        1.539      490.90 ppb        1.539   0.31%
   QC value within limits for Cr 267.716  Recovery = 98.18%
Cu 324.752†         145307.2      483.98 ug/L        0.542      483.98 ppb        0.542   0.11%
   QC value within limits for Cu 324.752  Recovery = 96.80%
Fe 238.204 Radial†     401.2      5114.4 ug/L         5.07      5114.4 ppb         5.07   0.10%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.29%
K 766.490 Radial†    27724.2      5149.3 ug/L        36.65      5149.3 ppb        36.65   0.71%
   QC value within limits for K 766.490 Radial  Recovery = 102.99%
Mg 279.077 IEC†        127.2      5239.3 ug/L        26.91      5239.3 ppb        26.91   0.51%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.79%
Mn 257.610†         381768.6      494.27 ug/L        1.492      494.27 ppb        1.492   0.30%
   QC value within limits for Mn 257.610  Recovery = 98.85%
Mo 202.031†          5136.5      493.86 ug/L        2.716      493.86 ppb        2.716   0.55%
   QC value within limits for Mo 202.031  Recovery = 98.77%
Na 589.592 Radial†   23215.3       10218 ug/L         97.6       10218 ppb         97.6   0.96%
   QC value within limits for Na 589.592 Radial  Recovery = 102.18%
Ni 231.604†          15280.6      497.98 ug/L        1.479      497.98 ppb        1.479   0.30%
   QC value within limits for Ni 231.604  Recovery = 99.60%
P 214.914†            3809.5      2340.8 ug/L        21.19      2340.8 ppb        21.19   0.91%
   QC value within limits for P 214.914  Recovery = 93.63%
Pb 220.353†           3121.9      492.84 ug/L        5.291      492.84 ppb        5.291   1.07%
   QC value within limits for Pb 220.353  Recovery = 98.57%
S 181.975 Axial†       652.2      978.96 ug/L        7.083      978.96 ppb        7.083   0.72%
   QC value within limits for S 181.975 Axial  Recovery = 97.90%
Sb 206.836†           1227.1      508.68 ug/L        3.138      508.68 ppb        3.138   0.62%
   QC value within limits for Sb 206.836  Recovery = 101.74%
Se 196.026†            663.8      508.79 ug/L        2.842      508.79 ppb        2.842   0.56%
   QC value within limits for Se 196.026  Recovery = 101.76%
Si 251.611†          67102.0      2450.5 ug/L         2.90      2450.5 ppb         2.90   0.12%
   QC value within limits for Si 251.611  Recovery = 98.02%
Sn 189.927†           2157.5      496.57 ug/L        5.593      496.57 ppb        5.593   1.13%
   QC value within limits for Sn 189.927  Recovery = 99.31%
Sr 421.552†          51377.7      493.27 ug/L        3.476      493.27 ppb        3.476   0.70%
   QC value within limits for Sr 421.552  Recovery = 98.65%
Ti 334.940†         269946.8      489.81 ug/L        0.573      489.81 ppb        0.573   0.12%
   QC value within limits for Ti 334.940  Recovery = 97.96%
Tl 190.801†           1291.9      500.28 ug/L        3.247      500.28 ppb        3.247   0.65%
   QC value within limits for Tl 190.801  Recovery = 100.06%
U 409.014†           12373.3      474.93 ug/L        4.805      474.93 ppb        4.805   1.01%
   QC value within limits for U 409.014  Recovery = 94.99%
V 292.402†           55296.2      494.01 ug/L        1.551      494.01 ppb        1.551   0.31%
   QC value within limits for V 292.402  Recovery = 98.80%
Zn 213.857†          42834.4      485.36 ug/L        1.210      485.36 ppb        1.210   0.25%
   QC value within limits for Zn 213.857  Recovery = 97.07%
SiO2†                66259.4      5218.1 ug/L        54.98      5218.1 ppb        54.98   1.05%
   QC value within limits for SiO2  Recovery = 97.58%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 4/1/2010 08:54:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3833.1	3833.1	99.9	%			08:56:52
1	Y RADIAL	4368.7	4368.7	100.9	%			08:56:32
1	Al 396.153Radial†	-98.9	-6.8	-7.1324	ug/L	-7.1324	ppb	08:56:52
1	Ca 317.933Radial†	23.3	4.7	9.1688	ug/L	9.1688	ppb	08:56:52
1	Fe 238.204 Radial†	6.8	0.6	7.9545	ug/L	7.9545	ppb	08:56:52
1	K 766.490 Radial†	3622.7	632.1	117.54	ug/L	117.54	ppb	08:56:32
1	Mg 279.077 IEC†	4.2	1.2	49.337	ug/L	49.337	ppb	08:56:52
1	Na 589.592 Radial†	-1080.4	-4.1	-1.8066	ug/L	-1.8066	ppb	08:56:32
1	Sr 421.552†	3.2	-10.6	-0.1021	ug/L	-0.1021	ppb	08:56:32
1	Sc 361.383	692997.5	692997.5	100.49	%			08:57:49
1	Y 371.029	544403.5	544403.5	100.48	%			08:57:49
1	Ag 328.068†	149.2	48.5	0.2681	ug/L	0.2681	ppb	08:57:49
1	As 188.979†	-19.4	3.5	1.7299	ug/L	1.7299	ppb	08:58:09
1	B 249.677†	448.8	1029.6	25.902	ug/L	25.902	ppb	08:57:49
1	Ba 233.527†	-8.4	-9.1	-0.0893	ug/L	-0.0893	ppb	08:58:09
1	Be 313.107†	-4441.8	103.3	0.0414	ug/L	0.0414	ppb	08:57:49
1	Cd 226.502†	-160.6	53.7	0.7839	ug/L	0.7839	ppb	08:58:09
1	Co 228.616†	-51.1	8.8	0.2160	ug/L	0.2160	ppb	08:58:09
1	Cr 267.716†	104.7	12.9	0.1910	ug/L	0.1910	ppb	08:58:09
1	Cu 324.752†	5705.8	-10.2	-0.0329	ug/L	-0.0329	ppb	08:57:49
1	Mn 257.610†	456.0	8.8	0.0101	ug/L	0.0101	ppb	08:58:09
1	Mo 202.031†	4.6	-7.9	-0.7603	ug/L	-0.7603	ppb	08:58:09
1	Ni 231.604†	81.1	6.0	0.1957	ug/L	0.1957	ppb	08:58:09
1	P 214.914†	212.7	-6.8	-4.3183	ug/L	-4.3183	ppb	08:58:09
1	Pb 220.353†	-65.5	1.9	0.2881	ug/L	0.2881	ppb	08:58:09
1	S 181.975 Axial†	44.5	4.0	6.0718	ug/L	6.0718	ppb	08:58:09
1	Sb 206.836†	40.7	8.7	3.5429	ug/L	3.5429	ppb	08:58:09
1	Se 196.026†	-25.6	-3.4	-2.5049	ug/L	-2.5049	ppb	08:58:09
1	Si 251.611†	590.3	90.8	3.3338	ug/L	3.3338	ppb	08:58:09
1	Sn 189.927†	23.3	19.1	4.3826	ug/L	4.3826	ppb	08:58:09
1	Ti 334.940†	-1507.3	-78.4	-0.1447	ug/L	-0.1447	ppb	08:57:49
1	Tl 190.801†	-24.5	13.6	5.2135	ug/L	5.2135	ppb	08:58:09
1	U 409.014†	-2447.3	-28.7	-1.1076	ug/L	-1.1076	ppb	08:57:49
1	V 292.402†	-1794.9	-69.6	-0.6267	ug/L	-0.6267	ppb	08:57:49
1	Zn 213.857†	756.4	88.1	1.0050	ug/L	1.0050	ppb	08:58:09
1	SiO2†	587.1	45.1	3.5792	ug/L	3.5792	ppb	08:59:05
2	Sc Radial	3723.1	3723.1	97.0	%			08:57:17
2	Y RADIAL	4239.6	4239.6	97.87	%			08:56:57
2	Al 396.153Radial†	-103.4	-14.4	-15.137	ug/L	-15.137	ppb	08:57:17
2	Ca 317.933Radial†	14.1	-4.1	-8.0001	ug/L	-8.0001	ppb	08:57:17
2	Fe 238.204 Radial†	7.1	1.1	14.271	ug/L	14.271	ppb	08:57:17
2	K 766.490 Radial†	3626.2	742.9	138.18	ug/L	138.18	ppb	08:56:57
2	Mg 279.077 IEC†	2.6	-0.3	-12.956	ug/L	-12.956	ppb	08:57:17
2	Na 589.592 Radial†	-1118.0	-74.9	-32.981	ug/L	-32.981	ppb	08:56:57
2	Sr 421.552†	43.1	30.6	0.2938	ug/L	0.2938	ppb	08:56:57
2	Sc 361.383	680454.7	680454.7	98.676	%			08:58:14
2	Y 371.029	534960.3	534960.3	98.734	%			08:58:14
2	Ag 328.068†	194.9	97.6	0.5421	ug/L	0.5421	ppb	08:58:14
2	As 188.979†	-25.0	-2.6	-1.2679	ug/L	-1.2679	ppb	08:58:34
2	B 249.677†	409.1	997.6	25.097	ug/L	25.097	ppb	08:58:14
2	Ba 233.527†	12.6	12.0	0.1137	ug/L	0.1137	ppb	08:58:34
2	Be 313.107†	-4293.5	172.2	0.0692	ug/L	0.0692	ppb	08:58:14
2	Cd 226.502†	-168.9	42.3	0.6162	ug/L	0.6162	ppb	08:58:34
2	Co 228.616†	-58.5	0.4	0.0111	ug/L	0.0111	ppb	08:58:34
2	Cr 267.716†	105.1	15.2	0.2257	ug/L	0.2257	ppb	08:58:34
2	Cu 324.752†	5583.4	-29.7	-0.0950	ug/L	-0.0950	ppb	08:58:14
2	Mn 257.610†	481.3	42.7	0.0573	ug/L	0.0573	ppb	08:58:34
2	Mo 202.031†	18.3	6.0	0.5809	ug/L	0.5809	ppb	08:58:34
2	Ni 231.604†	79.4	5.8	0.1884	ug/L	0.1884	ppb	08:58:34

2	P 214.914†	200.2	-15.6	-9.9467 ug/L	-9.9467 ppb	08:58:34
2	Pb 220.353†	-66.9	-0.8	-0.1285 ug/L	-0.1285 ppb	08:58:34
2	S 181.975 Axial†	42.7	3.0	4.5479 ug/L	4.5479 ppb	08:58:34
2	Sb 206.836†	38.7	7.5	3.0502 ug/L	3.0502 ppb	08:58:34
2	Se 196.026†	-17.4	4.5	3.3636 ug/L	3.3636 ppb	08:58:34
2	Si 251.611†	576.1	87.2	3.1858 ug/L	3.1858 ppb	08:58:34
2	Sn 189.927†	12.9	8.9	2.0478 ug/L	2.0478 ppb	08:58:34
2	Ti 334.940†	-1476.9	-75.2	-0.1342 ug/L	-0.1342 ppb	08:58:14
2	Tl 190.801†	-29.3	8.3	3.1862 ug/L	3.1862 ppb	08:58:34
2	U 409.014†	-2514.6	-141.8	-5.4657 ug/L	-5.4657 ppb	08:58:14
2	V 292.402†	-1819.2	-127.2	-1.1257 ug/L	-1.1257 ppb	08:58:14
2	Zn 213.857†	752.0	97.5	1.1116 ug/L	1.1116 ppb	08:58:34
2	SiO2†	619.3	88.4	6.9645 ug/L	6.9645 ppb	08:59:10
3	Sc Radial	3709.4	3709.4	96.6 %		08:57:42
3	Y RADIAL	4131.5	4131.5	95.38 %		08:57:22
3	Al 396.153Radial†	-95.5	-6.6	-6.9593 ug/L	-6.9593 ppb	08:57:42
3	Ca 317.933Radial†	19.3	1.3	2.5600 ug/L	2.5600 ppb	08:57:42
3	Fe 238.204 Radial†	9.3	3.4	43.775 ug/L	43.775 ppb	08:57:42
3	K 766.490 Radial†	3647.4	778.6	144.81 ug/L	144.81 ppb	08:57:22
3	Mg 279.077 IEC†	2.5	-0.4	-16.797 ug/L	-16.797 ppb	08:57:42
3	Na 589.592 Radial†	-1083.3	-43.2	-19.033 ug/L	-19.033 ppb	08:57:22
3	Sr 421.552†	35.9	23.3	0.2233 ug/L	0.2233 ppb	08:57:22
3	Sc 361.383	682472.7	682472.7	98.968 %		08:58:40
3	Y 371.029	537459.2	537459.2	99.195 %		08:58:40
3	Ag 328.068†	226.1	128.6	0.7272 ug/L	0.7272 ppb	08:58:40
3	As 188.979†	-15.3	7.4	3.6610 ug/L	3.6610 ppb	08:59:00
3	B 249.677†	356.3	943.0	23.717 ug/L	23.717 ppb	08:58:40
3	Ba 233.527†	-3.7	-4.5	-0.0441 ug/L	-0.0441 ppb	08:59:00
3	Be 313.107†	-4294.5	184.0	0.0736 ug/L	0.0736 ppb	08:58:40
3	Cd 226.502†	-151.7	60.2	0.8738 ug/L	0.8738 ppb	08:59:00
3	Co 228.616†	-40.1	19.1	0.4752 ug/L	0.4752 ppb	08:59:00
3	Cr 267.716†	117.9	27.8	0.4178 ug/L	0.4178 ppb	08:59:00
3	Cu 324.752†	5659.5	30.6	0.1100 ug/L	0.1100 ppb	08:58:40
3	Mn 257.610†	492.2	52.3	0.0727 ug/L	0.0727 ppb	08:59:00
3	Mo 202.031†	17.2	4.9	0.4749 ug/L	0.4749 ppb	08:59:00
3	Ni 231.604†	84.8	11.0	0.3582 ug/L	0.3582 ppb	08:59:00
3	P 214.914†	216.2	-0.1	-0.0865 ug/L	-0.0865 ppb	08:59:00
3	Pb 220.353†	-62.2	4.1	0.6476 ug/L	0.6476 ppb	08:59:00
3	S 181.975 Axial†	36.8	-3.1	-4.6352 ug/L	-4.6352 ppb	08:59:00
3	Sb 206.836†	29.2	-2.2	-0.8413 ug/L	-0.8413 ppb	08:59:00
3	Se 196.026†	-17.6	4.3	3.2869 ug/L	3.2869 ppb	08:59:00
3	Si 251.611†	577.9	87.3	3.1911 ug/L	3.1911 ppb	08:59:00
3	Sn 189.927†	14.5	10.5	2.4077 ug/L	2.4077 ppb	08:59:00
3	Ti 334.940†	-1575.4	-170.3	-0.3028 ug/L	-0.3028 ppb	08:58:40
3	Tl 190.801†	-22.8	14.9	5.7293 ug/L	5.7293 ppb	08:59:00
3	U 409.014†	-2654.7	-275.8	-10.631 ug/L	-10.631 ppb	08:58:40
3	V 292.402†	-1788.9	-91.2	-0.8240 ug/L	-0.8240 ppb	08:58:40
3	Zn 213.857†	747.7	90.9	1.0306 ug/L	1.0306 ppb	08:59:00
3	SiO2†	579.9	46.8	3.6785 ug/L	3.6785 ppb	08:59:15

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	685308.3	99.379	%	0.9767				0.98%
Sc Radial	3755.2	97.8	%	1.77				1.81%
Y 371.029	538941.0	99.468	%	0.9030				0.91%
Y RADIAL	4246.6	98.03	%	2.741				2.80%
Ag 328.068†	91.6	0.5125	ug/L	0.23098	0.5125	ppb	0.23098	45.07%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-9.3	-9.7429	ug/L	4.67222	-9.7429	ppb	4.67222	47.95%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.8	1.3744	ug/L	2.48363	1.3744	ppb	2.48363	180.71%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	990.1	24.905	ug/L	1.1050	24.905	ppb	1.1050	4.44%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.6	-0.0066	ug/L	0.10659	-0.0066	ppb	0.10659	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	153.1	0.0614	ug/L	0.01747	0.0614	ppb	0.01747	28.46%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.6	1.2429	ug/L	8.65988	1.2429	ppb	8.65988	696.74%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                52.1      0.7580 ug/L       0.13076      0.7580 ppb        0.13076  17.25%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 9.4      0.2341 ug/L       0.23258      0.2341 ppb        0.23258  99.34%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                18.6      0.2782 ug/L       0.12220      0.2782 ppb        0.12220  43.93%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                -3.1     -0.0060 ug/L       0.10512     -0.0060 ppb        0.10512 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.7      22.000 ug/L       19.1203      22.000 ppb        19.1203  86.91%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         717.9      133.51 ug/L        14.218      133.51 ppb         14.218  10.65%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.2      6.5282 ug/L      37.12348      6.5282 ppb       37.12348 568.67%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                34.6      0.0467 ug/L       0.03262      0.0467 ppb        0.03262  69.84%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.0      0.0985 ug/L       0.74565      0.0985 ppb        0.74565 757.12%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -40.8     -17.940 ug/L       15.6158     -17.940 ppb        15.6158  87.04%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 7.6      0.2474 ug/L       0.09600      0.2474 ppb        0.09600  38.80%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -7.5     -4.7838 ug/L       4.94655     -4.7838 ppb        4.94655 103.40%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.7      0.2691 ug/L       0.38836      0.2691 ppb        0.38836 144.34%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.3      1.9948 ug/L       5.79207      1.9948 ppb        5.79207 290.35%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.7      1.9173 ug/L       2.40167      1.9173 ppb        2.40167 125.27%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 1.8      1.3819 ug/L       3.36622      1.3819 ppb        3.36622 243.60%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                88.5      3.2369 ug/L       0.08396      3.2369 ppb        0.08396   2.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                12.8      2.9460 ug/L       1.25704      2.9460 ppb        1.25704  42.67%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                14.4      0.1383 ug/L       0.21114      0.1383 ppb        0.21114 152.63%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -108.0     -0.1939 ug/L       0.09449     -0.1939 ppb        0.09449  48.73%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                12.2      4.7097 ug/L       1.34435      4.7097 ppb        1.34435  28.54%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -148.8     -5.7349 ug/L       4.76763     -5.7349 ppb        4.76763  83.13%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -96.0     -0.8588 ug/L       0.25134     -0.8588 ppb        0.25134  29.27%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                92.1      1.0491 ug/L       0.05562      1.0491 ppb        0.05562   5.30%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      60.1      4.7407 ug/L       1.92649      4.7407 ppb        1.92649  40.64%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Analysis Begun

Start Time: 4/1/2010 09:01:40 **Plasma On Time: 3/30/2010 17:10:22**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\040110.sif
Batch ID:
Results Data Set: 040110
Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 4/1/2010 07:31:18**
IEC File: 011110.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 **Autosampler Location: 37**
Sample ID: LR1 **Date Collected: 4/1/2010 09:01:41**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3704.6	3704.6	96.5	%			09:03:55
1	Y RADIAL	4265.8	4265.8	98.48	%			09:03:35
1	Al 396.153Radial†	-93.3	-4.4	-3.3400	ug/L	-3.3400	ppb	09:03:35

1	Ca 317.933Radial†	13.9	-4.3	-8.4092 ug/L	-8.4092 ppb	09:03:55
1	Fe 238.204 Radial†	29520.7	30582.3	388690 ug/L	388690 ppb	09:03:35
1	K 766.490 Radial†	3212.5	332.9	61.973 ug/L	61.973 ppb	09:03:35
1	Mg 279.077 IEC†	12.5	10.0	3.1216 ug/L	3.1216 ppb	09:03:55
1	Na 589.592 Radial†	-1155.8	-119.8	-52.731 ug/L	-52.731 ppb	09:03:35
1	Sr 421.552†	48.1	35.9	0.3452 ug/L	0.3452 ppb	09:03:35
1	Sc 361.383	683466.6	683466.6	99.112 %		09:04:52
1	Y 371.029	536898.0	536898.0	99.091 %		09:04:52
1	Ag 328.068†	-21182.8	-21472.4	2.0586 ug/L	2.0586 ppb	09:04:52
1	As 188.979†	-189.7	-168.7	7.6068 ug/L	7.6068 ppb	09:05:12
1	B 249.677†	1625.0	2222.6	-7.2517 ug/L	-7.2517 ppb	09:04:52
1	Ba 233.527†	-1609.7	-1624.9	-3.7530 ug/L	-3.7530 ppb	09:04:52
1	Be 313.107†	-4414.7	69.0	0.0276 ug/L	0.0276 ppb	09:04:52
1	Cd 226.502†	2337.6	2572.0	-2.5277 ug/L	-2.5277 ppb	09:04:52
1	Co 228.616†	634.7	700.1	11.661 ug/L	11.661 ppb	09:05:12
1	Cr 267.716†	-521.7	-617.6	32.113 ug/L	32.113 ppb	09:04:52
1	Cu 324.752†	-1147.9	-6846.1	-2.2794 ug/L	-2.2794 ppb	09:04:52
1	Mn 257.610†	-31685.2	-32414.0	-3.5689 ug/L	-3.5689 ppb	09:04:52
1	Mo 202.031†	-268.2	-283.0	2.9873 ug/L	2.9873 ppb	09:04:52
1	Ni 231.604†	173.6	100.5	3.2675 ug/L	3.2675 ppb	09:05:12
1	P 214.914†	620.4	407.4	-48.140 ug/L	-48.140 ppb	09:05:12
1	Pb 220.353†	133.0	201.2	-6.1679 ug/L	-6.1679 ppb	09:05:12
1	S 181.975 Axial†	60.4	20.8	31.183 ug/L	31.183 ppb	09:05:12
1	Sb 206.836†	30.9	-0.6	-5.0114 ug/L	-5.0114 ppb	09:05:12
1	Se 196.026†	-1544.8	-1536.5	-106.68 ug/L	-106.68 ppb	09:05:12
1	Si 251.611†	-337.4	-837.0	-30.306 ug/L	-30.306 ppb	09:04:52
1	Sn 189.927†	-12.3	-16.5	-1.3529 ug/L	-1.3529 ppb	09:05:12
1	Ti 334.940†	-1465.0	-56.6	-0.1741 ug/L	-0.1741 ppb	09:04:52
1	Tl 190.801†	-48.1	-10.5	-4.4423 ug/L	-4.4423 ppb	09:05:12
1	U 409.014†	-37.8	2368.4	46.939 ug/L	46.939 ppb	09:04:52
1	V 292.402†	4708.4	6466.9	0.2014 ug/L	0.2014 ppb	09:04:52
1	Zn 213.857†	3648.6	3016.7	-23.651 ug/L	-23.651 ppb	09:05:12
1	SiO2†	-506.9	-1050.6	-82.208 ug/L	-82.208 ppb	09:06:10
2	Sc Radial	3690.1	3690.1	96.1 %		09:04:20
2	Y RADIAL	4107.1	4107.1	94.81 %		09:04:00
2	Al 396.153Radial†	-130.6	-43.6	-44.536 ug/L	-44.536 ppb	09:04:00
2	Ca 317.933Radial†	18.0	0.1	0.1572 ug/L	0.1572 ppb	09:04:20
2	Fe 238.204 Radial†	29083.1	30247.5	384430 ug/L	384430 ppb	09:04:00
2	K 766.490 Radial†	3165.3	296.8	55.259 ug/L	55.259 ppb	09:04:00
2	Mg 279.077 IEC†	7.7	5.0	-198.02 ug/L	-198.02 ppb	09:04:20
2	Na 589.592 Radial†	-1111.5	-78.5	-34.538 ug/L	-34.538 ppb	09:04:00
2	Sr 421.552†	67.6	56.5	0.5421 ug/L	0.5421 ppb	09:04:00
2	Sc 361.383	680561.8	680561.8	98.691 %		09:05:18
2	Y 371.029	535720.8	535720.8	98.874 %		09:05:18
2	Ag 328.068†	-20902.3	-21279.4	1.8107 ug/L	1.8107 ppb	09:05:18
2	As 188.979†	-164.2	-143.6	19.006 ug/L	19.006 ppb	09:05:38
2	B 249.677†	1576.7	2180.6	-7.6149 ug/L	-7.6149 ppb	09:05:18
2	Ba 233.527†	-1521.1	-1542.1	-3.0855 ug/L	-3.0855 ppb	09:05:18
2	Be 313.107†	-4379.4	85.8	0.0343 ug/L	0.0343 ppb	09:05:18
2	Cd 226.502†	2290.7	2534.5	-2.6382 ug/L	-2.6382 ppb	09:05:18
2	Co 228.616†	598.9	666.5	10.889 ug/L	10.889 ppb	09:05:38
2	Cr 267.716†	-565.3	-664.1	30.980 ug/L	30.980 ppb	09:05:18
2	Cu 324.752†	-1306.1	-7011.3	-3.0480 ug/L	-3.0480 ppb	09:05:18
2	Mn 257.610†	-31541.7	-32405.1	-3.9692 ug/L	-3.9692 ppb	09:05:18
2	Mo 202.031†	-279.1	-295.3	1.4772 ug/L	1.4772 ppb	09:05:18
2	Ni 231.604†	188.6	116.5	3.7877 ug/L	3.7877 ppb	09:05:38
2	P 214.914†	622.5	412.2	-41.554 ug/L	-41.554 ppb	09:05:38
2	Pb 220.353†	123.1	191.7	-7.2657 ug/L	-7.2657 ppb	09:05:38
2	S 181.975 Axial†	54.9	15.4	23.148 ug/L	23.148 ppb	09:05:38
2	Sb 206.836†	24.1	-7.3	-7.7378 ug/L	-7.7378 ppb	09:05:38
2	Se 196.026†	-1560.2	-1558.8	-134.54 ug/L	-134.54 ppb	09:05:38
2	Si 251.611†	-298.4	-798.9	-28.899 ug/L	-28.899 ppb	09:05:18
2	Sn 189.927†	-24.0	-28.4	-4.1129 ug/L	-4.1129 ppb	09:05:38
2	Ti 334.940†	-1487.5	-85.7	-0.2033 ug/L	-0.2033 ppb	09:05:18
2	Tl 190.801†	-24.9	12.7	4.5103 ug/L	4.5103 ppb	09:05:38
2	U 409.014†	-357.3	2044.5	34.948 ug/L	34.948 ppb	09:05:18
2	V 292.402†	4535.2	6311.7	-0.5912 ug/L	-0.5912 ppb	09:05:18
2	Zn 213.857†	3622.9	3006.4	-23.136 ug/L	-23.136 ppb	09:05:38
2	SiO2†	-464.0	-1009.4	-78.921 ug/L	-78.921 ppb	09:06:15
3	Sc Radial	3673.3	3673.3	95.7 %		09:04:45
3	Y RADIAL	4044.4	4044.4	93.37 %		09:04:25

3	Al 396.153Radial†	-116.2	-29.2	-29.674 ug/L	-29.674 ppb	09:04:25
3	Ca 317.933Radial†	17.6	-0.2	-0.4231 ug/L	-0.4231 ppb	09:04:45
3	Fe 238.204 Radial†	28969.2	30266.8	384680 ug/L	384680 ppb	09:04:25
3	K 766.490 Radial†	3152.4	298.4	55.552 ug/L	55.552 ppb	09:04:25
3	Mg 279.077 IEC†	7.9	5.2	-187.11 ug/L	-187.11 ppb	09:04:45
3	Na 589.592 Radial†	-1121.0	-93.6	-41.215 ug/L	-41.215 ppb	09:04:25
3	Sr 421.552†	52.7	41.2	0.3953 ug/L	0.3953 ppb	09:04:25
3	Sc 361.383	674278.2	674278.2	97.780 %		09:05:44
3	Y 371.029	529893.8	529893.8	97.798 %		09:05:44
3	Ag 328.068†	-20911.3	-21486.0	0.7404 ug/L	0.7404 ppb	09:05:44
3	As 188.979†	-182.8	-164.2	8.8819 ug/L	8.8819 ppb	09:06:04
3	B 249.677†	1531.3	2149.0	-8.4517 ug/L	-8.4517 ppb	09:05:44
3	Ba 233.527†	-1617.5	-1655.0	-4.1670 ug/L	-4.1670 ppb	09:05:44
3	Be 313.107†	-4357.7	66.6	0.0264 ug/L	0.0264 ppb	09:05:44
3	Cd 226.502†	2265.1	2529.9	-2.7278 ug/L	-2.7278 ppb	09:05:44
3	Co 228.616†	635.7	709.8	11.972 ug/L	11.972 ppb	09:06:04
3	Cr 267.716†	-518.4	-621.5	31.630 ug/L	31.630 ppb	09:05:44
3	Cu 324.752†	-1405.7	-7125.6	-3.4230 ug/L	-3.4230 ppb	09:05:44
3	Mn 257.610†	-31573.7	-32735.5	-4.3731 ug/L	-4.3731 ppb	09:05:44
3	Mo 202.031†	-207.8	-225.0	8.2481 ug/L	8.2481 ppb	09:05:44
3	Ni 231.604†	180.2	109.6	3.5641 ug/L	3.5641 ppb	09:06:04
3	P 214.914†	623.1	418.7	-37.527 ug/L	-37.527 ppb	09:06:04
3	Pb 220.353†	119.6	189.4	-7.6384 ug/L	-7.6384 ppb	09:06:04
3	S 181.975 Axial†	56.4	17.4	26.195 ug/L	26.195 ppb	09:06:04
3	Sb 206.836†	25.0	-6.2	-7.1040 ug/L	-7.1040 ppb	09:06:04
3	Se 196.026†	-1546.3	-1559.3	-134.23 ug/L	-134.23 ppb	09:06:04
3	Si 251.611†	-413.4	-919.4	-33.393 ug/L	-33.393 ppb	09:05:44
3	Sn 189.927†	-17.8	-22.3	-2.7107 ug/L	-2.7107 ppb	09:06:04
3	Ti 334.940†	-1511.3	-124.1	-0.2801 ug/L	-0.2801 ppb	09:05:44
3	Tl 190.801†	-38.9	-1.8	-1.0789 ug/L	-1.0789 ppb	09:06:04
3	U 409.014†	-6.4	2399.9	48.610 ug/L	48.610 ppb	09:05:44
3	V 292.402†	4585.8	6406.3	0.3283 ug/L	0.3283 ppb	09:05:44
3	Zn 213.857†	3566.8	2983.2	-23.435 ug/L	-23.435 ppb	09:06:04
3	SiO2†	-444.7	-994.0	-77.893 ug/L	-77.893 ppb	09:06:20

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	679435.6	98.528	%	0.6811				0.69%
Sc Radial	3689.3	96.1	%	0.41				0.42%
Y 371.029	534170.9	98.588	%	0.6922				0.70%
Y RADIAL	4139.1	95.55	%	2.634				2.76%
Ag 328.068†	-21412.6	1.5366	ug/L	0.70054	1.5366	ppb	0.70054	45.59%
Al 396.153Radial†	-25.7	-25.850	ug/L	20.8625	-25.850	ppb	20.8625	80.71%
As 188.979†	-158.8	11.831	ug/L	6.2457	11.831	ppb	6.2457	52.79%
B 249.677†	2184.1	-7.7728	ug/L	0.61538	-7.7728	ppb	0.61538	7.92%
Ba 233.527†	-1607.3	-3.6685	ug/L	0.54571	-3.6685	ppb	0.54571	14.88%
Be 313.107†	73.8	0.0294	ug/L	0.00424	0.0294	ppb	0.00424	14.41%
Ca 317.933Radial†	-1.5	-2.8917	ug/L	4.78711	-2.8917	ppb	4.78711	165.55%
Cd 226.502†	2545.5	-2.6312	ug/L	0.10023	-2.6312	ppb	0.10023	3.81%
Co 228.616†	692.1	11.507	ug/L	0.5573	11.507	ppb	0.5573	4.84%
Cr 267.716†	-634.4	31.574	ug/L	0.5687	31.574	ppb	0.5687	1.80%
Cu 324.752†	-6994.3	-2.9168	ug/L	0.58299	-2.9168	ppb	0.58299	19.99%
Fe 238.204 Radial†	30365.6	385930	ug/L	2389.2	385930	ppb	2389.2	0.62%
K 766.490 Radial†	309.4	57.595	ug/L	3.7944	57.595	ppb	3.7944	6.59%
Mg 279.077 IEC†	6.7	-127.34	ug/L	113.111	-127.34	ppb	113.111	88.83%
Mn 257.610†	-32518.2	-3.9704	ug/L	0.40208	-3.9704	ppb	0.40208	10.13%
Mo 202.031†	-267.8	4.2375	ug/L	3.55439	4.2375	ppb	3.55439	83.88%
Na 589.592 Radial†	-97.3	-42.828	ug/L	9.2036	-42.828	ppb	9.2036	21.49%
Ni 231.604†	108.9	3.5398	ug/L	0.26092	3.5398	ppb	0.26092	7.37%
P 214.914†	412.8	-42.407	ug/L	5.3577	-42.407	ppb	5.3577	12.63%
Pb 220.353†	194.1	-7.0240	ug/L	0.76445	-7.0240	ppb	0.76445	10.88%
S 181.975 Axial†	17.9	26.842	ug/L	4.0564	26.842	ppb	4.0564	15.11%
Sb 206.836†	-4.7	-6.6177	ug/L	1.42675	-6.6177	ppb	1.42675	21.56%
Se 196.026†	-1551.6	-125.15	ug/L	15.996	-125.15	ppb	15.996	12.78%
Si 251.611†	-851.8	-30.866	ug/L	2.2989	-30.866	ppb	2.2989	7.45%
Sn 189.927†	-22.4	-2.7255	ug/L	1.38009	-2.7255	ppb	1.38009	50.64%
Sr 421.552†	44.5	0.4275	ug/L	0.10234	0.4275	ppb	0.10234	23.94%
Ti 334.940†	-88.8	-0.2192	ug/L	0.05477	-0.2192	ppb	0.05477	24.99%
Tl 190.801†	0.1	-0.3370	ug/L	4.52215	-0.3370	ppb	4.52215	>999.9%

U 409.014†	2270.9	43.499	ug/L	7.4525	43.499	ppb	7.4525	17.13%
V 292.402†	6395.0	-0.0205	ug/L	0.49829	-0.0205	ppb	0.49829	>999.9%
Zn 213.857†	3002.1	-23.407	ug/L	0.2590	-23.407	ppb	0.2590	1.11%
SiO2†	-1018.0	-79.674	ug/L	2.2538	-79.674	ppb	2.2538	2.83%

Sequence No.: 2
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 4/1/2010 09:08:33
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	3756.5	3756.5	97.9	%			09:10:46
1	Y RADIAL	4326.5	4326.5	99.88	%			09:10:26
1	Al 396.153Radial†	4551.2	4742.9	4969.4	ug/L	4969.4	ppb	09:10:26
1	Ca 317.933Radial†	2567.0	2604.4	5113.9	ug/L	5113.9	ppb	09:10:46
1	Fe 238.204 Radial†	394.1	396.5	5054.0	ug/L	5054.0	ppb	09:10:46
1	K 766.490 Radial†	29446.7	27094.5	5032.3	ug/L	5032.3	ppb	09:10:26
1	Mg 279.077 IEC†	126.2	125.9	5187.1	ug/L	5187.1	ppb	09:10:46
1	Na 589.592 Radial†	21654.8	23205.9	10214	ug/L	10214	ppb	09:10:26
1	Sr 421.552†	50228.1	51312.1	492.64	ug/L	492.64	ppb	09:10:26
1	Sc 361.383	689769.3	689769.3	100.03	%			09:11:43
1	Y 371.029	469119.0	469119.0	86.582	%			09:11:48
1	Ag 328.068†	87909.6	87786.5	486.70	ug/L	486.70	ppb	09:11:48
1	As 188.979†	932.0	954.6	476.85	ug/L	476.85	ppb	09:12:08
1	B 249.677†	18845.0	19423.0	486.44	ug/L	486.44	ppb	09:11:48
1	Ba 233.527†	50269.6	50255.5	486.94	ug/L	486.94	ppb	09:11:48
1	Be 313.107†	1200188.5	1204395.7	487.52	ug/L	487.52	ppb	09:11:43
1	Cd 226.502†	32972.1	33176.9	484.92	ug/L	484.92	ppb	09:11:48
1	Co 228.616†	19949.2	20003.6	495.55	ug/L	495.55	ppb	09:11:48
1	Cr 267.716†	33072.9	32972.8	487.43	ug/L	487.43	ppb	09:11:48
1	Cu 324.752†	149177.4	143450.1	477.79	ug/L	477.79	ppb	09:11:48
1	Mn 257.610†	371791.8	371248.9	480.66	ug/L	480.66	ppb	09:11:48
1	Mo 202.031†	5043.5	5029.7	483.59	ug/L	483.59	ppb	09:12:08
1	Ni 231.604†	15189.2	15110.5	492.43	ug/L	492.43	ppb	09:11:48
1	P 214.914†	3917.2	3697.7	2270.5	ug/L	2270.5	ppb	09:12:08
1	Pb 220.353†	2997.4	3063.6	483.66	ug/L	483.66	ppb	09:12:08
1	S 181.975 Axial†	675.4	635.0	953.18	ug/L	953.18	ppb	09:12:08
1	Sb 206.836†	1226.5	1194.5	495.23	ug/L	495.23	ppb	09:12:08
1	Se 196.026†	624.4	646.3	495.65	ug/L	495.65	ppb	09:12:08
1	Si 251.611†	66832.5	66318.2	2421.9	ug/L	2421.9	ppb	09:11:48
1	Sn 189.927†	2109.8	2105.1	484.51	ug/L	484.51	ppb	09:12:08
1	Ti 334.940†	265917.3	267268.7	484.95	ug/L	484.95	ppb	09:11:48
1	Tl 190.801†	1217.7	1255.3	486.14	ug/L	486.14	ppb	09:12:08
1	U 409.014†	9839.2	12243.1	469.93	ug/L	469.93	ppb	09:11:48
1	V 292.402†	53032.5	54734.9	488.92	ug/L	488.92	ppb	09:11:48
1	Zn 213.857†	42938.0	42262.1	478.87	ug/L	478.87	ppb	09:11:48
1	SiO2†	65629.0	65072.6	5124.7	ug/L	5124.7	ppb	09:13:15
2	Sc Radial	3767.1	3767.1	98.1	%			09:11:11
2	Y RADIAL	4187.2	4187.2	96.66	%			09:10:51
2	Al 396.153Radial†	4544.5	4723.0	4948.1	ug/L	4948.1	ppb	09:10:51
2	Ca 317.933Radial†	2593.7	2624.2	5152.8	ug/L	5152.8	ppb	09:11:11
2	Fe 238.204 Radial†	400.6	402.0	5123.9	ug/L	5123.9	ppb	09:11:11
2	K 766.490 Radial†	29201.7	26760.2	4970.1	ug/L	4970.1	ppb	09:10:51
2	Mg 279.077 IEC†	125.8	125.2	5155.8	ug/L	5155.8	ppb	09:11:11
2	Na 589.592 Radial†	21436.1	22920.9	10088	ug/L	10088	ppb	09:10:51
2	Sr 421.552†	50206.7	51145.9	491.04	ug/L	491.04	ppb	09:10:51
2	Sc 361.383	687475.1	687475.1	99.694	%			09:12:13
2	Y 371.029	470498.0	470498.0	86.836	%			09:12:19
2	Ag 328.068†	87866.5	88036.7	488.09	ug/L	488.09	ppb	09:12:19
2	As 188.979†	941.0	966.7	482.85	ug/L	482.85	ppb	09:12:39
2	B 249.677†	18912.4	19553.5	489.71	ug/L	489.71	ppb	09:12:19
2	Ba 233.527†	50243.9	50397.5	488.31	ug/L	488.31	ppb	09:12:19
2	Be 313.107†	1199013.2	1207220.9	488.66	ug/L	488.66	ppb	09:12:13
2	Cd 226.502†	32739.0	33053.0	483.10	ug/L	483.10	ppb	09:12:19
2	Co 228.616†	19883.2	20004.0	495.58	ug/L	495.58	ppb	09:12:19
2	Cr 267.716†	32871.4	32881.1	486.08	ug/L	486.08	ppb	09:12:19
2	Cu 324.752†	148979.5	143749.4	478.78	ug/L	478.78	ppb	09:12:19
2	Mn 257.610†	371096.2	371791.5	481.37	ug/L	481.37	ppb	09:12:19
2	Mo 202.031†	5106.9	5110.1	491.32	ug/L	491.32	ppb	09:12:39
2	Ni 231.604†	15172.5	15144.5	493.54	ug/L	493.54	ppb	09:12:19

2	P 214.914†	3983.0	3776.7	2320.9 ug/L	2320.9 ppb	09:12:39
2	Pb 220.353†	3013.2	3089.5	487.74 ug/L	487.74 ppb	09:12:39
2	S 181.975 Axial†	673.7	635.6	954.01 ug/L	954.01 ppb	09:12:39
2	Sb 206.836†	1229.5	1201.6	498.35 ug/L	498.35 ppb	09:12:39
2	Se 196.026†	623.0	647.0	496.35 ug/L	496.35 ppb	09:12:39
2	Si 251.611†	66733.0	66441.4	2426.3 ug/L	2426.3 ppb	09:12:19
2	Sn 189.927†	2136.6	2139.0	492.32 ug/L	492.32 ppb	09:12:39
2	Ti 334.940†	265883.2	268121.7	486.50 ug/L	486.50 ppb	09:12:19
2	Tl 190.801†	1233.5	1275.2	493.81 ug/L	493.81 ppb	09:12:39
2	U 409.014†	10158.2	12595.9	483.52 ug/L	483.52 ppb	09:12:19
2	V 292.402†	52973.9	54853.1	490.08 ug/L	490.08 ppb	09:12:19
2	Zn 213.857†	42789.1	42256.0	478.78 ug/L	478.78 ppb	09:12:19
2	SiO2†	66018.6	65682.3	5172.6 ug/L	5172.6 ppb	09:13:20
3	Sc Radial	3770.2	3770.2	98.2 %		09:11:36
3	Y RADIAL	4232.4	4232.4	97.70 %		09:11:16
3	Al 396.153Radial†	4607.5	4783.4	5011.8 ug/L	5011.8 ppb	09:11:16
3	Ca 317.933Radial†	2594.2	2622.6	5149.6 ug/L	5149.6 ppb	09:11:36
3	Fe 238.204 Radial†	400.6	401.6	5119.4 ug/L	5119.4 ppb	09:11:36
3	K 766.490 Radial†	29732.1	27276.1	5066.0 ug/L	5066.0 ppb	09:11:16
3	Mg 279.077 IEC†	126.7	126.0	5190.2 ug/L	5190.2 ppb	09:11:36
3	Na 589.592 Radial†	21670.3	23141.6	10185 ug/L	10185 ppb	09:11:16
3	Sr 421.552†	50761.1	51668.9	496.06 ug/L	496.06 ppb	09:11:16
3	Sc 361.383	686552.9	686552.9	99.560 %		09:12:44
3	Y 371.029	466714.9	466714.9	86.138 %		09:12:49
3	Ag 328.068†	86385.9	86667.9	480.54 ug/L	480.54 ppb	09:12:49
3	As 188.979†	929.9	956.8	477.92 ug/L	477.92 ppb	09:13:09
3	B 249.677†	18555.8	19220.8	481.35 ug/L	481.35 ppb	09:12:49
3	Ba 233.527†	49539.7	49757.9	482.12 ug/L	482.12 ppb	09:12:49
3	Be 313.107†	1195426.0	1205233.4	487.85 ug/L	487.85 ppb	09:12:44
3	Cd 226.502†	32333.6	32689.9	477.79 ug/L	477.79 ppb	09:12:49
3	Co 228.616†	19639.5	19786.0	490.18 ug/L	490.18 ppb	09:12:49
3	Cr 267.716†	32495.5	32547.8	481.16 ug/L	481.16 ppb	09:12:49
3	Cu 324.752†	146515.4	141475.1	471.22 ug/L	471.22 ppb	09:12:49
3	Mn 257.610†	366214.9	367388.6	475.67 ug/L	475.67 ppb	09:12:49
3	Mo 202.031†	5052.0	5061.9	486.69 ug/L	486.69 ppb	09:13:09
3	Ni 231.604†	14998.0	14989.6	488.50 ug/L	488.50 ppb	09:12:49
3	P 214.914†	3936.5	3735.4	2295.9 ug/L	2295.9 ppb	09:13:09
3	Pb 220.353†	3001.1	3081.4	486.47 ug/L	486.47 ppb	09:13:09
3	S 181.975 Axial†	661.9	624.6	937.58 ug/L	937.58 ppb	09:13:09
3	Sb 206.836†	1225.3	1199.0	497.12 ug/L	497.12 ppb	09:13:09
3	Se 196.026†	610.6	635.4	487.71 ug/L	487.71 ppb	09:13:09
3	Si 251.611†	65584.4	65377.7	2387.4 ug/L	2387.4 ppb	09:12:49
3	Sn 189.927†	2111.5	2116.7	487.20 ug/L	487.20 ppb	09:13:09
3	Ti 334.940†	262046.8	264626.6	480.16 ug/L	480.16 ppb	09:12:49
3	Tl 190.801†	1225.8	1269.1	491.43 ug/L	491.43 ppb	09:13:09
3	U 409.014†	9699.0	12148.4	466.29 ug/L	466.29 ppb	09:12:49
3	V 292.402†	52119.9	54066.7	483.06 ug/L	483.06 ppb	09:12:49
3	Zn 213.857†	42243.8	41766.0	473.22 ug/L	473.22 ppb	09:12:49
3	SiO2†	65923.0	65675.3	5172.2 ug/L	5172.2 ppb	09:13:25

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	687932.5	99.760	%	0.2402				0.24%
Sc Radial	3764.6	98.1	%	0.19				0.19%
Y 371.029	468777.3	86.519	%	0.3534				0.41%
Y RADIAL	4248.7	98.08	%	1.641				1.67%
Ag 328.068†	87497.0	485.11	ug/L	4.022	485.11	ppb	4.022	0.83%
QC value within limits for Ag 328.068 Recovery = 97.02%								
Al 396.153Radial†	4749.8	4976.4	ug/L	32.45	4976.4	ppb	32.45	0.65%
QC value within limits for Al 396.153Radial Recovery = 99.53%								
As 188.979†	959.3	479.21	ug/L	3.205	479.21	ppb	3.205	0.67%
QC value within limits for As 188.979 Recovery = 95.84%								
B 249.677†	19399.1	485.83	ug/L	4.210	485.83	ppb	4.210	0.87%
QC value within limits for B 249.677 Recovery = 97.17%								
Ba 233.527†	50137.0	485.79	ug/L	3.254	485.79	ppb	3.254	0.67%
QC value within limits for Ba 233.527 Recovery = 97.16%								
Be 313.107†	1205616.7	488.01	ug/L	0.589	488.01	ppb	0.589	0.12%
QC value within limits for Be 313.107 Recovery = 97.60%								
Ca 317.933Radial†	2617.1	5138.8	ug/L	21.61	5138.8	ppb	21.61	0.42%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.78%
Cd 226.502†            32973.3      481.93 ug/L         3.705      481.93 ppb          3.705   0.77%
   QC value within limits for Cd 226.502  Recovery = 96.39%
Co 228.616†            19931.2      493.77 ug/L         3.109      493.77 ppb          3.109   0.63%
   QC value within limits for Co 228.616  Recovery = 98.75%
Cr 267.716†            32800.6      484.89 ug/L         3.300      484.89 ppb          3.300   0.68%
   QC value within limits for Cr 267.716  Recovery = 96.98%
Cu 324.752†           142891.5      475.93 ug/L         4.111      475.93 ppb          4.111   0.86%
   QC value within limits for Cu 324.752  Recovery = 95.19%
Fe 238.204 Radial†       400.0      5099.1 ug/L        39.14      5099.1 ppb         39.14   0.77%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.98%
K 766.490 Radial†      27043.6      5022.8 ug/L        48.64      5022.8 ppb         48.64   0.97%
   QC value within limits for K 766.490 Radial  Recovery = 100.46%
Mg 279.077 IEC†          125.7      5177.7 ug/L        19.03      5177.7 ppb         19.03   0.37%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.55%
Mn 257.610†           370143.0      479.23 ug/L         3.106      479.23 ppb          3.106   0.65%
   QC value within limits for Mn 257.610  Recovery = 95.85%
Mo 202.031†             5067.2      487.20 ug/L         3.888      487.20 ppb          3.888   0.80%
   QC value within limits for Mo 202.031  Recovery = 97.44%
Na 589.592 Radial†     23089.4       10162 ug/L          65.8       10162 ppb           65.8   0.65%
   QC value within limits for Na 589.592 Radial  Recovery = 101.62%
Ni 231.604†            15081.5      491.49 ug/L         2.652      491.49 ppb          2.652   0.54%
   QC value within limits for Ni 231.604  Recovery = 98.30%
P 214.914†              3736.6      2295.8 ug/L        25.18      2295.8 ppb         25.18   1.10%
   QC value within limits for P 214.914  Recovery = 91.83%
Pb 220.353†             3078.2      485.95 ug/L         2.086      485.95 ppb          2.086   0.43%
   QC value within limits for Pb 220.353  Recovery = 97.19%
S 181.975 Axial†         631.7      948.26 ug/L         9.257      948.26 ppb          9.257   0.98%
   QC value within limits for S 181.975 Axial  Recovery = 94.83%
Sb 206.836†             1198.3      496.90 ug/L         1.572      496.90 ppb          1.572   0.32%
   QC value within limits for Sb 206.836  Recovery = 99.38%
Se 196.026†              642.9      493.24 ug/L         4.800      493.24 ppb          4.800   0.97%
   QC value within limits for Se 196.026  Recovery = 98.65%
Si 251.611†            66045.8      2411.9 ug/L        21.29      2411.9 ppb         21.29   0.88%
   QC value within limits for Si 251.611  Recovery = 96.47%
Sn 189.927†             2120.3      488.01 ug/L         3.966      488.01 ppb          3.966   0.81%
   QC value within limits for Sn 189.927  Recovery = 97.60%
Sr 421.552†            51375.6      493.25 ug/L         2.566      493.25 ppb          2.566   0.52%
   QC value within limits for Sr 421.552  Recovery = 98.65%
Ti 334.940†           266672.3      483.87 ug/L         3.303      483.87 ppb          3.303   0.68%
   QC value within limits for Ti 334.940  Recovery = 96.77%
Tl 190.801†             1266.5      490.46 ug/L         3.923      490.46 ppb          3.923   0.80%
   QC value within limits for Tl 190.801  Recovery = 98.09%
U 409.014†             12329.1      473.25 ug/L         9.078      473.25 ppb          9.078   1.92%
   QC value within limits for U 409.014  Recovery = 94.65%
V 292.402†             54551.5      487.35 ug/L         3.763      487.35 ppb          3.763   0.77%
   QC value within limits for V 292.402  Recovery = 97.47%
Zn 213.857†            42094.7      476.96 ug/L         3.237      476.96 ppb          3.237   0.68%
   QC value within limits for Zn 213.857  Recovery = 95.39%
SiO2†                  65476.7      5156.5 ug/L        27.55      5156.5 ppb         27.55   0.53%
   QC value within limits for SiO2  Recovery = 96.43%
All analyte(s) passed QC.
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Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 4/1/2010 09:15:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3682.9	3682.9	95.9	%			09:17:48
1	Y RADIAL	3937.9	3937.9	90.91	%			09:17:28
1	Al 396.153Radial†	-77.1	11.9	12.475	ug/L	12.475	ppb	09:17:28
1	Ca 317.933Radial†	19.9	2.1	4.1926	ug/L	4.1926	ppb	09:17:48
1	Fe 238.204 Radial†	7.5	1.7	21.060	ug/L	21.060	ppb	09:17:48
1	K 766.490 Radial†	3232.6	373.4	69.487	ug/L	69.487	ppb	09:17:28
1	Mg 279.077 IEC†	3.5	0.6	24.233	ug/L	24.233	ppb	09:17:48
1	Na 589.592 Radial†	-1289.2	-265.9	-117.01	ug/L	-117.01	ppb	09:17:28
1	Sr 421.552†	15.7	2.5	0.0236	ug/L	0.0236	ppb	09:17:28
1	Sc 361.383	640852.2	640852.2	92.933	%			09:18:45
1	Y 371.029	504229.3	504229.3	93.062	%			09:18:45
1	Ag 328.068†	157.4	69.5	0.3953	ug/L	0.3953	ppb	09:18:45
1	As 188.979†	-24.1	-3.2	-1.5709	ug/L	-1.5709	ppb	09:19:05
1	B 249.677†	56.3	643.6	16.189	ug/L	16.189	ppb	09:18:45
1	Ba 233.527†	-3.7	-4.8	-0.0482	ug/L	-0.0482	ppb	09:19:05
1	Be 313.107†	-4160.0	46.9	0.0184	ug/L	0.0184	ppb	09:18:45
1	Cd 226.502†	-201.7	-3.6	-0.0572	ug/L	-0.0572	ppb	09:19:05
1	Co 228.616†	-54.7	0.8	0.0207	ug/L	0.0207	ppb	09:19:05
1	Cr 267.716†	109.4	26.5	0.3963	ug/L	0.3963	ppb	09:18:45
1	Cu 324.752†	5566.0	301.3	1.0123	ug/L	1.0123	ppb	09:18:45
1	Mn 257.610†	453.2	42.7	0.0563	ug/L	0.0563	ppb	09:19:05
1	Mo 202.031†	17.8	6.7	0.6425	ug/L	0.6425	ppb	09:19:05
1	Ni 231.604†	68.7	-0.7	-0.0229	ug/L	-0.0229	ppb	09:19:05
1	P 214.914†	223.3	21.8	13.707	ug/L	13.707	ppb	09:19:05
1	Pb 220.353†	-64.8	-2.7	-0.4225	ug/L	-0.4225	ppb	09:19:05
1	S 181.975 Axial†	35.6	-2.0	-2.9485	ug/L	-2.9485	ppb	09:19:05
1	Sb 206.836†	37.8	8.9	3.6109	ug/L	3.6109	ppb	09:19:05
1	Se 196.026†	-16.4	4.5	3.3681	ug/L	3.3681	ppb	09:19:05
1	Si 251.611†	548.8	93.9	3.4304	ug/L	3.4304	ppb	09:19:05
1	Sn 189.927†	9.8	6.4	1.4699	ug/L	1.4699	ppb	09:19:05
1	Ti 334.940†	-1448.7	-137.4	-0.2448	ug/L	-0.2448	ppb	09:18:45
1	Tl 190.801†	-39.3	-4.4	-1.6836	ug/L	-1.6836	ppb	09:19:05
1	U 409.014†	-2566.3	-355.0	-13.677	ug/L	-13.677	ppb	09:18:45
1	V 292.402†	-1727.8	-142.7	-1.2780	ug/L	-1.2780	ppb	09:18:45
1	Zn 213.857†	702.7	91.6	1.0430	ug/L	1.0430	ppb	09:19:05
1	SiO2†	556.2	59.3	4.6667	ug/L	4.6667	ppb	09:20:01
2	Sc Radial	3873.2	3873.2	101	%			09:18:13
2	Y RADIAL	4418.1	4418.1	102.0	%			09:17:53
2	Al 396.153Radial†	-90.6	2.4	2.5842	ug/L	2.5842	ppb	09:17:53
2	Ca 317.933Radial†	17.2	-1.6	-3.1286	ug/L	-3.1286	ppb	09:18:13
2	Fe 238.204 Radial†	6.5	0.3	3.7410	ug/L	3.7410	ppb	09:18:13
2	K 766.490 Radial†	3404.0	377.7	70.262	ug/L	70.262	ppb	09:17:53
2	Mg 279.077 IEC†	-0.4	-3.4	-141.21	ug/L	-141.21	ppb	09:18:13
2	Na 589.592 Radial†	-1184.7	-96.3	-42.387	ug/L	-42.387	ppb	09:17:53
2	Sr 421.552†	32.1	18.0	0.1726	ug/L	0.1726	ppb	09:17:53
2	Sc 361.383	693895.7	693895.7	100.62	%			09:19:10
2	Y 371.029	546763.5	546763.5	100.91	%			09:19:10
2	Ag 328.068†	199.8	98.6	0.5432	ug/L	0.5432	ppb	09:19:10
2	As 188.979†	-28.2	-5.3	-2.6107	ug/L	-2.6107	ppb	09:19:30
2	B 249.677†	95.9	678.3	17.065	ug/L	17.065	ppb	09:19:10
2	Ba 233.527†	7.6	6.8	0.0675	ug/L	0.0675	ppb	09:19:30
2	Be 313.107†	-4446.8	104.1	0.0418	ug/L	0.0418	ppb	09:19:10
2	Cd 226.502†	-195.2	19.4	0.2852	ug/L	0.2852	ppb	09:19:30
2	Co 228.616†	-44.7	15.2	0.3772	ug/L	0.3772	ppb	09:19:30
2	Cr 267.716†	116.3	24.3	0.3571	ug/L	0.3571	ppb	09:19:10
2	Cu 324.752†	5736.9	13.3	0.0416	ug/L	0.0416	ppb	09:19:10
2	Mn 257.610†	446.2	-1.6	0.0041	ug/L	0.0041	ppb	09:19:30
2	Mo 202.031†	11.4	-1.2	-0.1115	ug/L	-0.1115	ppb	09:19:30
2	Ni 231.604†	102.6	27.3	0.8886	ug/L	0.8886	ppb	09:19:30

2	P 214.914†	217.1	-2.8	-1.8024	ug/L	-1.8024 ppb	09:19:30
2	Pb 220.353†	-69.5	-2.0	-0.3176	ug/L	-0.3176 ppb	09:19:30
2	S 181.975 Axial†	43.1	2.6	3.8850	ug/L	3.8850 ppb	09:19:30
2	Sb 206.836†	25.6	-6.3	-2.5125	ug/L	-2.5125 ppb	09:19:30
2	Se 196.026†	-23.2	-1.0	-0.7036	ug/L	-0.7036 ppb	09:19:30
2	Si 251.611†	542.4	42.4	1.5537	ug/L	1.5537 ppb	09:19:30
2	Sn 189.927†	1.5	-2.6	-0.6049	ug/L	-0.6049 ppb	09:19:30
2	Ti 334.940†	-1485.4	-54.7	-0.0906	ug/L	-0.0906 ppb	09:19:10
2	Tl 190.801†	-24.5	13.6	5.2130	ug/L	5.2130 ppb	09:19:30
2	U 409.014†	-2284.3	136.4	5.2533	ug/L	5.2533 ppb	09:19:10
2	V 292.402†	-1647.9	78.7	0.6993	ug/L	0.6993 ppb	09:19:10
2	Zn 213.857†	711.5	42.5	0.4798	ug/L	0.4798 ppb	09:19:30
2	SiO2†	530.4	-12.0	-0.9450	ug/L	-0.9450 ppb	09:20:06
3	Sc Radial	3789.5	3789.5	98.7	%		09:18:38
3	Y RADIAL	4170.1	4170.1	96.27	%		09:18:18
3	Al 396.153Radial†	-103.9	-13.0	-13.679	ug/L	-13.679 ppb	09:18:18
3	Ca 317.933Radial†	22.0	3.6	7.1296	ug/L	7.1296 ppb	09:18:38
3	Fe 238.204 Radial†	6.3	0.1	1.8791	ug/L	1.8791 ppb	09:18:38
3	K 766.490 Radial†	3260.3	306.7	57.063	ug/L	57.063 ppb	09:18:18
3	Mg 279.077 IEC†	3.1	0.1	3.2048	ug/L	3.2048 ppb	09:18:38
3	Na 589.592 Radial†	-1201.6	-139.3	-61.325	ug/L	-61.325 ppb	09:18:18
3	Sr 421.552†	27.9	14.4	0.1379	ug/L	0.1379 ppb	09:18:18
3	Sc 361.383	683991.3	683991.3	99.188	%		09:19:35
3	Y 371.029	538350.8	538350.8	99.359	%		09:19:35
3	Ag 328.068†	134.2	35.4	0.1983	ug/L	0.1983 ppb	09:19:35
3	As 188.979†	-22.4	0.2	0.0864	ug/L	0.0864 ppb	09:19:55
3	B 249.677†	97.5	681.4	17.143	ug/L	17.143 ppb	09:19:35
3	Ba 233.527†	7.7	6.9	0.0667	ug/L	0.0667 ppb	09:19:55
3	Be 313.107†	-4318.3	169.7	0.0684	ug/L	0.0684 ppb	09:19:35
3	Cd 226.502†	-174.7	37.4	0.5453	ug/L	0.5453 ppb	09:19:55
3	Co 228.616†	-67.2	-8.1	-0.1993	ug/L	-0.1993 ppb	09:19:55
3	Cr 267.716†	93.2	2.7	0.0410	ug/L	0.0410 ppb	09:19:35
3	Cu 324.752†	5705.5	64.2	0.2165	ug/L	0.2165 ppb	09:19:35
3	Mn 257.610†	446.9	5.5	0.0072	ug/L	0.0072 ppb	09:19:55
3	Mo 202.031†	16.7	4.3	0.4149	ug/L	0.4149 ppb	09:19:55
3	Ni 231.604†	85.1	11.1	0.3616	ug/L	0.3616 ppb	09:19:55
3	P 214.914†	218.1	1.4	0.8394	ug/L	0.8394 ppb	09:19:55
3	Pb 220.353†	-84.7	-18.3	-2.8879	ug/L	-2.8879 ppb	09:19:55
3	S 181.975 Axial†	32.9	-7.0	-10.548	ug/L	-10.548 ppb	09:19:55
3	Sb 206.836†	46.4	15.1	6.0550	ug/L	6.0550 ppb	09:19:55
3	Se 196.026†	-25.9	-4.0	-2.9535	ug/L	-2.9535 ppb	09:19:55
3	Si 251.611†	546.4	54.2	1.9797	ug/L	1.9797 ppb	09:19:55
3	Sn 189.927†	9.7	5.6	1.2940	ug/L	1.2940 ppb	09:19:55
3	Ti 334.940†	-1439.7	-30.0	-0.0516	ug/L	-0.0516 ppb	09:19:35
3	Tl 190.801†	-29.6	8.1	3.1327	ug/L	3.1327 ppb	09:19:55
3	U 409.014†	-2508.4	-122.4	-4.7140	ug/L	-4.7140 ppb	09:19:35
3	V 292.402†	-1726.0	-23.7	-0.2124	ug/L	-0.2124 ppb	09:19:35
3	Zn 213.857†	719.0	60.2	0.6862	ug/L	0.6862 ppb	09:19:55
3	SiO2†	572.2	37.7	2.9657	ug/L	2.9657 ppb	09:20:11

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	672913.1	97.582	%	4.0899				4.19%
Sc Radial	3781.9	98.5	%	2.48				2.52%
Y 371.029	529781.2	97.778	%	4.1572				4.25%
Y RADIAL	4175.4	96.39	%	5.544				5.75%
Ag 328.068†	67.8	0.3789	ug/L	0.17304	0.3789	ppb	0.17304	45.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.5	0.4599	ug/L	13.20585	0.4599	ppb	13.20585	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.8	-1.3651	ug/L	1.36031	-1.3651	ppb	1.36031	99.65%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	667.8	16.799	ug/L	0.5297	16.799	ppb	0.5297	3.15%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	3.0	0.0286	ug/L	0.06657	0.0286	ppb	0.06657	232.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	106.9	0.0429	ug/L	0.02503	0.0429	ppb	0.02503	58.41%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.4	2.7312	ug/L	5.28292	2.7312	ppb	5.28292	193.43%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                17.7      0.2578 ug/L       0.30219      0.2578 ppb        0.30219 117.22%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 2.6      0.0662 ug/L       0.29093      0.0662 ppb        0.29093 439.35%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                17.8      0.2648 ug/L       0.19478      0.2648 ppb        0.19478  73.56%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               126.3      0.4235 ug/L       0.51739      0.4235 ppb        0.51739 122.18%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.7      8.8933 ug/L      10.57756      8.8933 ppb       10.57756 118.94%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         352.6      65.604 ug/L        7.4067      65.604 ppb         7.4067  11.29%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.9     -37.923 ug/L       90.0623     -37.923 ppb        90.0623 237.49%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                15.5      0.0225 ug/L       0.02927      0.0225 ppb        0.02927 129.91%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.3      0.3153 ug/L       0.38676      0.3153 ppb        0.38676 122.66%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -167.2     -73.574 ug/L       38.7908     -73.574 ppb        38.7908  52.72%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                12.5      0.4091 ug/L       0.45757      0.4091 ppb        0.45757 111.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  6.8      4.2481 ug/L       8.29775      4.2481 ppb        8.29775 195.33%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -7.7     -1.2093 ug/L       1.45462     -1.2093 ppb        1.45462 120.28%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.1     -3.2039 ug/L       7.21998     -3.2039 ppb        7.21998 225.35%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.9      2.3844 ug/L       4.41347      2.3844 ppb        4.41347 185.09%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -0.2     -0.0964 ug/L       3.20427     -0.0964 ppb        3.20427 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                63.5      2.3213 ug/L       0.98390      2.3213 ppb        0.98390  42.39%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 3.1      0.7197 ug/L       1.15051      0.7197 ppb        1.15051 159.87%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                11.6      0.1114 ug/L       0.07794      0.1114 ppb        0.07794  69.98%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -74.0     -0.1290 ug/L       0.10218     -0.1290 ppb        0.10218  79.20%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 5.8      2.2207 ug/L       3.53764      2.2207 ppb        3.53764 159.30%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -113.6     -4.3792 ug/L       9.46957     -4.3792 ppb        9.46957 216.24%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -29.2     -0.2637 ug/L       0.98962     -0.2637 ppb        0.98962 375.27%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                64.8      0.7363 ug/L       0.28497      0.7363 ppb        0.28497  38.70%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      28.3      2.2291 ug/L       2.87748      2.2291 ppb        2.87748 129.09%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 4/1/2010 09:49:27
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	3854.9	3854.9	100	%			09:51:39
1	Y RADIAL	4327.0	4327.0	99.89	%			09:51:19
1	Al 396.153Radial†	4687.1	4759.6	4986.3	ug/L	4986.3	ppb	09:51:19
1	Ca 317.933Radial†	2649.6	2619.8	5144.1	ug/L	5144.1	ppb	09:51:39
1	Fe 238.204 Radial†	409.8	401.9	5122.8	ug/L	5122.8	ppb	09:51:39
1	K 766.490 Radial†	30021.6	26899.1	4995.9	ug/L	4995.9	ppb	09:51:19
1	Mg 279.077 IEC†	131.9	128.3	5284.3	ug/L	5284.3	ppb	09:51:39
1	Na 589.592 Radial†	22291.1	23274.9	10244	ug/L	10244	ppb	09:51:19
1	Sr 421.552†	51588.8	51357.4	493.07	ug/L	493.07	ppb	09:51:19
1	Sc 361.383	689706.5	689706.5	100.02	%			09:52:37
1	Y 371.029	537143.4	537143.4	99.136	%			09:52:37
1	Ag 328.068†	89429.9	89314.6	495.16	ug/L	495.16	ppb	09:52:42
1	As 188.979†	962.6	985.2	492.08	ug/L	492.08	ppb	09:53:02
1	B 249.677†	18931.4	19511.1	488.63	ug/L	488.63	ppb	09:52:42
1	Ba 233.527†	50796.0	50786.4	492.09	ug/L	492.09	ppb	09:52:42
1	Be 313.107†	1212170.7	1216485.1	492.42	ug/L	492.42	ppb	09:52:37
1	Cd 226.502†	33398.8	33606.5	491.20	ug/L	491.20	ppb	09:52:42
1	Co 228.616†	20176.4	20232.6	501.23	ug/L	501.23	ppb	09:52:42
1	Cr 267.716†	33421.6	33324.6	492.63	ug/L	492.63	ppb	09:52:42
1	Cu 324.752†	152276.3	146562.1	488.15	ug/L	488.15	ppb	09:52:42
1	Mn 257.610†	380683.0	380172.4	492.21	ug/L	492.21	ppb	09:52:37
1	Mo 202.031†	5171.4	5158.0	495.92	ug/L	495.92	ppb	09:53:02
1	Ni 231.604†	15399.4	15322.1	499.33	ug/L	499.33	ppb	09:52:42
1	P 214.914†	4030.8	3811.6	2341.4	ug/L	2341.4	ppb	09:53:02
1	Pb 220.353†	3059.4	3125.9	493.47	ug/L	493.47	ppb	09:53:02
1	S 181.975 Axial†	678.2	637.9	957.51	ug/L	957.51	ppb	09:53:02
1	Sb 206.836†	1261.5	1229.6	509.78	ug/L	509.78	ppb	09:53:02
1	Se 196.026†	632.4	654.4	501.84	ug/L	501.84	ppb	09:53:02
1	Si 251.611†	67835.5	67327.2	2458.7	ug/L	2458.7	ppb	09:52:42
1	Sn 189.927†	2178.7	2174.2	500.39	ug/L	500.39	ppb	09:53:02
1	Ti 334.940†	270383.4	271758.3	493.08	ug/L	493.08	ppb	09:52:42
1	Tl 190.801†	1242.5	1280.2	495.82	ug/L	495.82	ppb	09:53:02
1	U 409.014†	10278.0	12682.7	486.85	ug/L	486.85	ppb	09:52:42
1	V 292.402†	53896.1	55603.2	496.76	ug/L	496.76	ppb	09:52:42
1	Zn 213.857†	43423.5	42751.5	484.40	ug/L	484.40	ppb	09:52:42
1	SiO2†	66982.7	66432.0	5231.7	ug/L	5231.7	ppb	09:54:09
2	Sc Radial	3653.9	3653.9	95.2	%			09:52:04
2	Y RADIAL	4140.8	4140.8	95.59	%			09:51:44
2	Al 396.153Radial†	4478.2	4797.0	5026.2	ug/L	5026.2	ppb	09:51:44
2	Ca 317.933Radial†	2525.0	2634.0	5172.1	ug/L	5172.1	ppb	09:52:04
2	Fe 238.204 Radial†	386.7	400.1	5099.5	ug/L	5099.5	ppb	09:52:04
2	K 766.490 Radial†	28908.6	27374.6	5084.3	ug/L	5084.3	ppb	09:51:44
2	Mg 279.077 IEC†	120.3	123.3	5079.5	ug/L	5079.5	ppb	09:52:04
2	Na 589.592 Radial†	21256.3	23409.0	10303	ug/L	10303	ppb	09:51:44
2	Sr 421.552†	49200.4	51674.5	496.12	ug/L	496.12	ppb	09:51:44
2	Sc 361.383	692239.2	692239.2	100.38	%			09:53:08
2	Y 371.029	539012.1	539012.1	99.481	%			09:53:08
2	Ag 328.068†	89615.8	89172.6	494.37	ug/L	494.37	ppb	09:53:13
2	As 188.979†	953.5	972.6	485.87	ug/L	485.87	ppb	09:53:33
2	B 249.677†	18962.8	19473.2	487.68	ug/L	487.68	ppb	09:53:13
2	Ba 233.527†	50999.5	50803.4	492.25	ug/L	492.25	ppb	09:53:13
2	Be 313.107†	1216890.1	1216752.2	492.53	ug/L	492.53	ppb	09:53:08
2	Cd 226.502†	33438.4	33523.8	489.99	ug/L	489.99	ppb	09:53:13
2	Co 228.616†	20248.2	20230.3	501.16	ug/L	501.16	ppb	09:53:13
2	Cr 267.716†	33537.2	33317.4	492.53	ug/L	492.53	ppb	09:53:13
2	Cu 324.752†	152391.8	146120.1	486.68	ug/L	486.68	ppb	09:53:13
2	Mn 257.610†	382528.1	380617.9	492.79	ug/L	492.79	ppb	09:53:08
2	Mo 202.031†	5083.2	5051.3	485.67	ug/L	485.67	ppb	09:53:33
2	Ni 231.604†	15435.6	15301.8	498.67	ug/L	498.67	ppb	09:53:13

2	P 214.914†	3962.9	3729.2	2288.9 ug/L	2288.9 ppb	09:53:33
2	Pb 220.353†	3012.4	3067.9	484.34 ug/L	484.34 ppb	09:53:33
2	S 181.975 Axial†	677.2	634.3	952.18 ug/L	952.18 ppb	09:53:33
2	Sb 206.836†	1251.1	1214.6	503.37 ug/L	503.37 ppb	09:53:33
2	Se 196.026†	627.1	646.8	496.11 ug/L	496.11 ppb	09:53:33
2	Si 251.611†	67992.3	67235.2	2455.4 ug/L	2455.4 ppb	09:53:13
2	Sn 189.927†	2129.1	2116.8	487.22 ug/L	487.22 ppb	09:53:33
2	Ti 334.940†	270999.9	271383.3	492.43 ug/L	492.43 ppb	09:53:13
2	Tl 190.801†	1226.2	1259.5	487.84 ug/L	487.84 ppb	09:53:33
2	U 409.014†	10144.1	12511.8	480.27 ug/L	480.27 ppb	09:53:13
2	V 292.402†	53974.1	55483.8	495.55 ug/L	495.55 ppb	09:53:13
2	Zn 213.857†	43644.8	42813.0	485.11 ug/L	485.11 ppb	09:53:13
2	SiO2†	66116.3	65323.9	5144.5 ug/L	5144.5 ppb	09:54:14
3	Sc Radial	3791.0	3791.0	98.8 %		09:52:30
3	Y RADIAL	4041.1	4041.1	93.29 %		09:52:10
3	Al 396.153Radial†	4407.3	4555.0	4770.9 ug/L	4770.9 ppb	09:52:10
3	Ca 317.933Radial†	2601.5	2615.6	5135.8 ug/L	5135.8 ppb	09:52:30
3	Fe 238.204 Radial†	399.8	398.7	5081.9 ug/L	5081.9 ppb	09:52:30
3	K 766.490 Radial†	28426.7	25788.1	4789.5 ug/L	4789.5 ppb	09:52:10
3	Mg 279.077 IEC†	128.4	127.0	5230.4 ug/L	5230.4 ppb	09:52:30
3	Na 589.592 Radial†	20717.6	22055.8	9707.6 ug/L	9707.6 ppb	09:52:10
3	Sr 421.552†	48217.0	48809.1	468.61 ug/L	468.61 ppb	09:52:10
3	Sc 361.383	673437.3	673437.3	97.658 %		09:53:39
3	Y 371.029	524886.5	524886.5	96.874 %		09:53:39
3	Ag 328.068†	85976.4	87938.4	487.54 ug/L	487.54 ppb	09:53:44
3	As 188.979†	946.1	991.6	495.15 ug/L	495.15 ppb	09:54:04
3	B 249.677†	18048.2	19064.0	477.40 ug/L	477.40 ppb	09:53:44
3	Ba 233.527†	49287.4	50468.6	489.00 ug/L	489.00 ppb	09:53:44
3	Be 313.107†	1176679.4	1209421.8	489.55 ug/L	489.55 ppb	09:53:39
3	Cd 226.502†	32156.2	33140.8	484.39 ug/L	484.39 ppb	09:53:44
3	Co 228.616†	19494.7	20021.9	496.04 ug/L	496.04 ppb	09:53:44
3	Cr 267.716†	32231.4	32913.1	486.55 ug/L	486.55 ppb	09:53:44
3	Cu 324.752†	144952.4	142740.7	475.43 ug/L	475.43 ppb	09:53:44
3	Mn 257.610†	371476.1	379939.9	491.90 ug/L	491.90 ppb	09:53:39
3	Mo 202.031†	5073.7	5182.9	498.31 ug/L	498.31 ppb	09:54:04
3	Ni 231.604†	14933.6	15217.1	495.91 ug/L	495.91 ppb	09:53:44
3	P 214.914†	3919.9	3795.4	2333.5 ug/L	2333.5 ppb	09:54:04
3	Pb 220.353†	3000.5	3139.5	495.58 ug/L	495.58 ppb	09:54:04
3	S 181.975 Axial†	673.2	649.1	974.46 ug/L	974.46 ppb	09:54:04
3	Sb 206.836†	1236.7	1234.6	511.83 ug/L	511.83 ppb	09:54:04
3	Se 196.026†	622.7	659.8	505.68 ug/L	505.68 ppb	09:54:04
3	Si 251.611†	64974.9	66036.6	2411.4 ug/L	2411.4 ppb	09:53:44
3	Sn 189.927†	2124.3	2171.1	499.68 ug/L	499.68 ppb	09:54:04
3	Ti 334.940†	259894.2	267548.4	485.45 ug/L	485.45 ppb	09:53:44
3	Tl 190.801†	1215.7	1282.8	496.78 ug/L	496.78 ppb	09:54:04
3	U 409.014†	9657.7	12295.8	471.96 ug/L	471.96 ppb	09:53:44
3	V 292.402†	51793.3	54751.8	489.27 ug/L	489.27 ppb	09:53:44
3	Zn 213.857†	41784.3	42121.8	477.24 ug/L	477.24 ppb	09:53:44
3	SiO2†	66488.1	67543.4	5319.4 ug/L	5319.4 ppb	09:54:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	685127.7	99.353	%	1.4796				1.49%
Sc Radial	3766.6	98.1	%	2.68				2.73%
Y 371.029	533680.7	98.497	%	1.4162				1.44%
Y RADIAL	4169.6	96.26	%	3.349				3.48%
Ag 328.068†	88808.5	492.36	ug/L	4.186	492.36	ppb	4.186	0.85%
QC value within limits for Ag 328.068 Recovery = 98.47%								
Al 396.153Radial†	4703.9	4927.8	ug/L	137.37	4927.8	ppb	137.37	2.79%
QC value within limits for Al 396.153Radial Recovery = 98.56%								
As 188.979†	983.2	491.03	ug/L	4.730	491.03	ppb	4.730	0.96%
QC value within limits for As 188.979 Recovery = 98.21%								
B 249.677†	19349.5	484.57	ug/L	6.226	484.57	ppb	6.226	1.28%
QC value within limits for B 249.677 Recovery = 96.91%								
Ba 233.527†	50686.1	491.11	ug/L	1.832	491.11	ppb	1.832	0.37%
QC value within limits for Ba 233.527 Recovery = 98.22%								
Be 313.107†	1214219.7	491.50	ug/L	1.689	491.50	ppb	1.689	0.34%
QC value within limits for Be 313.107 Recovery = 98.30%								
Ca 317.933Radial†	2623.1	5150.7	ug/L	19.00	5150.7	ppb	19.00	0.37%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.01%
Cd 226.502†            33423.7      488.52 ug/L         3.633      488.52 ppb         3.633   0.74%
   QC value within limits for Cd 226.502  Recovery = 97.70%
Co 228.616†            20161.6      499.48 ug/L         2.977      499.48 ppb         2.977   0.60%
   QC value within limits for Co 228.616  Recovery = 99.90%
Cr 267.716†            33185.0      490.57 ug/L         3.480      490.57 ppb         3.480   0.71%
   QC value within limits for Cr 267.716  Recovery = 98.11%
Cu 324.752†           145141.0      483.42 ug/L         6.960      483.42 ppb         6.960   1.44%
   QC value within limits for Cu 324.752  Recovery = 96.68%
Fe 238.204 Radial†       400.2      5101.4 ug/L        20.56      5101.4 ppb        20.56   0.40%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.03%
K 766.490 Radial†      26687.3      4956.6 ug/L       151.29      4956.6 ppb       151.29   3.05%
   QC value within limits for K 766.490 Radial  Recovery = 99.13%
Mg 279.077 IEC†          126.2      5198.1 ug/L       106.17      5198.1 ppb       106.17   2.04%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.96%
Mn 257.610†           380243.4      492.30 ug/L         0.450      492.30 ppb         0.450   0.09%
   QC value within limits for Mn 257.610  Recovery = 98.46%
Mo 202.031†             5130.7      493.30 ug/L         6.714      493.30 ppb         6.714   1.36%
   QC value within limits for Mo 202.031  Recovery = 98.66%
Na 589.592 Radial†     22913.3       10085 ug/L         328.2       10085 ppb         328.2   3.25%
   QC value within limits for Na 589.592 Radial  Recovery = 100.85%
Ni 231.604†            15280.3      497.97 ug/L         1.815      497.97 ppb         1.815   0.36%
   QC value within limits for Ni 231.604  Recovery = 99.59%
P 214.914†              3778.7      2321.3 ug/L        28.28      2321.3 ppb        28.28   1.22%
   QC value within limits for P 214.914  Recovery = 92.85%
Pb 220.353†             3111.1      491.13 ug/L         5.973      491.13 ppb         5.973   1.22%
   QC value within limits for Pb 220.353  Recovery = 98.23%
S 181.975 Axial†         640.5      961.38 ug/L        11.633      961.38 ppb        11.633   1.21%
   QC value within limits for S 181.975 Axial  Recovery = 96.14%
Sb 206.836†             1226.3      508.32 ug/L         4.414      508.32 ppb         4.414   0.87%
   QC value within limits for Sb 206.836  Recovery = 101.66%
Se 196.026†              653.6      501.21 ug/L         4.820      501.21 ppb         4.820   0.96%
   QC value within limits for Se 196.026  Recovery = 100.24%
Si 251.611†            66866.4      2441.8 ug/L        26.41      2441.8 ppb        26.41   1.08%
   QC value within limits for Si 251.611  Recovery = 97.67%
Sn 189.927†             2154.0      495.77 ug/L         7.407      495.77 ppb         7.407   1.49%
   QC value within limits for Sn 189.927  Recovery = 99.15%
Sr 421.552†            50613.7      485.93 ug/L        15.082      485.93 ppb        15.082   3.10%
   QC value within limits for Sr 421.552  Recovery = 97.19%
Ti 334.940†           270230.0      490.32 ug/L         4.227      490.32 ppb         4.227   0.86%
   QC value within limits for Ti 334.940  Recovery = 98.06%
Tl 190.801†             1274.2      493.48 ug/L         4.907      493.48 ppb         4.907   0.99%
   QC value within limits for Tl 190.801  Recovery = 98.70%
U 409.014†             12496.8      479.69 ug/L         7.459      479.69 ppb         7.459   1.56%
   QC value within limits for U 409.014  Recovery = 95.94%
V 292.402†             55279.6      493.86 ug/L         4.018      493.86 ppb         4.018   0.81%
   QC value within limits for V 292.402  Recovery = 98.77%
Zn 213.857†            42562.1      482.25 ug/L         4.353      482.25 ppb         4.353   0.90%
   QC value within limits for Zn 213.857  Recovery = 96.45%
SiO2†                  66433.1      5231.9 ug/L        87.45      5231.9 ppb        87.45   1.67%
   QC value within limits for SiO2  Recovery = 97.84%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 4/1/2010 09:56:29
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	3738.7	3738.7	97.4	%			09:58:42
1	Y RADIAL	4095.8	4095.8	94.55	%			09:58:22
1	Al 396.153Radial†	-92.5	-2.7	-2.8556	ug/L	-2.8556	ppb	09:58:22
1	Ca 317.933Radial†	17.8	-0.3	-0.6648	ug/L	-0.6648	ppb	09:58:42
1	Fe 238.204 Radial†	7.8	1.8	23.238	ug/L	23.238	ppb	09:58:42
1	K 766.490 Radial†	3172.4	261.3	48.612	ug/L	48.612	ppb	09:58:22
1	Mg 279.077 IEC†	1.9	-1.1	-45.345	ug/L	-45.345	ppb	09:58:42
1	Na 589.592 Radial†	-1153.5	-106.6	-46.898	ug/L	-46.898	ppb	09:58:22
1	Sr 421.552†	45.8	33.1	0.3181	ug/L	0.3181	ppb	09:58:22
1	Sc 361.383	683986.3	683986.3	99.188	%			09:59:39
1	Y 371.029	537723.5	537723.5	99.244	%			09:59:39
1	Ag 328.068†	27.6	-72.1	-0.3930	ug/L	-0.3930	ppb	09:59:39
1	As 188.979†	-19.9	2.7	1.3310	ug/L	1.3310	ppb	09:59:59
1	B 249.677†	-210.7	370.6	9.3196	ug/L	9.3196	ppb	09:59:59
1	Ba 233.527†	-4.0	-4.9	-0.0474	ug/L	-0.0474	ppb	09:59:59
1	Be 313.107†	-4383.7	103.7	0.0416	ug/L	0.0416	ppb	09:59:39
1	Cd 226.502†	-211.8	-0.0	-0.0029	ug/L	-0.0029	ppb	09:59:59
1	Co 228.616†	-56.5	2.7	0.0678	ug/L	0.0678	ppb	09:59:59
1	Cr 267.716†	70.0	-20.7	-0.3043	ug/L	-0.3043	ppb	09:59:59
1	Cu 324.752†	5544.3	-98.3	-0.3266	ug/L	-0.3266	ppb	09:59:39
1	Mn 257.610†	436.9	-4.5	-0.0017	ug/L	-0.0017	ppb	09:59:59
1	Mo 202.031†	13.5	1.2	0.1126	ug/L	0.1126	ppb	09:59:59
1	Ni 231.604†	77.6	3.6	0.1162	ug/L	0.1162	ppb	09:59:59
1	P 214.914†	218.7	2.0	1.3611	ug/L	1.3611	ppb	09:59:59
1	Pb 220.353†	-76.4	-10.1	-1.5847	ug/L	-1.5847	ppb	09:59:59
1	S 181.975 Axial†	39.9	-0.1	-0.0765	ug/L	-0.0765	ppb	09:59:59
1	Sb 206.836†	32.4	0.9	0.3766	ug/L	0.3766	ppb	09:59:59
1	Se 196.026†	-23.8	-1.9	-1.3130	ug/L	-1.3130	ppb	09:59:59
1	Si 251.611†	523.7	31.4	1.1478	ug/L	1.1478	ppb	09:59:59
1	Sn 189.927†	10.7	6.6	1.5251	ug/L	1.5251	ppb	09:59:59
1	Ti 334.940†	-1481.4	-72.1	-0.1275	ug/L	-0.1275	ppb	09:59:39
1	Tl 190.801†	-37.3	0.4	0.1447	ug/L	0.1447	ppb	09:59:59
1	U 409.014†	-2362.4	24.7	0.9510	ug/L	0.9510	ppb	09:59:39
1	V 292.402†	-1764.6	-62.7	-0.5533	ug/L	-0.5533	ppb	09:59:39
1	Zn 213.857†	710.3	51.5	0.5854	ug/L	0.5854	ppb	09:59:59
1	SiO2†	570.0	35.5	2.8005	ug/L	2.8005	ppb	10:00:55
2	Sc Radial	3884.7	3884.7	101	%			09:59:07
2	Y RADIAL	4091.0	4091.0	94.44	%			09:58:47
2	Al 396.153Radial†	-98.5	-5.0	-5.3282	ug/L	-5.3282	ppb	09:58:47
2	Ca 317.933Radial†	20.2	1.3	2.4920	ug/L	2.4920	ppb	09:59:07
2	Fe 238.204 Radial†	6.6	0.4	4.7701	ug/L	4.7701	ppb	09:59:07
2	K 766.490 Radial†	3110.9	78.2	14.549	ug/L	14.549	ppb	09:58:47
2	Mg 279.077 IEC†	1.0	-2.0	-81.481	ug/L	-81.481	ppb	09:59:07
2	Na 589.592 Radial†	-1155.5	-64.0	-28.151	ug/L	-28.151	ppb	09:58:47
2	Sr 421.552†	-12.2	-25.9	-0.2489	ug/L	-0.2489	ppb	09:58:47
2	Sc 361.383	682105.8	682105.8	98.915	%			10:00:04
2	Y 371.029	535412.2	535412.2	98.817	%			10:00:04
2	Ag 328.068†	211.0	113.4	0.6241	ug/L	0.6241	ppb	10:00:04
2	As 188.979†	-27.4	-4.9	-2.4290	ug/L	-2.4290	ppb	10:00:24
2	B 249.677†	-228.0	352.5	8.8672	ug/L	8.8672	ppb	10:00:24
2	Ba 233.527†	10.0	9.3	0.0872	ug/L	0.0872	ppb	10:00:24
2	Be 313.107†	-4403.1	71.8	0.0288	ug/L	0.0288	ppb	10:00:04
2	Cd 226.502†	-191.4	20.0	0.2912	ug/L	0.2912	ppb	10:00:24
2	Co 228.616†	-53.4	5.7	0.1429	ug/L	0.1429	ppb	10:00:24
2	Cr 267.716†	93.1	2.9	0.0423	ug/L	0.0423	ppb	10:00:24
2	Cu 324.752†	5727.1	101.9	0.3416	ug/L	0.3416	ppb	10:00:04
2	Mn 257.610†	452.7	12.7	0.0202	ug/L	0.0202	ppb	10:00:24
2	Mo 202.031†	15.2	2.9	0.2772	ug/L	0.2772	ppb	10:00:24
2	Ni 231.604†	71.5	-2.4	-0.0783	ug/L	-0.0783	ppb	10:00:24

2	P 214.914†	223.7	7.6	4.8152 ug/L	4.8152 ppb	10:00:24
2	Pb 220.353†	-74.0	-7.8	-1.2250 ug/L	-1.2250 ppb	10:00:24
2	S 181.975 Axial†	35.2	-4.7	-7.0479 ug/L	-7.0479 ppb	10:00:24
2	Sb 206.836†	36.7	5.4	2.1865 ug/L	2.1865 ppb	10:00:24
2	Se 196.026†	-20.6	1.3	0.9781 ug/L	0.9781 ppb	10:00:24
2	Si 251.611†	525.0	34.2	1.2480 ug/L	1.2480 ppb	10:00:24
2	Sn 189.927†	13.8	9.8	2.2487 ug/L	2.2487 ppb	10:00:24
2	Ti 334.940†	-1453.8	-48.3	-0.0791 ug/L	-0.0791 ppb	10:00:04
2	Tl 190.801†	-23.1	14.6	5.6025 ug/L	5.6025 ppb	10:00:24
2	U 409.014†	-2468.1	-88.7	-3.4161 ug/L	-3.4161 ppb	10:00:04
2	V 292.402†	-1833.8	-137.6	-1.2175 ug/L	-1.2175 ppb	10:00:04
2	Zn 213.857†	704.4	47.5	0.5430 ug/L	0.5430 ppb	10:00:24
2	SiO2†	497.5	-36.2	-2.8622 ug/L	-2.8622 ppb	10:01:00
3	Sc Radial	3799.5	3799.5	99.0 %		09:59:32
3	Y RADIAL	4238.6	4238.6	97.85 %		09:59:12
3	Al 396.153Radial†	-89.8	1.6	1.6620 ug/L	1.6620 ppb	09:59:12
3	Ca 317.933Radial†	20.8	2.3	4.5987 ug/L	4.5987 ppb	09:59:32
3	Fe 238.204 Radial†	8.4	2.3	29.786 ug/L	29.786 ppb	09:59:32
3	K 766.490 Radial†	3253.8	291.5	54.231 ug/L	54.231 ppb	09:59:12
3	Mg 279.077 IEC†	5.1	2.2	88.556 ug/L	88.556 ppb	09:59:32
3	Na 589.592 Radial†	-1160.0	-94.2	-41.443 ug/L	-41.443 ppb	09:59:12
3	Sr 421.552†	17.1	3.4	0.0330 ug/L	0.0330 ppb	09:59:12
3	Sc 361.383	684805.1	684805.1	99.306 %		10:00:30
3	Y 371.029	536757.6	536757.6	99.065 %		10:00:30
3	Ag 328.068†	64.1	-35.4	-0.1776 ug/L	-0.1776 ppb	10:00:30
3	As 188.979†	-13.6	9.1	4.4961 ug/L	4.4961 ppb	10:00:50
3	B 249.677†	-230.5	350.9	8.8255 ug/L	8.8255 ppb	10:00:50
3	Ba 233.527†	-4.8	-5.6	-0.0538 ug/L	-0.0538 ppb	10:00:50
3	Be 313.107†	-4512.7	-21.0	-0.0088 ug/L	-0.0088 ppb	10:00:30
3	Cd 226.502†	-201.7	10.4	0.1466 ug/L	0.1466 ppb	10:00:50
3	Co 228.616†	-71.5	-12.3	-0.3065 ug/L	-0.3065 ppb	10:00:50
3	Cr 267.716†	78.4	-12.3	-0.1747 ug/L	-0.1747 ppb	10:00:50
3	Cu 324.752†	5670.4	22.1	0.0816 ug/L	0.0816 ppb	10:00:30
3	Mn 257.610†	467.9	26.2	0.0332 ug/L	0.0332 ppb	10:00:50
3	Mo 202.031†	6.4	-6.1	-0.5796 ug/L	-0.5796 ppb	10:00:50
3	Ni 231.604†	84.9	10.8	0.3517 ug/L	0.3517 ppb	10:00:50
3	P 214.914†	222.4	5.4	3.4492 ug/L	3.4492 ppb	10:00:50
3	Pb 220.353†	-69.1	-2.5	-0.4036 ug/L	-0.4036 ppb	10:00:50
3	S 181.975 Axial†	37.5	-2.5	-3.7429 ug/L	-3.7429 ppb	10:00:50
3	Sb 206.836†	36.0	4.5	1.8126 ug/L	1.8126 ppb	10:00:50
3	Se 196.026†	-27.3	-5.4	-3.9190 ug/L	-3.9190 ppb	10:00:50
3	Si 251.611†	514.8	21.8	0.8038 ug/L	0.8038 ppb	10:00:50
3	Sn 189.927†	7.2	3.2	0.7271 ug/L	0.7271 ppb	10:00:50
3	Ti 334.940†	-1482.8	-71.6	-0.1313 ug/L	-0.1313 ppb	10:00:30
3	Tl 190.801†	-27.8	9.9	3.8130 ug/L	3.8130 ppb	10:00:50
3	U 409.014†	-2696.5	-308.8	-11.899 ug/L	-11.899 ppb	10:00:30
3	V 292.402†	-1750.1	-45.9	-0.4381 ug/L	-0.4381 ppb	10:00:30
3	Zn 213.857†	678.3	18.5	0.2045 ug/L	0.2045 ppb	10:00:50
3	SiO2†	556.9	21.7	1.7260 ug/L	1.7260 ppb	10:01:05

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	683632.4	99.136	%	0.2007				0.20%
Sc Radial	3807.6	99.2	%	1.91				1.93%
Y 371.029	536631.1	99.042	%	0.2142				0.22%
Y RADIAL	4141.8	95.61	%	1.936				2.03%
Ag 328.068†	2.0	0.0178	ug/L	0.53596	0.0178	ppb	0.53596	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.1	-2.1739	ug/L	3.54462	-2.1739	ppb	3.54462	163.05%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.3	1.1327	ug/L	3.46682	1.1327	ppb	3.46682	306.07%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	358.0	9.0041	ug/L	0.27401	9.0041	ppb	0.27401	3.04%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.4	-0.0047	ug/L	0.07962	-0.0047	ppb	0.07962	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	51.5	0.0205	ug/L	0.02617	0.0205	ppb	0.02617	127.46%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.1	2.1420	ug/L	2.64915	2.1420	ppb	2.64915	123.68%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                10.1      0.1450 ug/L       0.14704      0.1450 ppb        0.14704 101.42%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -1.3     -0.0319 ug/L       0.24073     -0.0319 ppb        0.24073 753.79%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -10.1     -0.1456 ug/L       0.17514     -0.1456 ppb        0.17514 120.31%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                 8.6      0.0322 ug/L       0.33686      0.0322 ppb        0.33686 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.5     19.265 ug/L       12.9728     19.265 ppb        12.9728  67.34%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         210.3     39.131 ug/L       21.4726     39.131 ppb        21.4726  54.87%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.3    -12.757 ug/L       89.5802    -12.757 ppb        89.5802 702.23%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                11.5      0.0172 ug/L       0.01767      0.0172 ppb        0.01767 102.47%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -0.7     -0.0633 ug/L       0.45465     -0.0633 ppb        0.45465 718.75%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -88.2    -38.830 ug/L        9.6428    -38.830 ppb         9.6428  24.83%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 4.0      0.1299 ug/L       0.21537      0.1299 ppb        0.21537 165.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  5.0      3.2085 ug/L       1.73959      3.2085 ppb        1.73959  54.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -6.8     -1.0711 ug/L       0.60537     -1.0711 ppb        0.60537  56.52%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.4     -3.6224 ug/L       3.48727     -3.6224 ppb        3.48727  96.27%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 3.6      1.4586 ug/L       0.95551      1.4586 ppb        0.95551  65.51%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.0     -1.4180 ug/L       2.45023     -1.4180 ppb        2.45023 172.80%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                29.1      1.0666 ug/L       0.23299      1.0666 ppb        0.23299  21.84%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.5      1.5003 ug/L       0.76109      1.5003 ppb        0.76109  50.73%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 3.5      0.0340 ug/L       0.28351      0.0340 ppb        0.28351 832.70%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -64.0     -0.1126 ug/L       0.02910     -0.1126 ppb        0.02910  25.83%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 8.3      3.1867 ug/L       2.78226      3.1867 ppb        2.78226  87.31%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -124.3     -4.7880 ug/L       6.53389     -4.7880 ppb        6.53389 136.46%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -82.1     -0.7363 ug/L       0.42068     -0.7363 ppb        0.42068  57.13%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                39.2      0.4443 ug/L       0.20876      0.4443 ppb        0.20876  46.99%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                       7.0      0.5548 ug/L       3.00755      0.5548 ppb        3.00755 542.12%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 4/1/2010 10:49:48
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	3684.0	3684.0	96.0	%			10:52:00
1	Y RADIAL	4171.6	4171.6	96.30	%			10:51:40
1	Al 396.153Radial†	4453.6	4732.7	4958.2	ug/L	4958.2	ppb	10:51:40
1	Ca 317.933Radial†	2562.3	2651.2	5205.7	ug/L	5205.7	ppb	10:52:00
1	Fe 238.204 Radial†	389.3	399.4	5091.3	ug/L	5091.3	ppb	10:52:00
1	K 766.490 Radial†	28814.5	27027.9	5019.9	ug/L	5019.9	ppb	10:51:40
1	Mg 279.077 IEC†	123.3	125.4	5166.8	ug/L	5166.8	ppb	10:52:00
1	Na 589.592 Radial†	20881.1	22835.2	10051	ug/L	10051	ppb	10:51:40
1	Sr 421.552†	48827.7	50862.9	488.32	ug/L	488.32	ppb	10:51:40
1	Sc 361.383	693604.5	693604.5	100.58	%			10:52:57
1	Y 371.029	540460.1	540460.1	99.749	%			10:52:57
1	Ag 328.068†	90053.3	89431.9	495.79	ug/L	495.79	ppb	10:53:03
1	As 188.979†	965.5	982.7	490.83	ug/L	490.83	ppb	10:53:23
1	B 249.677†	19080.2	19552.7	489.68	ug/L	489.68	ppb	10:53:03
1	Ba 233.527†	51099.8	50803.1	492.25	ug/L	492.25	ppb	10:53:03
1	Be 313.107†	1207123.2	1204655.7	487.64	ug/L	487.64	ppb	10:52:57
1	Cd 226.502†	33370.1	33390.3	488.04	ug/L	488.04	ppb	10:53:03
1	Co 228.616†	20273.0	20215.3	500.80	ug/L	500.80	ppb	10:53:03
1	Cr 267.716†	33508.0	33222.7	491.13	ug/L	491.13	ppb	10:53:03
1	Cu 324.752†	153322.0	146746.1	488.76	ug/L	488.76	ppb	10:53:03
1	Mn 257.610†	380808.0	378157.7	489.60	ug/L	489.60	ppb	10:52:57
1	Mo 202.031†	5169.4	5127.0	492.94	ug/L	492.94	ppb	10:53:23
1	Ni 231.604†	15416.0	15252.1	497.05	ug/L	497.05	ppb	10:53:03
1	P 214.914†	4031.3	3789.4	2327.1	ug/L	2327.1	ppb	10:53:23
1	Pb 220.353†	3057.5	3106.8	490.46	ug/L	490.46	ppb	10:53:23
1	S 181.975 Axial†	695.7	651.4	977.80	ug/L	977.80	ppb	10:53:23
1	Sb 206.836†	1255.0	1216.0	504.20	ug/L	504.20	ppb	10:53:23
1	Se 196.026†	627.6	646.0	495.54	ug/L	495.54	ppb	10:53:23
1	Si 251.611†	68152.1	67260.8	2456.3	ug/L	2456.3	ppb	10:53:03
1	Sn 189.927†	2168.7	2152.0	495.31	ug/L	495.31	ppb	10:53:23
1	Ti 334.940†	271711.3	271559.2	492.74	ug/L	492.74	ppb	10:53:03
1	Tl 190.801†	1238.2	1269.0	491.47	ug/L	491.47	ppb	10:53:23
1	U 409.014†	10346.0	12692.6	487.24	ug/L	487.24	ppb	10:53:03
1	V 292.402†	54168.1	55570.8	496.44	ug/L	496.44	ppb	10:53:03
1	Zn 213.857†	43659.1	42741.6	484.30	ug/L	484.30	ppb	10:53:03
1	SiO2†	66234.4	65311.7	5143.3	ug/L	5143.3	ppb	10:54:30
2	Sc Radial	3811.1	3811.1	99.3	%			10:52:25
2	Y RADIAL	4293.3	4293.3	99.11	%			10:52:05
2	Al 396.153Radial†	4471.9	4596.5	4815.0	ug/L	4815.0	ppb	10:52:05
2	Ca 317.933Radial†	2585.3	2585.3	5076.4	ug/L	5076.4	ppb	10:52:25
2	Fe 238.204 Radial†	396.3	393.0	5009.9	ug/L	5009.9	ppb	10:52:25
2	K 766.490 Radial†	28916.0	26129.2	4852.9	ug/L	4852.9	ppb	10:52:05
2	Mg 279.077 IEC†	124.3	122.2	5031.4	ug/L	5031.4	ppb	10:52:25
2	Na 589.592 Radial†	20914.7	22143.7	9746.2	ug/L	9746.2	ppb	10:52:05
2	Sr 421.552†	49116.3	49457.4	474.83	ug/L	474.83	ppb	10:52:05
2	Sc 361.383	694919.9	694919.9	100.77	%			10:53:28
2	Y 371.029	542217.2	542217.2	100.07	%			10:53:28
2	Ag 328.068†	88973.3	88190.7	488.92	ug/L	488.92	ppb	10:53:34
2	As 188.979†	952.5	967.9	483.46	ug/L	483.46	ppb	10:53:54
2	B 249.677†	18862.4	19300.6	483.37	ug/L	483.37	ppb	10:53:34
2	Ba 233.527†	50724.3	50334.3	487.70	ug/L	487.70	ppb	10:53:34
2	Be 313.107†	1213232.6	1208446.6	489.16	ug/L	489.16	ppb	10:53:28
2	Cd 226.502†	33106.2	33065.6	483.29	ug/L	483.29	ppb	10:53:34
2	Co 228.616†	20068.0	19973.7	494.82	ug/L	494.82	ppb	10:53:34
2	Cr 267.716†	33316.2	32969.2	487.38	ug/L	487.38	ppb	10:53:34
2	Cu 324.752†	151303.8	144454.9	481.13	ug/L	481.13	ppb	10:53:34
2	Mn 257.610†	380937.7	377569.7	488.84	ug/L	488.84	ppb	10:53:28
2	Mo 202.031†	5135.6	5083.7	488.77	ug/L	488.77	ppb	10:53:54
2	Ni 231.604†	15337.8	15145.4	493.57	ug/L	493.57	ppb	10:53:34

2	P 214.914†	3991.5	3742.3	2298.4 ug/L	2298.4 ppb	10:53:54
2	Pb 220.353†	3038.0	3081.7	486.48 ug/L	486.48 ppb	10:53:54
2	S 181.975 Axial†	674.9	629.5	944.92 ug/L	944.92 ppb	10:53:54
2	Sb 206.836†	1247.6	1206.3	500.10 ug/L	500.10 ppb	10:53:54
2	Se 196.026†	637.5	654.7	501.70 ug/L	501.70 ppb	10:53:54
2	Si 251.611†	67495.5	66481.0	2427.8 ug/L	2427.8 ppb	10:53:34
2	Sn 189.927†	2137.2	2116.7	487.18 ug/L	487.18 ppb	10:53:54
2	Ti 334.940†	269230.3	268585.9	487.34 ug/L	487.34 ppb	10:53:34
2	Tl 190.801†	1234.0	1262.5	488.95 ug/L	488.95 ppb	10:53:54
2	U 409.014†	10014.9	12344.5	473.85 ug/L	473.85 ppb	10:53:34
2	V 292.402†	53759.4	55063.3	491.89 ug/L	491.89 ppb	10:53:34
2	Zn 213.857†	43238.7	42242.3	478.64 ug/L	478.64 ppb	10:53:34
2	SiO2†	65396.0	64355.1	5067.9 ug/L	5067.9 ppb	10:54:35
3	Sc Radial	3852.4	3852.4	100 %		10:52:50
3	Y RADIAL	4421.0	4421.0	102.1 %		10:52:30
3	Al 396.153Radial†	4561.3	4637.3	4857.4 ug/L	4857.4 ppb	10:52:30
3	Ca 317.933Radial†	2604.6	2576.6	5059.4 ug/L	5059.4 ppb	10:52:50
3	Fe 238.204 Radial†	398.9	391.3	4988.6 ug/L	4988.6 ppb	10:52:50
3	K 766.490 Radial†	29425.3	26324.4	4889.2 ug/L	4889.2 ppb	10:52:30
3	Mg 279.077 IEC†	127.2	123.7	5095.8 ug/L	5095.8 ppb	10:52:50
3	Na 589.592 Radial†	21313.7	22315.4	9821.8 ug/L	9821.8 ppb	10:52:30
3	Sr 421.552†	50061.8	49869.1	478.78 ug/L	478.78 ppb	10:52:30
3	Sc 361.383	681103.3	681103.3	98.770 %		10:53:59
3	Y 371.029	531112.2	531112.2	98.023 %		10:53:59
3	Ag 328.068†	89572.7	90588.6	502.16 ug/L	502.16 ppb	10:54:05
3	As 188.979†	955.0	989.7	494.31 ug/L	494.31 ppb	10:54:25
3	B 249.677†	18971.0	19790.3	495.65 ug/L	495.65 ppb	10:54:05
3	Ba 233.527†	50899.4	51532.7	499.31 ug/L	499.31 ppb	10:54:05
3	Be 313.107†	1199264.3	1218726.6	493.34 ug/L	493.34 ppb	10:53:59
3	Cd 226.502†	33185.3	33812.2	494.22 ug/L	494.22 ppb	10:54:05
3	Co 228.616†	20245.3	20557.1	509.27 ug/L	509.27 ppb	10:54:05
3	Cr 267.716†	33357.6	33681.9	497.90 ug/L	497.90 ppb	10:54:05
3	Cu 324.752†	152588.6	148801.4	495.60 ug/L	495.60 ppb	10:54:05
3	Mn 257.610†	377848.8	382110.6	494.71 ug/L	494.71 ppb	10:53:59
3	Mo 202.031†	5147.1	5198.8	499.83 ug/L	499.83 ppb	10:54:25
3	Ni 231.604†	15323.0	15439.2	503.14 ug/L	503.14 ppb	10:54:05
3	P 214.914†	3977.5	3808.6	2338.0 ug/L	2338.0 ppb	10:54:25
3	Pb 220.353†	3047.7	3152.7	497.67 ug/L	497.67 ppb	10:54:25
3	S 181.975 Axial†	681.9	650.1	975.92 ug/L	975.92 ppb	10:54:25
3	Sb 206.836†	1243.4	1227.2	508.87 ug/L	508.87 ppb	10:54:25
3	Se 196.026†	637.0	667.0	510.82 ug/L	510.82 ppb	10:54:25
3	Si 251.611†	67877.9	68226.8	2491.6 ug/L	2491.6 ppb	10:54:05
3	Sn 189.927†	2143.5	2166.1	498.53 ug/L	498.53 ppb	10:54:25
3	Ti 334.940†	270799.9	275594.7	500.05 ug/L	500.05 ppb	10:54:05
3	Tl 190.801†	1230.1	1283.4	497.05 ug/L	497.05 ppb	10:54:25
3	U 409.014†	10235.7	12769.7	490.20 ug/L	490.20 ppb	10:54:05
3	V 292.402†	54015.9	56405.1	503.90 ug/L	503.90 ppb	10:54:05
3	Zn 213.857†	43394.5	43270.5	490.32 ug/L	490.32 ppb	10:54:05
3	SiO2†	65514.5	65791.5	5181.0 ug/L	5181.0 ppb	10:54:40

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	689875.9	100.04	%	1.106				1.11%
Sc Radial	3782.5	98.5	%	2.29				2.32%
Y 371.029	537929.8	99.282	%	1.1017				1.11%
Y RADIAL	4295.3	99.16	%	2.879				2.90%
Ag 328.068†	89403.7	495.63	ug/L	6.621	495.63	ppb	6.621	1.34%
QC value within limits for Ag 328.068 Recovery = 99.13%								
Al 396.153Radial†	4655.5	4876.9	ug/L	73.54	4876.9	ppb	73.54	1.51%
QC value within limits for Al 396.153Radial Recovery = 97.54%								
As 188.979†	980.1	489.54	ug/L	5.541	489.54	ppb	5.541	1.13%
QC value within limits for As 188.979 Recovery = 97.91%								
B 249.677†	19547.9	489.56	ug/L	6.142	489.56	ppb	6.142	1.25%
QC value within limits for B 249.677 Recovery = 97.91%								
Ba 233.527†	50890.0	493.09	ug/L	5.850	493.09	ppb	5.850	1.19%
QC value within limits for Ba 233.527 Recovery = 98.62%								
Be 313.107†	1210609.7	490.05	ug/L	2.952	490.05	ppb	2.952	0.60%
QC value within limits for Be 313.107 Recovery = 98.01%								
Ca 317.933Radial†	2604.4	5113.8	ug/L	80.03	5113.8	ppb	80.03	1.56%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.28%
Cd 226.502†            33422.7      488.52 ug/L         5.479      488.52 ppb          5.479   1.12%
   QC value within limits for Cd 226.502  Recovery = 97.70%
Co 228.616†            20248.7      501.63 ug/L         7.262      501.63 ppb          7.262   1.45%
   QC value within limits for Co 228.616  Recovery = 100.33%
Cr 267.716†            33291.3      492.13 ug/L         5.332      492.13 ppb          5.332   1.08%
   QC value within limits for Cr 267.716  Recovery = 98.43%
Cu 324.752†           146667.5      488.50 ug/L         7.237      488.50 ppb          7.237   1.48%
   QC value within limits for Cu 324.752  Recovery = 97.70%
Fe 238.204 Radial†       394.6      5029.9 ug/L        54.21      5029.9 ppb         54.21   1.08%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.60%
K 766.490 Radial†      26493.8      4920.7 ug/L        87.82      4920.7 ppb         87.82   1.78%
   QC value within limits for K 766.490 Radial  Recovery = 98.41%
Mg 279.077 IEC†          123.8      5098.0 ug/L        67.73      5098.0 ppb         67.73   1.33%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.96%
Mn 257.610†           379279.3      491.05 ug/L         3.192      491.05 ppb          3.192   0.65%
   QC value within limits for Mn 257.610  Recovery = 98.21%
Mo 202.031†             5136.5      493.85 ug/L         5.582      493.85 ppb          5.582   1.13%
   QC value within limits for Mo 202.031  Recovery = 98.77%
Na 589.592 Radial†     22431.4      9872.9 ug/L       158.47      9872.9 ppb        158.47   1.61%
   QC value within limits for Na 589.592 Radial  Recovery = 98.73%
Ni 231.604†            15278.9      497.92 ug/L         4.846      497.92 ppb          4.846   0.97%
   QC value within limits for Ni 231.604  Recovery = 99.58%
P 214.914†              3780.1      2321.2 ug/L        20.45      2321.2 ppb         20.45   0.88%
   QC value within limits for P 214.914  Recovery = 92.85%
Pb 220.353†             3113.7      491.54 ug/L         5.674      491.54 ppb          5.674   1.15%
   QC value within limits for Pb 220.353  Recovery = 98.31%
S 181.975 Axial†         643.7      966.21 ug/L        18.465      966.21 ppb         18.465   1.91%
   QC value within limits for S 181.975 Axial  Recovery = 96.62%
Sb 206.836†             1216.5      504.39 ug/L         4.386      504.39 ppb          4.386   0.87%
   QC value within limits for Sb 206.836  Recovery = 100.88%
Se 196.026†              655.9      502.69 ug/L         7.689      502.69 ppb          7.689   1.53%
   QC value within limits for Se 196.026  Recovery = 100.54%
Si 251.611†            67322.9      2458.5 ug/L        31.95      2458.5 ppb         31.95   1.30%
   QC value within limits for Si 251.611  Recovery = 98.34%
Sn 189.927†             2144.9      493.67 ug/L         5.849      493.67 ppb          5.849   1.18%
   QC value within limits for Sn 189.927  Recovery = 98.73%
Sr 421.552†            50063.2      480.65 ug/L         6.937      480.65 ppb          6.937   1.44%
   QC value within limits for Sr 421.552  Recovery = 96.13%
Ti 334.940†           271913.3      493.38 ug/L         6.375      493.38 ppb          6.375   1.29%
   QC value within limits for Ti 334.940  Recovery = 98.68%
Tl 190.801†             1271.6      492.49 ug/L         4.146      492.49 ppb          4.146   0.84%
   QC value within limits for Tl 190.801  Recovery = 98.50%
U 409.014†             12602.3      483.76 ug/L         8.715      483.76 ppb          8.715   1.80%
   QC value within limits for U 409.014  Recovery = 96.75%
V 292.402†             55679.8      497.41 ug/L         6.061      497.41 ppb          6.061   1.22%
   QC value within limits for V 292.402  Recovery = 99.48%
Zn 213.857†            42751.5      484.42 ug/L         5.842      484.42 ppb          5.842   1.21%
   QC value within limits for Zn 213.857  Recovery = 96.88%
SiO2†                  65152.7      5130.7 ug/L        57.59      5130.7 ppb         57.59   1.12%
   QC value within limits for SiO2  Recovery = 95.95%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 4/1/2010 10:56:51
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	3708.3	3708.3	96.6	%			10:59:03
1	Y RADIAL	4169.0	4169.0	96.24	%			10:58:43
1	Al 396.153Radial†	-98.9	-10.2	-10.696	ug/L	-10.696	ppb	10:59:03
1	Ca 317.933Radial†	23.4	5.6	10.990	ug/L	10.990	ppb	10:59:03
1	Fe 238.204 Radial†	7.2	1.3	16.316	ug/L	16.316	ppb	10:59:03
1	K 766.490 Radial†	3209.5	326.4	60.726	ug/L	60.726	ppb	10:58:43
1	Mg 279.077 IEC†	3.3	0.4	17.076	ug/L	17.076	ppb	10:59:03
1	Na 589.592 Radial†	-1181.3	-145.0	-63.840	ug/L	-63.840	ppb	10:58:43
1	Sr 421.552†	31.1	18.3	0.1754	ug/L	0.1754	ppb	10:58:43
1	Sc 361.383	687198.4	687198.4	99.654	%			11:00:00
1	Y 371.029	540172.2	540172.2	99.695	%			11:00:00
1	Ag 328.068†	165.0	65.7	0.3621	ug/L	0.3621	ppb	11:00:00
1	As 188.979†	-19.4	3.3	1.6594	ug/L	1.6594	ppb	11:00:20
1	B 249.677†	-135.7	446.9	11.241	ug/L	11.241	ppb	11:00:20
1	Ba 233.527†	5.6	4.8	0.0455	ug/L	0.0455	ppb	11:00:20
1	Be 313.107†	-4419.4	88.5	0.0355	ug/L	0.0355	ppb	11:00:00
1	Cd 226.502†	-187.8	25.0	0.3649	ug/L	0.3649	ppb	11:00:20
1	Co 228.616†	-54.3	5.2	0.1281	ug/L	0.1281	ppb	11:00:20
1	Cr 267.716†	96.4	5.5	0.0805	ug/L	0.0805	ppb	11:00:20
1	Cu 324.752†	5628.0	-40.4	-0.1348	ug/L	-0.1348	ppb	11:00:00
1	Mn 257.610†	505.0	61.8	0.0808	ug/L	0.0808	ppb	11:00:20
1	Mo 202.031†	10.1	-2.3	-0.2184	ug/L	-0.2184	ppb	11:00:20
1	Ni 231.604†	99.0	24.7	0.8059	ug/L	0.8059	ppb	11:00:20
1	P 214.914†	202.0	-15.8	-10.080	ug/L	-10.080	ppb	11:00:20
1	Pb 220.353†	-92.5	-25.8	-4.0660	ug/L	-4.0660	ppb	11:00:20
1	S 181.975 Axial†	38.9	-1.2	-1.8519	ug/L	-1.8519	ppb	11:00:20
1	Sb 206.836†	41.8	10.2	4.0735	ug/L	4.0735	ppb	11:00:20
1	Se 196.026†	-19.2	2.8	2.0995	ug/L	2.0995	ppb	11:00:20
1	Si 251.611†	567.8	73.2	2.6813	ug/L	2.6813	ppb	11:00:20
1	Sn 189.927†	1.5	-2.6	-0.5969	ug/L	-0.5969	ppb	11:00:20
1	Ti 334.940†	-1466.0	-49.6	-0.0909	ug/L	-0.0909	ppb	11:00:00
1	Tl 190.801†	-27.7	10.2	3.9174	ug/L	3.9174	ppb	11:00:20
1	U 409.014†	-2346.8	51.5	1.9821	ug/L	1.9821	ppb	11:00:00
1	V 292.402†	-1798.3	-88.1	-0.7780	ug/L	-0.7780	ppb	11:00:00
1	Zn 213.857†	715.8	53.7	0.6065	ug/L	0.6065	ppb	11:00:20
1	SiO2†	582.2	45.0	3.5619	ug/L	3.5619	ppb	11:01:16
2	Sc Radial	3829.4	3829.4	99.8	%			10:59:28
2	Y RADIAL	4273.1	4273.1	98.64	%			10:59:08
2	Al 396.153Radial†	-88.5	3.5	3.6630	ug/L	3.6630	ppb	10:59:28
2	Ca 317.933Radial†	21.9	3.3	6.3959	ug/L	6.3959	ppb	10:59:28
2	Fe 238.204 Radial†	6.0	-0.2	-2.2003	ug/L	-2.2003	ppb	10:59:28
2	K 766.490 Radial†	3015.0	26.3	4.9259	ug/L	4.9259	ppb	10:59:08
2	Mg 279.077 IEC†	1.9	-1.2	-47.521	ug/L	-47.521	ppb	10:59:28
2	Na 589.592 Radial†	-1252.5	-177.7	-78.220	ug/L	-78.220	ppb	10:59:08
2	Sr 421.552†	-0.3	-14.2	-0.1359	ug/L	-0.1359	ppb	10:59:08
2	Sc 361.383	695162.2	695162.2	100.81	%			11:00:25
2	Y 371.029	546443.6	546443.6	100.85	%			11:00:25
2	Ag 328.068†	169.8	68.5	0.3797	ug/L	0.3797	ppb	11:00:25
2	As 188.979†	-24.4	-1.4	-0.6781	ug/L	-0.6781	ppb	11:00:45
2	B 249.677†	-124.1	459.9	11.571	ug/L	11.571	ppb	11:00:45
2	Ba 233.527†	12.3	11.5	0.1112	ug/L	0.1112	ppb	11:00:45
2	Be 313.107†	-4450.1	108.8	0.0442	ug/L	0.0442	ppb	11:00:25
2	Cd 226.502†	-206.0	9.1	0.1331	ug/L	0.1331	ppb	11:00:45
2	Co 228.616†	-45.4	14.7	0.3643	ug/L	0.3643	ppb	11:00:45
2	Cr 267.716†	94.1	2.0	0.0305	ug/L	0.0305	ppb	11:00:45
2	Cu 324.752†	5678.0	-55.5	-0.1835	ug/L	-0.1835	ppb	11:00:25
2	Mn 257.610†	479.7	30.8	0.0416	ug/L	0.0416	ppb	11:00:45
2	Mo 202.031†	16.2	3.6	0.3445	ug/L	0.3445	ppb	11:00:45
2	Ni 231.604†	71.6	-3.7	-0.1202	ug/L	-0.1202	ppb	11:00:45

2	P 214.914†	203.8	-16.3	-10.393 ug/L	-10.393 ppb	11:00:45
2	Pb 220.353†	-70.1	-2.5	-0.3908 ug/L	-0.3908 ppb	11:00:45
2	S 181.975 Axial†	35.1	-5.5	-8.2027 ug/L	-8.2027 ppb	11:00:45
2	Sb 206.836†	29.8	-2.1	-0.8406 ug/L	-0.8406 ppb	11:00:45
2	Se 196.026†	-19.6	2.6	1.9506 ug/L	1.9506 ppb	11:00:45
2	Si 251.611†	558.5	57.4	2.0980 ug/L	2.0980 ppb	11:00:45
2	Sn 189.927†	7.6	3.4	0.7767 ug/L	0.7767 ppb	11:00:45
2	Ti 334.940†	-1370.7	61.7	0.1179 ug/L	0.1179 ppb	11:00:25
2	Tl 190.801†	-40.6	-2.4	-0.9060 ug/L	-0.9060 ppb	11:00:45
2	U 409.014†	-2488.8	-62.3	-2.4009 ug/L	-2.4009 ppb	11:00:25
2	V 292.402†	-1704.2	25.8	0.2273 ug/L	0.2273 ppb	11:00:25
2	Zn 213.857†	721.0	50.6	0.5799 ug/L	0.5799 ppb	11:00:45
2	SiO2†	565.5	21.8	1.7087 ug/L	1.7087 ppb	11:01:21
3	Sc Radial	3840.8	3840.8	100 %		10:59:53
3	Y RADIAL	4322.6	4322.6	99.79 %		10:59:33
3	Al 396.153Radial†	-111.2	-18.9	-19.891 ug/L	-19.891 ppb	10:59:53
3	Ca 317.933Radial†	15.8	-2.8	-5.5585 ug/L	-5.5585 ppb	10:59:53
3	Fe 238.204 Radial†	8.1	1.9	24.620 ug/L	24.620 ppb	10:59:53
3	K 766.490 Radial†	3142.8	145.2	27.019 ug/L	27.019 ppb	10:59:33
3	Mg 279.077 IEC†	0.6	-2.4	-97.712 ug/L	-97.712 ppb	10:59:53
3	Na 589.592 Radial†	-1186.5	-108.0	-47.553 ug/L	-47.553 ppb	10:59:33
3	Sr 421.552†	7.9	-6.0	-0.0574 ug/L	-0.0574 ppb	10:59:33
3	Sc 361.383	682242.7	682242.7	98.935 %		11:00:51
3	Y 371.029	537396.3	537396.3	99.183 %		11:00:51
3	Ag 328.068†	80.2	-18.8	-0.0963 ug/L	-0.0963 ppb	11:00:51
3	As 188.979†	-22.1	0.5	0.2403 ug/L	0.2403 ppb	11:01:11
3	B 249.677†	-164.4	416.9	10.484 ug/L	10.484 ppb	11:01:11
3	Ba 233.527†	-7.4	-8.2	-0.0797 ug/L	-0.0797 ppb	11:01:11
3	Be 313.107†	-4318.3	158.5	0.0639 ug/L	0.0639 ppb	11:00:51
3	Cd 226.502†	-200.9	10.4	0.1486 ug/L	0.1486 ppb	11:01:11
3	Co 228.616†	-58.9	0.2	0.0065 ug/L	0.0065 ppb	11:01:11
3	Cr 267.716†	84.7	-5.7	-0.0811 ug/L	-0.0811 ppb	11:01:11
3	Cu 324.752†	5627.8	0.4	0.0034 ug/L	0.0034 ppb	11:00:51
3	Mn 257.610†	508.9	69.4	0.0962 ug/L	0.0962 ppb	11:01:11
3	Mo 202.031†	22.5	10.3	0.9866 ug/L	0.9866 ppb	11:01:11
3	Ni 231.604†	71.8	-2.1	-0.0672 ug/L	-0.0672 ppb	11:01:11
3	P 214.914†	206.8	-9.5	-6.0811 ug/L	-6.0811 ppb	11:01:11
3	Pb 220.353†	-69.3	-3.1	-0.4873 ug/L	-0.4873 ppb	11:01:11
3	S 181.975 Axial†	33.6	-6.3	-9.4880 ug/L	-9.4880 ppb	11:01:11
3	Sb 206.836†	39.3	8.0	3.2282 ug/L	3.2282 ppb	11:01:11
3	Se 196.026†	-25.0	-3.2	-2.3021 ug/L	-2.3021 ppb	11:01:11
3	Si 251.611†	547.5	56.7	2.0649 ug/L	2.0649 ppb	11:01:11
3	Sn 189.927†	3.6	-0.5	-0.1096 ug/L	-0.1096 ppb	11:01:11
3	Ti 334.940†	-1424.1	-17.9	-0.0247 ug/L	-0.0247 ppb	11:00:51
3	Tl 190.801†	-40.9	-3.4	-1.3005 ug/L	-1.3005 ppb	11:01:11
3	U 409.014†	-2415.9	-35.4	-1.3660 ug/L	-1.3660 ppb	11:00:51
3	V 292.402†	-1734.8	-37.1	-0.3208 ug/L	-0.3208 ppb	11:00:51
3	Zn 213.857†	701.2	44.1	0.5015 ug/L	0.5015 ppb	11:01:11
3	SiO2†	559.0	25.9	2.0184 ug/L	2.0184 ppb	11:01:26

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	688201.1	99.799	%	0.9452				0.95%
Sc Radial	3792.8	98.8	%	1.91				1.94%
Y 371.029	541337.3	99.911	%	0.8554				0.86%
Y RADIAL	4254.9	98.22	%	1.810				1.84%
Ag 328.068†	38.5	0.2152	ug/L	0.26989	0.2152	ppb	0.26989	125.44%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-8.5	-8.9746	ug/L	11.87097	-8.9746	ppb	11.87097	132.27%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.8	0.4072	ug/L	1.17769	0.4072	ppb	1.17769	289.22%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	441.2	11.098	ug/L	0.5570	11.098	ppb	0.5570	5.02%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.7	0.0257	ug/L	0.09698	0.0257	ppb	0.09698	377.51%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	118.6	0.0479	ug/L	0.01456	0.0479	ppb	0.01456	30.40%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.0	3.9426	ug/L	8.54282	3.9426	ppb	8.54282	216.68%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              14.8      0.2155 ug/L       0.12960      0.2155 ppb        0.12960  60.14%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               6.7      0.1663 ug/L       0.18198      0.1663 ppb        0.18198 109.43%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               0.6      0.0100 ug/L       0.08276      0.0100 ppb        0.08276 828.93%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -31.8     -0.1050 ug/L       0.09697     -0.1050 ppb        0.09697  92.39%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.0      12.912 ug/L       13.7305      12.912 ppb        13.7305 106.34%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       166.0      30.890 ug/L       28.1009      30.890 ppb        28.1009  90.97%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -1.0     -42.719 ug/L       57.5441     -42.719 ppb        57.5441 134.70%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              54.0      0.0729 ug/L       0.02816      0.0729 ppb        0.02816  38.64%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               3.9      0.3709 ug/L       0.60291      0.3709 ppb        0.60291 162.55%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -143.6     -63.204 ug/L       15.3435     -63.204 ppb        15.3435  24.28%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               6.3      0.2062 ug/L       0.52005      0.2062 ppb        0.52005 252.24%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -13.9      -8.8511 ug/L      2.40400     -8.8511 ppb        2.40400  27.16%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -10.5      -1.6480 ug/L      2.09455     -1.6480 ppb        2.09455 127.09%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -4.3      -6.5142 ug/L      4.08848     -6.5142 ppb        4.08848  62.76%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               5.4      2.1537 ug/L       2.62732      2.1537 ppb        2.62732 121.99%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               0.7      0.5826 ug/L       2.49941      0.5826 ppb        2.49941 428.98%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              62.4      2.2814 ug/L       0.34671      2.2814 ppb        0.34671  15.20%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               0.1      0.0234 ug/L       0.69637      0.0234 ppb        0.69637 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -0.6      -0.0060 ug/L      0.16193     -0.0060 ppb        0.16193 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -1.9      0.0008 ug/L       0.10667      0.0008 ppb        0.10667 >999.9%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               1.5      0.5703 ug/L       2.90537      0.5703 ppb        2.90537 509.44%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -15.4      -0.5949 ug/L      2.29100     -0.5949 ppb        2.29100 385.08%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -33.1      -0.2905 ug/L      0.50333     -0.2905 ppb        0.50333 173.25%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              49.5      0.5626 ug/L       0.05461      0.5626 ppb        0.05461   9.71%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    30.9      2.4297 ug/L       0.99272      2.4297 ppb        0.99272  40.86%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 18
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 4/1/2010 11:59:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3817.3	3817.3	99.4	%			12:02:00
1	Y RADIAL	4302.9	4302.9	99.33	%			12:01:40
1	Al 396.153Radial†	4666.0	4784.4	5012.6	ug/L	5012.6	ppb	12:01:40
1	Ca 317.933Radial†	2626.2	2622.2	5148.9	ug/L	5148.9	ppb	12:02:00
1	Fe 238.204 Radial†	403.8	399.8	5096.5	ug/L	5096.5	ppb	12:02:00
1	K 766.490 Radial†	29877.8	27049.0	5023.7	ug/L	5023.7	ppb	12:01:40
1	Mg 279.077 IEC†	131.1	128.8	5304.5	ug/L	5304.5	ppb	12:02:00
1	Na 589.592 Radial†	22466.2	23669.7	10418	ug/L	10418	ppb	12:01:40
1	Sr 421.552†	51656.5	51931.6	498.59	ug/L	498.59	ppb	12:01:40
1	Sc 361.383	696662.4	696662.4	101.03	%			12:02:57
1	Y 371.029	470771.3	470771.3	86.887	%			12:03:02
1	Ag 328.068†	89800.1	88788.3	492.24	ug/L	492.24	ppb	12:03:02
1	As 188.979†	969.6	982.5	490.72	ug/L	490.72	ppb	12:03:23
1	B 249.677†	18566.7	18961.2	474.80	ug/L	474.80	ppb	12:03:02
1	Ba 233.527†	51189.0	50668.4	490.94	ug/L	490.94	ppb	12:03:02
1	Be 313.107†	1220647.2	1212774.6	490.92	ug/L	490.92	ppb	12:02:57
1	Cd 226.502†	33375.6	33250.1	485.99	ug/L	485.99	ppb	12:03:02
1	Co 228.616†	20288.8	20142.5	499.00	ug/L	499.00	ppb	12:03:02
1	Cr 267.716†	33547.7	33115.7	489.54	ug/L	489.54	ppb	12:03:02
1	Cu 324.752†	152657.1	145418.9	484.34	ug/L	484.34	ppb	12:03:02
1	Mn 257.610†	385357.4	380999.0	493.27	ug/L	493.27	ppb	12:02:57
1	Mo 202.031†	5196.7	5131.5	493.37	ug/L	493.37	ppb	12:03:23
1	Ni 231.604†	15444.8	15213.3	495.78	ug/L	495.78	ppb	12:03:02
1	P 214.914†	4028.7	3769.3	2315.1	ug/L	2315.1	ppb	12:03:23
1	Pb 220.353†	3079.1	3114.8	491.73	ug/L	491.73	ppb	12:03:23
1	S 181.975 Axial†	692.1	644.8	967.94	ug/L	967.94	ppb	12:03:23
1	Sb 206.836†	1278.9	1234.2	511.43	ug/L	511.43	ppb	12:03:23
1	Se 196.026†	641.7	657.3	503.91	ug/L	503.91	ppb	12:03:23
1	Si 251.611†	68244.4	67054.8	2448.7	ug/L	2448.7	ppb	12:03:02
1	Sn 189.927†	2165.7	2139.6	492.45	ug/L	492.45	ppb	12:03:23
1	Ti 334.940†	272076.8	270735.2	491.22	ug/L	491.22	ppb	12:03:02
1	Tl 190.801†	1249.2	1274.5	493.62	ug/L	493.62	ppb	12:03:23
1	U 409.014†	10518.6	12818.3	492.08	ug/L	492.08	ppb	12:03:02
1	V 292.402†	54173.8	55340.0	494.42	ug/L	494.42	ppb	12:03:02
1	Zn 213.857†	43526.5	42419.9	480.64	ug/L	480.64	ppb	12:03:02
1	SiO2†	67917.1	66688.2	5252.0	ug/L	5252.0	ppb	12:04:30
2	Sc Radial	3788.0	3788.0	98.7	%			12:02:25
2	Y RADIAL	4256.8	4256.8	98.27	%			12:02:05
2	Al 396.153Radial†	4632.5	4786.7	5015.2	ug/L	5015.2	ppb	12:02:05
2	Ca 317.933Radial†	2601.8	2617.9	5140.4	ug/L	5140.4	ppb	12:02:25
2	Fe 238.204 Radial†	401.7	400.9	5109.7	ug/L	5109.7	ppb	12:02:25
2	K 766.490 Radial†	29550.4	26949.8	5005.3	ug/L	5005.3	ppb	12:02:05
2	Mg 279.077 IEC†	126.4	125.0	5150.4	ug/L	5150.4	ppb	12:02:25
2	Na 589.592 Radial†	21966.6	23338.3	10272	ug/L	10272	ppb	12:02:05
2	Sr 421.552†	50653.1	51316.8	492.68	ug/L	492.68	ppb	12:02:05
2	Sc 361.383	699454.8	699454.8	101.43	%			12:03:28
2	Y 371.029	472632.6	472632.6	87.230	%			12:03:33
2	Ag 328.068†	90206.3	88833.9	492.49	ug/L	492.49	ppb	12:03:33
2	As 188.979†	945.1	954.6	476.91	ug/L	476.91	ppb	12:03:53
2	B 249.677†	18605.1	18925.6	473.91	ug/L	473.91	ppb	12:03:33
2	Ba 233.527†	51232.3	50508.8	489.39	ug/L	489.39	ppb	12:03:33
2	Be 313.107†	1220168.5	1207479.1	488.78	ug/L	488.78	ppb	12:03:28
2	Cd 226.502†	33216.1	32960.9	481.76	ug/L	481.76	ppb	12:03:33
2	Co 228.616†	20272.6	20046.3	496.61	ug/L	496.61	ppb	12:03:33
2	Cr 267.716†	33554.5	32989.8	487.69	ug/L	487.69	ppb	12:03:33
2	Cu 324.752†	153481.8	145628.7	485.04	ug/L	485.04	ppb	12:03:33
2	Mn 257.610†	384937.6	379062.4	490.77	ug/L	490.77	ppb	12:03:28
2	Mo 202.031†	5172.1	5086.7	489.07	ug/L	489.07	ppb	12:03:53
2	Ni 231.604†	15442.9	15150.4	493.73	ug/L	493.73	ppb	12:03:33

2	P 214.914†	4005.5	3730.5	2290.0 ug/L	2290.0 ppb	12:03:53
2	Pb 220.353†	3056.8	3080.7	486.36 ug/L	486.36 ppb	12:03:53
2	S 181.975 Axial†	688.4	638.4	958.30 ug/L	958.30 ppb	12:03:53
2	Sb 206.836†	1254.7	1205.2	499.66 ug/L	499.66 ppb	12:03:53
2	Se 196.026†	635.6	648.8	497.62 ug/L	497.62 ppb	12:03:53
2	Si 251.611†	68330.5	66870.0	2442.0 ug/L	2442.0 ppb	12:03:33
2	Sn 189.927†	2147.8	2113.3	486.42 ug/L	486.42 ppb	12:03:53
2	Ti 334.940†	272716.7	270291.0	490.43 ug/L	490.43 ppb	12:03:33
2	Tl 190.801†	1243.7	1264.2	489.63 ug/L	489.63 ppb	12:03:53
2	U 409.014†	10391.1	12651.0	485.64 ug/L	485.64 ppb	12:03:33
2	V 292.402†	54187.3	55139.3	492.57 ug/L	492.57 ppb	12:03:33
2	Zn 213.857†	43522.0	42243.4	478.63 ug/L	478.63 ppb	12:03:33
2	SiO2†	67479.5	65988.4	5196.9 ug/L	5196.9 ppb	12:04:35
3	Sc Radial	3756.9	3756.9	97.9 %		12:02:50
3	Y RADIAL	4300.3	4300.3	99.27 %		12:02:30
3	Al 396.153Radial†	4686.5	4880.7	5114.0 ug/L	5114.0 ppb	12:02:30
3	Ca 317.933Radial†	2586.3	2623.9	5152.2 ug/L	5152.2 ppb	12:02:50
3	Fe 238.204 Radial†	397.8	400.3	5102.3 ug/L	5102.3 ppb	12:02:50
3	K 766.490 Radial†	29865.8	27519.5	5111.2 ug/L	5111.2 ppb	12:02:30
3	Mg 279.077 IEC†	125.0	124.7	5135.4 ug/L	5135.4 ppb	12:02:50
3	Na 589.592 Radial†	22219.0	23780.0	10466 ug/L	10466 ppb	12:02:30
3	Sr 421.552†	51475.6	52581.3	504.82 ug/L	504.82 ppb	12:02:30
3	Sc 361.383	683426.6	683426.6	99.107 %		12:03:59
3	Y 371.029	472551.9	472551.9	87.215 %		12:04:04
3	Ag 328.068†	89473.0	90179.7	499.93 ug/L	499.93 ppb	12:04:04
3	As 188.979†	946.6	977.9	488.51 ug/L	488.51 ppb	12:04:24
3	B 249.677†	18453.9	19203.2	480.87 ug/L	480.87 ppb	12:04:04
3	Ba 233.527†	50905.1	51363.2	497.67 ug/L	497.67 ppb	12:04:04
3	Be 313.107†	1196165.6	1211472.3	490.41 ug/L	490.41 ppb	12:03:59
3	Cd 226.502†	33092.7	33604.5	491.17 ug/L	491.17 ppb	12:04:04
3	Co 228.616†	20153.0	20394.3	505.22 ug/L	505.22 ppb	12:04:04
3	Cr 267.716†	33362.3	33571.8	496.28 ug/L	496.28 ppb	12:04:04
3	Cu 324.752†	152273.8	147958.5	492.80 ug/L	492.80 ppb	12:04:04
3	Mn 257.610†	377611.0	380570.1	492.72 ug/L	492.72 ppb	12:03:59
3	Mo 202.031†	5087.2	5120.5	492.32 ug/L	492.32 ppb	12:04:24
3	Ni 231.604†	15369.0	15432.9	502.94 ug/L	502.94 ppb	12:04:04
3	P 214.914†	3932.7	3749.6	2300.8 ug/L	2300.8 ppb	12:04:24
3	Pb 220.353†	2997.0	3091.0	488.01 ug/L	488.01 ppb	12:04:24
3	S 181.975 Axial†	667.6	633.4	950.75 ug/L	950.75 ppb	12:04:24
3	Sb 206.836†	1243.1	1222.5	506.78 ug/L	506.78 ppb	12:04:24
3	Se 196.026†	615.0	642.6	493.11 ug/L	493.11 ppb	12:04:24
3	Si 251.611†	67757.4	67871.7	2478.7 ug/L	2478.7 ppb	12:04:04
3	Sn 189.927†	2132.3	2147.4	494.25 ug/L	494.25 ppb	12:04:24
3	Ti 334.940†	271021.3	274886.0	498.77 ug/L	498.77 ppb	12:04:04
3	Tl 190.801†	1231.8	1280.9	496.08 ug/L	496.08 ppb	12:04:24
3	U 409.014†	10392.7	12892.8	494.94 ug/L	494.94 ppb	12:04:04
3	V 292.402†	53927.9	56130.5	501.36 ug/L	501.36 ppb	12:04:04
3	Zn 213.857†	43160.4	42884.9	485.90 ug/L	485.90 ppb	12:04:04
3	SiO2†	67469.4	67538.4	5319.2 ug/L	5319.2 ppb	12:04:40

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	693181.3	100.52	%	1.242				1.24%
Sc Radial	3787.4	98.7	%	0.79				0.80%
Y 371.029	471985.2	87.111	%	0.1942				0.22%
Y RADIAL	4286.7	98.96	%	0.599				0.61%
Ag 328.068†	89267.3	494.89	ug/L	4.370	494.89	ppb	4.370	0.88%
QC value within limits for Ag 328.068 Recovery = 98.98%								
Al 396.153Radial†	4817.3	5047.3	ug/L	57.84	5047.3	ppb	57.84	1.15%
QC value within limits for Al 396.153Radial Recovery = 100.95%								
As 188.979†	971.7	485.38	ug/L	7.418	485.38	ppb	7.418	1.53%
QC value within limits for As 188.979 Recovery = 97.08%								
B 249.677†	19030.0	476.53	ug/L	3.789	476.53	ppb	3.789	0.80%
QC value within limits for B 249.677 Recovery = 95.31%								
Ba 233.527†	50846.8	492.67	ug/L	4.401	492.67	ppb	4.401	0.89%
QC value within limits for Ba 233.527 Recovery = 98.53%								
Be 313.107†	1210575.3	490.03	ug/L	1.118	490.03	ppb	1.118	0.23%
QC value within limits for Be 313.107 Recovery = 98.01%								
Ca 317.933Radial†	2621.4	5147.2	ug/L	6.06	5147.2	ppb	6.06	0.12%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.94%
Cd 226.502†            33271.8      486.31 ug/L          4.716      486.31 ppb          4.716   0.97%
   QC value within limits for Cd 226.502  Recovery = 97.26%
Co 228.616†            20194.4      500.28 ug/L          4.446      500.28 ppb          4.446   0.89%
   QC value within limits for Co 228.616  Recovery = 100.06%
Cr 267.716†            33225.8      491.17 ug/L          4.522      491.17 ppb          4.522   0.92%
   QC value within limits for Cr 267.716  Recovery = 98.23%
Cu 324.752†           146335.4      487.39 ug/L          4.693      487.39 ppb          4.693   0.96%
   QC value within limits for Cu 324.752  Recovery = 97.48%
Fe 238.204 Radial†       400.3      5102.9 ug/L           6.63      5102.9 ppb           6.63   0.13%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.06%
K 766.490 Radial†      27172.8      5046.7 ug/L          56.56      5046.7 ppb          56.56   1.12%
   QC value within limits for K 766.490 Radial  Recovery = 100.93%
Mg 279.077 IEC†          126.2      5196.8 ug/L          93.63      5196.8 ppb          93.63   1.80%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.94%
Mn 257.610†           380210.5      492.26 ug/L          1.313      492.26 ppb          1.313   0.27%
   QC value within limits for Mn 257.610  Recovery = 98.45%
Mo 202.031†             5112.9      491.59 ug/L          2.245      491.59 ppb          2.245   0.46%
   QC value within limits for Mo 202.031  Recovery = 98.32%
Na 589.592 Radial†     23596.0       10385 ug/L          101.2       10385 ppb          101.2   0.97%
   QC value within limits for Na 589.592 Radial  Recovery = 103.85%
Ni 231.604†            15265.5      497.49 ug/L          4.834      497.49 ppb          4.834   0.97%
   QC value within limits for Ni 231.604  Recovery = 99.50%
P 214.914†              3749.8      2302.0 ug/L          12.56      2302.0 ppb          12.56   0.55%
   QC value within limits for P 214.914  Recovery = 92.08%
Pb 220.353†             3095.5      488.70 ug/L          2.753      488.70 ppb          2.753   0.56%
   QC value within limits for Pb 220.353  Recovery = 97.74%
S 181.975 Axial†         638.9      959.00 ug/L          8.618      959.00 ppb          8.618   0.90%
   QC value within limits for S 181.975 Axial  Recovery = 95.90%
Sb 206.836†             1220.6      505.96 ug/L          5.925      505.96 ppb          5.925   1.17%
   QC value within limits for Sb 206.836  Recovery = 101.19%
Se 196.026†              649.6      498.21 ug/L          5.423      498.21 ppb          5.423   1.09%
   QC value within limits for Se 196.026  Recovery = 99.64%
Si 251.611†            67265.5      2456.5 ug/L          19.50      2456.5 ppb          19.50   0.79%
   QC value within limits for Si 251.611  Recovery = 98.26%
Sn 189.927†             2133.4      491.04 ug/L          4.102      491.04 ppb          4.102   0.84%
   QC value within limits for Sn 189.927  Recovery = 98.21%
Sr 421.552†            51943.2      498.70 ug/L          6.071      498.70 ppb          6.071   1.22%
   QC value within limits for Sr 421.552  Recovery = 99.74%
Ti 334.940†           271970.8      493.47 ug/L          4.601      493.47 ppb          4.601   0.93%
   QC value within limits for Ti 334.940  Recovery = 98.69%
Tl 190.801†             1273.2      493.11 ug/L          3.254      493.11 ppb          3.254   0.66%
   QC value within limits for Tl 190.801  Recovery = 98.62%
U 409.014†             12787.4      490.89 ug/L          4.762      490.89 ppb          4.762   0.97%
   QC value within limits for U 409.014  Recovery = 98.18%
V 292.402†             55536.6      496.12 ug/L          4.635      496.12 ppb          4.635   0.93%
   QC value within limits for V 292.402  Recovery = 99.22%
Zn 213.857†            42516.1      481.72 ug/L          3.754      481.72 ppb          3.754   0.78%
   QC value within limits for Zn 213.857  Recovery = 96.34%
SiO2†                  66738.4      5256.0 ug/L          61.25      5256.0 ppb          61.25   1.17%
   QC value within limits for SiO2  Recovery = 98.29%
All analyte(s) passed QC.
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Sequence No.: 19
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 4/1/2010 12:06:51
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	3679.5	3679.5	95.9	%			12:09:03
1	Y RADIAL	4353.6	4353.6	100.5	%			12:08:43
1	Al 396.153Radial†	-92.5	-4.3	-4.5230	ug/L	-4.5230	ppb	12:09:03
1	Ca 317.933Radial†	19.3	1.5	2.9369	ug/L	2.9369	ppb	12:09:03
1	Fe 238.204 Radial†	8.4	2.6	33.225	ug/L	33.225	ppb	12:09:03
1	K 766.490 Radial†	3136.0	275.7	51.308	ug/L	51.308	ppb	12:08:43
1	Mg 279.077 IEC†	0.6	-2.4	-97.239	ug/L	-97.239	ppb	12:09:03
1	Na 589.592 Radial†	-1205.9	-180.2	-79.318	ug/L	-79.318	ppb	12:08:43
1	Sr 421.552†	18.4	5.3	0.0512	ug/L	0.0512	ppb	12:08:43
1	Sc 361.383	701143.0	701143.0	101.68	%			12:10:00
1	Y 371.029	551323.0	551323.0	101.75	%			12:10:00
1	Ag 328.068†	163.9	61.3	0.3467	ug/L	0.3467	ppb	12:10:00
1	As 188.979†	-30.3	-7.0	-3.4404	ug/L	-3.4404	ppb	12:10:20
1	B 249.677†	-436.6	153.6	3.8604	ug/L	3.8604	ppb	12:10:20
1	Ba 233.527†	-9.0	-9.6	-0.0909	ug/L	-0.0909	ppb	12:10:20
1	Be 313.107†	-4445.6	150.9	0.0614	ug/L	0.0614	ppb	12:10:00
1	Cd 226.502†	-198.6	18.2	0.2630	ug/L	0.2630	ppb	12:10:20
1	Co 228.616†	-64.4	-3.7	-0.0921	ug/L	-0.0921	ppb	12:10:20
1	Cr 267.716†	106.8	13.7	0.2052	ug/L	0.2052	ppb	12:10:20
1	Cu 324.752†	5697.7	-84.2	-0.2808	ug/L	-0.2808	ppb	12:10:00
1	Mn 257.610†	504.1	50.8	0.0729	ug/L	0.0729	ppb	12:10:20
1	Mo 202.031†	12.9	0.2	0.0213	ug/L	0.0213	ppb	12:10:20
1	Ni 231.604†	89.7	13.5	0.4406	ug/L	0.4406	ppb	12:10:20
1	P 214.914†	209.2	-12.7	-8.0811	ug/L	-8.0811	ppb	12:10:20
1	Pb 220.353†	-65.3	2.8	0.4301	ug/L	0.4301	ppb	12:10:20
1	S 181.975 Axial†	39.7	-1.2	-1.8191	ug/L	-1.8191	ppb	12:10:20
1	Sb 206.836†	31.2	-1.1	-0.3879	ug/L	-0.3879	ppb	12:10:20
1	Se 196.026†	-29.1	-6.5	-4.7336	ug/L	-4.7336	ppb	12:10:20
1	Si 251.611†	621.1	114.3	4.1832	ug/L	4.1832	ppb	12:10:20
1	Sn 189.927†	15.9	11.5	2.6442	ug/L	2.6442	ppb	12:10:20
1	Ti 334.940†	-1323.2	120.1	0.2245	ug/L	0.2245	ppb	12:10:00
1	Tl 190.801†	-31.3	7.2	2.7676	ug/L	2.7676	ppb	12:10:20
1	U 409.014†	-2346.1	99.1	3.8130	ug/L	3.8130	ppb	12:10:00
1	V 292.402†	-1700.4	44.1	0.3891	ug/L	0.3891	ppb	12:10:00
1	Zn 213.857†	712.6	36.2	0.4072	ug/L	0.4072	ppb	12:10:20
1	SiO2†	638.4	88.7	7.0007	ug/L	7.0007	ppb	12:11:16
2	Sc Radial	3814.2	3814.2	99.4	%			12:09:29
2	Y RADIAL	4276.7	4276.7	98.73	%			12:09:09
2	Al 396.153Radial†	-88.0	3.7	3.9219	ug/L	3.9219	ppb	12:09:29
2	Ca 317.933Radial†	22.2	3.7	7.2411	ug/L	7.2411	ppb	12:09:29
2	Fe 238.204 Radial†	7.6	1.4	18.014	ug/L	18.014	ppb	12:09:29
2	K 766.490 Radial†	3000.5	23.9	4.4634	ug/L	4.4634	ppb	12:09:09
2	Mg 279.077 IEC†	0.9	-2.1	-88.167	ug/L	-88.167	ppb	12:09:29
2	Na 589.592 Radial†	-1178.4	-108.1	-47.584	ug/L	-47.584	ppb	12:09:09
2	Sr 421.552†	-9.9	-23.9	-0.2294	ug/L	-0.2294	ppb	12:09:09
2	Sc 361.383	700612.0	700612.0	101.60	%			12:10:26
2	Y 371.029	550661.3	550661.3	101.63	%			12:10:26
2	Ag 328.068†	210.9	107.7	0.5980	ug/L	0.5980	ppb	12:10:26
2	As 188.979†	-23.8	-0.7	-0.3318	ug/L	-0.3318	ppb	12:10:46
2	B 249.677†	-488.3	102.4	2.5736	ug/L	2.5736	ppb	12:10:46
2	Ba 233.527†	6.4	5.5	0.0547	ug/L	0.0547	ppb	12:10:46
2	Be 313.107†	-4565.8	29.3	0.0119	ug/L	0.0119	ppb	12:10:26
2	Cd 226.502†	-221.5	-4.6	-0.0677	ug/L	-0.0677	ppb	12:10:46
2	Co 228.616†	-50.2	10.2	0.2526	ug/L	0.2526	ppb	12:10:46
2	Cr 267.716†	74.9	-17.6	-0.2584	ug/L	-0.2584	ppb	12:10:46
2	Cu 324.752†	5683.5	-93.9	-0.3137	ug/L	-0.3137	ppb	12:10:26
2	Mn 257.610†	458.1	5.9	0.0130	ug/L	0.0130	ppb	12:10:46
2	Mo 202.031†	10.3	-2.3	-0.2204	ug/L	-0.2204	ppb	12:10:46
2	Ni 231.604†	86.8	10.8	0.3505	ug/L	0.3505	ppb	12:10:46

2	P 214.914†	224.5	2.5	1.6213 ug/L	1.6213 ppb	12:10:46
2	Pb 220.353†	-64.8	3.2	0.5032 ug/L	0.5032 ppb	12:10:46
2	S 181.975 Axial†	43.9	2.9	4.4228 ug/L	4.4228 ppb	12:10:46
2	Sb 206.836†	37.9	5.6	2.2314 ug/L	2.2314 ppb	12:10:46
2	Se 196.026†	-19.8	2.6	1.9748 ug/L	1.9748 ppb	12:10:46
2	Si 251.611†	600.7	94.6	3.4668 ug/L	3.4668 ppb	12:10:46
2	Sn 189.927†	4.5	0.3	0.0676 ug/L	0.0676 ppb	12:10:46
2	Ti 334.940†	-1427.7	16.2	0.0360 ug/L	0.0360 ppb	12:10:26
2	Tl 190.801†	-25.6	12.8	4.9052 ug/L	4.9052 ppb	12:10:46
2	U 409.014†	-2346.4	97.0	3.7359 ug/L	3.7359 ppb	12:10:26
2	V 292.402†	-1674.1	68.6	0.6045 ug/L	0.6045 ppb	12:10:26
2	Zn 213.857†	694.6	19.1	0.2137 ug/L	0.2137 ppb	12:10:46
2	SiO2†	598.1	49.5	3.9181 ug/L	3.9181 ppb	12:11:21
3	Sc Radial	3883.4	3883.4	101 %		12:09:54
3	Y RADIAL	4371.3	4371.3	100.9 %		12:09:34
3	Al 396.153Radial†	-82.8	10.4	10.912 ug/L	10.912 ppb	12:09:54
3	Ca 317.933Radial†	19.5	0.6	1.1481 ug/L	1.1481 ppb	12:09:54
3	Fe 238.204 Radial†	7.8	1.5	19.057 ug/L	19.057 ppb	12:09:54
3	K 766.490 Radial†	3031.9	1.0	0.2037 ug/L	0.2037 ppb	12:09:34
3	Mg 279.077 IEC†	0.2	-2.8	-114.79 ug/L	-114.79 ppb	12:09:54
3	Na 589.592 Radial†	-1166.9	-75.6	-33.267 ug/L	-33.267 ppb	12:09:34
3	Sr 421.552†	19.3	5.2	0.0502 ug/L	0.0502 ppb	12:09:34
3	Sc 361.383	691677.9	691677.9	100.30 %		12:10:51
3	Y 371.029	544663.3	544663.3	100.52 %		12:10:51
3	Ag 328.068†	224.7	124.2	0.6877 ug/L	0.6877 ppb	12:10:51
3	As 188.979†	-17.5	5.3	2.6449 ug/L	2.6449 ppb	12:11:11
3	B 249.677†	-447.9	136.5	3.4292 ug/L	3.4292 ppb	12:11:11
3	Ba 233.527†	2.0	1.3	0.0141 ug/L	0.0141 ppb	12:11:11
3	Be 313.107†	-4390.8	145.7	0.0589 ug/L	0.0589 ppb	12:10:51
3	Cd 226.502†	-188.5	25.5	0.3725 ug/L	0.3725 ppb	12:11:11
3	Co 228.616†	-39.0	20.8	0.5166 ug/L	0.5166 ppb	12:11:11
3	Cr 267.716†	81.4	-10.2	-0.1495 ug/L	-0.1495 ppb	12:11:11
3	Cu 324.752†	5697.6	-7.6	-0.0277 ug/L	-0.0277 ppb	12:10:51
3	Mn 257.610†	460.7	14.3	0.0251 ug/L	0.0251 ppb	12:11:11
3	Mo 202.031†	17.3	4.8	0.4583 ug/L	0.4583 ppb	12:11:11
3	Ni 231.604†	84.7	9.8	0.3177 ug/L	0.3177 ppb	12:11:11
3	P 214.914†	211.1	-8.1	-5.1460 ug/L	-5.1460 ppb	12:11:11
3	Pb 220.353†	-60.1	7.1	1.1153 ug/L	1.1153 ppb	12:11:11
3	S 181.975 Axial†	37.9	-2.4	-3.6193 ug/L	-3.6193 ppb	12:11:11
3	Sb 206.836†	37.6	5.7	2.3259 ug/L	2.3259 ppb	12:11:11
3	Se 196.026†	-28.8	-6.6	-4.8299 ug/L	-4.8299 ppb	12:11:11
3	Si 251.611†	604.6	106.2	3.8825 ug/L	3.8825 ppb	12:11:11
3	Sn 189.927†	13.3	9.2	2.1053 ug/L	2.1053 ppb	12:11:11
3	Ti 334.940†	-1413.4	12.4	0.0294 ug/L	0.0294 ppb	12:10:51
3	Tl 190.801†	-38.7	-0.6	-0.2307 ug/L	-0.2307 ppb	12:11:11
3	U 409.014†	-2258.4	155.0	5.9670 ug/L	5.9670 ppb	12:10:51
3	V 292.402†	-1650.0	71.4	0.6426 ug/L	0.6426 ppb	12:10:51
3	Zn 213.857†	701.0	34.3	0.3876 ug/L	0.3876 ppb	12:11:11
3	SiO2†	594.5	53.6	4.2166 ug/L	4.2166 ppb	12:11:26

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	697811.0	101.19	%	0.771				0.76%
Sc Radial	3792.4	98.8	%	2.70				2.73%
Y 371.029	548882.5	101.30	%	0.677				0.67%
Y RADIAL	4333.9	100.0	%	1.16				1.16%
Ag 328.068†	97.7	0.5441	ug/L	0.17678	0.5441	ppb	0.17678	32.49%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.3	3.4368	ug/L	7.72876	3.4368	ppb	7.72876	224.88%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.8	-0.3757	ug/L	3.04289	-0.3757	ppb	3.04289	809.87%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	130.9	3.2878	ug/L	0.65497	3.2878	ppb	0.65497	19.92%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.0	-0.0074	ug/L	0.07513	-0.0074	ppb	0.07513	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	108.7	0.0441	ug/L	0.02790	0.0441	ppb	0.02790	63.27%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.9	3.7754	ug/L	3.13187	3.7754	ppb	3.13187	82.96%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                13.0      0.1893 ug/L       0.22920      0.1893 ppb        0.22920 121.09%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 9.1      0.2257 ug/L       0.30525      0.2257 ppb        0.30525 135.24%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -4.7     -0.0676 ug/L       0.24239     -0.0676 ppb        0.24239 358.72%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -61.9     -0.2074 ug/L       0.15654     -0.2074 ppb        0.15654  75.47%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.8      23.432 ug/L        8.4971      23.432 ppb         8.4971  36.26%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         100.2      18.658 ug/L       28.3557      18.658 ppb        28.3557 151.97%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -2.4     -100.06 ug/L        13.534     -100.06 ppb         13.534  13.52%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                23.7      0.0370 ug/L       0.03170      0.0370 ppb        0.03170  85.67%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.9      0.0864 ug/L       0.34400      0.0864 ppb        0.34400 397.95%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -121.3     -53.390 ug/L       23.5685     -53.390 ppb        23.5685  44.14%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                11.3      0.3696 ug/L       0.06365      0.3696 ppb        0.06365  17.22%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -6.1     -3.8686 ug/L       4.97570     -3.8686 ppb        4.97570 128.62%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 4.3      0.6829 ug/L       0.37631      0.6829 ppb        0.37631  55.11%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.2     -0.3385 ug/L       4.22054     -0.3385 ppb        4.22054 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 3.4      1.3898 ug/L       1.54024      1.3898 ppb        1.54024 110.83%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -3.5     -2.5296 ug/L       3.90123     -2.5296 ppb        3.90123 154.23%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               105.0      3.8441 ug/L       0.35975      3.8441 ppb        0.35975   9.36%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 7.0      1.6057 ug/L       1.35901      1.6057 ppb        1.35901  84.64%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -4.4     -0.0427 ug/L       0.16174     -0.0427 ppb        0.16174 379.20%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                49.5      0.0966 ug/L       0.11077      0.0966 ppb        0.11077 114.63%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 6.5      2.4807 ug/L       2.57995      2.4807 ppb        2.57995 104.00%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                117.0      4.5053 ug/L       1.26647      4.5053 ppb        1.26647  28.11%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 61.4      0.5454 ug/L       0.13671      0.5454 ppb        0.13671  25.07%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                29.9      0.3362 ug/L       0.10650      0.3362 ppb        0.10650  31.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      63.9      5.0451 ug/L       1.70014      5.0451 ppb        1.70014  33.70%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 28
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 4/1/2010 13:09:57
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	3812.3	3812.3	99.3	%			13:12:09
1	Y RADIAL	4308.7	4308.7	99.47	%			13:11:49
1	Al 396.153Radial†	4682.6	4807.3	5036.8	ug/L	5036.8	ppb	13:11:49
1	Ca 317.933Radial†	2636.4	2636.0	5175.9	ug/L	5175.9	ppb	13:12:09
1	Fe 238.204 Radial†	405.3	401.9	5122.8	ug/L	5122.8	ppb	13:12:09
1	K 766.490 Radial†	30014.0	27225.8	5056.7	ug/L	5056.7	ppb	13:11:49
1	Mg 279.077 IEC†	129.0	126.9	5227.5	ug/L	5227.5	ppb	13:12:09
1	Na 589.592 Radial†	21991.6	23221.5	10221	ug/L	10221	ppb	13:11:49
1	Sr 421.552†	50932.2	51270.7	492.24	ug/L	492.24	ppb	13:11:49
1	Sc 361.383	692822.5	692822.5	100.47	%			13:13:06
1	Y 371.029	467393.2	467393.2	86.263	%			13:13:11
1	Ag 328.068†	89216.2	88699.8	491.77	ug/L	491.77	ppb	13:13:11
1	As 188.979†	971.0	989.3	494.08	ug/L	494.08	ppb	13:13:31
1	B 249.677†	18433.4	18930.3	474.01	ug/L	474.01	ppb	13:13:11
1	Ba 233.527†	50946.5	50707.8	491.32	ug/L	491.32	ppb	13:13:11
1	Be 313.107†	1216830.3	1215672.1	492.09	ug/L	492.09	ppb	13:13:06
1	Cd 226.502†	33312.1	33370.0	487.74	ug/L	487.74	ppb	13:13:11
1	Co 228.616†	20303.3	20268.2	502.11	ug/L	502.11	ppb	13:13:11
1	Cr 267.716†	33290.9	33044.2	488.50	ug/L	488.50	ppb	13:13:11
1	Cu 324.752†	151793.3	145396.6	484.28	ug/L	484.28	ppb	13:13:11
1	Mn 257.610†	383294.0	381059.3	493.36	ug/L	493.36	ppb	13:13:06
1	Mo 202.031†	5131.4	5094.9	489.86	ug/L	489.86	ppb	13:13:31
1	Ni 231.604†	15441.7	15294.9	498.44	ug/L	498.44	ppb	13:13:11
1	P 214.914†	4036.4	3799.1	2334.1	ug/L	2334.1	ppb	13:13:31
1	Pb 220.353†	3058.3	3111.0	491.13	ug/L	491.13	ppb	13:13:31
1	S 181.975 Axial†	691.6	648.2	972.94	ug/L	972.94	ppb	13:13:31
1	Sb 206.836†	1256.0	1218.4	505.00	ug/L	505.00	ppb	13:13:31
1	Se 196.026†	633.4	652.6	500.51	ug/L	500.51	ppb	13:13:31
1	Si 251.611†	68014.2	67200.0	2454.1	ug/L	2454.1	ppb	13:13:11
1	Sn 189.927†	2137.9	2123.7	488.81	ug/L	488.81	ppb	13:13:31
1	Ti 334.940†	270274.6	270434.1	490.70	ug/L	490.70	ppb	13:13:11
1	Tl 190.801†	1235.0	1267.2	490.77	ug/L	490.77	ppb	13:13:31
1	U 409.014†	9915.4	12275.6	471.18	ug/L	471.18	ppb	13:13:11
1	V 292.402†	53730.0	55195.5	493.05	ug/L	493.05	ppb	13:13:11
1	Zn 213.857†	43549.5	42681.6	483.61	ug/L	483.61	ppb	13:13:11
1	SiO2†	68641.6	67782.0	5338.4	ug/L	5338.4	ppb	13:14:38
2	Sc Radial	3755.8	3755.8	97.8	%			13:12:34
2	Y RADIAL	4248.3	4248.3	98.07	%			13:12:14
2	Al 396.153Radial†	4575.4	4768.6	4996.0	ug/L	4996.0	ppb	13:12:14
2	Ca 317.933Radial†	2605.9	2644.7	5192.9	ug/L	5192.9	ppb	13:12:34
2	Fe 238.204 Radial†	397.4	400.0	5098.7	ug/L	5098.7	ppb	13:12:34
2	K 766.490 Radial†	29659.2	27317.4	5073.7	ug/L	5073.7	ppb	13:12:14
2	Mg 279.077 IEC†	128.3	128.1	5277.2	ug/L	5277.2	ppb	13:12:34
2	Na 589.592 Radial†	21658.7	23214.2	10217	ug/L	10217	ppb	13:12:14
2	Sr 421.552†	50015.3	51104.5	490.64	ug/L	490.64	ppb	13:12:14
2	Sc 361.383	689589.4	689589.4	100.00	%			13:13:37
2	Y 371.029	465675.1	465675.1	85.946	%			13:13:42
2	Ag 328.068†	88991.7	88891.6	492.81	ug/L	492.81	ppb	13:13:42
2	As 188.979†	957.5	980.3	489.65	ug/L	489.65	ppb	13:14:02
2	B 249.677†	18384.9	18967.8	474.95	ug/L	474.95	ppb	13:13:42
2	Ba 233.527†	50887.2	50886.3	493.04	ug/L	493.04	ppb	13:13:42
2	Be 313.107†	1208896.4	1213416.6	491.18	ug/L	491.18	ppb	13:13:37
2	Cd 226.502†	33349.8	33563.2	490.56	ug/L	490.56	ppb	13:13:42
2	Co 228.616†	20290.2	20349.9	504.14	ug/L	504.14	ppb	13:13:42
2	Cr 267.716†	33291.1	33199.7	490.79	ug/L	490.79	ppb	13:13:42
2	Cu 324.752†	150977.4	145289.0	483.91	ug/L	483.91	ppb	13:13:42
2	Mn 257.610†	382340.9	381894.9	494.43	ug/L	494.43	ppb	13:13:37
2	Mo 202.031†	5130.4	5117.9	492.07	ug/L	492.07	ppb	13:14:02
2	Ni 231.604†	15396.5	15321.8	499.32	ug/L	499.32	ppb	13:13:42

2	P 214.914†	4036.6	3818.1	2346.3 ug/L	2346.3 ppb	13:14:02
2	Pb 220.353†	3030.6	3097.6	489.03 ug/L	489.03 ppb	13:14:02
2	S 181.975 Axial†	685.8	645.5	968.98 ug/L	968.98 ppb	13:14:02
2	Sb 206.836†	1257.2	1225.4	507.94 ug/L	507.94 ppb	13:14:02
2	Se 196.026†	642.9	665.0	509.68 ug/L	509.68 ppb	13:14:02
2	Si 251.611†	67889.6	67392.8	2461.1 ug/L	2461.1 ppb	13:13:42
2	Sn 189.927†	2151.6	2147.5	494.28 ug/L	494.28 ppb	13:14:02
2	Ti 334.940†	269400.4	270821.2	491.39 ug/L	491.39 ppb	13:13:42
2	Tl 190.801†	1234.9	1272.8	492.95 ug/L	492.95 ppb	13:14:02
2	U 409.014†	10041.1	12447.5	477.80 ug/L	477.80 ppb	13:13:42
2	V 292.402†	53445.1	55161.3	492.80 ug/L	492.80 ppb	13:13:42
2	Zn 213.857†	43483.0	42818.3	485.17 ug/L	485.17 ppb	13:13:42
2	SiO2†	69203.4	68664.1	5408.0 ug/L	5408.0 ppb	13:14:43
3	Sc Radial	3850.3	3850.3	100 %		13:12:59
3	Y RADIAL	4300.1	4300.1	99.27 %		13:12:39
3	Al 396.153Radial†	4689.1	4767.2	4994.4 ug/L	4994.4 ppb	13:12:39
3	Ca 317.933Radial†	2654.3	2627.6	5159.5 ug/L	5159.5 ppb	13:12:59
3	Fe 238.204 Radial†	409.8	402.4	5129.6 ug/L	5129.6 ppb	13:12:59
3	K 766.490 Radial†	30062.6	26976.0	5010.3 ug/L	5010.3 ppb	13:12:39
3	Mg 279.077 IEC†	131.1	127.6	5257.3 ug/L	5257.3 ppb	13:12:59
3	Na 589.592 Radial†	21677.1	22689.5	9986.4 ug/L	9986.4 ppb	13:12:39
3	Sr 421.552†	50663.3	50496.4	484.81 ug/L	484.81 ppb	13:12:39
3	Sc 361.383	695656.5	695656.5	100.88 %		13:14:08
3	Y 371.029	468017.6	468017.6	86.378 %		13:14:13
3	Ag 328.068†	89917.4	89033.1	493.60 ug/L	493.60 ppb	13:14:13
3	As 188.979†	968.9	983.3	491.12 ug/L	491.12 ppb	13:14:33
3	B 249.677†	18784.7	19203.8	480.89 ug/L	480.89 ppb	13:14:13
3	Ba 233.527†	51285.5	50837.3	492.57 ug/L	492.57 ppb	13:14:13
3	Be 313.107†	1225042.7	1218878.9	493.39 ug/L	493.39 ppb	13:14:08
3	Cd 226.502†	33573.5	33494.1	489.55 ug/L	489.55 ppb	13:14:13
3	Co 228.616†	20439.0	20320.4	503.41 ug/L	503.41 ppb	13:14:13
3	Cr 267.716†	33524.1	33140.3	489.92 ug/L	489.92 ppb	13:14:13
3	Cu 324.752†	153238.9	146214.1	487.00 ug/L	487.00 ppb	13:14:13
3	Mn 257.610†	386639.6	382821.6	495.64 ug/L	495.64 ppb	13:14:08
3	Mo 202.031†	5194.0	5136.2	493.83 ug/L	493.83 ppb	13:14:33
3	Ni 231.604†	15585.3	15374.7	501.04 ug/L	501.04 ppb	13:14:13
3	P 214.914†	4107.8	3853.5	2368.3 ug/L	2368.3 ppb	13:14:33
3	Pb 220.353†	3076.4	3116.6	492.01 ug/L	492.01 ppb	13:14:33
3	S 181.975 Axial†	704.3	657.9	987.64 ug/L	987.64 ppb	13:14:33
3	Sb 206.836†	1271.7	1228.9	509.37 ug/L	509.37 ppb	13:14:33
3	Se 196.026†	659.1	675.4	517.47 ug/L	517.47 ppb	13:14:33
3	Si 251.611†	68669.8	67574.1	2467.7 ug/L	2467.7 ppb	13:14:13
3	Sn 189.927†	2173.4	2150.3	494.91 ug/L	494.91 ppb	13:14:33
3	Ti 334.940†	272553.9	271597.7	492.80 ug/L	492.80 ppb	13:14:13
3	Tl 190.801†	1256.1	1283.0	496.91 ug/L	496.91 ppb	13:14:33
3	U 409.014†	10199.0	12516.5	480.45 ug/L	480.45 ppb	13:14:13
3	V 292.402†	54102.2	55346.6	494.46 ug/L	494.46 ppb	13:14:13
3	Zn 213.857†	43833.5	42786.5	484.79 ug/L	484.79 ppb	13:14:13
3	SiO2†	69470.8	68325.6	5381.3 ug/L	5381.3 ppb	13:14:48

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	692689.5	100.45	%	0.440				0.44%
Sc Radial	3806.1	99.2	%	1.24				1.25%
Y 371.029	467028.6	86.196	%	0.2239				0.26%
Y RADIAL	4285.7	98.94	%	0.755				0.76%
Ag 328.068†	88874.8	492.73	ug/L	0.921	492.73	ppb	0.921	0.19%
QC value within limits for Ag 328.068 Recovery = 98.55%								
Al 396.153Radial†	4781.0	5009.1	ug/L	24.02	5009.1	ppb	24.02	0.48%
QC value within limits for Al 396.153Radial Recovery = 100.18%								
As 188.979†	984.3	491.62	ug/L	2.256	491.62	ppb	2.256	0.46%
QC value within limits for As 188.979 Recovery = 98.32%								
B 249.677†	19034.0	476.62	ug/L	3.728	476.62	ppb	3.728	0.78%
QC value within limits for B 249.677 Recovery = 95.32%								
Ba 233.527†	50810.5	492.31	ug/L	0.891	492.31	ppb	0.891	0.18%
QC value within limits for Ba 233.527 Recovery = 98.46%								
Be 313.107†	1215989.2	492.22	ug/L	1.110	492.22	ppb	1.110	0.23%
QC value within limits for Be 313.107 Recovery = 98.44%								
Ca 317.933Radial†	2636.1	5176.1	ug/L	16.73	5176.1	ppb	16.73	0.32%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.52%
Cd 226.502†            33475.8      489.28 ug/L         1.433      489.28 ppb          1.433   0.29%
   QC value within limits for Cd 226.502  Recovery = 97.86%
Co 228.616†            20312.8      503.22 ug/L         1.027      503.22 ppb          1.027   0.20%
   QC value within limits for Co 228.616  Recovery = 100.64%
Cr 267.716†            33128.0      489.73 ug/L         1.155      489.73 ppb          1.155   0.24%
   QC value within limits for Cr 267.716  Recovery = 97.95%
Cu 324.752†           145633.2      485.06 ug/L         1.684      485.06 ppb          1.684   0.35%
   QC value within limits for Cu 324.752  Recovery = 97.01%
Fe 238.204 Radial†       401.4      5117.1 ug/L         16.23      5117.1 ppb          16.23   0.32%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.34%
K 766.490 Radial†      27173.1      5046.9 ug/L         32.81      5046.9 ppb          32.81   0.65%
   QC value within limits for K 766.490 Radial  Recovery = 100.94%
Mg 279.077 IEC†          127.6      5254.0 ug/L         25.01      5254.0 ppb          25.01   0.48%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.08%
Mn 257.610†           381925.3      494.47 ug/L         1.140      494.47 ppb          1.140   0.23%
   QC value within limits for Mn 257.610  Recovery = 98.89%
Mo 202.031†             5116.4      491.92 ug/L         1.988      491.92 ppb          1.988   0.40%
   QC value within limits for Mo 202.031  Recovery = 98.38%
Na 589.592 Radial†     23041.7       10141 ug/L         134.3       10141 ppb          134.3   1.32%
   QC value within limits for Na 589.592 Radial  Recovery = 101.41%
Ni 231.604†            15330.5      499.60 ug/L         1.322      499.60 ppb          1.322   0.26%
   QC value within limits for Ni 231.604  Recovery = 99.92%
P 214.914†              3823.6      2349.6 ug/L         17.35      2349.6 ppb          17.35   0.74%
   QC value within limits for P 214.914  Recovery = 93.98%
Pb 220.353†             3108.4      490.73 ug/L         1.533      490.73 ppb          1.533   0.31%
   QC value within limits for Pb 220.353  Recovery = 98.15%
S 181.975 Axial†         650.5      976.52 ug/L         9.831      976.52 ppb          9.831   1.01%
   QC value within limits for S 181.975 Axial  Recovery = 97.65%
Sb 206.836†             1224.2      507.44 ug/L         2.231      507.44 ppb          2.231   0.44%
   QC value within limits for Sb 206.836  Recovery = 101.49%
Se 196.026†              664.4      509.22 ug/L         8.490      509.22 ppb          8.490   1.67%
   QC value within limits for Se 196.026  Recovery = 101.84%
Si 251.611†            67389.0      2461.0 ug/L          6.82      2461.0 ppb           6.82   0.28%
   QC value within limits for Si 251.611  Recovery = 98.44%
Sn 189.927†             2140.5      492.67 ug/L         3.353      492.67 ppb          3.353   0.68%
   QC value within limits for Sn 189.927  Recovery = 98.53%
Sr 421.552†            50957.2      489.23 ug/L         3.914      489.23 ppb          3.914   0.80%
   QC value within limits for Sr 421.552  Recovery = 97.85%
Ti 334.940†           270951.0      491.63 ug/L         1.071      491.63 ppb          1.071   0.22%
   QC value within limits for Ti 334.940  Recovery = 98.33%
Tl 190.801†             1274.3      493.54 ug/L         3.109      493.54 ppb          3.109   0.63%
   QC value within limits for Tl 190.801  Recovery = 98.71%
U 409.014†             12413.2      476.47 ug/L         4.777      476.47 ppb          4.777   1.00%
   QC value within limits for U 409.014  Recovery = 95.29%
V 292.402†             55234.5      493.44 ug/L         0.892      493.44 ppb          0.892   0.18%
   QC value within limits for V 292.402  Recovery = 98.69%
Zn 213.857†            42762.1      484.52 ug/L         0.814      484.52 ppb          0.814   0.17%
   QC value within limits for Zn 213.857  Recovery = 96.90%
SiO2†                  68257.2      5375.9 ug/L         35.10      5375.9 ppb          35.10   0.65%
   QC value within limits for SiO2  Recovery = 100.53%
All analyte(s) passed QC.
```

Sequence No.: 29
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 4/1/2010 13:16:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3899.3	3899.3	102	%			13:19:11
1	Y RADIAL	4286.1	4286.1	98.94	%			13:18:51
1	Al 396.153Radial†	-94.1	-0.4	-0.3995	ug/L	-0.3995	ppb	13:18:51
1	Ca 317.933Radial†	23.5	4.5	8.8160	ug/L	8.8160	ppb	13:19:11
1	Fe 238.204 Radial†	6.8	0.5	6.3335	ug/L	6.3335	ppb	13:19:11
1	K 766.490 Radial†	3076.7	33.0	6.1433	ug/L	6.1433	ppb	13:18:51
1	Mg 279.077 IEC†	1.2	-1.8	-74.536	ug/L	-74.536	ppb	13:19:11
1	Na 589.592 Radial†	-1187.1	-90.9	-39.992	ug/L	-39.992	ppb	13:18:51
1	Sr 421.552†	38.1	23.6	0.2267	ug/L	0.2267	ppb	13:18:51
1	Sc 361.383	689213.7	689213.7	99.946	%			13:20:08
1	Y 371.029	540087.7	540087.7	99.680	%			13:20:08
1	Ag 328.068†	126.0	26.2	0.1431	ug/L	0.1431	ppb	13:20:08
1	As 188.979†	-29.4	-6.6	-3.2930	ug/L	-3.2930	ppb	13:20:28
1	B 249.677†	-514.6	68.1	1.7122	ug/L	1.7122	ppb	13:20:28
1	Ba 233.527†	-15.7	-16.5	-0.1612	ug/L	-0.1612	ppb	13:20:28
1	Be 313.107†	-4417.9	103.0	0.0413	ug/L	0.0413	ppb	13:20:08
1	Cd 226.502†	-209.0	4.4	0.0625	ug/L	0.0625	ppb	13:20:28
1	Co 228.616†	-56.6	3.1	0.0770	ug/L	0.0770	ppb	13:20:28
1	Cr 267.716†	84.9	-6.3	-0.0940	ug/L	-0.0940	ppb	13:20:28
1	Cu 324.752†	5749.6	64.7	0.2166	ug/L	0.2166	ppb	13:20:08
1	Mn 257.610†	496.2	51.5	0.0702	ug/L	0.0702	ppb	13:20:28
1	Mo 202.031†	18.0	5.5	0.5307	ug/L	0.5307	ppb	13:20:28
1	Ni 231.604†	62.8	-11.8	-0.3853	ug/L	-0.3853	ppb	13:20:28
1	P 214.914†	217.9	-0.5	-0.3288	ug/L	-0.3288	ppb	13:20:28
1	Pb 220.353†	-58.4	8.5	1.3444	ug/L	1.3444	ppb	13:20:28
1	S 181.975 Axial†	40.6	0.4	0.5400	ug/L	0.5400	ppb	13:20:28
1	Sb 206.836†	25.3	-6.5	-2.5364	ug/L	-2.5364	ppb	13:20:28
1	Se 196.026†	-29.8	-7.7	-5.7260	ug/L	-5.7260	ppb	13:20:28
1	Si 251.611†	567.6	71.3	2.6043	ug/L	2.6043	ppb	13:20:28
1	Sn 189.927†	16.5	12.4	2.8403	ug/L	2.8403	ppb	13:20:28
1	Ti 334.940†	-1481.2	-60.5	-0.1020	ug/L	-0.1020	ppb	13:20:08
1	Tl 190.801†	-39.7	-1.8	-0.6951	ug/L	-0.6951	ppb	13:20:28
1	U 409.014†	-2435.9	-30.7	-1.1832	ug/L	-1.1832	ppb	13:20:08
1	V 292.402†	-1831.8	-116.4	-1.0234	ug/L	-1.0234	ppb	13:20:08
1	Zn 213.857†	701.6	37.4	0.4288	ug/L	0.4288	ppb	13:20:28
1	SiO2†	569.6	30.7	2.4108	ug/L	2.4108	ppb	13:21:24
2	Sc Radial	3921.8	3921.8	102	%			13:19:36
2	Y RADIAL	4378.7	4378.7	101.1	%			13:19:16
2	Al 396.153Radial†	-112.5	-17.9	-18.844	ug/L	-18.844	ppb	13:19:16
2	Ca 317.933Radial†	19.0	-0.1	-0.2053	ug/L	-0.2053	ppb	13:19:36
2	Fe 238.204 Radial†	7.8	1.4	17.761	ug/L	17.761	ppb	13:19:36
2	K 766.490 Radial†	2982.9	-76.2	-14.160	ug/L	-14.160	ppb	13:19:16
2	Mg 279.077 IEC†	1.1	-1.9	-78.200	ug/L	-78.200	ppb	13:19:36
2	Na 589.592 Radial†	-1171.6	-69.0	-30.361	ug/L	-30.361	ppb	13:19:16
2	Sr 421.552†	20.4	6.1	0.0584	ug/L	0.0584	ppb	13:19:16
2	Sc 361.383	696639.9	696639.9	101.02	%			13:20:33
2	Y 371.029	545980.2	545980.2	100.77	%			13:20:33
2	Ag 328.068†	112.1	11.1	0.0612	ug/L	0.0612	ppb	13:20:33
2	As 188.979†	-29.2	-6.1	-3.0343	ug/L	-3.0343	ppb	13:20:53
2	B 249.677†	-498.6	89.5	2.2489	ug/L	2.2489	ppb	13:20:53
2	Ba 233.527†	-6.1	-6.8	-0.0662	ug/L	-0.0662	ppb	13:20:53
2	Be 313.107†	-4619.7	-49.7	-0.0199	ug/L	-0.0199	ppb	13:20:33
2	Cd 226.502†	-211.0	4.6	0.0654	ug/L	0.0654	ppb	13:20:53
2	Co 228.616†	-60.8	-0.5	-0.0120	ug/L	-0.0120	ppb	13:20:53
2	Cr 267.716†	99.9	7.5	0.1109	ug/L	0.1109	ppb	13:20:53
2	Cu 324.752†	5722.7	-23.2	-0.0784	ug/L	-0.0784	ppb	13:20:33
2	Mn 257.610†	472.7	22.9	0.0346	ug/L	0.0346	ppb	13:20:53
2	Mo 202.031†	15.3	2.7	0.2593	ug/L	0.2593	ppb	13:20:53
2	Ni 231.604†	64.6	-10.7	-0.3484	ug/L	-0.3484	ppb	13:20:53

2	P 214.914†	220.5	-0.3	-0.1644	ug/L	-0.1644 ppb	13:20:53
2	Pb 220.353†	-76.5	-8.8	-1.3848	ug/L	-1.3848 ppb	13:20:53
2	S 181.975 Axial†	39.7	-0.9	-1.3532	ug/L	-1.3532 ppb	13:20:53
2	Sb 206.836†	39.9	7.8	3.1192	ug/L	3.1192 ppb	13:20:53
2	Se 196.026†	-32.2	-9.8	-7.2288	ug/L	-7.2288 ppb	13:20:53
2	Si 251.611†	576.4	73.9	2.7026	ug/L	2.7026 ppb	13:20:53
2	Sn 189.927†	7.7	3.5	0.8100	ug/L	0.8100 ppb	13:20:53
2	Ti 334.940†	-1399.8	35.9	0.0698	ug/L	0.0698 ppb	13:20:33
2	Tl 190.801†	-36.3	2.0	0.7751	ug/L	0.7751 ppb	13:20:53
2	U 409.014†	-2333.0	97.1	3.7372	ug/L	3.7372 ppb	13:20:33
2	V 292.402†	-1795.0	-60.5	-0.5264	ug/L	-0.5264 ppb	13:20:33
2	Zn 213.857†	709.4	37.7	0.4304	ug/L	0.4304 ppb	13:20:53
2	SiO2†	553.9	9.2	0.7157	ug/L	0.7157 ppb	13:21:29
3	Sc Radial	3847.8	3847.8	100	%		13:20:01
3	Y RADIAL	4316.2	4316.2	99.64	%		13:19:41
3	Al 396.153Radial†	-113.6	-21.1	-22.246	ug/L	-22.246 ppb	13:19:41
3	Ca 317.933Radial†	17.8	-0.9	-1.8076	ug/L	-1.8076 ppb	13:20:01
3	Fe 238.204 Radial†	3.8	-2.4	-30.079	ug/L	-30.079 ppb	13:20:01
3	K 766.490 Radial†	3023.8	20.8	3.8802	ug/L	3.8802 ppb	13:19:41
3	Mg 279.077 IEC†	3.2	0.2	8.2462	ug/L	8.2462 ppb	13:20:01
3	Na 589.592 Radial†	-1174.2	-93.6	-41.208	ug/L	-41.208 ppb	13:19:41
3	Sr 421.552†	14.3	0.3	0.0034	ug/L	0.0034 ppb	13:19:41
3	Sc 361.383	691071.6	691071.6	100.22	%		13:20:58
3	Y 371.029	541226.7	541226.7	99.890	%		13:20:58
3	Ag 328.068†	98.8	-1.3	-0.0105	ug/L	-0.0105 ppb	13:20:58
3	As 188.979†	-27.2	-4.3	-2.1603	ug/L	-2.1603 ppb	13:21:18
3	B 249.677†	-516.7	67.4	1.7007	ug/L	1.7007 ppb	13:21:18
3	Ba 233.527†	-1.3	-2.1	-0.0208	ug/L	-0.0208 ppb	13:21:18
3	Be 313.107†	-4566.0	-32.9	-0.0131	ug/L	-0.0131 ppb	13:20:58
3	Cd 226.502†	-215.8	-1.9	-0.0259	ug/L	-0.0259 ppb	13:21:18
3	Co 228.616†	-63.1	-3.3	-0.0802	ug/L	-0.0802 ppb	13:21:18
3	Cr 267.716†	100.6	9.1	0.1342	ug/L	0.1342 ppb	13:21:18
3	Cu 324.752†	5644.9	-55.1	-0.1814	ug/L	-0.1814 ppb	13:20:58
3	Mn 257.610†	505.9	59.8	0.0741	ug/L	0.0741 ppb	13:21:18
3	Mo 202.031†	16.0	3.5	0.3378	ug/L	0.3378 ppb	13:21:18
3	Ni 231.604†	71.2	-3.6	-0.1171	ug/L	-0.1171 ppb	13:21:18
3	P 214.914†	216.5	-2.5	-1.5070	ug/L	-1.5070 ppb	13:21:18
3	Pb 220.353†	-78.3	-11.1	-1.7516	ug/L	-1.7516 ppb	13:21:18
3	S 181.975 Axial†	41.7	1.4	2.1321	ug/L	2.1321 ppb	13:21:18
3	Sb 206.836†	36.7	4.9	1.9773	ug/L	1.9773 ppb	13:21:18
3	Se 196.026†	-28.1	-6.0	-4.5203	ug/L	-4.5203 ppb	13:21:18
3	Si 251.611†	558.6	60.8	2.2209	ug/L	2.2209 ppb	13:21:18
3	Sn 189.927†	6.3	2.2	0.5002	ug/L	0.5002 ppb	13:21:18
3	Ti 334.940†	-1388.2	36.2	0.0678	ug/L	0.0678 ppb	13:20:58
3	Tl 190.801†	-42.2	-4.1	-1.5881	ug/L	-1.5881 ppb	13:21:18
3	U 409.014†	-2594.2	-182.1	-7.0128	ug/L	-7.0128 ppb	13:20:58
3	V 292.402†	-1711.5	8.6	0.0717	ug/L	0.0717 ppb	13:20:58
3	Zn 213.857†	704.4	38.3	0.4437	ug/L	0.4437 ppb	13:21:18
3	SiO2†	540.6	0.2	0.0094	ug/L	0.0094 ppb	13:21:34

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	692308.4	100.39	%	0.560				0.56%
Sc Radial	3889.6	101	%	1.0				0.98%
Y 371.029	542431.5	100.11	%	0.577				0.58%
Y RADIAL	4327.0	99.89	%	1.091				1.09%
Ag 328.068†	12.0	0.0646	ug/L	0.07686	0.0646	ppb	0.07686	119.03%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-13.1	-13.830	ug/L	11.7548	-13.830	ppb	11.7548	85.00%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-5.7	-2.8292	ug/L	0.59355	-2.8292	ppb	0.59355	20.98%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	75.0	1.8873	ug/L	0.31324	1.8873	ppb	0.31324	16.60%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-8.4	-0.0827	ug/L	0.07162	-0.0827	ppb	0.07162	86.58%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	6.8	0.0028	ug/L	0.03358	0.0028	ppb	0.03358	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.2	2.2677	ug/L	5.72729	2.2677	ppb	5.72729	252.56%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 2.3      0.0340 ug/L       0.05193      0.0340 ppb        0.05193 152.67%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -0.2     -0.0051 ug/L       0.07882     -0.0051 ppb        0.07882 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 3.4      0.0504 ug/L       0.12555      0.0504 ppb        0.12555 249.22%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                -4.5     -0.0144 ug/L       0.20657     -0.0144 ppb        0.20657 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.2     -1.9949 ug/L      24.98389     -1.9949 ppb       24.98389 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          -7.5     -1.3789 ug/L      11.12668     -1.3789 ppb       11.12668 806.92%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.2     -48.163 ug/L       48.8864     -48.163 ppb        48.8864 101.50%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                44.7      0.0596 ug/L       0.02177      0.0596 ppb        0.02177  36.52%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.9      0.3759 ug/L       0.13964      0.3759 ppb        0.13964  37.15%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -84.5     -37.187 ug/L        5.9429     -37.187 ppb         5.9429  15.98%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -8.7     -0.2836 ug/L       0.14538     -0.2836 ppb        0.14538  51.26%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -1.1     -0.6667 ug/L       0.73231     -0.6667 ppb        0.73231 109.84%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -3.8     -0.5973 ug/L       1.69158     -0.5973 ppb        1.69158 283.19%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.3      0.4396 ug/L       1.74485      0.4396 ppb        1.74485 396.90%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.1      0.8534 ug/L       2.99061      0.8534 ppb        2.99061 350.45%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -7.8     -5.8251 ug/L       1.35694     -5.8251 ppb        1.35694  23.29%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                68.7      2.5093 ug/L       0.25452      2.5093 ppb        0.25452  10.14%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.0      1.3835 ug/L       1.27114      1.3835 ppb        1.27114  91.88%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                10.0      0.0962 ug/L       0.11638      0.0962 ppb        0.11638 121.02%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 3.8      0.0119 ug/L       0.09863      0.0119 ppb        0.09863 831.63%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.3     -0.5027 ug/L       1.19330     -0.5027 ppb        1.19330 237.38%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -38.6     -1.4863 ug/L       5.38139     -1.4863 ppb        5.38139 362.08%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -56.1     -0.4927 ug/L       0.54831     -0.4927 ppb        0.54831 111.29%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                37.8      0.4343 ug/L       0.00818      0.4343 ppb        0.00818   1.88%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      13.4      1.0453 ug/L       1.23417      1.0453 ppb        1.23417 118.07%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 4/1/2010 13:44:49 **Plasma On Time: 3/30/2010 17:10:22**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\040110.sif
Batch ID:
Results Data Set: 040110
Results Library: C:\pe\Optima3\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 4/1/2010 13:44:50**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4179.3	4179.3	109	%			13:46:42
1	Y RADIAL	4540.1	4540.1	104.8	%			13:46:42
1	Al 396.153Radial†	4609.9	4326.4	4530.4	ug/L	4530.4	ppb	13:46:42
1	Ca 317.933Radial†	2661.3	2425.7	4763.0	ug/L	4763.0	ppb	13:47:02
1	Fe 238.204 Radial†	405.6	366.4	4671.7	ug/L	4671.7	ppb	13:47:02
1	K 766.490 Radial†	29793.6	24369.2	4525.9	ug/L	4525.9	ppb	13:46:42
1	Mg 279.077 IEC†	127.4	114.0	4697.8	ug/L	4697.8	ppb	13:47:02
1	Na 589.592 Radial†	21739.7	21045.5	9262.9	ug/L	9262.9	ppb	13:46:42
1	Sr 421.552†	50541.7	46408.2	445.55	ug/L	445.55	ppb	13:46:42
1	Sc 361.383	694768.4	694768.4	100.75	%			13:47:59
1	Y 371.029	447465.7	447465.7	82.585	%			13:48:04
1	Ag 328.068†	91788.9	91004.5	504.36	ug/L	504.36	ppb	13:48:04
1	As 188.979†	971.7	987.3	493.09	ug/L	493.09	ppb	13:48:24
1	B 249.677†	19204.8	19644.6	492.03	ug/L	492.03	ppb	13:48:04
1	Ba 233.527†	52110.4	51721.1	501.12	ug/L	501.12	ppb	13:48:04
1	Be 313.107†	1222314.5	1217723.2	492.94	ug/L	492.94	ppb	13:47:59
1	Cd 226.502†	34182.3	34140.8	499.06	ug/L	499.06	ppb	13:48:04
1	Co 228.616†	20754.5	20659.4	511.79	ug/L	511.79	ppb	13:48:04
1	Cr 267.716†	34074.4	33729.0	498.56	ug/L	498.56	ppb	13:48:04
1	Cu 324.752†	156812.6	149955.3	499.43	ug/L	499.43	ppb	13:48:04
1	Mn 257.610†	386506.8	383179.7	496.08	ug/L	496.08	ppb	13:48:04
1	Mo 202.031†	5194.3	5143.1	494.46	ug/L	494.46	ppb	13:48:24
1	Ni 231.604†	15851.5	15658.7	510.30	ug/L	510.30	ppb	13:48:04
1	P 214.914†	4085.4	3836.5	2355.2	ug/L	2355.2	ppb	13:48:24
1	Pb 220.353†	3063.1	3107.3	490.47	ug/L	490.47	ppb	13:48:24
1	S 181.975 Axial†	706.2	660.7	991.91	ug/L	991.91	ppb	13:48:24
1	Sb 206.836†	1266.6	1225.4	508.01	ug/L	508.01	ppb	13:48:24
1	Se 196.026†	634.3	651.7	498.49	ug/L	498.49	ppb	13:48:24
1	Si 251.611†	70079.8	69060.7	2522.2	ug/L	2522.2	ppb	13:48:04
1	Sn 189.927†	2174.8	2154.5	495.80	ug/L	495.80	ppb	13:48:24
1	Ti 334.940†	278175.1	277522.3	503.54	ug/L	503.54	ppb	13:48:04
1	Tl 190.801†	1257.3	1285.9	498.04	ug/L	498.04	ppb	13:48:24
1	U 409.014†	10492.1	12820.3	492.19	ug/L	492.19	ppb	13:48:04
1	V 292.402†	55143.4	56448.6	504.24	ug/L	504.24	ppb	13:48:04
1	Zn 213.857†	44766.2	43767.8	496.01	ug/L	496.01	ppb	13:48:04
1	SiO2†	67727.3	66683.1	5251.6	ug/L	5251.6	ppb	13:49:31
2	Sc Radial	3794.3	3794.3	98.8	%			13:47:07
2	Y RADIAL	4107.4	4107.4	94.82	%			13:47:07
2	Al 396.153Radial†	4483.9	4628.6	4848.5	ug/L	4848.5	ppb	13:47:07
2	Ca 317.933Radial†	2586.4	2598.0	5101.3	ug/L	5101.3	ppb	13:47:27
2	Fe 238.204 Radial†	394.6	393.1	5010.5	ug/L	5010.5	ppb	13:47:27
2	K 766.490 Radial†	28828.8	26170.1	4860.5	ug/L	4860.5	ppb	13:47:07
2	Mg 279.077 IEC†	124.1	122.6	5048.6	ug/L	5048.6	ppb	13:47:27
2	Na 589.592 Radial†	20778.4	22099.2	9726.6	ug/L	9726.6	ppb	13:47:07
2	Sr 421.552†	48409.0	48961.3	470.07	ug/L	470.07	ppb	13:47:07
2	Sc 361.383	696471.8	696471.8	101.00	%			13:48:30
2	Y 371.029	442927.0	442927.0	81.748	%			13:48:35

2	Ag 328.068†	89686.0	88699.7	491.73 ug/L	491.73 ppb	13:48:35
2	As 188.979†	971.5	984.7	491.76 ug/L	491.76 ppb	13:48:55
2	B 249.677†	18706.7	19104.9	478.42 ug/L	478.42 ppb	13:48:35
2	Ba 233.527†	51055.1	50549.7	489.79 ug/L	489.79 ppb	13:48:35
2	Be 313.107†	1225805.0	1218212.1	493.11 ug/L	493.11 ppb	13:48:30
2	Cd 226.502†	33394.2	33277.6	486.40 ug/L	486.40 ppb	13:48:35
2	Co 228.616†	20358.2	20216.7	500.85 ug/L	500.85 ppb	13:48:35
2	Cr 267.716†	33343.8	32922.9	486.70 ug/L	486.70 ppb	13:48:35
2	Cu 324.752†	153051.8	145851.0	485.78 ug/L	485.78 ppb	13:48:35
2	Mn 257.610†	378482.4	374296.3	484.60 ug/L	484.60 ppb	13:48:35
2	Mo 202.031†	5220.8	5156.7	495.79 ug/L	495.79 ppb	13:48:55
2	Ni 231.604†	15450.9	15223.5	496.12 ug/L	496.12 ppb	13:48:35
2	P 214.914†	4095.5	3836.5	2357.8 ug/L	2357.8 ppb	13:48:55
2	Pb 220.353†	3090.4	3126.9	493.61 ug/L	493.61 ppb	13:48:55
2	S 181.975 Axial†	703.1	656.0	984.68 ug/L	984.68 ppb	13:48:55
2	Sb 206.836†	1285.4	1240.9	514.20 ug/L	514.20 ppb	13:48:55
2	Se 196.026†	646.1	661.8	507.03 ug/L	507.03 ppb	13:48:55
2	Si 251.611†	68364.6	67192.2	2453.7 ug/L	2453.7 ppb	13:48:35
2	Sn 189.927†	2168.7	2143.2	493.26 ug/L	493.26 ppb	13:48:55
2	Ti 334.940†	271820.9	270555.6	490.92 ug/L	490.92 ppb	13:48:35
2	Tl 190.801†	1250.6	1276.2	494.23 ug/L	494.23 ppb	13:48:55
2	U 409.014†	10126.2	12432.7	477.24 ug/L	477.24 ppb	13:48:35
2	V 292.402†	54015.8	55198.3	493.19 ug/L	493.19 ppb	13:48:35
2	Zn 213.857†	43697.4	42600.9	482.72 ug/L	482.72 ppb	13:48:35
2	SiO2†	67676.9	66468.8	5234.6 ug/L	5234.6 ppb	13:49:36
3	Sc Radial	3923.6	3923.6	102 %		13:47:32
3	Y RADIAL	4224.6	4224.6	97.53 %		13:47:32
3	Al 396.153Radial†	4662.7	4654.0	4875.4 ug/L	4875.4 ppb	13:47:32
3	Ca 317.933Radial†	2666.4	2590.1	5085.7 ug/L	5085.7 ppb	13:47:52
3	Fe 238.204 Radial†	408.4	393.4	5015.0 ug/L	5015.0 ppb	13:47:52
3	K 766.490 Radial†	29910.4	26267.1	4878.6 ug/L	4878.6 ppb	13:47:32
3	Mg 279.077 IEC†	129.0	123.2	5075.7 ug/L	5075.7 ppb	13:47:52
3	Na 589.592 Radial†	21668.6	22277.3	9805.1 ug/L	9805.1 ppb	13:47:32
3	Sr 421.552†	50281.8	49179.5	472.16 ug/L	472.16 ppb	13:47:32
3	Sc 361.383	701444.7	701444.7	101.72 %		13:49:00
3	Y 371.029	442308.7	442308.7	81.634 %		13:49:06
3	Ag 328.068†	89904.5	88284.9	489.43 ug/L	489.43 ppb	13:49:06
3	As 188.979†	975.3	981.6	490.25 ug/L	490.25 ppb	13:49:26
3	B 249.677†	18724.2	18990.7	475.56 ug/L	475.56 ppb	13:49:06
3	Ba 233.527†	51339.8	50471.2	489.02 ug/L	489.02 ppb	13:49:06
3	Be 313.107†	1232226.4	1215920.4	492.18 ug/L	492.18 ppb	13:49:00
3	Cd 226.502†	33704.2	33347.9	487.42 ug/L	487.42 ppb	13:49:06
3	Co 228.616†	20438.4	20152.6	499.25 ug/L	499.25 ppb	13:49:06
3	Cr 267.716†	33602.4	32943.1	486.99 ug/L	486.99 ppb	13:49:06
3	Cu 324.752†	153179.0	144901.7	482.62 ug/L	482.62 ppb	13:49:06
3	Mn 257.610†	380335.7	373461.6	483.52 ug/L	483.52 ppb	13:49:06
3	Mo 202.031†	5215.2	5114.5	491.74 ug/L	491.74 ppb	13:49:26
3	Ni 231.604†	15580.3	15242.3	496.73 ug/L	496.73 ppb	13:49:06
3	P 214.914†	4117.0	3828.9	2353.6 ug/L	2353.6 ppb	13:49:26
3	Pb 220.353†	3071.8	3086.9	487.32 ug/L	487.32 ppb	13:49:26
3	S 181.975 Axial†	712.5	660.3	991.14 ug/L	991.14 ppb	13:49:26
3	Sb 206.836†	1293.6	1239.9	513.76 ug/L	513.76 ppb	13:49:26
3	Se 196.026†	647.0	658.1	504.28 ug/L	504.28 ppb	13:49:26
3	Si 251.611†	68646.0	66989.0	2446.3 ug/L	2446.3 ppb	13:49:06
3	Sn 189.927†	2192.9	2151.7	495.23 ug/L	495.23 ppb	13:49:26
3	Ti 334.940†	272895.2	269703.7	489.37 ug/L	489.37 ppb	13:49:06
3	Tl 190.801†	1261.6	1278.2	494.99 ug/L	494.99 ppb	13:49:26
3	U 409.014†	10271.4	12504.3	480.00 ug/L	480.00 ppb	13:49:06
3	V 292.402†	54102.5	54904.3	490.54 ug/L	490.54 ppb	13:49:06
3	Zn 213.857†	43847.3	42441.5	480.89 ug/L	480.89 ppb	13:49:06
3	SiO2†	67812.9	66127.4	5207.8 ug/L	5207.8 ppb	13:49:41

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	697561.6	101.16	%	0.503				0.50%
Sc Radial	3965.7	103	%	5.1				4.94%
Y 371.029	444233.8	81.989	%	0.5197				0.63%
Y RADIAL	4290.7	99.05	%	5.166				5.22%
Ag 328.068†	89329.7	495.17	ug/L	8.038	495.17	ppb	8.038	1.62%

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   QC value within limits for Ag 328.068  Recovery = 99.03%
Al 396.153Radial†       4536.3      4751.4 ug/L        191.93      4751.4 ppb        191.93   4.04%
   QC value within limits for Al 396.153Radial  Recovery = 95.03%
As 188.979†              984.5      491.70 ug/L         1.421      491.70 ppb         1.421   0.29%
   QC value within limits for As 188.979  Recovery = 98.34%
B 249.677†             19246.7      482.00 ug/L         8.800      482.00 ppb         8.800   1.83%
   QC value within limits for B 249.677  Recovery = 96.40%
Ba 233.527†            50914.0      493.31 ug/L         6.776      493.31 ppb         6.776   1.37%
   QC value within limits for Ba 233.527  Recovery = 98.66%
Be 313.107†          1217285.2      492.75 ug/L         0.495      492.75 ppb         0.495   0.10%
   QC value within limits for Be 313.107  Recovery = 98.55%
Ca 317.933Radial†       2537.9      4983.3 ug/L        190.99      4983.3 ppb        190.99   3.83%
   QC value within limits for Ca 317.933Radial  Recovery = 99.67%
Cd 226.502†            33588.8      490.96 ug/L         7.035      490.96 ppb         7.035   1.43%
   QC value within limits for Cd 226.502  Recovery = 98.19%
Co 228.616†            20342.9      503.96 ug/L         6.825      503.96 ppb         6.825   1.35%
   QC value within limits for Co 228.616  Recovery = 100.79%
Cr 267.716†            33198.3      490.75 ug/L         6.767      490.75 ppb         6.767   1.38%
   QC value within limits for Cr 267.716  Recovery = 98.15%
Cu 324.752†           146902.7      489.28 ug/L         8.931      489.28 ppb         8.931   1.83%
   QC value within limits for Cu 324.752  Recovery = 97.86%
Fe 238.204 Radial†       384.3      4899.1 ug/L        196.91      4899.1 ppb        196.91   4.02%
   QC value within limits for Fe 238.204 Radial  Recovery = 97.98%
K 766.490 Radial†      25602.1      4755.0 ug/L        198.59      4755.0 ppb        198.59   4.18%
   QC value within limits for K 766.490 Radial  Recovery = 95.10%
Mg 279.077 IEC†          119.9      4940.7 ug/L        210.80      4940.7 ppb        210.80   4.27%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.81%
Mn 257.610†           376979.2      488.07 ug/L         6.958      488.07 ppb         6.958   1.43%
   QC value within limits for Mn 257.610  Recovery = 97.61%
Mo 202.031†             5138.1      493.99 ug/L         2.064      493.99 ppb         2.064   0.42%
   QC value within limits for Mo 202.031  Recovery = 98.80%
Na 589.592 Radial†     21807.3      9598.2 ug/L        293.03      9598.2 ppb        293.03   3.05%
   QC value within limits for Na 589.592 Radial  Recovery = 95.98%
Ni 231.604†            15374.8      501.05 ug/L         8.017      501.05 ppb         8.017   1.60%
   QC value within limits for Ni 231.604  Recovery = 100.21%
P 214.914†              3834.0      2355.5 ug/L          2.11      2355.5 ppb          2.11   0.09%
   QC value within limits for P 214.914  Recovery = 94.22%
Pb 220.353†             3107.0      490.46 ug/L         3.143      490.46 ppb         3.143   0.64%
   QC value within limits for Pb 220.353  Recovery = 98.09%
S 181.975 Axial†         659.0      989.24 ug/L         3.973      989.24 ppb         3.973   0.40%
   QC value within limits for S 181.975 Axial  Recovery = 98.92%
Sb 206.836†             1235.4      511.99 ug/L         3.451      511.99 ppb         3.451   0.67%
   QC value within limits for Sb 206.836  Recovery = 102.40%
Se 196.026†              657.2      503.27 ug/L         4.362      503.27 ppb         4.362   0.87%
   QC value within limits for Se 196.026  Recovery = 100.65%
Si 251.611†            67747.3      2474.1 ug/L         41.80      2474.1 ppb         41.80   1.69%
   QC value within limits for Si 251.611  Recovery = 98.96%
Sn 189.927†             2149.8      494.76 ug/L         1.334      494.76 ppb         1.334   0.27%
   QC value within limits for Sn 189.927  Recovery = 98.95%
Sr 421.552†            48183.0      462.59 ug/L        14.794      462.59 ppb        14.794   3.20%
   QC value within limits for Sr 421.552  Recovery = 92.52%
Ti 334.940†           272593.9      494.61 ug/L         7.771      494.61 ppb         7.771   1.57%
   QC value within limits for Ti 334.940  Recovery = 98.92%
Tl 190.801†             1280.1      495.75 ug/L         2.017      495.75 ppb         2.017   0.41%
   QC value within limits for Tl 190.801  Recovery = 99.15%
U 409.014†             12585.8      483.14 ug/L         7.953      483.14 ppb         7.953   1.65%
   QC value within limits for U 409.014  Recovery = 96.63%
V 292.402†             55517.1      495.99 ug/L         7.267      495.99 ppb         7.267   1.47%
   QC value within limits for V 292.402  Recovery = 99.20%
Zn 213.857†            42936.7      486.54 ug/L         8.249      486.54 ppb         8.249   1.70%
   QC value within limits for Zn 213.857  Recovery = 97.31%
SiO2†                  66426.5      5231.3 ug/L         22.09      5231.3 ppb         22.09   0.42%
   QC value within limits for SiO2  Recovery = 97.83%
All analyte(s) passed QC.
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Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 4/1/2010 13:51:51
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	3924.7	3924.7	102	%			13:54:04
1	Y RADIAL	4413.9	4413.9	101.9	%			13:53:44
1	Al 396.153Radial†	-95.4	-1.1	-1.1833	ug/L	-1.1833	ppb	13:53:44
1	Ca 317.933Radial†	22.2	3.0	5.9389	ug/L	5.9389	ppb	13:54:04
1	Fe 238.204 Radial†	6.1	-0.2	-2.7320	ug/L	-2.7320	ppb	13:54:04
1	K 766.490 Radial†	2906.1	-153.5	-28.550	ug/L	-28.550	ppb	13:53:44
1	Mg 279.077 IEC†	1.3	-1.8	-73.301	ug/L	-73.301	ppb	13:54:04
1	Na 589.592 Radial†	-1124.2	-21.8	-9.5783	ug/L	-9.5783	ppb	13:53:44
1	Sr 421.552†	27.9	13.4	0.1288	ug/L	0.1288	ppb	13:53:44
1	Sc 361.383	692036.1	692036.1	100.36	%			13:55:01
1	Y 371.029	542380.8	542380.8	100.10	%			13:55:01
1	Ag 328.068†	19.8	-80.1	-0.4368	ug/L	-0.4368	ppb	13:55:01
1	As 188.979†	-28.5	-5.6	-2.7648	ug/L	-2.7648	ppb	13:55:21
1	B 249.677†	-552.8	32.1	0.8099	ug/L	0.8099	ppb	13:55:21
1	Ba 233.527†	-11.0	-11.8	-0.1124	ug/L	-0.1124	ppb	13:55:21
1	Be 313.107†	-4463.7	75.3	0.0300	ug/L	0.0300	ppb	13:55:01
1	Cd 226.502†	-211.7	2.5	0.0357	ug/L	0.0357	ppb	13:55:21
1	Co 228.616†	-73.8	-13.8	-0.3402	ug/L	-0.3402	ppb	13:55:21
1	Cr 267.716†	92.5	0.9	0.0150	ug/L	0.0150	ppb	13:55:21
1	Cu 324.752†	5591.1	-116.6	-0.3864	ug/L	-0.3864	ppb	13:55:01
1	Mn 257.610†	461.6	15.0	0.0221	ug/L	0.0221	ppb	13:55:21
1	Mo 202.031†	20.0	7.4	0.7132	ug/L	0.7132	ppb	13:55:21
1	Ni 231.604†	78.9	4.0	0.1296	ug/L	0.1296	ppb	13:55:21
1	P 214.914†	214.7	-4.6	-2.8507	ug/L	-2.8507	ppb	13:55:21
1	Pb 220.353†	-86.6	-19.3	-3.0380	ug/L	-3.0380	ppb	13:55:21
1	S 181.975 Axial†	38.5	-1.8	-2.7422	ug/L	-2.7422	ppb	13:55:21
1	Sb 206.836†	45.8	13.9	5.5795	ug/L	5.5795	ppb	13:55:21
1	Se 196.026†	-29.1	-6.9	-5.1522	ug/L	-5.1522	ppb	13:55:21
1	Si 251.611†	546.4	47.9	1.7442	ug/L	1.7442	ppb	13:55:21
1	Sn 189.927†	8.1	3.9	0.9015	ug/L	0.9015	ppb	13:55:21
1	Ti 334.940†	-1523.4	-96.6	-0.1668	ug/L	-0.1668	ppb	13:55:01
1	Tl 190.801†	-48.1	-10.0	-3.8385	ug/L	-3.8385	ppb	13:55:21
1	U 409.014†	-2516.5	-101.1	-3.8923	ug/L	-3.8923	ppb	13:55:01
1	V 292.402†	-1655.1	67.2	0.5941	ug/L	0.5941	ppb	13:55:01
1	Zn 213.857†	716.4	49.2	0.5631	ug/L	0.5631	ppb	13:55:21
1	SiO2†	549.8	8.6	0.6634	ug/L	0.6634	ppb	13:56:17
2	Sc Radial	3830.2	3830.2	99.8	%			13:54:29
2	Y RADIAL	4428.9	4428.9	102.2	%			13:54:09
2	Al 396.153Radial†	-104.8	-12.7	-13.447	ug/L	-13.447	ppb	13:54:09
2	Ca 317.933Radial†	16.7	-1.9	-3.6843	ug/L	-3.6843	ppb	13:54:29
2	Fe 238.204 Radial†	7.3	1.1	13.970	ug/L	13.970	ppb	13:54:29
2	K 766.490 Radial†	2989.7	0.4	0.0899	ug/L	0.0899	ppb	13:54:09
2	Mg 279.077 IEC†	-0.1	-3.1	-127.19	ug/L	-127.19	ppb	13:54:29
2	Na 589.592 Radial†	-1160.9	-85.7	-37.721	ug/L	-37.721	ppb	13:54:09
2	Sr 421.552†	18.0	4.1	0.0396	ug/L	0.0396	ppb	13:54:09
2	Sc 361.383	689234.4	689234.4	99.949	%			13:55:26
2	Y 371.029	541197.6	541197.6	99.885	%			13:55:26
2	Ag 328.068†	131.9	32.1	0.1785	ug/L	0.1785	ppb	13:55:26
2	As 188.979†	-30.8	-8.0	-3.9796	ug/L	-3.9796	ppb	13:55:46
2	B 249.677†	-500.6	82.2	2.0657	ug/L	2.0657	ppb	13:55:46
2	Ba 233.527†	2.0	1.3	0.0125	ug/L	0.0125	ppb	13:55:46
2	Be 313.107†	-4479.5	41.5	0.0168	ug/L	0.0168	ppb	13:55:26
2	Cd 226.502†	-212.7	0.6	0.0080	ug/L	0.0080	ppb	13:55:46
2	Co 228.616†	-65.5	-5.8	-0.1430	ug/L	-0.1430	ppb	13:55:46
2	Cr 267.716†	92.7	1.5	0.0220	ug/L	0.0220	ppb	13:55:46
2	Cu 324.752†	5614.9	-70.2	-0.2345	ug/L	-0.2345	ppb	13:55:26
2	Mn 257.610†	474.2	29.4	0.0447	ug/L	0.0447	ppb	13:55:46
2	Mo 202.031†	19.9	7.4	0.7140	ug/L	0.7140	ppb	13:55:46
2	Ni 231.604†	86.1	11.5	0.3756	ug/L	0.3756	ppb	13:55:46

2	P 214.914†	229.4	11.0	7.0985	ug/L	7.0985 ppb	13:55:46
2	Pb 220.353†	-78.5	-11.5	-1.8187	ug/L	-1.8187 ppb	13:55:46
2	S 181.975 Axial†	45.5	5.2	7.8743	ug/L	7.8743 ppb	13:55:46
2	Sb 206.836†	43.0	11.2	4.5693	ug/L	4.5693 ppb	13:55:46
2	Se 196.026†	-32.7	-10.7	-7.8729	ug/L	-7.8729 ppb	13:55:46
2	Si 251.611†	554.8	58.5	2.1325	ug/L	2.1325 ppb	13:55:46
2	Sn 189.927†	20.5	16.4	3.7708	ug/L	3.7708 ppb	13:55:46
2	Ti 334.940†	-1404.9	15.8	0.0374	ug/L	0.0374 ppb	13:55:26
2	Tl 190.801†	-48.6	-10.7	-4.0973	ug/L	-4.0973 ppb	13:55:46
2	U 409.014†	-2337.6	67.7	2.6076	ug/L	2.6076 ppb	13:55:26
2	V 292.402†	-1727.1	-11.6	-0.0915	ug/L	-0.0915 ppb	13:55:26
2	Zn 213.857†	710.6	46.4	0.5267	ug/L	0.5267 ppb	13:55:46
2	SiO2†	561.0	22.2	1.7298	ug/L	1.7298 ppb	13:56:22
3	Sc Radial	3801.3	3801.3	99.0	%		13:54:54
3	Y RADIAL	4325.4	4325.4	99.85	%		13:54:34
3	Al 396.153Radial†	-93.4	-2.1	-2.2147	ug/L	-2.2147 ppb	13:54:34
3	Ca 317.933Radial†	15.9	-2.6	-5.0648	ug/L	-5.0648 ppb	13:54:54
3	Fe 238.204 Radial†	6.4	0.3	3.4869	ug/L	3.4869 ppb	13:54:54
3	K 766.490 Radial†	2998.7	32.2	5.9969	ug/L	5.9969 ppb	13:54:34
3	Mg 279.077 IEC†	0.9	-2.1	-87.410	ug/L	-87.410 ppb	13:54:54
3	Na 589.592 Radial†	-1074.1	-6.8	-2.9892	ug/L	-2.9892 ppb	13:54:34
3	Sr 421.552†	19.6	5.9	0.0565	ug/L	0.0565 ppb	13:54:34
3	Sc 361.383	691940.7	691940.7	100.34	%		13:55:51
3	Y 371.029	542622.8	542622.8	100.15	%		13:55:51
3	Ag 328.068†	84.0	-16.2	-0.0873	ug/L	-0.0873 ppb	13:55:51
3	As 188.979†	-22.2	0.7	0.3475	ug/L	0.3475 ppb	13:56:11
3	B 249.677†	-525.4	59.4	1.4948	ug/L	1.4948 ppb	13:56:11
3	Ba 233.527†	3.0	2.2	0.0198	ug/L	0.0198 ppb	13:56:11
3	Be 313.107†	-4516.9	21.7	0.0089	ug/L	0.0089 ppb	13:55:51
3	Cd 226.502†	-214.2	0.0	-0.0005	ug/L	-0.0005 ppb	13:56:11
3	Co 228.616†	-67.9	-8.0	-0.1984	ug/L	-0.1984 ppb	13:56:11
3	Cr 267.716†	80.4	-11.2	-0.1636	ug/L	-0.1636 ppb	13:56:11
3	Cu 324.752†	5568.7	-138.2	-0.4578	ug/L	-0.4578 ppb	13:55:51
3	Mn 257.610†	453.1	6.5	0.0124	ug/L	0.0124 ppb	13:56:11
3	Mo 202.031†	10.9	-1.6	-0.1531	ug/L	-0.1531 ppb	13:56:11
3	Ni 231.604†	92.8	17.8	0.5799	ug/L	0.5799 ppb	13:56:11
3	P 214.914†	224.2	4.9	3.2552	ug/L	3.2552 ppb	13:56:11
3	Pb 220.353†	-78.7	-11.5	-1.8029	ug/L	-1.8029 ppb	13:56:11
3	S 181.975 Axial†	36.4	-4.0	-5.9826	ug/L	-5.9826 ppb	13:56:11
3	Sb 206.836†	47.1	15.3	6.1079	ug/L	6.1079 ppb	13:56:11
3	Se 196.026†	-27.1	-4.9	-3.6251	ug/L	-3.6251 ppb	13:56:11
3	Si 251.611†	520.1	21.7	0.7974	ug/L	0.7974 ppb	13:56:11
3	Sn 189.927†	7.3	3.2	0.7327	ug/L	0.7327 ppb	13:56:11
3	Ti 334.940†	-1402.5	23.8	0.0514	ug/L	0.0514 ppb	13:55:51
3	Tl 190.801†	-33.7	4.4	1.6945	ug/L	1.6945 ppb	13:56:11
3	U 409.014†	-2519.7	-104.6	-4.0300	ug/L	-4.0300 ppb	13:55:51
3	V 292.402†	-1792.4	-69.9	-0.6286	ug/L	-0.6286 ppb	13:55:51
3	Zn 213.857†	719.9	52.9	0.6011	ug/L	0.6011 ppb	13:56:11
3	SiO2†	557.5	16.4	1.3016	ug/L	1.3016 ppb	13:56:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	691070.4	100.22	%	0.231				0.23%
Sc Radial	3852.1	100	%	1.7				1.68%
Y 371.029	542067.1	100.05	%	0.141				0.14%
Y RADIAL	4389.4	101.3	%	1.29				1.27%
Ag 328.068†	-21.4	-0.1152	ug/L	0.30862	-0.1152	ppb	0.30862	267.89%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.3	-5.6150	ug/L	6.80226	-5.6150	ppb	6.80226	121.14%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.3	-2.1323	ug/L	2.23180	-2.1323	ppb	2.23180	104.67%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	57.9	1.4568	ug/L	0.62874	1.4568	ppb	0.62874	43.16%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.8	-0.0267	ug/L	0.07433	-0.0267	ppb	0.07433	278.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	46.2	0.0186	ug/L	0.01069	0.0186	ppb	0.01069	57.58%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-0.5	-0.9367	ug/L	5.99434	-0.9367	ppb	5.99434	639.93%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                1.0      0.0144 ug/L       0.01893      0.0144 ppb        0.01893 131.34%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -9.2     -0.2272 ug/L       0.10172     -0.2272 ppb        0.10172  44.76%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -2.9     -0.0422 ug/L       0.10520     -0.0422 ppb        0.10520 249.21%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -108.3     -0.3596 ug/L       0.11407     -0.3596 ppb        0.11407  31.72%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         0.4      4.9084 ug/L       8.44147      4.9084 ppb        8.44147 171.98%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        -40.3     -7.4877 ug/L      18.47792     -7.4877 ppb       18.47792 246.78%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -2.3    -95.968 ug/L       27.9468     -95.968 ppb        27.9468  29.12%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               17.0      0.0264 ug/L       0.01656      0.0264 ppb        0.01656  62.73%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.4      0.4247 ug/L       0.50041      0.4247 ppb        0.50041 117.82%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -38.1     -16.763 ug/L       18.4466     -16.763 ppb        18.4466 110.05%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               11.1      0.3617 ug/L       0.22549      0.3617 ppb        0.22549  62.34%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 3.8      2.5010 ug/L       5.01727      2.5010 ppb        5.01727 200.61%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -14.1     -2.2198 ug/L       0.70857     -2.2198 ppb        0.70857  31.92%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -0.2     -0.2835 ug/L       7.24824     -0.2835 ppb        7.24824 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               13.5      5.4189 ug/L       0.78177      5.4189 ppb        0.78177  14.43%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -7.5     -5.5501 ug/L       2.15170     -5.5501 ppb        2.15170  38.77%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               42.7      1.5580 ug/L       0.68677      1.5580 ppb        0.68677  44.08%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                7.8      1.8017 ug/L       1.70743      1.8017 ppb        1.70743  94.77%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                7.8      0.0750 ug/L       0.04740      0.0750 ppb        0.04740  63.22%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -19.0     -0.0260 ug/L       0.12214     -0.0260 ppb        0.12214 470.08%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -5.4     -2.0805 ug/L       3.27178     -2.0805 ppb        3.27178 157.26%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -46.0     -1.7716 ug/L       3.79308     -1.7716 ppb        3.79308 214.10%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -4.8     -0.0420 ug/L       0.61284     -0.0420 ppb        0.61284 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               49.5      0.5636 ug/L       0.03723      0.5636 ppb        0.03723   6.61%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     15.7      1.2316 ug/L       0.53663      1.2316 ppb        0.53663  43.57%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 4/1/2010 14:47:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3876.6	3876.6	101	%			14:49:10
1	Y RADIAL	4206.7	4206.7	97.11	%			14:49:10
1	Al 396.153Radial†	4556.3	4604.0	4823.2	ug/L	4823.2	ppb	14:49:10
1	Ca 317.933Radial†	2630.1	2585.8	5077.2	ug/L	5077.2	ppb	14:49:30
1	Fe 238.204 Radial†	394.3	384.3	4898.8	ug/L	4898.8	ppb	14:49:30
1	K 766.490 Radial†	29693.2	26406.8	4904.7	ug/L	4904.7	ppb	14:49:10
1	Mg 279.077 IEC†	125.9	121.6	5009.2	ug/L	5009.2	ppb	14:49:30
1	Na 589.592 Radial†	20632.6	21508.5	9466.7	ug/L	9466.7	ppb	14:49:10
1	Sr 421.552†	48244.0	47758.0	458.51	ug/L	458.51	ppb	14:49:10
1	Sc 361.383	699168.8	699168.8	101.39	%			14:50:27
1	Y 371.029	474005.3	474005.3	87.484	%			14:50:32
1	Ag 328.068†	87657.6	86356.4	478.73	ug/L	478.73	ppb	14:50:32
1	As 188.979†	957.4	967.0	482.91	ug/L	482.91	ppb	14:50:52
1	B 249.677†	18298.3	18630.5	466.55	ug/L	466.55	ppb	14:50:32
1	Ba 233.527†	49759.5	49076.8	475.52	ug/L	475.52	ppb	14:50:32
1	Be 313.107†	1200917.9	1188984.3	481.27	ug/L	481.27	ppb	14:50:27
1	Cd 226.502†	32639.6	32405.8	473.65	ug/L	473.65	ppb	14:50:32
1	Co 228.616†	19862.0	19649.5	486.80	ug/L	486.80	ppb	14:50:32
1	Cr 267.716†	32454.9	31918.9	471.86	ug/L	471.86	ppb	14:50:32
1	Cu 324.752†	148969.0	141239.6	470.42	ug/L	470.42	ppb	14:50:32
1	Mn 257.610†	379078.7	373438.9	483.48	ug/L	483.48	ppb	14:50:27
1	Mo 202.031†	5097.8	5015.5	482.22	ug/L	482.22	ppb	14:50:52
1	Ni 231.604†	15084.7	14803.4	482.42	ug/L	482.42	ppb	14:50:32
1	P 214.914†	4029.5	3755.7	2309.2	ug/L	2309.2	ppb	14:50:52
1	Pb 220.353†	3014.6	3040.3	479.97	ug/L	479.97	ppb	14:50:52
1	S 181.975 Axial†	695.5	645.8	969.39	ug/L	969.39	ppb	14:50:52
1	Sb 206.836†	1264.3	1215.2	503.50	ug/L	503.50	ppb	14:50:52
1	Se 196.026†	637.6	650.9	498.62	ug/L	498.62	ppb	14:50:52
1	Si 251.611†	66655.5	65245.4	2382.6	ug/L	2382.6	ppb	14:50:32
1	Sn 189.927†	2138.1	2104.7	484.42	ug/L	484.42	ppb	14:50:52
1	Ti 334.940†	264385.1	262183.6	475.74	ug/L	475.74	ppb	14:50:32
1	Tl 190.801†	1236.9	1257.9	487.12	ug/L	487.12	ppb	14:50:52
1	U 409.014†	9840.6	12112.2	464.95	ug/L	464.95	ppb	14:50:32
1	V 292.402†	52487.0	53484.1	477.90	ug/L	477.90	ppb	14:50:32
1	Zn 213.857†	42642.5	41393.5	469.03	ug/L	469.03	ppb	14:50:32
1	SiO2†	68339.4	66863.7	5266.2	ug/L	5266.2	ppb	14:51:59
2	Sc Radial	4022.8	4022.8	105	%			14:49:35
2	Y RADIAL	4370.2	4370.2	100.9	%			14:49:35
2	Al 396.153Radial†	4736.1	4611.6	4830.7	ug/L	4830.7	ppb	14:49:35
2	Ca 317.933Radial†	2656.3	2516.1	4940.5	ug/L	4940.5	ppb	14:49:55
2	Fe 238.204 Radial†	403.4	378.7	4828.6	ug/L	4828.6	ppb	14:49:55
2	K 766.490 Radial†	30475.2	26084.3	4844.7	ug/L	4844.7	ppb	14:49:35
2	Mg 279.077 IEC†	130.5	121.5	5006.4	ug/L	5006.4	ppb	14:49:55
2	Na 589.592 Radial†	21579.1	21669.1	9537.3	ug/L	9537.3	ppb	14:49:35
2	Sr 421.552†	50610.2	48279.5	463.52	ug/L	463.52	ppb	14:49:35
2	Sc 361.383	682884.5	682884.5	99.028	%			14:50:58
2	Y 371.029	465231.0	465231.0	85.864	%			14:51:03
2	Ag 328.068†	88561.2	89330.6	495.17	ug/L	495.17	ppb	14:51:03
2	As 188.979†	958.3	990.5	494.62	ug/L	494.62	ppb	14:51:23
2	B 249.677†	18715.1	19481.8	487.92	ug/L	487.92	ppb	14:51:03
2	Ba 233.527†	50536.7	51032.0	494.45	ug/L	494.45	ppb	14:51:03
2	Be 313.107†	1203487.6	1219824.2	493.77	ug/L	493.77	ppb	14:50:58
2	Cd 226.502†	33201.1	33740.5	493.19	ug/L	493.19	ppb	14:51:03
2	Co 228.616†	20230.4	20488.6	507.57	ug/L	507.57	ppb	14:51:03
2	Cr 267.716†	33044.9	33278.0	491.92	ug/L	491.92	ppb	14:51:03
2	Cu 324.752†	150989.5	146783.7	488.88	ug/L	488.88	ppb	14:51:03
2	Mn 257.610†	379915.0	383199.2	496.10	ug/L	496.10	ppb	14:50:58
2	Mo 202.031†	5084.8	5122.3	492.46	ug/L	492.46	ppb	14:51:23
2	Ni 231.604†	15384.5	15460.8	503.85	ug/L	503.85	ppb	14:51:03

2	P 214.914†	4016.8	3837.7	2358.1 ug/L	2358.1 ppb	14:51:23
2	Pb 220.353†	3029.8	3126.5	493.55 ug/L	493.55 ppb	14:51:23
2	S 181.975 Axial†	695.3	661.9	993.59 ug/L	993.59 ppb	14:51:23
2	Sb 206.836†	1263.5	1244.2	515.47 ug/L	515.47 ppb	14:51:23
2	Se 196.026†	637.8	666.1	509.72 ug/L	509.72 ppb	14:51:23
2	Si 251.611†	67706.3	67874.3	2478.7 ug/L	2478.7 ppb	14:51:03
2	Sn 189.927†	2136.8	2153.6	495.63 ug/L	495.63 ppb	14:51:23
2	Ti 334.940†	268097.3	272150.5	493.80 ug/L	493.80 ppb	14:51:03
2	Tl 190.801†	1222.5	1272.4	492.80 ug/L	492.80 ppb	14:51:23
2	U 409.014†	9771.3	12273.7	471.13 ug/L	471.13 ppb	14:51:03
2	V 292.402†	53222.8	55461.6	495.47 ug/L	495.47 ppb	14:51:03
2	Zn 213.857†	43403.0	43164.4	489.14 ug/L	489.14 ppb	14:51:03
2	SiO2†	67835.4	67962.1	5352.6 ug/L	5352.6 ppb	14:52:04
3	Sc Radial	4051.5	4051.5	106 %		14:50:00
3	Y RADIAL	4372.9	4372.9	100.9 %		14:50:00
3	Al 396.153Radial†	4601.7	4452.1	4662.8 ug/L	4662.8 ppb	14:50:00
3	Ca 317.933Radial†	2640.4	2483.0	4875.6 ug/L	4875.6 ppb	14:50:20
3	Fe 238.204 Radial†	399.5	372.4	4747.5 ug/L	4747.5 ppb	14:50:20
3	K 766.490 Radial†	29844.8	25280.9	4695.5 ug/L	4695.5 ppb	14:50:00
3	Mg 279.077 IEC†	127.1	117.4	4835.3 ug/L	4835.3 ppb	14:50:20
3	Na 589.592 Radial†	20858.3	20840.2	9172.5 ug/L	9172.5 ppb	14:50:00
3	Sr 421.552†	49175.7	46578.2	447.19 ug/L	447.19 ppb	14:50:00
3	Sc 361.383	689209.8	689209.8	99.945 %		14:51:29
3	Y 371.029	464821.8	464821.8	85.789 %		14:51:34
3	Ag 328.068†	88947.6	88896.5	492.73 ug/L	492.73 ppb	14:51:34
3	As 188.979†	960.2	983.6	491.16 ug/L	491.16 ppb	14:51:54
3	B 249.677†	18709.9	19303.1	483.45 ug/L	483.45 ppb	14:51:34
3	Ba 233.527†	50646.5	50673.5	490.97 ug/L	490.97 ppb	14:51:34
3	Be 313.107†	1209719.5	1214906.0	491.78 ug/L	491.78 ppb	14:51:29
3	Cd 226.502†	33274.0	33505.7	489.76 ug/L	489.76 ppb	14:51:34
3	Co 228.616†	20236.4	20307.2	503.09 ug/L	503.09 ppb	14:51:34
3	Cr 267.716†	33093.7	33020.6	488.11 ug/L	488.11 ppb	14:51:34
3	Cu 324.752†	151284.1	145679.1	485.19 ug/L	485.19 ppb	14:51:34
3	Mn 257.610†	382488.3	382253.0	494.88 ug/L	494.88 ppb	14:51:29
3	Mo 202.031†	5135.6	5125.9	492.81 ug/L	492.81 ppb	14:51:54
3	Ni 231.604†	15334.3	15268.0	497.57 ug/L	497.57 ppb	14:51:34
3	P 214.914†	4054.7	3838.4	2359.3 ug/L	2359.3 ppb	14:51:54
3	Pb 220.353†	3034.5	3103.2	489.85 ug/L	489.85 ppb	14:51:54
3	S 181.975 Axial†	704.0	664.2	997.05 ug/L	997.05 ppb	14:51:54
3	Sb 206.836†	1275.7	1244.7	515.68 ug/L	515.68 ppb	14:51:54
3	Se 196.026†	636.5	658.9	504.13 ug/L	504.13 ppb	14:51:54
3	Si 251.611†	67788.2	67328.8	2458.8 ug/L	2458.8 ppb	14:51:34
3	Sn 189.927†	2152.6	2149.6	494.70 ug/L	494.70 ppb	14:51:54
3	Ti 334.940†	269225.7	270794.8	491.34 ug/L	491.34 ppb	14:51:34
3	Tl 190.801†	1246.9	1285.5	497.84 ug/L	497.84 ppb	14:51:54
3	U 409.014†	10086.0	12498.0	479.79 ug/L	479.79 ppb	14:51:34
3	V 292.402†	53318.0	55063.7	492.00 ug/L	492.00 ppb	14:51:34
3	Zn 213.857†	43397.8	42757.0	484.53 ug/L	484.53 ppb	14:51:34
3	SiO2†	67886.2	67384.3	5307.0 ug/L	5307.0 ppb	14:52:10

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	690421.0	100.12	%	1.190				1.19%
Sc Radial	3983.6	104	%	2.4				2.35%
Y 371.029	468019.4	86.379	%	0.9575				1.11%
Y RADIAL	4316.6	99.65	%	2.197				2.20%
Ag 328.068†	88194.5	488.88	ug/L	8.867	488.88	ppb	8.867	1.81%
QC value within limits for Ag 328.068 Recovery = 97.78%								
Al 396.153Radial†	4555.9	4772.2	ug/L	94.82	4772.2	ppb	94.82	1.99%
QC value within limits for Al 396.153Radial Recovery = 95.44%								
As 188.979†	980.4	489.56	ug/L	6.016	489.56	ppb	6.016	1.23%
QC value within limits for As 188.979 Recovery = 97.91%								
B 249.677†	19138.5	479.30	ug/L	11.271	479.30	ppb	11.271	2.35%
QC value within limits for B 249.677 Recovery = 95.86%								
Ba 233.527†	50260.8	486.98	ug/L	10.079	486.98	ppb	10.079	2.07%
QC value within limits for Ba 233.527 Recovery = 97.40%								
Be 313.107†	1207904.9	488.94	ug/L	6.714	488.94	ppb	6.714	1.37%
QC value within limits for Be 313.107 Recovery = 97.79%								
Ca 317.933Radial†	2528.3	4964.4	ug/L	102.95	4964.4	ppb	102.95	2.07%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.29%
Cd 226.502†            33217.3      485.53 ug/L        10.431      485.53 ppb         10.431   2.15%
   QC value within limits for Cd 226.502  Recovery = 97.11%
Co 228.616†            20148.4      499.15 ug/L        10.931      499.15 ppb         10.931   2.19%
   QC value within limits for Co 228.616  Recovery = 99.83%
Cr 267.716†            32739.1      483.96 ug/L        10.655      483.96 ppb         10.655   2.20%
   QC value within limits for Cr 267.716  Recovery = 96.79%
Cu 324.752†           144567.5      481.50 ug/L         9.768      481.50 ppb          9.768   2.03%
   QC value within limits for Cu 324.752  Recovery = 96.30%
Fe 238.204 Radial†       378.5      4825.0 ug/L         75.71      4825.0 ppb          75.71   1.57%
   QC value within limits for Fe 238.204 Radial  Recovery = 96.50%
K 766.490 Radial†      25924.0      4815.0 ug/L        107.73      4815.0 ppb         107.73   2.24%
   QC value within limits for K 766.490 Radial  Recovery = 96.30%
Mg 279.077 IEC†          120.2      4950.3 ug/L         99.63      4950.3 ppb          99.63   2.01%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.01%
Mn 257.610†           379630.4      491.49 ug/L         6.961      491.49 ppb          6.961   1.42%
   QC value within limits for Mn 257.610  Recovery = 98.30%
Mo 202.031†             5087.9      489.16 ug/L         6.019      489.16 ppb          6.019   1.23%
   QC value within limits for Mo 202.031  Recovery = 97.83%
Na 589.592 Radial†     21339.3      9392.2 ug/L        193.48      9392.2 ppb         193.48   2.06%
   QC value within limits for Na 589.592 Radial  Recovery = 93.92%
Ni 231.604†            15177.4      494.61 ug/L        11.014      494.61 ppb         11.014   2.23%
   QC value within limits for Ni 231.604  Recovery = 98.92%
P 214.914†              3810.6      2342.2 ug/L         28.59      2342.2 ppb          28.59   1.22%
   QC value within limits for P 214.914  Recovery = 93.69%
Pb 220.353†             3090.0      487.79 ug/L         7.021      487.79 ppb          7.021   1.44%
   QC value within limits for Pb 220.353  Recovery = 97.56%
S 181.975 Axial†         657.3      986.68 ug/L        15.073      986.68 ppb         15.073   1.53%
   QC value within limits for S 181.975 Axial  Recovery = 98.67%
Sb 206.836†             1234.7      511.55 ug/L         6.970      511.55 ppb          6.970   1.36%
   QC value within limits for Sb 206.836  Recovery = 102.31%
Se 196.026†              658.7      504.16 ug/L         5.554      504.16 ppb          5.554   1.10%
   QC value within limits for Se 196.026  Recovery = 100.83%
Si 251.611†            66816.2      2440.0 ug/L         50.72      2440.0 ppb          50.72   2.08%
   QC value within limits for Si 251.611  Recovery = 97.60%
Sn 189.927†             2136.0      491.58 ug/L         6.222      491.58 ppb          6.222   1.27%
   QC value within limits for Sn 189.927  Recovery = 98.32%
Sr 421.552†            47538.6      456.41 ug/L         8.369      456.41 ppb          8.369   1.83%
   QC value within limits for Sr 421.552  Recovery = 91.28%
Ti 334.940†           268376.3      486.96 ug/L         9.795      486.96 ppb          9.795   2.01%
   QC value within limits for Ti 334.940  Recovery = 97.39%
Tl 190.801†             1271.9      492.59 ug/L         5.362      492.59 ppb          5.362   1.09%
   QC value within limits for Tl 190.801  Recovery = 98.52%
U 409.014†             12294.6      471.95 ug/L         7.454      471.95 ppb          7.454   1.58%
   QC value within limits for U 409.014  Recovery = 94.39%
V 292.402†             54669.8      488.45 ug/L         9.307      488.45 ppb          9.307   1.91%
   QC value within limits for V 292.402  Recovery = 97.69%
Zn 213.857†            42438.3      480.90 ug/L        10.533      480.90 ppb         10.533   2.19%
   QC value within limits for Zn 213.857  Recovery = 96.18%
SiO2†                  67403.4      5308.6 ug/L         43.24      5308.6 ppb          43.24   0.81%
   QC value within limits for SiO2  Recovery = 99.27%
All analyte(s) passed QC.
```

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

Autosampler Location: 6
Date Collected: 4/1/2010 14:54:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3894.3	3894.3	101	%			14:56:11
1	Y RADIAL	4244.0	4244.0	97.97	%			14:56:11
1	Al 396.153Radial†	-86.6	6.9	7.2386	ug/L	7.2386	ppb	14:56:11
1	Ca 317.933Radial†	14.4	-4.5	-8.8019	ug/L	-8.8019	ppb	14:56:31
1	Fe 238.204 Radial†	8.9	2.5	32.361	ug/L	32.361	ppb	14:56:31
1	K 766.490 Radial†	3062.3	22.7	4.2381	ug/L	4.2381	ppb	14:56:11
1	Mg 279.077 IEC†	0.5	-2.5	-103.11	ug/L	-103.11	ppb	14:56:31
1	Na 589.592 Radial†	-1193.9	-99.0	-43.592	ug/L	-43.592	ppb	14:56:11
1	Sr 421.552†	19.1	4.9	0.0475	ug/L	0.0475	ppb	14:56:11
1	Sc 361.383	653906.9	653906.9	94.826	%			14:57:28
1	Y 371.029	512300.1	512300.1	94.551	%			14:57:28
1	Ag 328.068†	31.0	-67.2	-0.3538	ug/L	-0.3538	ppb	14:57:28
1	As 188.979†	-29.6	-8.4	-4.1772	ug/L	-4.1772	ppb	14:57:48
1	B 249.677†	-390.7	171.0	4.2979	ug/L	4.2979	ppb	14:57:48
1	Ba 233.527†	-4.8	-5.8	-0.0579	ug/L	-0.0579	ppb	14:57:48
1	Be 313.107†	-4359.6	-74.2	-0.0307	ug/L	-0.0307	ppb	14:57:28
1	Cd 226.502†	-223.2	-21.9	-0.3260	ug/L	-0.3260	ppb	14:57:48
1	Co 228.616†	-70.8	-15.0	-0.3714	ug/L	-0.3714	ppb	14:57:48
1	Cr 267.716†	96.4	10.3	0.1594	ug/L	0.1594	ppb	14:57:48
1	Cu 324.752†	5409.0	16.2	0.0634	ug/L	0.0634	ppb	14:57:28
1	Mn 257.610†	456.4	36.3	0.0544	ug/L	0.0544	ppb	14:57:48
1	Mo 202.031†	14.6	2.9	0.2805	ug/L	0.2805	ppb	14:57:48
1	Ni 231.604†	67.1	-3.9	-0.1276	ug/L	-0.1276	ppb	14:57:48
1	P 214.914†	223.9	17.6	11.198	ug/L	11.198	ppb	14:57:48
1	Pb 220.353†	-92.4	-30.4	-4.7904	ug/L	-4.7904	ppb	14:57:48
1	S 181.975 Axial†	39.9	1.8	2.7208	ug/L	2.7208	ppb	14:57:48
1	Sb 206.836†	39.1	9.4	3.7639	ug/L	3.7639	ppb	14:57:48
1	Se 196.026†	-28.6	-8.1	-5.9086	ug/L	-5.9086	ppb	14:57:48
1	Si 251.611†	562.0	96.0	3.5118	ug/L	3.5118	ppb	14:57:48
1	Sn 189.927†	-0.9	-5.0	-1.1592	ug/L	-1.1592	ppb	14:57:48
1	Ti 334.940†	-1510.2	-171.1	-0.2972	ug/L	-0.2972	ppb	14:57:28
1	Tl 190.801†	-30.0	6.3	2.4196	ug/L	2.4196	ppb	14:57:48
1	U 409.014†	-2622.3	-358.9	-13.828	ug/L	-13.828	ppb	14:57:28
1	V 292.402†	-1754.7	-134.0	-1.2104	ug/L	-1.2104	ppb	14:57:28
1	Zn 213.857†	654.6	25.8	0.2905	ug/L	0.2905	ppb	14:57:48
1	SiO2†	540.2	30.5	2.4010	ug/L	2.4010	ppb	14:58:44
2	Sc Radial	3927.9	3927.9	102	%			14:56:36
2	Y RADIAL	4288.0	4288.0	98.99	%			14:56:36
2	Al 396.153Radial†	-97.7	-3.2	-3.3543	ug/L	-3.3543	ppb	14:56:36
2	Ca 317.933Radial†	13.2	-5.8	-11.302	ug/L	-11.302	ppb	14:56:56
2	Fe 238.204 Radial†	9.8	3.4	43.019	ug/L	43.019	ppb	14:56:56
2	K 766.490 Radial†	3084.4	18.5	3.4546	ug/L	3.4546	ppb	14:56:36
2	Mg 279.077 IEC†	0.5	-2.5	-105.01	ug/L	-105.01	ppb	14:56:56
2	Na 589.592 Radial†	-1181.4	-76.7	-33.759	ug/L	-33.759	ppb	14:56:36
2	Sr 421.552†	-0.4	-14.3	-0.1368	ug/L	-0.1368	ppb	14:56:36
2	Sc 361.383	665886.1	665886.1	96.563	%			14:57:53
2	Y 371.029	521935.1	521935.1	96.330	%			14:57:53
2	Ag 328.068†	75.5	-21.7	-0.1018	ug/L	-0.1018	ppb	14:57:53
2	As 188.979†	-28.4	-6.7	-3.2903	ug/L	-3.2903	ppb	14:58:13
2	B 249.677†	-402.1	166.6	4.1844	ug/L	4.1844	ppb	14:58:13
2	Ba 233.527†	-1.5	-2.3	-0.0234	ug/L	-0.0234	ppb	14:58:13
2	Be 313.107†	-4389.7	-22.7	-0.0098	ug/L	-0.0098	ppb	14:57:53
2	Cd 226.502†	-215.6	-9.9	-0.1502	ug/L	-0.1502	ppb	14:58:13
2	Co 228.616†	-62.7	-5.2	-0.1313	ug/L	-0.1313	ppb	14:58:13
2	Cr 267.716†	91.8	3.7	0.0621	ug/L	0.0621	ppb	14:58:13
2	Cu 324.752†	5393.3	-102.7	-0.3338	ug/L	-0.3338	ppb	14:57:53
2	Mn 257.610†	453.8	25.0	0.0409	ug/L	0.0409	ppb	14:58:13
2	Mo 202.031†	4.4	-7.9	-0.7596	ug/L	-0.7596	ppb	14:58:13
2	Ni 231.604†	90.8	19.4	0.6327	ug/L	0.6327	ppb	14:58:13

2	P 214.914†	222.0	11.4	7.3481	ug/L	7.3481 ppb	14:58:13
2	Pb 220.353†	-70.2	-5.7	-0.9078	ug/L	-0.9078 ppb	14:58:13
2	S 181.975 Axial†	43.8	5.1	7.6868	ug/L	7.6868 ppb	14:58:13
2	Sb 206.836†	35.6	5.1	2.0515	ug/L	2.0515 ppb	14:58:13
2	Se 196.026†	-26.9	-5.8	-4.1770	ug/L	-4.1770 ppb	14:58:13
2	Si 251.611†	546.0	68.8	2.5288	ug/L	2.5288 ppb	14:58:13
2	Sn 189.927†	10.3	6.5	1.4904	ug/L	1.4904 ppb	14:58:13
2	Ti 334.940†	-1522.3	-155.0	-0.2696	ug/L	-0.2696 ppb	14:57:53
2	Tl 190.801†	-25.9	11.1	4.2863	ug/L	4.2863 ppb	14:58:13
2	U 409.014†	-2592.3	-278.1	-10.716	ug/L	-10.716 ppb	14:57:53
2	V 292.402†	-1771.8	-118.4	-1.0834	ug/L	-1.0834 ppb	14:57:53
2	Zn 213.857†	644.4	2.8	0.0217	ug/L	0.0217 ppb	14:58:13
2	SiO2†	595.5	77.6	6.1457	ug/L	6.1457 ppb	14:58:49
3	Sc Radial	3957.0	3957.0	103	%		14:57:01
3	Y RADIAL	4309.7	4309.7	99.49	%		14:57:01
3	Al 396.153Radial†	-107.9	-12.5	-13.123	ug/L	-13.123 ppb	14:57:01
3	Ca 317.933Radial†	19.7	0.5	0.9210	ug/L	0.9210 ppb	14:57:21
3	Fe 238.204 Radial†	7.4	0.9	11.968	ug/L	11.968 ppb	14:57:21
3	K 766.490 Radial†	3136.1	46.4	8.6271	ug/L	8.6271 ppb	14:57:01
3	Mg 279.077 IEC†	1.7	-1.3	-55.411	ug/L	-55.411 ppb	14:57:21
3	Na 589.592 Radial†	-1130.8	-19.1	-8.4182	ug/L	-8.4182 ppb	14:57:01
3	Sr 421.552†	13.9	-0.4	-0.0037	ug/L	-0.0037 ppb	14:57:01
3	Sc 361.383	697677.6	697677.6	101.17	%		14:58:19
3	Y 371.029	545917.4	545917.4	100.76	%		14:58:19
3	Ag 328.068†	134.8	33.3	0.1849	ug/L	0.1849 ppb	14:58:19
3	As 188.979†	-18.1	4.9	2.4358	ug/L	2.4358 ppb	14:58:39
3	B 249.677†	-377.9	209.5	5.2697	ug/L	5.2697 ppb	14:58:39
3	Ba 233.527†	-2.2	-2.9	-0.0274	ug/L	-0.0274 ppb	14:58:39
3	Be 313.107†	-4464.6	110.4	0.0441	ug/L	0.0441 ppb	14:58:19
3	Cd 226.502†	-223.0	-7.0	-0.1025	ug/L	-0.1025 ppb	14:58:39
3	Co 228.616†	-55.9	4.4	0.1100	ug/L	0.1100 ppb	14:58:39
3	Cr 267.716†	80.3	-11.9	-0.1756	ug/L	-0.1756 ppb	14:58:39
3	Cu 324.752†	5614.1	-138.9	-0.4645	ug/L	-0.4645 ppb	14:58:19
3	Mn 257.610†	501.9	51.0	0.0695	ug/L	0.0695 ppb	14:58:39
3	Mo 202.031†	15.1	2.4	0.2358	ug/L	0.2358 ppb	14:58:39
3	Ni 231.604†	72.5	-3.0	-0.0965	ug/L	-0.0965 ppb	14:58:39
3	P 214.914†	220.6	-0.5	-0.2215	ug/L	-0.2215 ppb	14:58:39
3	Pb 220.353†	-71.4	-3.6	-0.5673	ug/L	-0.5673 ppb	14:58:39
3	S 181.975 Axial†	42.5	1.8	2.7325	ug/L	2.7325 ppb	14:58:39
3	Sb 206.836†	44.0	11.8	4.7347	ug/L	4.7347 ppb	14:58:39
3	Se 196.026†	-28.4	-6.0	-4.4263	ug/L	-4.4263 ppb	14:58:39
3	Si 251.611†	558.1	55.0	2.0123	ug/L	2.0123 ppb	14:58:39
3	Sn 189.927†	9.3	5.0	1.1569	ug/L	1.1569 ppb	14:58:39
3	Ti 334.940†	-1567.0	-127.4	-0.2283	ug/L	-0.2283 ppb	14:58:19
3	Tl 190.801†	-36.0	2.4	0.9103	ug/L	0.9103 ppb	14:58:39
3	U 409.014†	-2320.1	113.3	4.3639	ug/L	4.3639 ppb	14:58:19
3	V 292.402†	-1705.1	31.1	0.2833	ug/L	0.2833 ppb	14:58:19
3	Zn 213.857†	637.7	-34.3	-0.3931	ug/L	-0.3931 ppb	14:58:39
3	SiO2†	581.7	35.8	2.8206	ug/L	2.8206 ppb	14:58:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	672490.2	97.521	%	3.2803				3.36%
Sc Radial	3926.4	102	%	0.8				0.80%
Y 371.029	526717.5	97.212	%	3.1950				3.29%
Y RADIAL	4280.6	98.82	%	0.773				0.78%
Ag 328.068†	-18.5	-0.0902	ug/L	0.26952	-0.0902	ppb	0.26952	298.74%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.9	-3.0797	ug/L	10.18375	-3.0797	ppb	10.18375	330.67%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.4	-1.6772	ug/L	3.58949	-1.6772	ppb	3.58949	214.02%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	182.4	4.5840	ug/L	0.59653	4.5840	ppb	0.59653	13.01%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.7	-0.0362	ug/L	0.01884	-0.0362	ppb	0.01884	51.97%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	4.5	0.0012	ug/L	0.03857	0.0012	ppb	0.03857	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-3.3	-6.3944	ug/L	6.45753	-6.3944	ppb	6.45753	100.99%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -12.9     -0.1929 ug/L       0.11775     -0.1929 ppb        0.11775  61.05%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -5.3     -0.1309 ug/L       0.24071     -0.1309 ppb        0.24071 183.88%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                0.7      0.0153 ug/L       0.17236      0.0153 ppb        0.17236 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -75.1     -0.2450 ug/L       0.27492     -0.2450 ppb        0.27492 112.21%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         2.3      29.116 ug/L       15.7776      29.116 ppb        15.7776  54.19%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         29.2      5.4399 ug/L       2.78780      5.4399 ppb        2.78780  51.25%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -2.1     -87.841 ug/L       28.1012     -87.841 ppb        28.1012  31.99%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               37.4      0.0549 ug/L       0.01432      0.0549 ppb        0.01432  26.08%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -0.9     -0.0811 ug/L       0.58803     -0.0811 ppb        0.58803 725.20%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -65.0     -28.590 ug/L       18.1476     -28.590 ppb        18.1476  63.48%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                4.2      0.1362 ug/L       0.43027      0.1362 ppb        0.43027 315.86%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 9.5      6.1083 ug/L       5.80997      6.1083 ppb        5.80997  95.12%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -13.3     -2.0885 ug/L       2.34609     -2.0885 ppb        2.34609 112.33%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           2.9      4.3800 ug/L       2.86378      4.3800 ppb        2.86378  65.38%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                8.8      3.5167 ug/L       1.35856      3.5167 ppb        1.35856  38.63%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -6.6     -4.8373 ug/L       0.93611     -4.8373 ppb        0.93611  19.35%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               73.3      2.6843 ug/L       0.76173      2.6843 ppb        0.76173  28.38%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                2.2      0.4961 ug/L       1.44316      0.4961 ppb        1.44316 290.93%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -3.2     -0.0310 ug/L       0.09516     -0.0310 ppb        0.09516 306.97%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -151.2     -0.2651 ug/L       0.03467     -0.2651 ppb        0.03467  13.08%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                6.6      2.5387 ug/L       1.69113      2.5387 ppb        1.69113  66.61%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -174.5     -6.7268 ug/L       9.73003     -6.7268 ppb        9.73003 144.65%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -73.8     -0.6702 ug/L       0.82815     -0.6702 ppb        0.82815 123.57%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -1.9     -0.0270 ug/L       0.34440     -0.0270 ppb        0.34440 >999.9%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     48.0      3.7891 ug/L       2.05162      3.7891 ppb        2.05162  54.15%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 18
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 4/1/2010 15:43:52
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	3676.1	3676.1	95.8	%			15:46:03
1	Y RADIAL	4105.0	4105.0	94.76	%			15:45:43
1	Al 396.153Radial†	4521.6	4813.8	5043.9	ug/L	5043.9	ppb	15:45:43
1	Ca 317.933Radial†	2573.7	2668.9	5240.5	ug/L	5240.5	ppb	15:46:03
1	Fe 238.204 Radial†	385.7	396.5	5055.0	ug/L	5055.0	ppb	15:46:03
1	K 766.490 Radial†	29178.5	27472.8	5102.8	ug/L	5102.8	ppb	15:45:43
1	Mg 279.077 IEC†	123.4	125.9	5184.5	ug/L	5184.5	ppb	15:46:03
1	Na 589.592 Radial†	20073.7	22039.1	9700.2	ug/L	9700.2	ppb	15:45:43
1	Sr 421.552†	47534.0	49621.9	476.41	ug/L	476.41	ppb	15:45:43
1	Sc 361.383	697239.8	697239.8	101.11	%			15:47:01
1	Y 371.029	465465.6	465465.6	85.907	%			15:47:06
1	Ag 328.068†	90259.8	89169.3	494.33	ug/L	494.33	ppb	15:47:06
1	As 188.979†	958.6	970.9	484.98	ug/L	484.98	ppb	15:47:26
1	B 249.677†	18825.7	19202.2	480.85	ug/L	480.85	ppb	15:47:06
1	Ba 233.527†	51288.0	50724.4	491.48	ug/L	491.48	ppb	15:47:06
1	Be 313.107†	1235632.2	1226594.5	496.50	ug/L	496.50	ppb	15:47:01
1	Cd 226.502†	33752.1	33595.1	491.04	ug/L	491.04	ppb	15:47:06
1	Co 228.616†	20520.0	20354.5	504.23	ug/L	504.23	ppb	15:47:06
1	Cr 267.716†	33528.1	33068.8	488.85	ug/L	488.85	ppb	15:47:06
1	Cu 324.752†	153998.4	146620.3	488.35	ug/L	488.35	ppb	15:47:06
1	Mn 257.610†	389371.9	384653.6	498.00	ug/L	498.00	ppb	15:47:01
1	Mo 202.031†	5122.6	5053.9	485.92	ug/L	485.92	ppb	15:47:26
1	Ni 231.604†	15574.3	15328.7	499.54	ug/L	499.54	ppb	15:47:06
1	P 214.914†	4069.7	3806.6	2338.1	ug/L	2338.1	ppb	15:47:26
1	Pb 220.353†	3048.0	3081.5	486.49	ug/L	486.49	ppb	15:47:26
1	S 181.975 Axial†	698.2	650.3	976.19	ug/L	976.19	ppb	15:47:26
1	Sb 206.836†	1267.8	1222.1	506.44	ug/L	506.44	ppb	15:47:26
1	Se 196.026†	638.5	653.6	501.04	ug/L	501.04	ppb	15:47:26
1	Si 251.611†	69089.7	67834.9	2477.4	ug/L	2477.4	ppb	15:47:06
1	Sn 189.927†	2164.3	2136.4	491.74	ug/L	491.74	ppb	15:47:26
1	Ti 334.940†	273336.6	271758.2	493.11	ug/L	493.11	ppb	15:47:06
1	Tl 190.801†	1245.5	1269.8	491.83	ug/L	491.83	ppb	15:47:26
1	U 409.014†	10172.2	12467.1	478.56	ug/L	478.56	ppb	15:47:06
1	V 292.402†	54123.3	55245.7	493.46	ug/L	493.46	ppb	15:47:06
1	Zn 213.857†	44204.3	43054.6	487.87	ug/L	487.87	ppb	15:47:06
1	SiO2†	69945.5	68638.7	5406.2	ug/L	5406.2	ppb	15:48:33
2	Sc Radial	3844.3	3844.3	100	%			15:46:28
2	Y RADIAL	4130.9	4130.9	95.36	%			15:46:08
2	Al 396.153Radial†	4493.9	4579.5	4796.6	ug/L	4796.6	ppb	15:46:08
2	Ca 317.933Radial†	2667.9	2645.3	5194.1	ug/L	5194.1	ppb	15:46:28
2	Fe 238.204 Radial†	396.4	389.7	4967.8	ug/L	4967.8	ppb	15:46:28
2	K 766.490 Radial†	29184.1	26145.3	4856.1	ug/L	4856.1	ppb	15:46:08
2	Mg 279.077 IEC†	131.5	128.2	5282.6	ug/L	5282.6	ppb	15:46:28
2	Na 589.592 Radial†	19795.5	20844.1	9174.2	ug/L	9174.2	ppb	15:46:08
2	Sr 421.552†	47279.7	47196.2	453.12	ug/L	453.12	ppb	15:46:08
2	Sc 361.383	675166.0	675166.0	97.909	%			15:47:31
2	Y 371.029	463037.6	463037.6	85.459	%			15:47:37
2	Ag 328.068†	88284.3	90070.2	499.29	ug/L	499.29	ppb	15:47:37
2	As 188.979†	953.3	996.4	497.64	ug/L	497.64	ppb	15:47:57
2	B 249.677†	18405.5	19381.7	485.36	ug/L	485.36	ppb	15:47:37
2	Ba 233.527†	50561.6	51640.8	500.35	ug/L	500.35	ppb	15:47:37
2	Be 313.107†	1201226.3	1231408.0	498.46	ug/L	498.46	ppb	15:47:31
2	Cd 226.502†	33193.3	34115.8	498.66	ug/L	498.66	ppb	15:47:37
2	Co 228.616†	20223.5	20715.1	513.19	ug/L	513.19	ppb	15:47:37
2	Cr 267.716†	32991.6	33605.0	496.76	ug/L	496.76	ppb	15:47:37
2	Cu 324.752†	150293.5	147815.8	492.32	ug/L	492.32	ppb	15:47:37
2	Mn 257.610†	379211.6	386866.6	500.85	ug/L	500.85	ppb	15:47:31
2	Mo 202.031†	5097.9	5194.3	499.40	ug/L	499.40	ppb	15:47:57
2	Ni 231.604†	15333.6	15586.5	507.94	ug/L	507.94	ppb	15:47:37

2	P 214.914†	4040.3	3908.1	2402.3 ug/L	2402.3 ppb	15:47:57
2	Pb 220.353†	3055.1	3187.4	503.12 ug/L	503.12 ppb	15:47:57
2	S 181.975 Axial†	699.8	674.6	1012.6 ug/L	1012.6 ppb	15:47:57
2	Sb 206.836†	1261.8	1257.1	520.87 ug/L	520.87 ppb	15:47:57
2	Se 196.026†	629.9	665.5	509.61 ug/L	509.61 ppb	15:47:57
2	Si 251.611†	67545.4	68491.6	2501.3 ug/L	2501.3 ppb	15:47:37
2	Sn 189.927†	2139.6	2181.2	502.02 ug/L	502.02 ppb	15:47:57
2	Ti 334.940†	267970.8	275116.2	499.18 ug/L	499.18 ppb	15:47:37
2	Tl 190.801†	1226.0	1290.1	499.64 ug/L	499.64 ppb	15:47:57
2	U 409.014†	9977.6	12597.2	483.56 ug/L	483.56 ppb	15:47:37
2	V 292.402†	53171.2	56023.4	500.52 ug/L	500.52 ppb	15:47:37
2	Zn 213.857†	43372.5	43634.4	494.46 ug/L	494.46 ppb	15:47:37
2	SiO2†	69823.0	70775.3	5574.5 ug/L	5574.5 ppb	15:48:38
3	Sc Radial	3866.3	3866.3	101 %		15:46:54
3	Y RADIAL	4346.6	4346.6	100.3 %		15:46:33
3	Al 396.153Radial†	4772.0	4830.2	5060.3 ug/L	5060.3 ppb	15:46:33
3	Ca 317.933Radial†	2670.0	2632.3	5168.7 ug/L	5168.7 ppb	15:46:54
3	Fe 238.204 Radial†	401.0	391.9	4996.6 ug/L	4996.6 ppb	15:46:54
3	K 766.490 Radial†	30491.4	27277.7	5066.5 ug/L	5066.5 ppb	15:46:33
3	Mg 279.077 IEC†	127.7	123.7	5097.1 ug/L	5097.1 ppb	15:46:54
3	Na 589.592 Radial†	20914.7	21843.1	9613.9 ug/L	9613.9 ppb	15:46:33
3	Sr 421.552†	50071.6	49700.0	477.16 ug/L	477.16 ppb	15:46:33
3	Sc 361.383	687465.4	687465.4	99.692 %		15:48:02
3	Y 371.029	466938.3	466938.3	86.179 %		15:48:07
3	Ag 328.068†	90238.2	90416.9	501.21 ug/L	501.21 ppb	15:48:07
3	As 188.979†	976.7	1002.5	500.66 ug/L	500.66 ppb	15:48:28
3	B 249.677†	18991.9	19633.5	491.69 ug/L	491.69 ppb	15:48:07
3	Ba 233.527†	51454.1	51612.2	500.08 ug/L	500.08 ppb	15:48:07
3	Be 313.107†	1219876.8	1228165.9	497.16 ug/L	497.16 ppb	15:48:02
3	Cd 226.502†	33819.8	34137.6	498.98 ug/L	498.98 ppb	15:48:07
3	Co 228.616†	20636.2	20759.5	514.29 ug/L	514.29 ppb	15:48:07
3	Cr 267.716†	33686.3	33699.0	498.15 ug/L	498.15 ppb	15:48:07
3	Cu 324.752†	154395.9	149184.6	496.88 ug/L	496.88 ppb	15:48:07
3	Mn 257.610†	384306.5	385047.9	498.51 ug/L	498.51 ppb	15:48:02
3	Mo 202.031†	5230.5	5234.2	503.23 ug/L	503.23 ppb	15:48:28
3	Ni 231.604†	15577.0	15550.4	506.77 ug/L	506.77 ppb	15:48:07
3	P 214.914†	4128.2	3922.4	2410.6 ug/L	2410.6 ppb	15:48:28
3	Pb 220.353†	3064.5	3140.9	495.88 ug/L	495.88 ppb	15:48:28
3	S 181.975 Axial†	724.6	686.6	1030.7 ug/L	1030.7 ppb	15:48:28
3	Sb 206.836†	1294.9	1267.2	525.00 ug/L	525.00 ppb	15:48:28
3	Se 196.026†	655.5	679.6	520.28 ug/L	520.28 ppb	15:48:28
3	Si 251.611†	69390.3	69107.9	2523.8 ug/L	2523.8 ppb	15:48:07
3	Sn 189.927†	2180.3	2182.9	502.40 ug/L	502.40 ppb	15:48:28
3	Ti 334.940†	274250.2	276518.3	501.74 ug/L	501.74 ppb	15:48:07
3	Tl 190.801†	1261.6	1303.4	504.77 ug/L	504.77 ppb	15:48:28
3	U 409.014†	10180.7	12618.6	484.38 ug/L	484.38 ppb	15:48:07
3	V 292.402†	54284.7	56168.7	501.85 ug/L	501.85 ppb	15:48:07
3	Zn 213.857†	44274.9	43747.0	495.75 ug/L	495.75 ppb	15:48:07
3	SiO2†	69280.8	68955.5	5430.7 ug/L	5430.7 ppb	15:48:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	686623.7	99.570	%	1.6040				1.61%
Sc Radial	3795.5	98.9	%	2.71				2.74%
Y 371.029	465147.2	85.849	%	0.3635				0.42%
Y RADIAL	4194.2	96.82	%	3.062				3.16%
Ag 328.068†	89885.4	498.28	ug/L	3.552	498.28	ppb	3.552	0.71%
QC value within limits for Ag 328.068 Recovery = 99.66%								
Al 396.153Radial†	4741.2	4966.9	ug/L	147.74	4966.9	ppb	147.74	2.97%
QC value within limits for Al 396.153Radial Recovery = 99.34%								
As 188.979†	989.9	494.43	ug/L	8.321	494.43	ppb	8.321	1.68%
QC value within limits for As 188.979 Recovery = 98.89%								
B 249.677†	19405.8	485.97	ug/L	5.442	485.97	ppb	5.442	1.12%
QC value within limits for B 249.677 Recovery = 97.19%								
Ba 233.527†	51325.8	497.30	ug/L	5.044	497.30	ppb	5.044	1.01%
QC value within limits for Ba 233.527 Recovery = 99.46%								
Be 313.107†	1228722.8	497.37	ug/L	0.997	497.37	ppb	0.997	0.20%
QC value within limits for Be 313.107 Recovery = 99.47%								
Ca 317.933Radial†	2648.8	5201.1	ug/L	36.41	5201.1	ppb	36.41	0.70%

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   QC value within limits for Ca 317.933Radial  Recovery = 104.02%
Cd 226.502†            33949.5      496.23 ug/L         4.498      496.23 ppb          4.498   0.91%
   QC value within limits for Cd 226.502  Recovery = 99.25%
Co 228.616†            20609.7      510.57 ug/L         5.516      510.57 ppb          5.516   1.08%
   QC value within limits for Co 228.616  Recovery = 102.11%
Cr 267.716†            33457.6      494.59 ug/L         5.015      494.59 ppb          5.015   1.01%
   QC value within limits for Cr 267.716  Recovery = 98.92%
Cu 324.752†           147873.6      492.52 ug/L         4.271      492.52 ppb          4.271   0.87%
   QC value within limits for Cu 324.752  Recovery = 98.50%
Fe 238.204 Radial†       392.7      5006.5 ug/L        44.39      5006.5 ppb         44.39   0.89%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.13%
K 766.490 Radial†      26965.3      5008.5 ug/L       133.19      5008.5 ppb        133.19   2.66%
   QC value within limits for K 766.490 Radial  Recovery = 100.17%
Mg 279.077 IEC†          126.0      5188.1 ug/L        92.79      5188.1 ppb         92.79   1.79%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.76%
Mn 257.610†           385522.7      499.12 ug/L         1.521      499.12 ppb          1.521   0.30%
   QC value within limits for Mn 257.610  Recovery = 99.82%
Mo 202.031†             5160.8      496.18 ug/L         9.094      496.18 ppb          9.094   1.83%
   QC value within limits for Mo 202.031  Recovery = 99.24%
Na 589.592 Radial†     21575.4      9496.1 ug/L       282.07      9496.1 ppb        282.07   2.97%
   QC value within limits for Na 589.592 Radial  Recovery = 94.96%
Ni 231.604†            15488.5      504.75 ug/L         4.548      504.75 ppb          4.548   0.90%
   QC value within limits for Ni 231.604  Recovery = 100.95%
P 214.914†              3879.0      2383.7 ug/L        39.69      2383.7 ppb         39.69   1.67%
   QC value within limits for P 214.914  Recovery = 95.35%
Pb 220.353†             3136.6      495.17 ug/L         8.338      495.17 ppb          8.338   1.68%
   QC value within limits for Pb 220.353  Recovery = 99.03%
S 181.975 Axial†         670.5      1006.5 ug/L        27.76      1006.5 ppb         27.76   2.76%
   QC value within limits for S 181.975 Axial  Recovery = 100.65%
Sb 206.836†             1248.8      517.44 ug/L         9.741      517.44 ppb          9.741   1.88%
   QC value within limits for Sb 206.836  Recovery = 103.49%
Se 196.026†              666.2      510.31 ug/L         9.637      510.31 ppb          9.637   1.89%
   QC value within limits for Se 196.026  Recovery = 102.06%
Si 251.611†            68478.1      2500.8 ug/L        23.20      2500.8 ppb         23.20   0.93%
   QC value within limits for Si 251.611  Recovery = 100.03%
Sn 189.927†             2166.9      498.72 ug/L         6.046      498.72 ppb          6.046   1.21%
   QC value within limits for Sn 189.927  Recovery = 99.74%
Sr 421.552†            48839.4      468.89 ug/L        13.668      468.89 ppb         13.668   2.91%
   QC value within limits for Sr 421.552  Recovery = 93.78%
Ti 334.940†           274464.2      498.01 ug/L         4.433      498.01 ppb          4.433   0.89%
   QC value within limits for Ti 334.940  Recovery = 99.60%
Tl 190.801†             1287.8      498.75 ug/L         6.515      498.75 ppb          6.515   1.31%
   QC value within limits for Tl 190.801  Recovery = 99.75%
U 409.014†             12561.0      482.17 ug/L         3.153      482.17 ppb          3.153   0.65%
   QC value within limits for U 409.014  Recovery = 96.43%
V 292.402†             55812.6      498.61 ug/L         4.508      498.61 ppb          4.508   0.90%
   QC value within limits for V 292.402  Recovery = 99.72%
Zn 213.857†            43478.7      492.69 ug/L         4.223      492.69 ppb          4.223   0.86%
   QC value within limits for Zn 213.857  Recovery = 98.54%
SiO2†                  69456.5      5470.5 ug/L        90.93      5470.5 ppb         90.93   1.66%
   QC value within limits for SiO2  Recovery = 102.30%
All analyte(s) passed QC.
```

Sequence No.: 19
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 4/1/2010 15:50:53
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	3848.0	3848.0	100	%			15:53:05
1	Y RADIAL	4291.7	4291.7	99.07	%			15:52:45
1	Al 396.153Radial†	-85.6	6.9	7.2339	ug/L	7.2339	ppb	15:52:45
1	Ca 317.933Radial†	10.5	-8.2	-16.026	ug/L	-16.026	ppb	15:53:05
1	Fe 238.204 Radial†	5.7	-0.5	-6.9197	ug/L	-6.9197	ppb	15:53:05
1	K 766.490 Radial†	3035.0	31.8	5.9178	ug/L	5.9178	ppb	15:52:45
1	Mg 279.077 IEC†	-0.2	-3.2	-130.97	ug/L	-130.97	ppb	15:53:05
1	Na 589.592 Radial†	-1118.3	-37.7	-16.608	ug/L	-16.608	ppb	15:52:45
1	Sr 421.552†	13.4	-0.5	-0.0051	ug/L	-0.0051	ppb	15:52:45
1	Sc 361.383	673597.2	673597.2	97.681	%			15:54:02
1	Y 371.029	526905.2	526905.2	97.247	%			15:54:02
1	Ag 328.068†	41.5	-57.4	-0.3167	ug/L	-0.3167	ppb	15:54:02
1	As 188.979†	-21.1	1.2	0.6133	ug/L	0.6133	ppb	15:54:22
1	B 249.677†	-546.5	23.5	0.5941	ug/L	0.5941	ppb	15:54:22
1	Ba 233.527†	-17.6	-18.8	-0.1842	ug/L	-0.1842	ppb	15:54:22
1	Be 313.107†	-4479.8	-62.9	-0.0255	ug/L	-0.0255	ppb	15:54:02
1	Cd 226.502†	-201.8	6.9	0.0997	ug/L	0.0997	ppb	15:54:22
1	Co 228.616†	-75.0	-17.1	-0.4236	ug/L	-0.4236	ppb	15:54:22
1	Cr 267.716†	76.8	-12.7	-0.1862	ug/L	-0.1862	ppb	15:54:22
1	Cu 324.752†	5454.4	-104.1	-0.3431	ug/L	-0.3431	ppb	15:54:02
1	Mn 257.610†	463.9	29.9	0.0434	ug/L	0.0434	ppb	15:54:22
1	Mo 202.031†	11.1	-1.1	-0.1092	ug/L	-0.1092	ppb	15:54:22
1	Ni 231.604†	82.1	9.4	0.3076	ug/L	0.3076	ppb	15:54:22
1	P 214.914†	231.6	18.6	11.940	ug/L	11.940	ppb	15:54:22
1	Pb 220.353†	-72.4	-7.1	-1.1219	ug/L	-1.1219	ppb	15:54:22
1	S 181.975 Axial†	40.5	1.3	1.8846	ug/L	1.8846	ppb	15:54:22
1	Sb 206.836†	42.3	11.5	4.6118	ug/L	4.6118	ppb	15:54:22
1	Se 196.026†	-31.6	-10.2	-7.6149	ug/L	-7.6149	ppb	15:54:22
1	Si 251.611†	539.4	55.6	2.0356	ug/L	2.0356	ppb	15:54:22
1	Sn 189.927†	5.0	1.0	0.2280	ug/L	0.2280	ppb	15:54:22
1	Ti 334.940†	-1406.6	-18.5	-0.0218	ug/L	-0.0218	ppb	15:54:02
1	Tl 190.801†	-37.9	-0.9	-0.3248	ug/L	-0.3248	ppb	15:54:22
1	U 409.014†	-2531.0	-184.6	-7.1080	ug/L	-7.1080	ppb	15:54:02
1	V 292.402†	-1794.3	-120.5	-1.0787	ug/L	-1.0787	ppb	15:54:02
1	Zn 213.857†	620.7	-29.1	-0.3336	ug/L	-0.3336	ppb	15:54:22
1	SiO2†	582.0	56.7	4.4762	ug/L	4.4762	ppb	15:55:18
2	Sc Radial	3831.6	3831.6	99.8	%			15:53:30
2	Y RADIAL	4309.3	4309.3	99.48	%			15:53:10
2	Al 396.153Radial†	-90.3	1.7	1.8297	ug/L	1.8297	ppb	15:53:10
2	Ca 317.933Radial†	15.1	-3.5	-6.9379	ug/L	-6.9379	ppb	15:53:30
2	Fe 238.204 Radial†	7.6	1.4	17.999	ug/L	17.999	ppb	15:53:30
2	K 766.490 Radial†	3064.8	74.6	13.878	ug/L	13.878	ppb	15:53:10
2	Mg 279.077 IEC†	-1.6	-4.7	-191.56	ug/L	-191.56	ppb	15:53:30
2	Na 589.592 Radial†	-1078.5	-2.7	-1.1825	ug/L	-1.1825	ppb	15:53:10
2	Sr 421.552†	16.2	2.3	0.0224	ug/L	0.0224	ppb	15:53:10
2	Sc 361.383	683924.0	683924.0	99.179	%			15:54:27
2	Y 371.029	534713.0	534713.0	98.688	%			15:54:27
2	Ag 328.068†	57.6	-41.8	-0.2175	ug/L	-0.2175	ppb	15:54:27
2	As 188.979†	-24.2	-1.6	-0.7746	ug/L	-0.7746	ppb	15:54:47
2	B 249.677†	-497.4	81.5	2.0465	ug/L	2.0465	ppb	15:54:47
2	Ba 233.527†	-16.4	-17.3	-0.1676	ug/L	-0.1676	ppb	15:54:47
2	Be 313.107†	-4516.8	-30.9	-0.0126	ug/L	-0.0126	ppb	15:54:27
2	Cd 226.502†	-236.4	-24.9	-0.3687	ug/L	-0.3687	ppb	15:54:47
2	Co 228.616†	-58.8	0.4	0.0087	ug/L	0.0087	ppb	15:54:47
2	Cr 267.716†	79.3	-11.4	-0.1624	ug/L	-0.1624	ppb	15:54:47
2	Cu 324.752†	5572.2	-69.6	-0.2249	ug/L	-0.2249	ppb	15:54:27
2	Mn 257.610†	444.2	2.9	0.0133	ug/L	0.0133	ppb	15:54:47
2	Mo 202.031†	12.5	0.2	0.0172	ug/L	0.0172	ppb	15:54:47
2	Ni 231.604†	73.1	-1.0	-0.0319	ug/L	-0.0319	ppb	15:54:47

2	P 214.914†	225.5	8.9	5.6979	ug/L	5.6979 ppb	15:54:47
2	Pb 220.353†	-59.5	7.0	1.0944	ug/L	1.0944 ppb	15:54:47
2	S 181.975 Axial†	38.9	-1.0	-1.4801	ug/L	-1.4801 ppb	15:54:47
2	Sb 206.836†	46.7	15.3	6.1259	ug/L	6.1259 ppb	15:54:47
2	Se 196.026†	-16.5	5.4	4.0751	ug/L	4.0751 ppb	15:54:47
2	Si 251.611†	556.6	64.6	2.3655	ug/L	2.3655 ppb	15:54:47
2	Sn 189.927†	1.9	-2.2	-0.5120	ug/L	-0.5120 ppb	15:54:47
2	Ti 334.940†	-1446.6	-37.1	-0.0477	ug/L	-0.0477 ppb	15:54:27
2	Tl 190.801†	-38.5	-0.9	-0.3482	ug/L	-0.3482 ppb	15:54:47
2	U 409.014†	-2668.3	-283.9	-10.937	ug/L	-10.937 ppb	15:54:27
2	V 292.402†	-1758.2	-56.4	-0.5239	ug/L	-0.5239 ppb	15:54:27
2	Zn 213.857†	614.0	-45.5	-0.5224	ug/L	-0.5224 ppb	15:54:47
2	SiO2†	582.0	47.7	3.7649	ug/L	3.7649 ppb	15:55:23
3	Sc Radial	3874.9	3874.9	101	%		15:53:55
3	Y RADIAL	4382.1	4382.1	101.2	%		15:53:35
3	Al 396.153Radial†	-97.0	-3.8	-4.1026	ug/L	-4.1026 ppb	15:53:35
3	Ca 317.933Radial†	17.3	-1.5	-3.0144	ug/L	-3.0144 ppb	15:53:55
3	Fe 238.204 Radial†	8.6	2.3	29.208	ug/L	29.208 ppb	15:53:55
3	K 766.490 Radial†	3013.8	-10.3	-1.9053	ug/L	-1.9053 ppb	15:53:35
3	Mg 279.077 IEC†	1.8	-1.2	-48.806	ug/L	-48.806 ppb	15:53:55
3	Na 589.592 Radial†	-1157.1	-68.5	-30.143	ug/L	-30.143 ppb	15:53:35
3	Sr 421.552†	9.8	-4.2	-0.0403	ug/L	-0.0403 ppb	15:53:35
3	Sc 361.383	687230.4	687230.4	99.658	%		15:54:53
3	Y 371.029	537507.9	537507.9	99.204	%		15:54:53
3	Ag 328.068†	98.7	-0.9	0.0130	ug/L	0.0130 ppb	15:54:53
3	As 188.979†	-33.5	-10.8	-5.3581	ug/L	-5.3581 ppb	15:55:13
3	B 249.677†	-506.1	75.2	1.8872	ug/L	1.8872 ppb	15:55:13
3	Ba 233.527†	-8.5	-9.3	-0.0893	ug/L	-0.0893 ppb	15:55:13
3	Be 313.107†	-4649.4	-142.0	-0.0573	ug/L	-0.0573 ppb	15:54:53
3	Cd 226.502†	-213.7	-1.0	-0.0200	ug/L	-0.0200 ppb	15:55:13
3	Co 228.616†	-65.1	-5.7	-0.1382	ug/L	-0.1382 ppb	15:55:13
3	Cr 267.716†	78.3	-12.8	-0.1809	ug/L	-0.1809 ppb	15:55:13
3	Cu 324.752†	5492.4	-176.8	-0.5806	ug/L	-0.5806 ppb	15:54:53
3	Mn 257.610†	437.3	-6.2	-0.0032	ug/L	-0.0032 ppb	15:55:13
3	Mo 202.031†	25.3	12.9	1.2428	ug/L	1.2428 ppb	15:55:13
3	Ni 231.604†	62.9	-11.5	-0.3754	ug/L	-0.3754 ppb	15:55:13
3	P 214.914†	230.2	12.5	8.0934	ug/L	8.0934 ppb	15:55:13
3	Pb 220.353†	-80.2	-13.5	-2.1190	ug/L	-2.1190 ppb	15:55:13
3	S 181.975 Axial†	40.4	0.3	0.4472	ug/L	0.4472 ppb	15:55:13
3	Sb 206.836†	41.4	9.8	4.0004	ug/L	4.0004 ppb	15:55:13
3	Se 196.026†	-20.7	1.3	1.0576	ug/L	1.0576 ppb	15:55:13
3	Si 251.611†	541.0	46.3	1.6787	ug/L	1.6787 ppb	15:55:13
3	Sn 189.927†	17.0	12.9	2.9606	ug/L	2.9606 ppb	15:55:13
3	Ti 334.940†	-1406.2	10.4	0.0278	ug/L	0.0278 ppb	15:54:53
3	Tl 190.801†	-29.4	8.4	3.2493	ug/L	3.2493 ppb	15:55:13
3	U 409.014†	-2705.4	-308.2	-11.876	ug/L	-11.876 ppb	15:54:53
3	V 292.402†	-1734.8	-24.3	-0.2250	ug/L	-0.2250 ppb	15:54:53
3	Zn 213.857†	615.6	-46.9	-0.5371	ug/L	-0.5371 ppb	15:55:13
3	SiO2†	605.6	68.5	5.3725	ug/L	5.3725 ppb	15:55:28

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	681583.9	98.839	%	1.0313				1.04%
Sc Radial	3851.5	100	%	0.6				0.57%
Y 371.029	533042.0	98.379	%	1.0142				1.03%
Y RADIAL	4327.7	99.90	%	1.106				1.11%
Ag 328.068†	-33.4	-0.1737	ug/L	0.16914	-0.1737	ppb	0.16914	97.35%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.6	1.6537	ug/L	5.67029	1.6537	ppb	5.67029	342.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.7	-1.8398	ug/L	3.12498	-1.8398	ppb	3.12498	169.85%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	60.1	1.5093	ug/L	0.79654	1.5093	ppb	0.79654	52.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-15.1	-0.1470	ug/L	0.05067	-0.1470	ppb	0.05067	34.46%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-78.6	-0.0318	ug/L	0.02300	-0.0318	ppb	0.02300	72.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-4.4	-8.6593	ug/L	6.67421	-8.6593	ppb	6.67421	77.08%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -6.4     -0.0963 ug/L       0.24334     -0.0963 ppb        0.24334 252.56%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -7.5     -0.1844 ug/L       0.21984     -0.1844 ppb        0.21984 119.24%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -12.3     -0.1765 ug/L       0.01246     -0.1765 ppb        0.01246   7.06%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -116.8     -0.3829 ug/L       0.18117     -0.3829 ppb        0.18117  47.31%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.1      13.429 ug/L       18.4925      13.429 ppb        18.4925 137.70%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          32.0      5.9636 ug/L       7.89199      5.9636 ppb        7.89199 132.34%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -3.0    -123.78 ug/L        71.646     -123.78 ppb         71.646  57.88%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 8.9      0.0178 ug/L       0.02360      0.0178 ppb        0.02360 132.21%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.0      0.3836 ug/L       0.74676      0.3836 ppb        0.74676 194.67%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -36.3     -15.978 ug/L       14.4904     -15.978 ppb        14.4904  90.69%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -1.0     -0.0332 ug/L       0.34151     -0.0332 ppb        0.34151 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 13.3      8.5769 ug/L       3.14879      8.5769 ppb        3.14879  36.71%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -4.5     -0.7155 ug/L       1.64480     -0.7155 ppb        1.64480 229.88%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.2      0.2839 ug/L       1.68829      0.2839 ppb        1.68829 594.71%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.2      4.9127 ug/L       1.09421      4.9127 ppb        1.09421  22.27%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.2     -0.8274 ug/L       6.06868     -0.8274 ppb        6.06868 733.45%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                55.5      2.0266 ug/L       0.34350      2.0266 ppb        0.34350  16.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 3.9      0.8922 ug/L       1.82909      0.8922 ppb        1.82909 205.01%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -0.8     -0.0077 ug/L       0.03142     -0.0077 ppb        0.03142 407.73%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -15.1     -0.0139 ug/L       0.03834     -0.0139 ppb        0.03834 275.31%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.2      0.8588 ug/L       2.07031      0.8588 ppb        2.07031 241.08%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -258.9     -9.9737 ug/L       2.52568     -9.9737 ppb        2.52568  25.32%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -67.1     -0.6092 ug/L       0.43319     -0.6092 ppb        0.43319  71.11%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -40.5     -0.4643 ug/L       0.11348     -0.4643 ppb        0.11348  24.44%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      57.6      4.5379 ug/L       0.80559      4.5379 ppb        0.80559  17.75%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 26
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 4/1/2010 16:40:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3758.8	3758.8	97.9	%			16:42:18
1	Y RADIAL	4204.3	4204.3	97.06	%			16:41:58
1	Al 396.153Radial†	4595.9	4785.8	5014.1	ug/L	5014.1	ppb	16:41:58
1	Ca 317.933Radial†	2595.3	2631.7	5167.5	ug/L	5167.5	ppb	16:42:18
1	Fe 238.204 Radial†	383.6	385.6	4915.5	ug/L	4915.5	ppb	16:42:18
1	K 766.490 Radial†	29604.1	27236.8	5059.0	ug/L	5059.0	ppb	16:41:58
1	Mg 279.077 IEC†	124.5	124.1	5111.3	ug/L	5111.3	ppb	16:42:18
1	Na 589.592 Radial†	20081.6	21585.8	9500.7	ug/L	9500.7	ppb	16:41:58
1	Sr 421.552†	48079.3	49086.2	471.27	ug/L	471.27	ppb	16:41:58
1	Sc 361.383	689089.7	689089.7	99.928	%			16:43:15
1	Y 371.029	463881.6	463881.6	85.615	%			16:43:21
1	Ag 328.068†	88211.3	88175.2	488.79	ug/L	488.79	ppb	16:43:21
1	As 188.979†	966.1	989.6	494.16	ug/L	494.16	ppb	16:43:41
1	B 249.677†	18261.0	18857.2	472.22	ug/L	472.22	ppb	16:43:21
1	Ba 233.527†	50182.3	50217.8	486.57	ug/L	486.57	ppb	16:43:21
1	Be 313.107†	1216738.3	1222140.8	494.69	ug/L	494.69	ppb	16:43:15
1	Cd 226.502†	32918.3	33155.5	484.62	ug/L	484.62	ppb	16:43:21
1	Co 228.616†	20023.4	20097.5	497.89	ug/L	497.89	ppb	16:43:21
1	Cr 267.716†	32844.6	32777.0	484.53	ug/L	484.53	ppb	16:43:21
1	Cu 324.752†	149444.1	143864.1	479.16	ug/L	479.16	ppb	16:43:21
1	Mn 257.610†	372374.3	372198.4	481.87	ug/L	481.87	ppb	16:43:21
1	Mo 202.031†	5115.5	5106.8	490.98	ug/L	490.98	ppb	16:43:41
1	Ni 231.604†	15219.0	15155.3	493.89	ug/L	493.89	ppb	16:43:21
1	P 214.914†	4043.3	3827.7	2353.6	ug/L	2353.6	ppb	16:43:41
1	Pb 220.353†	3014.3	3083.4	486.82	ug/L	486.82	ppb	16:43:41
1	S 181.975 Axial†	697.1	657.3	986.72	ug/L	986.72	ppb	16:43:41
1	Sb 206.836†	1266.5	1235.7	512.00	ug/L	512.00	ppb	16:43:41
1	Se 196.026†	644.2	666.8	510.47	ug/L	510.47	ppb	16:43:41
1	Si 251.611†	67184.2	66736.2	2437.1	ug/L	2437.1	ppb	16:43:21
1	Sn 189.927†	2147.4	2144.9	493.66	ug/L	493.66	ppb	16:43:41
1	Ti 334.940†	266871.6	268485.9	487.17	ug/L	487.17	ppb	16:43:21
1	Tl 190.801†	1241.2	1280.1	495.69	ug/L	495.69	ppb	16:43:41
1	U 409.014†	9946.9	12360.6	474.48	ug/L	474.48	ppb	16:43:21
1	V 292.402†	52968.3	54722.9	488.94	ug/L	488.94	ppb	16:43:21
1	Zn 213.857†	42933.4	42299.9	479.31	ug/L	479.31	ppb	16:43:21
1	SiO2†	67227.6	66737.0	5255.9	ug/L	5255.9	ppb	16:44:47
2	Sc Radial	3889.0	3889.0	101	%			16:42:43
2	Y RADIAL	4317.3	4317.3	99.66	%			16:42:23
2	Al 396.153Radial†	4699.6	4731.0	4956.3	ug/L	4956.3	ppb	16:42:23
2	Ca 317.933Radial†	2672.8	2619.5	5143.6	ug/L	5143.6	ppb	16:42:43
2	Fe 238.204 Radial†	395.2	383.9	4894.4	ug/L	4894.4	ppb	16:42:43
2	K 766.490 Radial†	30076.0	26690.3	4957.4	ug/L	4957.4	ppb	16:42:23
2	Mg 279.077 IEC†	126.3	121.6	5009.2	ug/L	5009.2	ppb	16:42:43
2	Na 589.592 Radial†	20474.4	21286.9	9369.1	ug/L	9369.1	ppb	16:42:23
2	Sr 421.552†	49326.0	48672.9	467.30	ug/L	467.30	ppb	16:42:23
2	Sc 361.383	691873.4	691873.4	100.33	%			16:43:46
2	Y 371.029	465273.1	465273.1	85.872	%			16:43:51
2	Ag 328.068†	89304.8	88909.9	492.84	ug/L	492.84	ppb	16:43:51
2	As 188.979†	964.1	983.7	491.26	ug/L	491.26	ppb	16:44:11
2	B 249.677†	18579.9	19101.5	478.35	ug/L	478.35	ppb	16:43:51
2	Ba 233.527†	50893.8	50724.8	491.48	ug/L	491.48	ppb	16:43:51
2	Be 313.107†	1220438.3	1220929.6	494.21	ug/L	494.21	ppb	16:43:46
2	Cd 226.502†	33360.4	33463.6	489.13	ug/L	489.13	ppb	16:43:51
2	Co 228.616†	20358.8	20351.2	504.17	ug/L	504.17	ppb	16:43:51
2	Cr 267.716†	33223.3	33022.2	488.14	ug/L	488.14	ppb	16:43:51
2	Cu 324.752†	152083.0	145892.6	485.91	ug/L	485.91	ppb	16:43:51
2	Mn 257.610†	377459.9	375767.8	486.50	ug/L	486.50	ppb	16:43:51
2	Mo 202.031†	5169.9	5140.3	494.20	ug/L	494.20	ppb	16:44:11
2	Ni 231.604†	15373.7	15248.3	496.92	ug/L	496.92	ppb	16:43:51

2	P 214.914†	4093.9	3861.8	2374.1 ug/L	2374.1 ppb	16:44:11
2	Pb 220.353†	3059.1	3116.0	491.93 ug/L	491.93 ppb	16:44:11
2	S 181.975 Axial†	710.4	667.9	1002.5 ug/L	1002.5 ppb	16:44:11
2	Sb 206.836†	1282.7	1246.8	516.54 ug/L	516.54 ppb	16:44:11
2	Se 196.026†	661.5	681.4	521.26 ug/L	521.26 ppb	16:44:11
2	Si 251.611†	68396.0	67673.4	2471.4 ug/L	2471.4 ppb	16:43:51
2	Sn 189.927†	2166.1	2154.8	495.94 ug/L	495.94 ppb	16:44:11
2	Ti 334.940†	270978.9	271505.1	492.65 ug/L	492.65 ppb	16:43:51
2	Tl 190.801†	1254.1	1287.9	498.73 ug/L	498.73 ppb	16:44:11
2	U 409.014†	10214.0	12586.8	483.19 ug/L	483.19 ppb	16:43:51
2	V 292.402†	53572.7	55112.1	492.43 ug/L	492.43 ppb	16:43:51
2	Zn 213.857†	43654.1	42845.3	485.52 ug/L	485.52 ppb	16:43:51
2	SiO2†	66384.7	65626.2	5168.1 ug/L	5168.1 ppb	16:44:52
3	Sc Radial	3847.8	3847.8	100 %		16:43:09
3	Y RADIAL	4407.9	4407.9	101.8 %		16:42:48
3	Al 396.153Radial†	4824.5	4905.3	5140.0 ug/L	5140.0 ppb	16:42:48
3	Ca 317.933Radial†	2648.9	2624.0	5152.3 ug/L	5152.3 ppb	16:43:09
3	Fe 238.204 Radial†	394.5	387.4	4939.0 ug/L	4939.0 ppb	16:43:09
3	K 766.490 Radial†	30765.2	27696.4	5144.4 ug/L	5144.4 ppb	16:42:48
3	Mg 279.077 IEC†	125.7	122.4	5041.5 ug/L	5041.5 ppb	16:43:09
3	Na 589.592 Radial†	20898.8	21927.1	9650.9 ug/L	9650.9 ppb	16:42:48
3	Sr 421.552†	50572.1	50438.3	484.25 ug/L	484.25 ppb	16:42:48
3	Sc 361.383	685072.4	685072.4	99.345 %		16:44:17
3	Y 371.029	465957.5	465957.5	85.998 %		16:44:22
3	Ag 328.068†	89528.0	90018.2	498.98 ug/L	498.98 ppb	16:44:22
3	As 188.979†	947.6	976.7	487.86 ug/L	487.86 ppb	16:44:42
3	B 249.677†	18672.0	19378.1	485.29 ug/L	485.29 ppb	16:44:22
3	Ba 233.527†	50761.1	51094.9	495.06 ug/L	495.06 ppb	16:44:22
3	Be 313.107†	1202254.7	1214702.1	491.71 ug/L	491.71 ppb	16:44:17
3	Cd 226.502†	33294.9	33727.7	492.99 ug/L	492.99 ppb	16:44:22
3	Co 228.616†	20317.0	20510.6	508.10 ug/L	508.10 ppb	16:44:22
3	Cr 267.716†	33215.6	33343.2	492.89 ug/L	492.89 ppb	16:44:22
3	Cu 324.752†	152544.0	147861.5	492.47 ug/L	492.47 ppb	16:44:22
3	Mn 257.610†	376959.9	378999.4	490.68 ug/L	490.68 ppb	16:44:22
3	Mo 202.031†	5066.5	5087.4	489.12 ug/L	489.12 ppb	16:44:42
3	Ni 231.604†	15364.8	15391.4	501.59 ug/L	501.59 ppb	16:44:22
3	P 214.914†	3999.4	3807.3	2337.8 ug/L	2337.8 ppb	16:44:42
3	Pb 220.353†	3003.2	3090.0	487.87 ug/L	487.87 ppb	16:44:42
3	S 181.975 Axial†	688.1	652.4	979.31 ug/L	979.31 ppb	16:44:42
3	Sb 206.836†	1258.6	1235.1	511.69 ug/L	511.69 ppb	16:44:42
3	Se 196.026†	637.8	664.1	508.60 ug/L	508.60 ppb	16:44:42
3	Si 251.611†	68303.7	68257.3	2492.8 ug/L	2492.8 ppb	16:44:22
3	Sn 189.927†	2120.7	2130.5	490.36 ug/L	490.36 ppb	16:44:42
3	Ti 334.940†	271056.5	274264.6	497.65 ug/L	497.65 ppb	16:44:22
3	Tl 190.801†	1218.3	1264.3	489.69 ug/L	489.69 ppb	16:44:42
3	U 409.014†	10331.3	12805.9	491.62 ug/L	491.62 ppb	16:44:22
3	V 292.402†	53617.1	55686.9	497.43 ug/L	497.43 ppb	16:44:22
3	Zn 213.857†	43574.9	43197.5	489.51 ug/L	489.51 ppb	16:44:22
3	SiO2†	65947.6	65843.1	5185.4 ug/L	5185.4 ppb	16:44:58

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	688678.5	99.868	%	0.4958				0.50%
Sc Radial	3831.9	99.8	%	1.73				1.74%
Y 371.029	465037.4	85.828	%	0.1952				0.23%
Y RADIAL	4309.8	99.49	%	2.355				2.37%
Ag 328.068†	89034.4	493.54	ug/L	5.126	493.54	ppb	5.126	1.04%
QC value within limits for Ag 328.068 Recovery = 98.71%								
Al 396.153Radial†	4807.3	5036.8	ug/L	93.96	5036.8	ppb	93.96	1.87%
QC value within limits for Al 396.153Radial Recovery = 100.74%								
As 188.979†	983.3	491.09	ug/L	3.156	491.09	ppb	3.156	0.64%
QC value within limits for As 188.979 Recovery = 98.22%								
B 249.677†	19112.3	478.62	ug/L	6.540	478.62	ppb	6.540	1.37%
QC value within limits for B 249.677 Recovery = 95.72%								
Ba 233.527†	50679.2	491.04	ug/L	4.265	491.04	ppb	4.265	0.87%
QC value within limits for Ba 233.527 Recovery = 98.21%								
Be 313.107†	1219257.5	493.54	ug/L	1.601	493.54	ppb	1.601	0.32%
QC value within limits for Be 313.107 Recovery = 98.71%								
Ca 317.933Radial†	2625.1	5154.5	ug/L	12.12	5154.5	ppb	12.12	0.24%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.09%
Cd 226.502†            33449.0      488.91 ug/L         4.190      488.91 ppb          4.190   0.86%
   QC value within limits for Cd 226.502  Recovery = 97.78%
Co 228.616†            20319.8      503.39 ug/L         5.147      503.39 ppb          5.147   1.02%
   QC value within limits for Co 228.616  Recovery = 100.68%
Cr 267.716†            33047.5      488.52 ug/L         4.192      488.52 ppb          4.192   0.86%
   QC value within limits for Cr 267.716  Recovery = 97.70%
Cu 324.752†           145872.7      485.85 ug/L         6.653      485.85 ppb          6.653   1.37%
   QC value within limits for Cu 324.752  Recovery = 97.17%
Fe 238.204 Radial†       385.6      4916.3 ug/L        22.29      4916.3 ppb         22.29   0.45%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.33%
K 766.490 Radial†      27207.9      5053.6 ug/L        93.61      5053.6 ppb         93.61   1.85%
   QC value within limits for K 766.490 Radial  Recovery = 101.07%
Mg 279.077 IEC†          122.7      5054.0 ug/L        52.18      5054.0 ppb         52.18   1.03%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.08%
Mn 257.610†           375655.2      486.35 ug/L         4.404      486.35 ppb          4.404   0.91%
   QC value within limits for Mn 257.610  Recovery = 97.27%
Mo 202.031†             5111.5      491.44 ug/L         2.571      491.44 ppb          2.571   0.52%
   QC value within limits for Mo 202.031  Recovery = 98.29%
Na 589.592 Radial†     21599.9      9506.9 ug/L       140.98      9506.9 ppb        140.98   1.48%
   QC value within limits for Na 589.592 Radial  Recovery = 95.07%
Ni 231.604†            15265.0      497.47 ug/L         3.875      497.47 ppb          3.875   0.78%
   QC value within limits for Ni 231.604  Recovery = 99.49%
P 214.914†              3832.3      2355.2 ug/L        18.17      2355.2 ppb         18.17   0.77%
   QC value within limits for P 214.914  Recovery = 94.21%
Pb 220.353†             3096.5      488.87 ug/L         2.698      488.87 ppb          2.698   0.55%
   QC value within limits for Pb 220.353  Recovery = 97.77%
S 181.975 Axial†         659.2      989.52 ug/L        11.864      989.52 ppb         11.864   1.20%
   QC value within limits for S 181.975 Axial  Recovery = 98.95%
Sb 206.836†             1239.2      513.41 ug/L         2.716      513.41 ppb          2.716   0.53%
   QC value within limits for Sb 206.836  Recovery = 102.68%
Se 196.026†              670.8      513.44 ug/L         6.831      513.44 ppb          6.831   1.33%
   QC value within limits for Se 196.026  Recovery = 102.69%
Si 251.611†            67555.6      2467.1 ug/L        28.10      2467.1 ppb         28.10   1.14%
   QC value within limits for Si 251.611  Recovery = 98.68%
Sn 189.927†             2143.4      493.32 ug/L         2.805      493.32 ppb          2.805   0.57%
   QC value within limits for Sn 189.927  Recovery = 98.66%
Sr 421.552†            49399.1      474.27 ug/L         8.866      474.27 ppb          8.866   1.87%
   QC value within limits for Sr 421.552  Recovery = 94.85%
Ti 334.940†           271418.5      492.49 ug/L         5.242      492.49 ppb          5.242   1.06%
   QC value within limits for Ti 334.940  Recovery = 98.50%
Tl 190.801†             1277.4      494.70 ug/L         4.599      494.70 ppb          4.599   0.93%
   QC value within limits for Tl 190.801  Recovery = 98.94%
U 409.014†             12584.4      483.10 ug/L         8.567      483.10 ppb          8.567   1.77%
   QC value within limits for U 409.014  Recovery = 96.62%
V 292.402†             55174.0      492.93 ug/L         4.265      492.93 ppb          4.265   0.87%
   QC value within limits for V 292.402  Recovery = 98.59%
Zn 213.857†            42780.9      484.78 ug/L         5.139      484.78 ppb          5.139   1.06%
   QC value within limits for Zn 213.857  Recovery = 96.96%
SiO2†                  66068.8      5203.1 ug/L        46.51      5203.1 ppb         46.51   0.89%
   QC value within limits for SiO2  Recovery = 97.30%
All analyte(s) passed QC.
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Sequence No.: 27
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 4/1/2010 16:47:07
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	3714.1	3714.1	96.8	%			16:49:19
1	Y RADIAL	4052.2	4052.2	93.54	%			16:48:59
1	Al 396.153Radial†	-96.9	-7.9	-8.3585	ug/L	-8.3585	ppb	16:48:59
1	Ca 317.933Radial†	17.0	-1.1	-2.1432	ug/L	-2.1432	ppb	16:49:19
1	Fe 238.204 Radial†	5.1	-0.9	-11.425	ug/L	-11.425	ppb	16:49:19
1	K 766.490 Radial†	3105.3	213.6	39.735	ug/L	39.735	ppb	16:48:59
1	Mg 279.077 IEC†	0.8	-2.2	-90.554	ug/L	-90.554	ppb	16:49:19
1	Na 589.592 Radial†	-1097.2	-56.2	-24.730	ug/L	-24.730	ppb	16:48:59
1	Sr 421.552†	-12.3	-26.6	-0.2557	ug/L	-0.2557	ppb	16:48:59
1	Sc 361.383	688566.6	688566.6	99.852	%			16:50:16
1	Y 371.029	538828.1	538828.1	99.447	%			16:50:16
1	Ag 328.068†	102.0	2.3	0.0095	ug/L	0.0095	ppb	16:50:16
1	As 188.979†	-29.1	-6.4	-3.1691	ug/L	-3.1691	ppb	16:50:36
1	B 249.677†	-513.5	68.8	1.7330	ug/L	1.7330	ppb	16:50:36
1	Ba 233.527†	-1.2	-2.0	-0.0189	ug/L	-0.0189	ppb	16:50:36
1	Be 313.107†	-4538.6	-22.1	-0.0093	ug/L	-0.0093	ppb	16:50:16
1	Cd 226.502†	-199.5	13.7	0.2015	ug/L	0.2015	ppb	16:50:36
1	Co 228.616†	-59.9	-0.3	-0.0062	ug/L	-0.0062	ppb	16:50:36
1	Cr 267.716†	82.5	-8.7	-0.1290	ug/L	-0.1290	ppb	16:50:36
1	Cu 324.752†	5541.5	-138.3	-0.4613	ug/L	-0.4613	ppb	16:50:16
1	Mn 257.610†	484.1	39.8	0.0541	ug/L	0.0541	ppb	16:50:36
1	Mo 202.031†	17.9	5.5	0.5266	ug/L	0.5266	ppb	16:50:36
1	Ni 231.604†	84.4	9.8	0.3202	ug/L	0.3202	ppb	16:50:36
1	P 214.914†	213.9	-4.2	-2.6227	ug/L	-2.6227	ppb	16:50:36
1	Pb 220.353†	-66.2	0.7	0.1048	ug/L	0.1048	ppb	16:50:36
1	S 181.975 Axial†	34.0	-6.2	-9.2600	ug/L	-9.2600	ppb	16:50:36
1	Sb 206.836†	46.0	14.3	5.7155	ug/L	5.7155	ppb	16:50:36
1	Se 196.026†	-22.5	-0.4	-0.3234	ug/L	-0.3234	ppb	16:50:36
1	Si 251.611†	558.2	62.4	2.2790	ug/L	2.2790	ppb	16:50:36
1	Sn 189.927†	0.5	-3.7	-0.8426	ug/L	-0.8426	ppb	16:50:36
1	Ti 334.940†	-1514.2	-95.0	-0.1654	ug/L	-0.1654	ppb	16:50:16
1	Tl 190.801†	-39.0	-1.1	-0.4269	ug/L	-0.4269	ppb	16:50:36
1	U 409.014†	-2395.7	7.3	0.2814	ug/L	0.2814	ppb	16:50:16
1	V 292.402†	-1692.8	21.1	0.1942	ug/L	0.1942	ppb	16:50:16
1	Zn 213.857†	622.5	-41.2	-0.4704	ug/L	-0.4704	ppb	16:50:36
1	SiO2†	563.7	25.4	1.9916	ug/L	1.9916	ppb	16:51:32
2	Sc Radial	3908.3	3908.3	102	%			16:49:44
2	Y RADIAL	4216.0	4216.0	97.33	%			16:49:24
2	Al 396.153Radial†	-114.6	-20.3	-21.379	ug/L	-21.379	ppb	16:49:24
2	Ca 317.933Radial†	16.3	-2.7	-5.2137	ug/L	-5.2137	ppb	16:49:44
2	Fe 238.204 Radial†	5.0	-1.2	-15.832	ug/L	-15.832	ppb	16:49:44
2	K 766.490 Radial†	3170.1	117.7	21.874	ug/L	21.874	ppb	16:49:24
2	Mg 279.077 IEC†	2.5	-0.6	-23.337	ug/L	-23.337	ppb	16:49:44
2	Na 589.592 Radial†	-1052.8	43.8	19.269	ug/L	19.269	ppb	16:49:24
2	Sr 421.552†	28.5	14.1	0.1356	ug/L	0.1356	ppb	16:49:24
2	Sc 361.383	689663.8	689663.8	100.01	%			16:50:41
2	Y 371.029	539863.9	539863.9	99.639	%			16:50:41
2	Ag 328.068†	49.8	-50.1	-0.2810	ug/L	-0.2810	ppb	16:50:41
2	As 188.979†	-31.3	-8.5	-4.2361	ug/L	-4.2361	ppb	16:51:01
2	B 249.677†	-534.7	48.3	1.2183	ug/L	1.2183	ppb	16:51:01
2	Ba 233.527†	-1.9	-2.6	-0.0266	ug/L	-0.0266	ppb	16:51:01
2	Be 313.107†	-4399.3	124.4	0.0501	ug/L	0.0501	ppb	16:50:41
2	Cd 226.502†	-198.6	14.9	0.2187	ug/L	0.2187	ppb	16:51:01
2	Co 228.616†	-52.9	6.8	0.1707	ug/L	0.1707	ppb	16:51:01
2	Cr 267.716†	64.9	-26.4	-0.3907	ug/L	-0.3907	ppb	16:51:01
2	Cu 324.752†	5449.0	-239.6	-0.7981	ug/L	-0.7981	ppb	16:50:41
2	Mn 257.610†	464.3	19.3	0.0243	ug/L	0.0243	ppb	16:51:01
2	Mo 202.031†	17.0	4.5	0.4330	ug/L	0.4330	ppb	16:51:01
2	Ni 231.604†	68.2	-6.5	-0.2111	ug/L	-0.2111	ppb	16:51:01

2	P 214.914†	219.9	1.4	1.0506 ug/L	1.0506 ppb	16:51:01
2	Pb 220.353†	-72.8	-5.8	-0.9096 ug/L	-0.9096 ppb	16:51:01
2	S 181.975 Axial†	35.2	-5.0	-7.5558 ug/L	-7.5558 ppb	16:51:01
2	Sb 206.836†	33.2	1.5	0.6248 ug/L	0.6248 ppb	16:51:01
2	Se 196.026†	-33.8	-11.7	-8.7439 ug/L	-8.7439 ppb	16:51:01
2	Si 251.611†	532.3	35.6	1.2973 ug/L	1.2973 ppb	16:51:01
2	Sn 189.927†	13.0	8.9	2.0409 ug/L	2.0409 ppb	16:51:01
2	Ti 334.940†	-1465.9	-44.2	-0.0784 ug/L	-0.0784 ppb	16:50:41
2	Tl 190.801†	-33.8	4.2	1.6003 ug/L	1.6003 ppb	16:51:01
2	U 409.014†	-2439.0	-32.2	-1.2384 ug/L	-1.2384 ppb	16:50:41
2	V 292.402†	-1745.5	-28.9	-0.2486 ug/L	-0.2486 ppb	16:50:41
2	Zn 213.857†	633.2	-31.5	-0.3556 ug/L	-0.3556 ppb	16:51:01
2	SiO2†	558.5	19.3	1.5139 ug/L	1.5139 ppb	16:51:37
3	Sc Radial	3860.8	3860.8	101 %		16:50:09
3	Y RADIAL	4238.7	4238.7	97.85 %		16:49:49
3	Al 396.153Radial†	-97.1	-4.2	-4.5052 ug/L	-4.5052 ppb	16:49:49
3	Ca 317.933Radial†	18.8	0.0	0.0860 ug/L	0.0860 ppb	16:50:09
3	Fe 238.204 Radial†	5.2	-1.0	-13.324 ug/L	-13.324 ppb	16:50:09
3	K 766.490 Radial†	3170.2	156.2	29.049 ug/L	29.049 ppb	16:49:49
3	Mg 279.077 IEC†	-1.7	-4.7	-192.71 ug/L	-192.71 ppb	16:50:09
3	Na 589.592 Radial†	-1072.0	12.0	5.2756 ug/L	5.2756 ppb	16:49:49
3	Sr 421.552†	7.2	-6.7	-0.0644 ug/L	-0.0644 ppb	16:49:49
3	Sc 361.383	658120.4	658120.4	95.437 %		16:51:07
3	Y 371.029	515803.9	515803.9	95.198 %		16:51:07
3	Ag 328.068†	149.0	56.2	0.3076 ug/L	0.3076 ppb	16:51:07
3	As 188.979†	-25.9	-4.3	-2.1473 ug/L	-2.1473 ppb	16:51:27
3	B 249.677†	-553.5	3.0	0.0802 ug/L	0.0802 ppb	16:51:27
3	Ba 233.527†	-1.5	-2.4	-0.0254 ug/L	-0.0254 ppb	16:51:27
3	Be 313.107†	-4229.9	91.2	0.0365 ug/L	0.0365 ppb	16:51:07
3	Cd 226.502†	-217.0	-13.9	-0.2038 ug/L	-0.2038 ppb	16:51:27
3	Co 228.616†	-85.3	-29.7	-0.7338 ug/L	-0.7338 ppb	16:51:27
3	Cr 267.716†	87.9	0.8	0.0114 ug/L	0.0114 ppb	16:51:27
3	Cu 324.752†	5320.4	-113.2	-0.3740 ug/L	-0.3740 ppb	16:51:07
3	Mn 257.610†	474.0	51.6	0.0734 ug/L	0.0734 ppb	16:51:27
3	Mo 202.031†	19.5	7.9	0.7586 ug/L	0.7586 ppb	16:51:27
3	Ni 231.604†	70.7	-0.5	-0.0169 ug/L	-0.0169 ppb	16:51:27
3	P 214.914†	223.7	15.8	10.229 ug/L	10.229 ppb	16:51:27
3	Pb 220.353†	-66.6	-2.8	-0.4423 ug/L	-0.4423 ppb	16:51:27
3	S 181.975 Axial†	41.6	3.4	5.0442 ug/L	5.0442 ppb	16:51:27
3	Sb 206.836†	39.1	9.2	3.7302 ug/L	3.7302 ppb	16:51:27
3	Se 196.026†	-23.3	-2.3	-1.7555 ug/L	-1.7555 ppb	16:51:27
3	Si 251.611†	520.5	48.8	1.7777 ug/L	1.7777 ppb	16:51:27
3	Sn 189.927†	11.4	7.8	1.7894 ug/L	1.7894 ppb	16:51:27
3	Ti 334.940†	-1425.5	-72.2	-0.1124 ug/L	-0.1124 ppb	16:51:07
3	Tl 190.801†	-36.5	-0.3	-0.1276 ug/L	-0.1276 ppb	16:51:27
3	U 409.014†	-2460.4	-171.6	-6.6066 ug/L	-6.6066 ppb	16:51:07
3	V 292.402†	-1732.6	-99.0	-0.8766 ug/L	-0.8766 ppb	16:51:07
3	Zn 213.857†	620.9	-14.0	-0.1579 ug/L	-0.1579 ppb	16:51:27
3	SiO2†	545.0	31.9	2.4979 ug/L	2.4979 ppb	16:51:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	678783.6	98.433	%	2.5962				2.64%
Sc Radial	3827.7	99.7	%	2.64				2.65%
Y 371.029	531498.6	98.095	%	2.5104				2.56%
Y RADIAL	4169.0	96.24	%	2.349				2.44%
Ag 328.068†	2.8	0.0121	ug/L	0.29433	0.0121	ppb	0.29433	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-10.8	-11.414	ug/L	8.8420	-11.414	ppb	8.8420	77.47%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-6.4	-3.1842	ug/L	1.04450	-3.1842	ppb	1.04450	32.80%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	40.1	1.0105	ug/L	0.84575	1.0105	ppb	0.84575	83.70%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.3	-0.0236	ug/L	0.00411	-0.0236	ppb	0.00411	17.41%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	64.5	0.0258	ug/L	0.03111	0.0258	ppb	0.03111	120.77%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.2	-2.4236	ug/L	2.66097	-2.4236	ppb	2.66097	109.79%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                4.9      0.0721 ug/L       0.23913      0.0721 ppb        0.23913 331.53%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -7.7     -0.1898 ug/L       0.47940     -0.1898 ppb        0.47940 252.60%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -11.4     -0.1694 ug/L       0.20407     -0.1694 ppb        0.20407 120.47%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -163.7     -0.5444 ug/L       0.22395     -0.5444 ppb        0.22395  41.13%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.1     -13.527 ug/L        2.2107     -13.527 ppb         2.2107  16.34%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        162.5      30.219 ug/L        8.9879      30.219 ppb         8.9879  29.74%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -2.5     -102.20 ug/L        85.284     -102.20 ppb         85.284  83.45%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               36.9      0.0506 ug/L       0.02472      0.0506 ppb        0.02472  48.85%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.0      0.5727 ug/L       0.16763      0.5727 ppb        0.16763  29.27%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -0.1     -0.0617 ug/L      22.48015     -0.0617 ppb       22.48015 >999.9%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                0.9      0.0307 ug/L       0.26885      0.0307 ppb        0.26885 875.56%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 4.3      2.8858 ug/L       6.61960      2.8858 ppb        6.61960 229.39%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -2.6     -0.4157 ug/L       0.50772     -0.4157 ppb        0.50772 122.14%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -2.6     -3.9239 ug/L       7.81316     -3.9239 ppb        7.81316 199.12%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                8.3      3.3568 ug/L       2.56578      3.3568 ppb        2.56578  76.43%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -4.8     -3.6076 ug/L       4.50542     -3.6076 ppb        4.50542 124.89%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               48.9      1.7847 ug/L       0.49087      1.7847 ppb        0.49087  27.51%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                4.3      0.9959 ug/L       1.59712      0.9959 ppb        1.59712 160.37%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -6.4     -0.0615 ug/L       0.19566     -0.0615 ppb        0.19566 318.33%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -70.5     -0.1187 ug/L       0.04385     -0.1187 ppb        0.04385  36.93%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.9      0.3486 ug/L       1.09428      0.3486 ppb        1.09428 313.94%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -65.5     -2.5212 ug/L       3.61873     -2.5212 ppb        3.61873 143.53%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -35.6     -0.3103 ug/L       0.53805     -0.3103 ppb        0.53805 173.38%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -28.9     -0.3280 ug/L       0.15807     -0.3280 ppb        0.15807  48.19%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     25.5      2.0011 ug/L       0.49211      2.0011 ppb        0.49211  24.59%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 28
Sample ID: 1202060848|960825|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 4/1/2010 16:53:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202060848|960825|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3883.3	3883.3	101	%			16:55:45
1	Y RADIAL	4231.1	4231.1	97.67	%			16:55:45
1	Al 396.153Radial†	-98.0	-4.6	-4.8475	ug/L	-4.8475	ppb	16:56:05
1	Ca 317.933Radial†	19.3	0.4	0.8576	ug/L	0.8576	ppb	16:56:05
1	Fe 238.204 Radial†	4.9	-1.4	-17.188	ug/L	-17.188	ppb	16:56:05
1	K 766.490 Radial†	3005.9	-24.6	-4.5825	ug/L	-4.5825	ppb	16:55:45
1	Mg 279.077 IEC†	5.4	2.3	96.188	ug/L	96.188	ppb	16:56:05
1	Na 589.592 Radial†	-992.6	96.7	42.542	ug/L	42.542	ppb	16:55:45
1	Sr 421.552†	15.2	1.2	0.0111	ug/L	0.0111	ppb	16:55:45
1	Sc 361.383	699850.7	699850.7	101.49	%			16:57:02
1	Y 371.029	547615.7	547615.7	101.07	%			16:57:02
1	Ag 328.068†	149.4	47.4	0.2552	ug/L	0.2552	ppb	16:57:02
1	As 188.979†	-19.7	3.4	1.6825	ug/L	1.6825	ppb	16:57:22
1	B 249.677†	-564.0	27.3	0.6892	ug/L	0.6892	ppb	16:57:22
1	Ba 233.527†	3.9	3.1	0.0320	ug/L	0.0320	ppb	16:57:22
1	Be 313.107†	-4641.5	-50.1	-0.0198	ug/L	-0.0198	ppb	16:57:02
1	Cd 226.502†	-210.9	5.6	0.0854	ug/L	0.0854	ppb	16:57:22
1	Co 228.616†	-63.7	-3.1	-0.0778	ug/L	-0.0778	ppb	16:57:22
1	Cr 267.716†	106.7	13.8	0.2012	ug/L	0.2012	ppb	16:57:22
1	Cu 324.752†	5585.5	-184.4	-0.6186	ug/L	-0.6186	ppb	16:57:02
1	Mn 257.610†	531.2	78.4	0.0959	ug/L	0.0959	ppb	16:57:22
1	Mo 202.031†	9.0	-3.6	-0.3501	ug/L	-0.3501	ppb	16:57:22
1	Ni 231.604†	84.7	8.8	0.2879	ug/L	0.2879	ppb	16:57:22
1	P 214.914†	220.7	-1.0	-0.5225	ug/L	-0.5225	ppb	16:57:22
1	Pb 220.353†	-71.9	-3.9	-0.6085	ug/L	-0.6085	ppb	16:57:22
1	S 181.975 Axial†	45.4	4.5	6.6957	ug/L	6.6957	ppb	16:57:22
1	Sb 206.836†	38.8	6.5	2.6125	ug/L	2.6125	ppb	16:57:22
1	Se 196.026†	-15.1	7.2	5.3024	ug/L	5.3024	ppb	16:57:22
1	Si 251.611†	695.8	189.0	6.9223	ug/L	6.9223	ppb	16:57:22
1	Sn 189.927†	4.8	0.6	0.1466	ug/L	0.1466	ppb	16:57:22
1	Ti 334.940†	-1328.0	113.0	0.1943	ug/L	0.1943	ppb	16:57:02
1	Tl 190.801†	-34.7	3.8	1.4486	ug/L	1.4486	ppb	16:57:22
1	U 409.014†	-2271.5	168.3	6.4853	ug/L	6.4853	ppb	16:57:02
1	V 292.402†	-1603.8	136.2	1.2118	ug/L	1.2118	ppb	16:57:02
1	Zn 213.857†	713.1	38.0	0.4363	ug/L	0.4363	ppb	16:57:22
1	SiO2†	740.7	190.7	15.067	ug/L	15.067	ppb	16:58:18
2	Sc Radial	3968.2	3968.2	103	%			16:56:10
2	Y RADIAL	4341.8	4341.8	100.2	%			16:56:10
2	Al 396.153Radial†	-92.0	3.3	3.3985	ug/L	3.3985	ppb	16:56:30
2	Ca 317.933Radial†	18.9	-0.4	-0.7160	ug/L	-0.7160	ppb	16:56:30
2	Fe 238.204 Radial†	9.1	2.6	32.809	ug/L	32.809	ppb	16:56:30
2	K 766.490 Radial†	3032.5	-62.3	-11.605	ug/L	-11.605	ppb	16:56:10
2	Mg 279.077 IEC†	-0.1	-3.1	-126.64	ug/L	-126.64	ppb	16:56:30
2	Na 589.592 Radial†	-1028.3	83.1	36.561	ug/L	36.561	ppb	16:56:10
2	Sr 421.552†	3.3	-10.7	-0.1028	ug/L	-0.1028	ppb	16:56:10
2	Sc 361.383	697766.8	697766.8	101.19	%			16:57:27
2	Y 371.029	546562.0	546562.0	100.87	%			16:57:27
2	Ag 328.068†	122.9	21.5	0.1270	ug/L	0.1270	ppb	16:57:27
2	As 188.979†	-29.6	-6.4	-3.1749	ug/L	-3.1749	ppb	16:57:47
2	B 249.677†	-571.4	18.3	0.4548	ug/L	0.4548	ppb	16:57:47
2	Ba 233.527†	-13.1	-13.7	-0.1303	ug/L	-0.1303	ppb	16:57:47
2	Be 313.107†	-4548.1	28.5	0.0119	ug/L	0.0119	ppb	16:57:27
2	Cd 226.502†	-227.8	-11.7	-0.1733	ug/L	-0.1733	ppb	16:57:47
2	Co 228.616†	-57.7	2.6	0.0667	ug/L	0.0667	ppb	16:57:47
2	Cr 267.716†	97.0	4.6	0.0699	ug/L	0.0699	ppb	16:57:47
2	Cu 324.752†	5605.3	-148.3	-0.4953	ug/L	-0.4953	ppb	16:57:27
2	Mn 257.610†	522.6	71.5	0.1009	ug/L	0.1009	ppb	16:57:47
2	Mo 202.031†	23.2	10.4	1.0048	ug/L	1.0048	ppb	16:57:47
2	Ni 231.604†	63.4	-12.0	-0.3911	ug/L	-0.3911	ppb	16:57:47

2	P 214.914†	231.1	9.9	6.4303	ug/L	6.4303 ppb	16:57:47
2	Pb 220.353†	-86.4	-18.3	-2.8851	ug/L	-2.8851 ppb	16:57:47
2	S 181.975 Axial†	31.5	-9.1	-13.638	ug/L	-13.638 ppb	16:57:47
2	Sb 206.836†	47.1	14.8	5.9670	ug/L	5.9670 ppb	16:57:47
2	Se 196.026†	-26.2	-3.8	-2.6993	ug/L	-2.6993 ppb	16:57:47
2	Si 251.611†	721.1	216.0	7.8953	ug/L	7.8953 ppb	16:57:47
2	Sn 189.927†	9.6	5.4	1.2371	ug/L	1.2371 ppb	16:57:47
2	Ti 334.940†	-1338.1	99.0	0.1875	ug/L	0.1875 ppb	16:57:27
2	Tl 190.801†	-36.9	1.5	0.5598	ug/L	0.5598 ppb	16:57:47
2	U 409.014†	-2290.9	142.5	5.4832	ug/L	5.4832 ppb	16:57:27
2	V 292.402†	-1661.0	74.9	0.6776	ug/L	0.6776 ppb	16:57:27
2	Zn 213.857†	716.7	43.7	0.4984	ug/L	0.4984 ppb	16:57:47
2	SiO2†	716.7	169.1	13.324	ug/L	13.324 ppb	16:58:23
3	Sc Radial	4057.2	4057.2	106	%		16:56:35
3	Y RADIAL	4441.0	4441.0	102.5	%		16:56:35
3	Al 396.153Radial†	-89.0	8.1	8.5081	ug/L	8.5081 ppb	16:56:55
3	Ca 317.933Radial†	23.7	3.8	7.4055	ug/L	7.4055 ppb	16:56:55
3	Fe 238.204 Radial†	8.1	1.5	19.290	ug/L	19.290 ppb	16:56:55
3	K 766.490 Radial†	2970.7	-185.2	-34.470	ug/L	-34.470 ppb	16:56:35
3	Mg 279.077 IEC†	2.4	-0.7	-29.502	ug/L	-29.502 ppb	16:56:55
3	Na 589.592 Radial†	-980.5	150.1	66.075	ug/L	66.075 ppb	16:56:35
3	Sr 421.552†	22.1	7.1	0.0678	ug/L	0.0678 ppb	16:56:35
3	Sc 361.383	696321.2	696321.2	100.98	%		16:57:52
3	Y 371.029	545081.3	545081.3	100.60	%		16:57:52
3	Ag 328.068†	80.2	-20.4	-0.1133	ug/L	-0.1133 ppb	16:57:52
3	As 188.979†	-32.4	-9.3	-4.5733	ug/L	-4.5733 ppb	16:58:13
3	B 249.677†	-569.3	19.3	0.4820	ug/L	0.4820 ppb	16:58:13
3	Ba 233.527†	7.6	6.8	0.0649	ug/L	0.0649 ppb	16:58:13
3	Be 313.107†	-4571.9	-4.5	-0.0013	ug/L	-0.0013 ppb	16:57:52
3	Cd 226.502†	-206.0	9.4	0.1366	ug/L	0.1366 ppb	16:58:13
3	Co 228.616†	-67.0	-6.6	-0.1657	ug/L	-0.1657 ppb	16:58:13
3	Cr 267.716†	92.0	-0.2	-0.0037	ug/L	-0.0037 ppb	16:58:13
3	Cu 324.752†	5604.4	-137.8	-0.4612	ug/L	-0.4612 ppb	16:57:52
3	Mn 257.610†	510.1	60.1	0.0809	ug/L	0.0809 ppb	16:58:13
3	Mo 202.031†	9.8	-2.7	-0.2624	ug/L	-0.2624 ppb	16:58:13
3	Ni 231.604†	67.3	-8.0	-0.2601	ug/L	-0.2601 ppb	16:58:13
3	P 214.914†	221.8	1.2	0.8311	ug/L	0.8311 ppb	16:58:13
3	Pb 220.353†	-69.7	-2.1	-0.3242	ug/L	-0.3242 ppb	16:58:13
3	S 181.975 Axial†	47.1	6.4	9.6563	ug/L	9.6563 ppb	16:58:13
3	Sb 206.836†	38.1	6.0	2.4044	ug/L	2.4044 ppb	16:58:13
3	Se 196.026†	-17.9	4.4	3.2841	ug/L	3.2841 ppb	16:58:13
3	Si 251.611†	720.2	216.6	7.9338	ug/L	7.9338 ppb	16:58:13
3	Sn 189.927†	8.3	4.1	0.9515	ug/L	0.9515 ppb	16:58:13
3	Ti 334.940†	-1321.4	112.8	0.2056	ug/L	0.2056 ppb	16:57:52
3	Tl 190.801†	-39.8	-1.5	-0.5545	ug/L	-0.5545 ppb	16:58:13
3	U 409.014†	-2275.5	153.0	5.8928	ug/L	5.8928 ppb	16:57:52
3	V 292.402†	-1782.6	-49.0	-0.4276	ug/L	-0.4276 ppb	16:57:52
3	Zn 213.857†	725.3	53.7	0.6138	ug/L	0.6138 ppb	16:58:13
3	SiO2†	732.4	186.2	14.708	ug/L	14.708 ppb	16:58:28

Mean Data: 1202060848|960825|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	697979.5	101.22	%	0.257				0.25%
Sc Radial	3969.6	103	%	2.3				2.19%
Y 371.029	546419.7	100.85	%	0.235				0.23%
Y RADIAL	4337.9	100.1	%	2.42				2.42%
Ag 328.068†	16.2	0.0896	ug/L	0.18704	0.0896	ppb	0.18704	208.68%
Al 396.153Radial†	2.2	2.3530	ug/L	6.73890	2.3530	ppb	6.73890	286.40%
As 188.979†	-4.1	-2.0219	ug/L	3.28340	-2.0219	ppb	3.28340	162.39%
B 249.677†	21.6	0.5420	ug/L	0.12819	0.5420	ppb	0.12819	23.65%
Ba 233.527†	-1.3	-0.0111	ug/L	0.10450	-0.0111	ppb	0.10450	941.24%
Be 313.107†	-8.7	-0.0031	ug/L	0.01592	-0.0031	ppb	0.01592	519.03%
Ca 317.933Radial†	1.3	2.5157	ug/L	4.30716	2.5157	ppb	4.30716	171.21%
Cd 226.502†	1.1	0.0162	ug/L	0.16616	0.0162	ppb	0.16616	>999.9%
Co 228.616†	-2.4	-0.0590	ug/L	0.11735	-0.0590	ppb	0.11735	199.04%
Cr 267.716†	6.1	0.0891	ug/L	0.10384	0.0891	ppb	0.10384	116.52%
Cu 324.752†	-156.8	-0.5251	ug/L	0.08281	-0.5251	ppb	0.08281	15.77%
Fe 238.204 Radial†	0.9	11.637	ug/L	25.8620	11.637	ppb	25.8620	222.23%
K 766.490 Radial†	-90.7	-16.886	ug/L	15.6281	-16.886	ppb	15.6281	92.55%

Mg 279.077 IEC†	-0.5	-19.986	ug/L	111.7203	-19.986	ppb	111.7203 558.99%
Mn 257.610†	70.0	0.0926	ug/L	0.01040	0.0926	ppb	0.01040 11.23%
Mo 202.031†	1.4	0.1308	ug/L	0.75823	0.1308	ppb	0.75823 579.89%
Na 589.592 Radial†	109.9	48.393	ug/L	15.6029	48.393	ppb	15.6029 32.24%
Ni 231.604†	-3.7	-0.1211	ug/L	0.36019	-0.1211	ppb	0.36019 297.39%
P 214.914†	3.4	2.2463	ug/L	3.68612	2.2463	ppb	3.68612 164.10%
Pb 220.353†	-8.1	-1.2726	ug/L	1.40367	-1.2726	ppb	1.40367 110.30%
S 181.975 Axial†	0.6	0.9046	ug/L	12.68105	0.9046	ppb	12.68105 >999.9%
Sb 206.836†	9.1	3.6613	ug/L	1.99951	3.6613	ppb	1.99951 54.61%
Se 196.026†	2.6	1.9624	ug/L	4.16141	1.9624	ppb	4.16141 212.06%
Si 251.611†	207.2	7.5838	ug/L	0.57319	7.5838	ppb	0.57319 7.56%
Sn 189.927†	3.4	0.7784	ug/L	0.56547	0.7784	ppb	0.56547 72.64%
Sr 421.552†	-0.8	-0.0080	ug/L	0.08691	-0.0080	ppb	0.08691 >999.9%
Ti 334.940†	108.3	0.1958	ug/L	0.00912	0.1958	ppb	0.00912 4.66%
Tl 190.801†	1.3	0.4846	ug/L	1.00365	0.4846	ppb	1.00365 207.10%
U 409.014†	154.6	5.9538	ug/L	0.50383	5.9538	ppb	0.50383 8.46%
V 292.402†	54.0	0.4873	ug/L	0.83614	0.4873	ppb	0.83614 171.59%
Zn 213.857†	45.1	0.5162	ug/L	0.09009	0.5162	ppb	0.09009 17.45%
SiO2†	182.0	14.367	ug/L	0.9202	14.367	ppb	0.9202 6.41%

Sequence No.: 29
Sample ID: 1202060849|960825|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 4/1/2010 17:00:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202060849|960825|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3768.5	3768.5	98.2	%			17:02:52
1	Y RADIAL	4344.4	4344.4	100.3	%			17:02:32
1	Al 396.153Radial†	4794.1	4975.5	5214.1	ug/L	5214.1	ppb	17:02:32
1	Ca 317.933Radial†	2618.5	2648.5	5200.5	ug/L	5200.5	ppb	17:02:52
1	Fe 238.204 Radial†	387.0	388.0	4945.6	ug/L	4945.6	ppb	17:02:52
1	K 766.490 Radial†	30276.3	27843.6	5173.6	ug/L	5173.6	ppb	17:02:32
1	Mg 279.077 IEC†	122.5	121.7	5014.3	ug/L	5014.3	ppb	17:02:52
1	Na 589.592 Radial†	9869.9	11131.2	4899.3	ug/L	4899.3	ppb	17:02:32
1	Sr 421.552†	49705.6	50616.3	485.96	ug/L	485.96	ppb	17:02:32
1	Sc 361.383	696189.1	696189.1	100.96	%			17:03:51
1	Y 371.029	539200.8	539200.8	99.516	%			17:03:51
1	Ag 328.068†	89215.3	88269.4	489.36	ug/L	489.36	ppb	17:03:51
1	As 188.979†	978.8	992.3	495.69	ug/L	495.69	ppb	17:04:11
1	B 249.677†	18905.0	19308.7	483.59	ug/L	483.59	ppb	17:03:51
1	Ba 233.527†	52697.3	52196.8	505.72	ug/L	505.72	ppb	17:03:51
1	Be 313.107†	1236893.6	1229688.3	497.78	ug/L	497.78	ppb	17:03:51
1	Cd 226.502†	32931.7	32832.9	479.90	ug/L	479.90	ppb	17:04:11
1	Co 228.616†	19933.7	19804.3	490.59	ug/L	490.59	ppb	17:04:11
1	Cr 267.716†	33663.6	33253.1	491.57	ug/L	491.57	ppb	17:03:51
1	Cu 324.752†	156532.4	149360.2	497.46	ug/L	497.46	ppb	17:03:51
1	Mn 257.610†	392700.9	388532.2	503.02	ug/L	503.02	ppb	17:03:51
1	Mo 202.031†	5131.9	5070.8	487.53	ug/L	487.53	ppb	17:04:11
1	Ni 231.604†	15402.5	15181.8	494.76	ug/L	494.76	ppb	17:04:11
1	P 214.914†	1135.9	906.6	482.69	ug/L	482.69	ppb	17:04:11
1	Pb 220.353†	3088.8	3126.6	493.63	ug/L	493.63	ppb	17:04:11
1	S 181.975 Axial†	3404.0	3331.5	5004.6	ug/L	5004.6	ppb	17:04:11
1	Sb 206.836†	1286.6	1242.6	514.71	ug/L	514.71	ppb	17:04:11
1	Se 196.026†	652.6	668.5	511.91	ug/L	511.91	ppb	17:04:11
1	Si 251.611†	137374.9	135575.7	4957.3	ug/L	4957.3	ppb	17:03:51
1	Sn 189.927†	2176.5	2151.7	495.25	ug/L	495.25	ppb	17:04:11
1	Ti 334.940†	280181.7	278946.4	506.16	ug/L	506.16	ppb	17:03:51
1	Tl 190.801†	1250.8	1276.9	494.73	ug/L	494.73	ppb	17:04:11
1	U 409.014†	10355.8	12664.2	486.16	ug/L	486.16	ppb	17:03:51
1	V 292.402†	54718.2	55915.8	499.40	ug/L	499.40	ppb	17:03:51
1	Zn 213.857†	44237.0	43153.0	489.03	ug/L	489.03	ppb	17:03:51
1	SiO2†	137515.7	135672.6	10699	ug/L	10699	ppb	17:05:11
2	Sc Radial	3847.0	3847.0	100	%			17:03:17
2	Y RADIAL	4118.1	4118.1	95.07	%			17:02:57
2	Al 396.153Radial†	4533.4	4615.8	4835.2	ug/L	4835.2	ppb	17:02:57
2	Ca 317.933Radial†	2652.4	2627.9	5160.1	ug/L	5160.1	ppb	17:03:17
2	Fe 238.204 Radial†	393.3	386.3	4924.4	ug/L	4924.4	ppb	17:03:17
2	K 766.490 Radial†	29127.4	26068.4	4843.6	ug/L	4843.6	ppb	17:02:57
2	Mg 279.077 IEC†	128.1	124.8	5142.0	ug/L	5142.0	ppb	17:03:17
2	Na 589.592 Radial†	9207.0	10264.9	4517.9	ug/L	4517.9	ppb	17:02:57
2	Sr 421.552†	46929.5	46813.9	449.45	ug/L	449.45	ppb	17:02:57
2	Sc 361.383	688734.8	688734.8	99.876	%			17:04:18
2	Y 371.029	534710.9	534710.9	98.688	%			17:04:18
2	Ag 328.068†	87824.3	87833.2	486.94	ug/L	486.94	ppb	17:04:18
2	As 188.979†	966.5	990.5	494.75	ug/L	494.75	ppb	17:04:38
2	B 249.677†	18551.7	19157.7	479.80	ug/L	479.80	ppb	17:04:18
2	Ba 233.527†	51759.2	51822.5	502.10	ug/L	502.10	ppb	17:04:18
2	Be 313.107†	1211148.5	1217171.7	492.72	ug/L	492.72	ppb	17:04:18
2	Cd 226.502†	32607.6	32861.4	480.32	ug/L	480.32	ppb	17:04:38
2	Co 228.616†	19732.8	19816.9	490.92	ug/L	490.92	ppb	17:04:38
2	Cr 267.716†	32986.8	32936.4	486.89	ug/L	486.89	ppb	17:04:18
2	Cu 324.752†	153913.1	148415.7	494.31	ug/L	494.31	ppb	17:04:18
2	Mn 257.610†	384879.5	384911.2	498.32	ug/L	498.32	ppb	17:04:18
2	Mo 202.031†	5114.6	5108.4	491.14	ug/L	491.14	ppb	17:04:38
2	Ni 231.604†	15254.8	15199.1	495.32	ug/L	495.32	ppb	17:04:38

2	P 214.914†	1101.1	883.9	468.74 ug/L	468.74 ppb	17:04:38
2	Pb 220.353†	3042.2	3112.9	491.41 ug/L	491.41 ppb	17:04:38
2	S 181.975 Axial†	3343.3	3307.2	4968.3 ug/L	4968.3 ppb	17:04:38
2	Sb 206.836†	1273.0	1242.9	514.89 ug/L	514.89 ppb	17:04:38
2	Se 196.026†	624.0	646.9	495.68 ug/L	495.68 ppb	17:04:38
2	Si 251.611†	134492.4	134162.3	4905.5 ug/L	4905.5 ppb	17:04:18
2	Sn 189.927†	2152.3	2150.8	495.03 ug/L	495.03 ppb	17:04:38
2	Ti 334.940†	275445.9	277208.5	502.99 ug/L	502.99 ppb	17:04:18
2	Tl 190.801†	1239.1	1278.6	495.33 ug/L	495.33 ppb	17:04:38
2	U 409.014†	10260.3	12679.5	486.76 ug/L	486.76 ppb	17:04:18
2	V 292.402†	53875.7	55658.8	497.20 ug/L	497.20 ppb	17:04:18
2	Zn 213.857†	43319.8	42708.8	483.96 ug/L	483.96 ppb	17:04:18
2	SiO2†	138560.8	138193.2	10898 ug/L	10898 ppb	17:05:16
3	Sc Radial	3896.1	3896.1	101 %		17:03:42
3	Y RADIAL	4362.5	4362.5	100.7 %		17:03:22
3	Al 396.153Radial†	4829.9	4850.9	5082.6 ug/L	5082.6 ppb	17:03:22
3	Ca 317.933Radial†	2706.3	2647.7	5198.9 ug/L	5198.9 ppb	17:03:42
3	Fe 238.204 Radial†	403.8	391.7	4992.8 ug/L	4992.8 ppb	17:03:42
3	K 766.490 Radial†	30693.8	27245.1	5062.4 ug/L	5062.4 ppb	17:03:22
3	Mg 279.077 IEC†	128.0	123.1	5072.2 ug/L	5072.2 ppb	17:03:42
3	Na 589.592 Radial†	9817.7	10750.6	4731.7 ug/L	4731.7 ppb	17:03:22
3	Sr 421.552†	49919.9	49169.7	472.07 ug/L	472.07 ppb	17:03:22
3	Sc 361.383	693061.4	693061.4	100.50 %		17:04:46
3	Y 371.029	538351.7	538351.7	99.359 %		17:04:46
3	Ag 328.068†	88427.1	87884.0	487.24 ug/L	487.24 ppb	17:04:46
3	As 188.979†	987.3	1005.1	501.99 ug/L	501.99 ppb	17:05:06
3	B 249.677†	18706.4	19195.6	480.74 ug/L	480.74 ppb	17:04:46
3	Ba 233.527†	52000.8	51739.4	501.30 ug/L	501.30 ppb	17:04:46
3	Be 313.107†	1221560.3	1219960.9	493.85 ug/L	493.85 ppb	17:04:46
3	Cd 226.502†	32927.9	32976.3	482.00 ug/L	482.00 ppb	17:05:06
3	Co 228.616†	19897.6	19857.5	491.93 ug/L	491.93 ppb	17:05:06
3	Cr 267.716†	33260.7	33002.7	487.87 ug/L	487.87 ppb	17:04:46
3	Cu 324.752†	155055.4	148590.3	494.90 ug/L	494.90 ppb	17:04:46
3	Mn 257.610†	387351.6	384965.2	498.40 ug/L	498.40 ppb	17:04:46
3	Mo 202.031†	5171.8	5133.4	493.55 ug/L	493.55 ppb	17:05:06
3	Ni 231.604†	15407.6	15255.7	497.17 ug/L	497.17 ppb	17:05:06
3	P 214.914†	1112.3	888.3	471.40 ug/L	471.40 ppb	17:05:06
3	Pb 220.353†	3077.2	3128.8	493.96 ug/L	493.96 ppb	17:05:06
3	S 181.975 Axial†	3400.9	3343.6	5023.0 ug/L	5023.0 ppb	17:05:06
3	Sb 206.836†	1298.3	1260.0	521.77 ug/L	521.77 ppb	17:05:06
3	Se 196.026†	651.1	669.9	513.06 ug/L	513.06 ppb	17:05:06
3	Si 251.611†	135445.5	134270.0	4909.4 ug/L	4909.4 ppb	17:04:46
3	Sn 189.927†	2163.8	2148.8	494.57 ug/L	494.57 ppb	17:05:06
3	Ti 334.940†	277379.8	277411.0	503.37 ug/L	503.37 ppb	17:04:46
3	Tl 190.801†	1244.5	1276.2	494.43 ug/L	494.43 ppb	17:05:06
3	U 409.014†	10292.8	12647.7	485.53 ug/L	485.53 ppb	17:04:46
3	V 292.402†	54217.8	55662.4	497.25 ug/L	497.25 ppb	17:04:46
3	Zn 213.857†	43528.3	42645.5	483.21 ug/L	483.21 ppb	17:04:46
3	SiO2†	134172.7	132961.0	10485 ug/L	10485 ppb	17:05:21

Mean Data: 1202060849|960825|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	692661.8	100.45	%	0.543				0.54%
Sc Radial	3837.2	100.0	%	1.68				1.68%
Y 371.029	537421.1	99.188	%	0.4402				0.44%
Y RADIAL	4275.0	98.69	%	3.144				3.19%
Ag 328.068†	87995.6	487.84	ug/L	1.318	487.84	ppb	1.318	0.27%
Al 396.153Radial†	4814.1	5044.0	ug/L	192.35	5044.0	ppb	192.35	3.81%
As 188.979†	996.0	497.48	ug/L	3.940	497.48	ppb	3.940	0.79%
B 249.677†	19220.7	481.37	ug/L	1.977	481.37	ppb	1.977	0.41%
Ba 233.527†	51919.6	503.04	ug/L	2.357	503.04	ppb	2.357	0.47%
Be 313.107†	1222273.6	494.78	ug/L	2.658	494.78	ppb	2.658	0.54%
Ca 317.933Radial†	2641.4	5186.5	ug/L	22.86	5186.5	ppb	22.86	0.44%
Cd 226.502†	32890.2	480.74	ug/L	1.108	480.74	ppb	1.108	0.23%
Co 228.616†	19826.3	491.14	ug/L	0.697	491.14	ppb	0.697	0.14%
Cr 267.716†	33064.0	488.77	ug/L	2.466	488.77	ppb	2.466	0.50%
Cu 324.752†	148788.7	495.56	ug/L	1.674	495.56	ppb	1.674	0.34%
Fe 238.204 Radial†	388.6	4954.2	ug/L	35.04	4954.2	ppb	35.04	0.71%
K 766.490 Radial†	27052.4	5026.5	ug/L	167.89	5026.5	ppb	167.89	3.34%

Mg 279.077 IEC†	123.2	5076.2	ug/L	63.98	5076.2	ppb	63.98	1.26%
Mn 257.610†	386136.2	499.91	ug/L	2.687	499.91	ppb	2.687	0.54%
Mo 202.031†	5104.2	490.74	ug/L	3.031	490.74	ppb	3.031	0.62%
Na 589.592 Radial†	10715.6	4716.3	ug/L	191.13	4716.3	ppb	191.13	4.05%
Ni 231.604†	15212.2	495.75	ug/L	1.259	495.75	ppb	1.259	0.25%
P 214.914†	892.9	474.28	ug/L	7.403	474.28	ppb	7.403	1.56%
Pb 220.353†	3122.8	493.00	ug/L	1.388	493.00	ppb	1.388	0.28%
S 181.975 Axial†	3327.4	4998.6	ug/L	27.84	4998.6	ppb	27.84	0.56%
Sb 206.836†	1248.5	517.12	ug/L	4.029	517.12	ppb	4.029	0.78%
Se 196.026†	661.8	506.88	ug/L	9.720	506.88	ppb	9.720	1.92%
Si 251.611†	134669.3	4924.1	ug/L	28.84	4924.1	ppb	28.84	0.59%
Sn 189.927†	2150.5	494.95	ug/L	0.345	494.95	ppb	0.345	0.07%
Sr 421.552†	48866.6	469.16	ug/L	18.428	469.16	ppb	18.428	3.93%
Ti 334.940†	277855.3	504.17	ug/L	1.730	504.17	ppb	1.730	0.34%
Tl 190.801†	1277.2	494.83	ug/L	0.460	494.83	ppb	0.460	0.09%
U 409.014†	12663.8	486.15	ug/L	0.618	486.15	ppb	0.618	0.13%
V 292.402†	55745.7	497.95	ug/L	1.257	497.95	ppb	1.257	0.25%
Zn 213.857†	42835.8	485.40	ug/L	3.169	485.40	ppb	3.169	0.65%
SiO2†	135609.0	10694	ug/L	206.6	10694	ppb	206.6	1.93%

Sequence No.: 30
Sample ID: 248375001|960825|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 4/1/2010 17:07:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248375001|960825|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4054.5	4054.5	106	%			17:09:25
1	Y RADIAL	4428.1	4428.1	102.2	%			17:09:25
1	Al 396.153Radial†	-76.7	19.7	20.729	ug/L	20.729	ppb	17:09:45
1	Ca 317.933Radial†	35.4	14.8	29.098	ug/L	29.098	ppb	17:09:45
1	Fe 238.204 Radial†	8.3	1.6	20.899	ug/L	20.899	ppb	17:09:45
1	K 766.490 Radial†	4318.2	1092.3	203.06	ug/L	203.06	ppb	17:09:25
1	Mg 279.077 IEC†	1.9	-1.2	-50.661	ug/L	-50.661	ppb	17:09:45
1	Na 589.592 Radial†	-676.9	437.0	192.33	ug/L	192.33	ppb	17:09:25
1	Sr 421.552†	30.0	14.5	0.1391	ug/L	0.1391	ppb	17:09:25
1	Sc 361.383	698165.4	698165.4	101.24	%			17:10:42
1	Y 371.029	546079.5	546079.5	100.79	%			17:10:42
1	Ag 328.068†	59.8	-40.9	-0.2186	ug/L	-0.2186	ppb	17:10:42
1	As 188.979†	-20.0	3.0	1.5221	ug/L	1.5221	ppb	17:11:02
1	B 249.677†	533.2	1109.7	27.916	ug/L	27.916	ppb	17:10:42
1	Ba 233.527†	15.9	14.9	0.1455	ug/L	0.1455	ppb	17:11:02
1	Be 313.107†	-4524.3	54.5	0.0238	ug/L	0.0238	ppb	17:10:42
1	Cd 226.502†	-209.8	6.3	0.0896	ug/L	0.0896	ppb	17:11:02
1	Co 228.616†	-54.2	6.1	0.1488	ug/L	0.1488	ppb	17:11:02
1	Cr 267.716†	85.7	-6.7	-0.0958	ug/L	-0.0958	ppb	17:11:02
1	Cu 324.752†	5782.0	23.0	0.0774	ug/L	0.0774	ppb	17:10:42
1	Mn 257.610†	976.8	519.8	0.6767	ug/L	0.6767	ppb	17:11:02
1	Mo 202.031†	10.1	-2.5	-0.2401	ug/L	-0.2401	ppb	17:11:02
1	Ni 231.604†	74.4	-1.1	-0.0375	ug/L	-0.0375	ppb	17:11:02
1	P 214.914†	220.7	-0.5	-0.3075	ug/L	-0.3075	ppb	17:11:02
1	Pb 220.353†	-72.9	-5.0	-0.7757	ug/L	-0.7757	ppb	17:11:02
1	S 181.975 Axial†	54.0	13.1	19.687	ug/L	19.687	ppb	17:11:02
1	Sb 206.836†	40.8	8.6	3.4542	ug/L	3.4542	ppb	17:11:02
1	Se 196.026†	-18.0	4.3	3.2836	ug/L	3.2836	ppb	17:11:02
1	Si 251.611†	43618.6	42586.1	1559.0	ug/L	1559.0	ppb	17:10:42
1	Sn 189.927†	12.8	8.5	1.9579	ug/L	1.9579	ppb	17:11:02
1	Ti 334.940†	-1010.2	423.7	0.7769	ug/L	0.7769	ppb	17:10:42
1	Tl 190.801†	-26.6	11.7	4.5019	ug/L	4.5019	ppb	17:11:02
1	U 409.014†	-2424.6	11.7	0.4489	ug/L	0.4489	ppb	17:10:42
1	V 292.402†	-1713.3	24.2	0.2059	ug/L	0.2059	ppb	17:10:42
1	Zn 213.857†	1040.2	362.8	4.1469	ug/L	4.1469	ppb	17:11:02
1	SiO2†	42203.2	41145.5	3248.7	ug/L	3248.7	ppb	17:11:58
2	Sc Radial	4038.3	4038.3	105	%			17:09:50
2	Y RADIAL	4397.3	4397.3	101.5	%			17:09:50
2	Al 396.153Radial†	-78.3	17.8	18.758	ug/L	18.758	ppb	17:10:11
2	Ca 317.933Radial†	30.8	10.6	20.879	ug/L	20.879	ppb	17:10:11
2	Fe 238.204 Radial†	9.9	3.2	40.916	ug/L	40.916	ppb	17:10:11
2	K 766.490 Radial†	4249.4	1043.4	193.96	ug/L	193.96	ppb	17:09:50
2	Mg 279.077 IEC†	3.3	0.1	4.2422	ug/L	4.2422	ppb	17:10:11
2	Na 589.592 Radial†	-642.5	467.1	205.59	ug/L	205.59	ppb	17:09:50
2	Sr 421.552†	59.6	42.8	0.4106	ug/L	0.4106	ppb	17:09:50
2	Sc 361.383	694548.6	694548.6	100.72	%			17:11:08
2	Y 371.029	542689.5	542689.5	100.16	%			17:11:08
2	Ag 328.068†	89.6	-11.0	-0.0504	ug/L	-0.0504	ppb	17:11:08
2	As 188.979†	-29.4	-6.4	-3.1412	ug/L	-3.1412	ppb	17:11:28
2	B 249.677†	539.2	1118.3	28.130	ug/L	28.130	ppb	17:11:08
2	Ba 233.527†	16.7	15.8	0.1548	ug/L	0.1548	ppb	17:11:28
2	Be 313.107†	-4573.3	-17.4	-0.0051	ug/L	-0.0051	ppb	17:11:08
2	Cd 226.502†	-204.3	10.6	0.1520	ug/L	0.1520	ppb	17:11:28
2	Co 228.616†	-64.5	-4.4	-0.1107	ug/L	-0.1107	ppb	17:11:28
2	Cr 267.716†	98.4	6.4	0.0973	ug/L	0.0973	ppb	17:11:28
2	Cu 324.752†	5748.0	18.9	0.0623	ug/L	0.0623	ppb	17:11:08
2	Mn 257.610†	946.8	495.0	0.6444	ug/L	0.6444	ppb	17:11:28
2	Mo 202.031†	15.4	2.8	0.2711	ug/L	0.2711	ppb	17:11:28
2	Ni 231.604†	92.7	17.4	0.5681	ug/L	0.5681	ppb	17:11:28

2	P 214.914†	222.6	2.5	1.5549	ug/L	1.5549 ppb	17:11:28
2	Pb 220.353†	-74.2	-6.6	-1.0411	ug/L	-1.0411 ppb	17:11:28
2	S 181.975 Axial†	54.1	13.4	20.197	ug/L	20.197 ppb	17:11:28
2	Sb 206.836†	29.6	-2.3	-0.9142	ug/L	-0.9142 ppb	17:11:28
2	Se 196.026†	-24.9	-2.7	-1.8552	ug/L	-1.8552 ppb	17:11:28
2	Si 251.611†	43300.2	42494.3	1555.7	ug/L	1555.7 ppb	17:11:08
2	Sn 189.927†	8.8	4.6	1.0549	ug/L	1.0549 ppb	17:11:28
2	Ti 334.940†	-962.4	465.9	0.8457	ug/L	0.8457 ppb	17:11:08
2	Tl 190.801†	-42.0	-3.7	-1.4197	ug/L	-1.4197 ppb	17:11:28
2	U 409.014†	-2284.4	138.4	5.3281	ug/L	5.3281 ppb	17:11:08
2	V 292.402†	-1670.6	57.7	0.5159	ug/L	0.5159 ppb	17:11:08
2	Zn 213.857†	1025.3	353.4	4.0323	ug/L	4.0323 ppb	17:11:28
2	SiO2†	42841.1	41995.9	3315.8	ug/L	3315.8 ppb	17:12:04
3	Sc Radial	3995.5	3995.5	104	%		17:10:16
3	Y RADIAL	4389.6	4389.6	101.3	%		17:10:16
3	Al 396.153Radial†	-71.8	23.2	24.446	ug/L	24.446 ppb	17:10:36
3	Ca 317.933Radial†	34.0	14.0	27.558	ug/L	27.558 ppb	17:10:36
3	Fe 238.204 Radial†	7.7	1.2	15.134	ug/L	15.134 ppb	17:10:36
3	K 766.490 Radial†	4229.9	1068.0	198.53	ug/L	198.53 ppb	17:10:16
3	Mg 279.077 IEC†	1.7	-1.4	-57.057	ug/L	-57.057 ppb	17:10:36
3	Na 589.592 Radial†	-633.3	469.4	206.60	ug/L	206.60 ppb	17:10:16
3	Sr 421.552†	-2.2	-16.0	-0.1534	ug/L	-0.1534 ppb	17:10:16
3	Sc 361.383	693824.7	693824.7	100.61	%		17:11:33
3	Y 371.029	542256.7	542256.7	100.08	%		17:11:33
3	Ag 328.068†	9.6	-90.3	-0.4969	ug/L	-0.4969 ppb	17:11:33
3	As 188.979†	-29.9	-6.9	-3.4057	ug/L	-3.4057 ppb	17:11:53
3	B 249.677†	517.5	1097.4	27.607	ug/L	27.607 ppb	17:11:33
3	Ba 233.527†	29.6	28.7	0.2771	ug/L	0.2771 ppb	17:11:53
3	Be 313.107†	-4536.5	14.5	0.0073	ug/L	0.0073 ppb	17:11:33
3	Cd 226.502†	-217.2	-2.4	-0.0357	ug/L	-0.0357 ppb	17:11:53
3	Co 228.616†	-56.8	3.2	0.0786	ug/L	0.0786 ppb	17:11:53
3	Cr 267.716†	97.3	5.4	0.0794	ug/L	0.0794 ppb	17:11:53
3	Cu 324.752†	5707.0	-15.8	-0.0541	ug/L	-0.0541 ppb	17:11:33
3	Mn 257.610†	962.2	511.4	0.6655	ug/L	0.6655 ppb	17:11:53
3	Mo 202.031†	18.2	5.6	0.5422	ug/L	0.5422 ppb	17:11:53
3	Ni 231.604†	88.2	13.0	0.4229	ug/L	0.4229 ppb	17:11:53
3	P 214.914†	235.9	15.9	10.195	ug/L	10.195 ppb	17:11:53
3	Pb 220.353†	-62.4	5.0	0.7962	ug/L	0.7962 ppb	17:11:53
3	S 181.975 Axial†	55.7	15.1	22.659	ug/L	22.659 ppb	17:11:53
3	Sb 206.836†	43.1	11.1	4.4872	ug/L	4.4872 ppb	17:11:53
3	Se 196.026†	-25.1	-2.8	-2.0541	ug/L	-2.0541 ppb	17:11:53
3	Si 251.611†	43829.6	43065.3	1576.6	ug/L	1576.6 ppb	17:11:33
3	Sn 189.927†	13.3	9.0	2.0825	ug/L	2.0825 ppb	17:11:53
3	Ti 334.940†	-1086.6	341.6	0.6265	ug/L	0.6265 ppb	17:11:33
3	Tl 190.801†	-28.8	9.3	3.5952	ug/L	3.5952 ppb	17:11:53
3	U 409.014†	-2319.8	100.9	3.8853	ug/L	3.8853 ppb	17:11:33
3	V 292.402†	-1742.5	-15.5	-0.1255	ug/L	-0.1255 ppb	17:11:33
3	Zn 213.857†	1027.3	356.4	4.0720	ug/L	4.0720 ppb	17:11:53
3	SiO2†	42295.5	41498.0	3276.5	ug/L	3276.5 ppb	17:12:09

Mean Data: 248375001|960825|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	695512.9	100.86	%	0.337				0.33%
Sc Radial	4029.5	105	%	0.8				0.76%
Y 371.029	543675.2	100.34	%	0.386				0.39%
Y RADIAL	4405.0	101.7	%	0.47				0.46%
Ag 328.068†	-47.4	-0.2553	ug/L	0.22554	-0.2553	ppb	0.22554	88.34%
Al 396.153Radial†	20.3	21.311	ug/L	2.8885	21.311	ppb	2.8885	13.55%
As 188.979†	-3.4	-1.6749	ug/L	2.77191	-1.6749	ppb	2.77191	165.49%
B 249.677†	1108.5	27.884	ug/L	0.2628	27.884	ppb	0.2628	0.94%
Ba 233.527†	19.8	0.1925	ug/L	0.07347	0.1925	ppb	0.07347	38.17%
Be 313.107†	17.2	0.0086	ug/L	0.01448	0.0086	ppb	0.01448	167.56%
Ca 317.933Radial†	13.2	25.845	ug/L	4.3695	25.845	ppb	4.3695	16.91%
Cd 226.502†	4.8	0.0686	ug/L	0.09559	0.0686	ppb	0.09559	139.34%
Co 228.616†	1.6	0.0389	ug/L	0.13422	0.0389	ppb	0.13422	344.90%
Cr 267.716†	1.7	0.0270	ug/L	0.10668	0.0270	ppb	0.10668	395.74%
Cu 324.752†	8.7	0.0285	ug/L	0.07194	0.0285	ppb	0.07194	252.14%
Fe 238.204 Radial†	2.0	25.650	ug/L	13.5315	25.650	ppb	13.5315	52.75%
K 766.490 Radial†	1067.9	198.51	ug/L	4.549	198.51	ppb	4.549	2.29%

Mg 279.077 IEC†	-0.8	-34.492 ug/L	33.6970	-34.492 ppb	33.6970	97.69%
Mn 257.610†	508.7	0.6622 ug/L	0.01642	0.6622 ppb	0.01642	2.48%
Mo 202.031†	2.0	0.1911 ug/L	0.39721	0.1911 ppb	0.39721	207.88%
Na 589.592 Radial†	457.8	201.51 ug/L	7.961	201.51 ppb	7.961	3.95%
Ni 231.604†	9.7	0.3178 ug/L	0.31619	0.3178 ppb	0.31619	99.48%
P 214.914†	6.0	3.8141 ug/L	5.60394	3.8141 ppb	5.60394	146.93%
Pb 220.353†	-2.2	-0.3402 ug/L	0.99307	-0.3402 ppb	0.99307	291.91%
S 181.975 Axial†	13.9	20.848 ug/L	1.5892	20.848 ppb	1.5892	7.62%
Sb 206.836†	5.8	2.3424 ug/L	2.86722	2.3424 ppb	2.86722	122.41%
Se 196.026†	-0.4	-0.2086 ug/L	3.02593	-0.2086 ppb	3.02593	>999.9%
Si 251.611†	42715.2	1563.8 ug/L	11.22	1563.8 ppb	11.22	0.72%
Sn 189.927†	7.4	1.6984 ug/L	0.56079	1.6984 ppb	0.56079	33.02%
Sr 421.552†	13.8	0.1321 ug/L	0.28208	0.1321 ppb	0.28208	213.50%
Ti 334.940†	410.4	0.7497 ug/L	0.11210	0.7497 ppb	0.11210	14.95%
Tl 190.801†	5.8	2.2258 ug/L	3.18948	2.2258 ppb	3.18948	143.29%
U 409.014†	83.7	3.2207 ug/L	2.50656	3.2207 ppb	2.50656	77.83%
V 292.402†	22.1	0.1988 ug/L	0.32076	0.1988 ppb	0.32076	161.39%
Zn 213.857†	357.5	4.0837 ug/L	0.05817	4.0837 ppb	0.05817	1.42%
SiO2†	41546.5	3280.3 ug/L	33.73	3280.3 ppb	33.73	1.03%

Sequence No.: 31
Sample ID: 1202060850|960825|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 4/1/2010 17:14:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202060850|960825|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3955.4	3955.4	103	%			17:16:33
1	Y RADIAL	4376.9	4376.9	101.0	%			17:16:13
1	Al 396.153Radial†	-92.5	2.5	2.6769	ug/L	2.6769	ppb	17:16:13
1	Ca 317.933Radial†	30.0	10.5	20.532	ug/L	20.532	ppb	17:16:33
1	Fe 238.204 Radial†	8.7	2.2	28.328	ug/L	28.328	ppb	17:16:33
1	K 766.490 Radial†	4087.5	970.9	180.48	ug/L	180.48	ppb	17:16:13
1	Mg 279.077 IEC†	-0.6	-3.5	-146.25	ug/L	-146.25	ppb	17:16:33
1	Na 589.592 Radial†	-675.6	422.1	185.80	ug/L	185.80	ppb	17:16:13
1	Sr 421.552†	44.8	29.6	0.2838	ug/L	0.2838	ppb	17:16:13
1	Sc 361.383	690015.0	690015.0	100.06	%			17:17:30
1	Y 371.029	539729.3	539729.3	99.614	%			17:17:30
1	Ag 328.068†	12.7	-87.2	-0.4763	ug/L	-0.4763	ppb	17:17:30
1	As 188.979†	-23.1	-0.2	-0.1110	ug/L	-0.1110	ppb	17:17:50
1	B 249.677†	289.3	872.2	21.939	ug/L	21.939	ppb	17:17:30
1	Ba 233.527†	27.6	26.8	0.2596	ug/L	0.2596	ppb	17:17:50
1	Be 313.107†	-4505.2	20.9	0.0094	ug/L	0.0094	ppb	17:17:30
1	Cd 226.502†	-211.6	2.0	0.0264	ug/L	0.0264	ppb	17:17:50
1	Co 228.616†	-71.0	-11.2	-0.2809	ug/L	-0.2809	ppb	17:17:50
1	Cr 267.716†	90.5	-0.9	-0.0120	ug/L	-0.0120	ppb	17:17:50
1	Cu 324.752†	5756.5	65.0	0.2156	ug/L	0.2156	ppb	17:17:30
1	Mn 257.610†	863.9	418.3	0.5501	ug/L	0.5501	ppb	17:17:50
1	Mo 202.031†	6.3	-6.1	-0.5860	ug/L	-0.5860	ppb	17:17:50
1	Ni 231.604†	73.3	-1.4	-0.0442	ug/L	-0.0442	ppb	17:17:50
1	P 214.914†	228.5	9.8	6.2497	ug/L	6.2497	ppb	17:17:50
1	Pb 220.353†	-77.7	-10.6	-1.6702	ug/L	-1.6702	ppb	17:17:50
1	S 181.975 Axial†	45.2	5.0	7.4529	ug/L	7.4529	ppb	17:17:50
1	Sb 206.836†	38.2	6.4	2.5937	ug/L	2.5937	ppb	17:17:50
1	Se 196.026†	-14.3	7.8	5.8893	ug/L	5.8893	ppb	17:17:50
1	Si 251.611†	40155.7	39634.2	1451.0	ug/L	1451.0	ppb	17:17:30
1	Sn 189.927†	13.3	9.2	2.1084	ug/L	2.1084	ppb	17:17:50
1	Ti 334.940†	-1191.5	230.7	0.4316	ug/L	0.4316	ppb	17:17:30
1	Tl 190.801†	-33.9	4.1	1.5865	ug/L	1.5865	ppb	17:17:50
1	U 409.014†	-2299.0	108.9	4.1909	ug/L	4.1909	ppb	17:17:30
1	V 292.402†	-1739.1	-21.7	-0.1987	ug/L	-0.1987	ppb	17:17:30
1	Zn 213.857†	753.3	88.2	1.0047	ug/L	1.0047	ppb	17:17:50
1	SiO2†	39885.9	39322.0	3104.7	ug/L	3104.7	ppb	17:18:46
2	Sc Radial	3959.6	3959.6	103	%			17:16:58
2	Y RADIAL	4410.8	4410.8	101.8	%			17:16:38
2	Al 396.153Radial†	-83.2	11.6	12.191	ug/L	12.191	ppb	17:16:38
2	Ca 317.933Radial†	31.5	11.9	23.316	ug/L	23.316	ppb	17:16:58
2	Fe 238.204 Radial†	8.8	2.3	29.560	ug/L	29.560	ppb	17:16:58
2	K 766.490 Radial†	4073.4	953.1	177.16	ug/L	177.16	ppb	17:16:38
2	Mg 279.077 IEC†	2.3	-0.8	-33.355	ug/L	-33.355	ppb	17:16:58
2	Na 589.592 Radial†	-717.1	382.6	168.39	ug/L	168.39	ppb	17:16:38
2	Sr 421.552†	25.1	10.4	0.0998	ug/L	0.0998	ppb	17:16:38
2	Sc 361.383	699420.2	699420.2	101.43	%			17:17:55
2	Y 371.029	546375.6	546375.6	100.84	%			17:17:55
2	Ag 328.068†	125.7	24.0	0.1315	ug/L	0.1315	ppb	17:17:55
2	As 188.979†	-26.5	-3.3	-1.6452	ug/L	-1.6452	ppb	17:18:15
2	B 249.677†	382.5	960.2	24.153	ug/L	24.153	ppb	17:17:55
2	Ba 233.527†	24.2	23.1	0.2233	ug/L	0.2233	ppb	17:18:15
2	Be 313.107†	-4578.1	9.5	0.0050	ug/L	0.0050	ppb	17:17:55
2	Cd 226.502†	-216.9	-0.4	-0.0066	ug/L	-0.0066	ppb	17:18:15
2	Co 228.616†	-73.3	-12.6	-0.3103	ug/L	-0.3103	ppb	17:18:15
2	Cr 267.716†	88.0	-4.6	-0.0690	ug/L	-0.0690	ppb	17:18:15
2	Cu 324.752†	5709.2	-59.1	-0.2013	ug/L	-0.2013	ppb	17:17:55
2	Mn 257.610†	870.8	413.6	0.5394	ug/L	0.5394	ppb	17:18:15
2	Mo 202.031†	23.2	10.4	0.9980	ug/L	0.9980	ppb	17:18:15
2	Ni 231.604†	84.6	8.7	0.2842	ug/L	0.2842	ppb	17:18:15

2	P 214.914†	214.7	-6.8	-4.3204 ug/L	-4.3204 ppb	17:18:15
2	Pb 220.353†	-41.2	26.4	4.1500 ug/L	4.1500 ppb	17:18:15
2	S 181.975 Axial†	57.5	16.5	24.744 ug/L	24.744 ppb	17:18:15
2	Sb 206.836†	37.6	5.4	2.1675 ug/L	2.1675 ppb	17:18:15
2	Se 196.026†	-23.2	-0.8	-0.5178 ug/L	-0.5178 ppb	17:18:15
2	Si 251.611†	40866.6	39795.4	1456.9 ug/L	1456.9 ppb	17:17:55
2	Sn 189.927†	6.2	2.0	0.4665 ug/L	0.4665 ppb	17:18:15
2	Ti 334.940†	-1170.6	267.4	0.4863 ug/L	0.4863 ppb	17:17:55
2	Tl 190.801†	-38.6	-0.1	-0.0423 ug/L	-0.0423 ppb	17:18:15
2	U 409.014†	-2148.3	288.4	11.106 ug/L	11.106 ppb	17:17:55
2	V 292.402†	-1759.6	-18.4	-0.1327 ug/L	-0.1327 ppb	17:17:55
2	Zn 213.857†	753.2	78.0	0.8860 ug/L	0.8860 ppb	17:18:15
2	SiO2†	40212.5	39108.0	3087.8 ug/L	3087.8 ppb	17:18:51
3	Sc Radial	3970.3	3970.3	103 %		17:17:23
3	Y RADIAL	4437.8	4437.8	102.4 %		17:17:03
3	Al 396.153Radial†	-88.3	6.9	7.2591 ug/L	7.2591 ppb	17:17:03
3	Ca 317.933Radial†	32.4	12.7	24.903 ug/L	24.903 ppb	17:17:23
3	Fe 238.204 Radial†	7.7	1.3	16.164 ug/L	16.164 ppb	17:17:23
3	K 766.490 Radial†	4073.9	942.9	175.28 ug/L	175.28 ppb	17:17:03
3	Mg 279.077 IEC†	4.8	1.6	67.000 ug/L	67.000 ppb	17:17:23
3	Na 589.592 Radial†	-807.5	297.1	130.78 ug/L	130.78 ppb	17:17:03
3	Sr 421.552†	7.3	-6.8	-0.0652 ug/L	-0.0652 ppb	17:17:03
3	Sc 361.383	695404.3	695404.3	100.84 %		17:18:21
3	Y 371.029	543411.8	543411.8	100.29 %		17:18:21
3	Ag 328.068†	190.6	89.1	0.4908 ug/L	0.4908 ppb	17:18:21
3	As 188.979†	-30.5	-7.4	-3.6606 ug/L	-3.6606 ppb	17:18:41
3	B 249.677†	344.7	924.8	23.264 ug/L	23.264 ppb	17:18:21
3	Ba 233.527†	25.7	24.7	0.2387 ug/L	0.2387 ppb	17:18:41
3	Be 313.107†	-4550.0	11.4	0.0059 ug/L	0.0059 ppb	17:18:21
3	Cd 226.502†	-212.1	3.1	0.0441 ug/L	0.0441 ppb	17:18:41
3	Co 228.616†	-45.3	14.8	0.3657 ug/L	0.3657 ppb	17:18:41
3	Cr 267.716†	82.3	-9.7	-0.1442 ug/L	-0.1442 ppb	17:18:41
3	Cu 324.752†	5572.1	-162.5	-0.5426 ug/L	-0.5426 ppb	17:18:21
3	Mn 257.610†	892.0	439.5	0.5676 ug/L	0.5676 ppb	17:18:41
3	Mo 202.031†	14.9	2.3	0.2193 ug/L	0.2193 ppb	17:18:41
3	Ni 231.604†	62.0	-13.2	-0.4305 ug/L	-0.4305 ppb	17:18:41
3	P 214.914†	240.7	20.2	13.005 ug/L	13.005 ppb	17:18:41
3	Pb 220.353†	-64.2	3.4	0.5306 ug/L	0.5306 ppb	17:18:41
3	S 181.975 Axial†	48.3	7.7	11.516 ug/L	11.516 ppb	17:18:41
3	Sb 206.836†	42.9	10.8	4.3380 ug/L	4.3380 ppb	17:18:41
3	Se 196.026†	-22.7	-0.4	-0.2613 ug/L	-0.2613 ppb	17:18:41
3	Si 251.611†	40457.7	39622.7	1450.5 ug/L	1450.5 ppb	17:18:21
3	Sn 189.927†	5.4	1.2	0.2886 ug/L	0.2886 ppb	17:18:41
3	Ti 334.940†	-1111.1	319.6	0.5763 ug/L	0.5763 ppb	17:18:21
3	Tl 190.801†	-38.1	0.2	0.0715 ug/L	0.0715 ppb	17:18:41
3	U 409.014†	-2322.8	103.2	3.9727 ug/L	3.9727 ppb	17:18:21
3	V 292.402†	-1777.3	-46.0	-0.3968 ug/L	-0.3968 ppb	17:18:21
3	Zn 213.857†	751.4	80.5	0.9221 ug/L	0.9221 ppb	17:18:41
3	SiO2†	40733.3	39853.4	3146.7 ug/L	3146.7 ppb	17:18:56

Mean Data: 1202060850|960825|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	694946.5	100.78	%	0.684				0.68%
Sc Radial	3961.8	103	%	0.2				0.19%
Y 371.029	543172.3	100.25	%	0.615				0.61%
Y RADIAL	4408.5	101.8	%	0.70				0.69%
Ag 328.068†	8.6	0.0487	ug/L	0.48882	0.0487	ppb	0.48882	>999.9%
Al 396.153Radial†	7.0	7.3758	ug/L	4.75834	7.3758	ppb	4.75834	64.51%
As 188.979†	-3.7	-1.8056	ug/L	1.78025	-1.8056	ppb	1.78025	98.60%
B 249.677†	919.0	23.119	ug/L	1.1140	23.119	ppb	1.1140	4.82%
Ba 233.527†	24.9	0.2406	ug/L	0.01818	0.2406	ppb	0.01818	7.56%
Be 313.107†	13.9	0.0067	ug/L	0.00233	0.0067	ppb	0.00233	34.55%
Ca 317.933Radial†	11.7	22.917	ug/L	2.2128	22.917	ppb	2.2128	9.66%
Cd 226.502†	1.5	0.0213	ug/L	0.02575	0.0213	ppb	0.02575	120.91%
Co 228.616†	-3.0	-0.0752	ug/L	0.38205	-0.0752	ppb	0.38205	508.24%
Cr 267.716†	-5.1	-0.0751	ug/L	0.06632	-0.0751	ppb	0.06632	88.35%
Cu 324.752†	-52.2	-0.1761	ug/L	0.37973	-0.1761	ppb	0.37973	215.62%
Fe 238.204 Radial†	1.9	24.684	ug/L	7.4045	24.684	ppb	7.4045	30.00%
K 766.490 Radial†	955.6	177.64	ug/L	2.633	177.64	ppb	2.633	1.48%

Mg 279.077 IEC†	-0.9	-37.533	ug/L	106.6838	-37.533	ppb	106.6838 284.24%
Mn 257.610†	423.8	0.5524	ug/L	0.01421	0.5524	ppb	0.01421 2.57%
Mo 202.031†	2.2	0.2105	ug/L	0.79207	0.2105	ppb	0.79207 376.37%
Na 589.592 Radial†	367.3	161.66	ug/L	28.121	161.66	ppb	28.121 17.40%
Ni 231.604†	-1.9	-0.0635	ug/L	0.35777	-0.0635	ppb	0.35777 563.51%
P 214.914†	7.7	4.9782	ug/L	8.73256	4.9782	ppb	8.73256 175.42%
Pb 220.353†	6.4	1.0035	ug/L	2.93875	1.0035	ppb	2.93875 292.86%
S 181.975 Axial†	9.7	14.571	ug/L	9.0413	14.571	ppb	9.0413 62.05%
Sb 206.836†	7.5	3.0330	ug/L	1.15004	3.0330	ppb	1.15004 37.92%
Se 196.026†	2.2	1.7034	ug/L	3.62740	1.7034	ppb	3.62740 212.95%
Si 251.611†	39684.1	1452.8	ug/L	3.53	1452.8	ppb	3.53 0.24%
Sn 189.927†	4.1	0.9545	ug/L	1.00325	0.9545	ppb	1.00325 105.11%
Sr 421.552†	11.1	0.1061	ug/L	0.17459	0.1061	ppb	0.17459 164.48%
Ti 334.940†	272.6	0.4980	ug/L	0.07307	0.4980	ppb	0.07307 14.67%
Tl 190.801†	1.4	0.5386	ug/L	0.90931	0.5386	ppb	0.90931 168.84%
U 409.014†	166.8	6.4233	ug/L	4.05712	6.4233	ppb	4.05712 63.16%
V 292.402†	-28.7	-0.2427	ug/L	0.13742	-0.2427	ppb	0.13742 56.62%
Zn 213.857†	82.2	0.9376	ug/L	0.06087	0.9376	ppb	0.06087 6.49%
SiO2†	39427.8	3113.0	ug/L	30.31	3113.0	ppb	30.31 0.97%

Sequence No.: 32
Sample ID: 1202060851|960825|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 4/1/2010 17:21:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202060851|960825|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3881.4	3881.4	101	%			17:23:21
1	Y RADIAL	4313.7	4313.7	99.58	%			17:23:01
1	Al 396.153Radial†	4834.1	4873.1	5106.6	ug/L	5106.6	ppb	17:23:01
1	Ca 317.933Radial†	2691.0	2642.7	5189.0	ug/L	5189.0	ppb	17:23:21
1	Fe 238.204 Radial†	406.9	396.2	5050.0	ug/L	5050.0	ppb	17:23:21
1	K 766.490 Radial†	31684.1	28339.4	5265.7	ug/L	5265.7	ppb	17:23:01
1	Mg 279.077 IEC†	128.2	123.7	5096.1	ug/L	5096.1	ppb	17:23:21
1	Na 589.592 Radial†	10757.1	11716.4	5156.8	ug/L	5156.8	ppb	17:23:01
1	Sr 421.552†	51266.4	50688.1	486.65	ug/L	486.65	ppb	17:23:01
1	Sc 361.383	699125.9	699125.9	101.38	%			17:24:18
1	Y 371.029	467974.3	467974.3	86.370	%			17:24:24
1	Ag 328.068†	88336.8	87031.7	482.52	ug/L	482.52	ppb	17:24:24
1	As 188.979†	968.2	977.8	488.34	ug/L	488.34	ppb	17:24:44
1	B 249.677†	19362.2	19681.1	492.95	ug/L	492.95	ppb	17:24:24
1	Ba 233.527†	51725.1	51018.7	494.31	ug/L	494.31	ppb	17:24:24
1	Be 313.107†	1210272.7	1198284.1	485.05	ug/L	485.05	ppb	17:24:18
1	Cd 226.502†	33130.0	32891.4	480.74	ug/L	480.74	ppb	17:24:24
1	Co 228.616†	19903.9	19692.0	487.83	ug/L	487.83	ppb	17:24:24
1	Cr 267.716†	32948.1	32407.2	479.08	ug/L	479.08	ppb	17:24:24
1	Cu 324.752†	152758.1	144986.1	482.90	ug/L	482.90	ppb	17:24:24
1	Mn 257.610†	385921.1	380210.9	492.26	ug/L	492.26	ppb	17:24:18
1	Mo 202.031†	5074.4	4992.7	480.04	ug/L	480.04	ppb	17:24:44
1	Ni 231.604†	15243.5	14960.9	487.56	ug/L	487.56	ppb	17:24:24
1	P 214.914†	1104.7	871.1	462.73	ug/L	462.73	ppb	17:24:44
1	Pb 220.353†	3027.1	3052.8	481.98	ug/L	481.98	ppb	17:24:44
1	S 181.975 Axial†	3343.6	3257.7	4893.8	ug/L	4893.8	ppb	17:24:44
1	Sb 206.836†	1279.8	1230.6	509.68	ug/L	509.68	ppb	17:24:44
1	Se 196.026†	621.4	635.0	487.26	ug/L	487.26	ppb	17:24:44
1	Si 251.611†	172395.3	169546.7	6201.0	ug/L	6201.0	ppb	17:24:24
1	Sn 189.927†	2155.6	2122.0	488.42	ug/L	488.42	ppb	17:24:44
1	Ti 334.940†	268951.1	266703.3	483.93	ug/L	483.93	ppb	17:24:24
1	Tl 190.801†	1230.5	1251.7	484.84	ug/L	484.84	ppb	17:24:44
1	U 409.014†	10387.5	12652.2	485.71	ug/L	485.71	ppb	17:24:24
1	V 292.402†	53647.6	54632.1	487.99	ug/L	487.99	ppb	17:24:24
1	Zn 213.857†	43222.8	41968.5	475.54	ug/L	475.54	ppb	17:24:24
1	SiO2†	175601.9	172667.0	13620	ug/L	13620	ppb	17:25:51
2	Sc Radial	3965.8	3965.8	103	%			17:23:46
2	Y RADIAL	4326.6	4326.6	99.88	%			17:23:26
2	Al 396.153Radial†	4722.9	4663.7	4886.2	ug/L	4886.2	ppb	17:23:26
2	Ca 317.933Radial†	2740.8	2634.3	5172.5	ug/L	5172.5	ppb	17:23:46
2	Fe 238.204 Radial†	414.3	394.8	5032.4	ug/L	5032.4	ppb	17:23:46
2	K 766.490 Radial†	31210.8	27214.0	5056.5	ug/L	5056.5	ppb	17:23:26
2	Mg 279.077 IEC†	130.5	123.3	5076.8	ug/L	5076.8	ppb	17:23:46
2	Na 589.592 Radial†	10536.0	11275.9	4962.9	ug/L	4962.9	ppb	17:23:26
2	Sr 421.552†	50412.7	48782.2	468.35	ug/L	468.35	ppb	17:23:26
2	Sc 361.383	696496.6	696496.6	101.00	%			17:24:49
2	Y 371.029	466817.8	466817.8	86.157	%			17:24:54
2	Ag 328.068†	87532.7	86564.6	479.93	ug/L	479.93	ppb	17:24:54
2	As 188.979†	965.1	978.4	488.61	ug/L	488.61	ppb	17:25:14
2	B 249.677†	19204.8	19597.3	490.85	ug/L	490.85	ppb	17:24:54
2	Ba 233.527†	51501.7	50990.1	494.03	ug/L	494.03	ppb	17:24:54
2	Be 313.107†	1205381.5	1197948.0	484.91	ug/L	484.91	ppb	17:24:49
2	Cd 226.502†	32809.2	32697.2	477.91	ug/L	477.91	ppb	17:24:54
2	Co 228.616†	19721.5	19585.6	485.20	ug/L	485.20	ppb	17:24:54
2	Cr 267.716†	32784.8	32368.2	478.50	ug/L	478.50	ppb	17:24:54
2	Cu 324.752†	151490.2	144299.5	480.61	ug/L	480.61	ppb	17:24:54
2	Mn 257.610†	383848.8	379596.2	491.46	ug/L	491.46	ppb	17:24:49
2	Mo 202.031†	5057.1	4994.4	480.20	ug/L	480.20	ppb	17:25:14
2	Ni 231.604†	15226.8	15001.1	488.87	ug/L	488.87	ppb	17:24:54

2	P 214.914†	1104.6	875.1	465.68 ug/L	465.68 ppb	17:25:14
2	Pb 220.353†	3004.7	3041.9	480.22 ug/L	480.22 ppb	17:25:14
2	S 181.975 Axial†	3334.2	3260.9	4898.6 ug/L	4898.6 ppb	17:25:14
2	Sb 206.836†	1278.1	1233.7	510.89 ug/L	510.89 ppb	17:25:14
2	Se 196.026†	625.8	641.6	492.08 ug/L	492.08 ppb	17:25:14
2	Si 251.611†	171045.5	168852.2	6175.6 ug/L	6175.6 ppb	17:24:54
2	Sn 189.927†	2137.6	2112.3	486.18 ug/L	486.18 ppb	17:25:14
2	Ti 334.940†	267204.8	265975.7	482.61 ug/L	482.61 ppb	17:24:54
2	Tl 190.801†	1242.7	1268.3	491.23 ug/L	491.23 ppb	17:25:14
2	U 409.014†	10558.8	12860.5	493.74 ug/L	493.74 ppb	17:24:54
2	V 292.402†	53192.8	54381.6	485.81 ug/L	485.81 ppb	17:24:54
2	Zn 213.857†	42914.6	41824.3	473.88 ug/L	473.88 ppb	17:24:54
2	SiO2†	178624.6	176313.6	13908 ug/L	13908 ppb	17:25:56
3	Sc Radial	3964.1	3964.1	103 %		17:24:11
3	Y RADIAL	4443.8	4443.8	102.6 %		17:23:51
3	Al 396.153Radial†	4822.4	4762.0	4989.1 ug/L	4989.1 ppb	17:23:51
3	Ca 317.933Radial†	2713.1	2608.5	5122.0 ug/L	5122.0 ppb	17:24:11
3	Fe 238.204 Radial†	413.2	393.9	5021.1 ug/L	5021.1 ppb	17:24:11
3	K 766.490 Radial†	31755.3	27754.5	5157.0 ug/L	5157.0 ppb	17:23:51
3	Mg 279.077 IEC†	130.6	123.5	5086.2 ug/L	5086.2 ppb	17:24:11
3	Na 589.592 Radial†	10727.4	11465.7	5046.5 ug/L	5046.5 ppb	17:23:51
3	Sr 421.552†	51498.4	49854.7	478.64 ug/L	478.64 ppb	17:23:51
3	Sc 361.383	685371.0	685371.0	99.389 %		17:25:20
3	Y 371.029	465722.9	465722.9	85.955 %		17:25:25
3	Ag 328.068†	87233.4	87670.2	486.04 ug/L	486.04 ppb	17:25:25
3	As 188.979†	968.6	997.4	498.05 ug/L	498.05 ppb	17:25:45
3	B 249.677†	19225.5	19926.8	499.13 ug/L	499.13 ppb	17:25:25
3	Ba 233.527†	51318.3	51633.2	500.26 ug/L	500.26 ppb	17:25:25
3	Be 313.107†	1188483.6	1200318.9	485.88 ug/L	485.88 ppb	17:25:20
3	Cd 226.502†	32696.9	33111.5	483.97 ug/L	483.97 ppb	17:25:25
3	Co 228.616†	19689.8	19870.6	492.28 ug/L	492.28 ppb	17:25:25
3	Cr 267.716†	32684.4	32794.1	484.79 ug/L	484.79 ppb	17:25:25
3	Cu 324.752†	150728.1	145967.5	486.16 ug/L	486.16 ppb	17:25:25
3	Mn 257.610†	379561.4	381451.7	493.86 ug/L	493.86 ppb	17:25:20
3	Mo 202.031†	5091.1	5109.9	491.30 ug/L	491.30 ppb	17:25:45
3	Ni 231.604†	15100.8	15119.1	492.71 ug/L	492.71 ppb	17:25:25
3	P 214.914†	1119.9	908.3	485.97 ug/L	485.97 ppb	17:25:45
3	Pb 220.353†	3031.8	3117.5	492.15 ug/L	492.15 ppb	17:25:45
3	S 181.975 Axial†	3387.6	3368.2	5059.9 ug/L	5059.9 ppb	17:25:45
3	Sb 206.836†	1282.2	1258.4	521.25 ug/L	521.25 ppb	17:25:45
3	Se 196.026†	630.9	656.9	503.44 ug/L	503.44 ppb	17:25:45
3	Si 251.611†	170408.5	170960.4	6252.6 ug/L	6252.6 ppb	17:25:25
3	Sn 189.927†	2178.0	2187.3	503.40 ug/L	503.40 ppb	17:25:45
3	Ti 334.940†	265911.7	268969.1	488.03 ug/L	488.03 ppb	17:25:25
3	Tl 190.801†	1232.7	1278.2	495.06 ug/L	495.06 ppb	17:25:45
3	U 409.014†	10331.4	12801.5	491.45 ug/L	491.45 ppb	17:25:25
3	V 292.402†	52986.1	55028.5	491.66 ug/L	491.66 ppb	17:25:25
3	Zn 213.857†	42783.2	42381.8	480.23 ug/L	480.23 ppb	17:25:25
3	SiO2†	177581.3	178134.7	14051 ug/L	14051 ppb	17:26:01

Mean Data: 1202060851|960825|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	693664.5	100.59	%	1.059				1.05%
Sc Radial	3937.1	103	%	1.3				1.23%
Y 371.029	466838.3	86.161	%	0.2078				0.24%
Y RADIAL	4361.3	100.7	%	1.65				1.64%
Ag 328.068†	87088.8	482.83	ug/L	3.068	482.83	ppb	3.068	0.64%
Al 396.153Radial†	4766.3	4994.0	ug/L	110.32	4994.0	ppb	110.32	2.21%
As 188.979†	984.5	491.67	ug/L	5.531	491.67	ppb	5.531	1.12%
B 249.677†	19735.1	494.31	ug/L	4.299	494.31	ppb	4.299	0.87%
Ba 233.527†	51214.0	496.20	ug/L	3.517	496.20	ppb	3.517	0.71%
Be 313.107†	1198850.3	485.28	ug/L	0.525	485.28	ppb	0.525	0.11%
Ca 317.933Radial†	2628.5	5161.2	ug/L	34.93	5161.2	ppb	34.93	0.68%
Cd 226.502†	32900.0	480.87	ug/L	3.032	480.87	ppb	3.032	0.63%
Co 228.616†	19716.1	488.44	ug/L	3.576	488.44	ppb	3.576	0.73%
Cr 267.716†	32523.2	480.79	ug/L	3.476	480.79	ppb	3.476	0.72%
Cu 324.752†	145084.4	483.22	ug/L	2.792	483.22	ppb	2.792	0.58%
Fe 238.204 Radial†	395.0	5034.5	ug/L	14.59	5034.5	ppb	14.59	0.29%
K 766.490 Radial†	27769.3	5159.8	ug/L	104.63	5159.8	ppb	104.63	2.03%

Mg 279.077 IEC†	123.5	5086.4 ug/L	9.64	5086.4 ppb	9.64	0.19%
Mn 257.610†	380419.6	492.52 ug/L	1.222	492.52 ppb	1.222	0.25%
Mo 202.031†	5032.3	483.85 ug/L	6.454	483.85 ppb	6.454	1.33%
Na 589.592 Radial†	11486.0	5055.4 ug/L	97.26	5055.4 ppb	97.26	1.92%
Ni 231.604†	15027.0	489.72 ug/L	2.679	489.72 ppb	2.679	0.55%
P 214.914†	884.8	471.46 ug/L	12.649	471.46 ppb	12.649	2.68%
Pb 220.353†	3070.7	484.78 ug/L	6.443	484.78 ppb	6.443	1.33%
S 181.975 Axial†	3295.6	4950.8 ug/L	94.53	4950.8 ppb	94.53	1.91%
Sb 206.836†	1240.9	513.94 ug/L	6.359	513.94 ppb	6.359	1.24%
Se 196.026†	644.5	494.26 ug/L	8.307	494.26 ppb	8.307	1.68%
Si 251.611†	169786.4	6209.7 ug/L	39.26	6209.7 ppb	39.26	0.63%
Sn 189.927†	2140.5	492.67 ug/L	9.362	492.67 ppb	9.362	1.90%
Sr 421.552†	49775.0	477.88 ug/L	9.174	477.88 ppb	9.174	1.92%
Ti 334.940†	267216.0	484.86 ug/L	2.828	484.86 ppb	2.828	0.58%
Tl 190.801†	1266.1	490.37 ug/L	5.161	490.37 ppb	5.161	1.05%
U 409.014†	12771.4	490.30 ug/L	4.135	490.30 ppb	4.135	0.84%
V 292.402†	54680.7	488.49 ug/L	2.955	488.49 ppb	2.955	0.60%
Zn 213.857†	42058.2	476.55 ug/L	3.293	476.55 ppb	3.293	0.69%
SiO2†	175705.1	13860 ug/L	219.7	13860 ppb	219.7	1.59%

Sequence No.: 33
Sample ID: 1202060852|960825|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 62
Date Collected: 4/1/2010 17:28:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202060852|960825|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3958.3	3958.3	103	%			17:30:26
1	Y RADIAL	4509.6	4509.6	104.1	%			17:30:06
1	Al 396.153Radial†	-80.2	14.4	15.197	ug/L	15.197	ppb	17:30:06
1	Ca 317.933Radial†	25.7	6.3	12.282	ug/L	12.282	ppb	17:30:26
1	Fe 238.204 Radial†	8.9	2.4	30.660	ug/L	30.660	ppb	17:30:26
1	K 766.490 Radial†	3209.3	116.4	21.629	ug/L	21.629	ppb	17:30:06
1	Mg 279.077 IEC†	2.7	-0.4	-15.042	ug/L	-15.042	ppb	17:30:26
1	Na 589.592 Radial†	-979.5	127.9	56.314	ug/L	56.314	ppb	17:30:06
1	Sr 421.552†	87.5	71.0	0.6815	ug/L	0.6815	ppb	17:30:06
1	Sc 361.383	698630.4	698630.4	101.31	%			17:31:23
1	Y 371.029	546366.4	546366.4	100.84	%			17:31:23
1	Ag 328.068†	110.0	8.7	0.0495	ug/L	0.0495	ppb	17:31:23
1	As 188.979†	-24.4	-1.3	-0.6234	ug/L	-0.6234	ppb	17:31:43
1	B 249.677†	-254.1	332.2	8.3535	ug/L	8.3535	ppb	17:31:43
1	Ba 233.527†	-1.3	-2.1	-0.0197	ug/L	-0.0197	ppb	17:31:43
1	Be 313.107†	-4514.5	67.2	0.0276	ug/L	0.0276	ppb	17:31:23
1	Cd 226.502†	-202.3	13.8	0.2001	ug/L	0.2001	ppb	17:31:43
1	Co 228.616†	-56.4	4.0	0.0981	ug/L	0.0981	ppb	17:31:43
1	Cr 267.716†	98.1	5.6	0.0816	ug/L	0.0816	ppb	17:31:43
1	Cu 324.752†	5780.0	17.2	0.0543	ug/L	0.0543	ppb	17:31:23
1	Mn 257.610†	600.0	147.2	0.1942	ug/L	0.1942	ppb	17:31:43
1	Mo 202.031†	14.6	1.9	0.1889	ug/L	0.1889	ppb	17:31:43
1	Ni 231.604†	85.5	9.7	0.3159	ug/L	0.3159	ppb	17:31:43
1	P 214.914†	217.2	-4.1	-2.6750	ug/L	-2.6750	ppb	17:31:43
1	Pb 220.353†	-77.7	-9.6	-1.5149	ug/L	-1.5149	ppb	17:31:43
1	S 181.975 Axial†	46.1	5.3	7.9321	ug/L	7.9321	ppb	17:31:43
1	Sb 206.836†	36.2	4.0	1.5759	ug/L	1.5759	ppb	17:31:43
1	Se 196.026†	-24.3	-1.9	-1.3225	ug/L	-1.3225	ppb	17:31:43
1	Si 251.611†	9147.5	8532.5	312.36	ug/L	312.36	ppb	17:31:23
1	Sn 189.927†	2.1	-2.0	-0.4658	ug/L	-0.4658	ppb	17:31:43
1	Ti 334.940†	-1319.9	118.6	0.2144	ug/L	0.2144	ppb	17:31:23
1	Tl 190.801†	-39.9	-1.4	-0.5544	ug/L	-0.5544	ppb	17:31:43
1	U 409.014†	-2212.7	222.4	8.5648	ug/L	8.5648	ppb	17:31:23
1	V 292.402†	-1754.4	-15.3	-0.1212	ug/L	-0.1212	ppb	17:31:23
1	Zn 213.857†	754.9	80.5	0.9141	ug/L	0.9141	ppb	17:31:43
1	SiO2†	8996.3	8340.7	658.54	ug/L	658.54	ppb	17:32:39
2	Sc Radial	3890.9	3890.9	101	%			17:30:51
2	Y RADIAL	4495.0	4495.0	103.8	%			17:30:31
2	Al 396.153Radial†	-78.1	15.2	15.983	ug/L	15.983	ppb	17:30:31
2	Ca 317.933Radial†	22.1	3.2	6.2631	ug/L	6.2631	ppb	17:30:51
2	Fe 238.204 Radial†	6.3	-0.0	-0.1322	ug/L	-0.1322	ppb	17:30:51
2	K 766.490 Radial†	3180.1	141.6	26.305	ug/L	26.305	ppb	17:30:31
2	Mg 279.077 IEC†	3.4	0.4	15.237	ug/L	15.237	ppb	17:30:51
2	Na 589.592 Radial†	-973.6	117.3	51.617	ug/L	51.617	ppb	17:30:31
2	Sr 421.552†	35.2	20.9	0.2006	ug/L	0.2006	ppb	17:30:31
2	Sc 361.383	699048.2	699048.2	101.37	%			17:31:48
2	Y 371.029	547434.2	547434.2	101.04	%			17:31:48
2	Ag 328.068†	130.4	28.8	0.1566	ug/L	0.1566	ppb	17:31:48
2	As 188.979†	-24.2	-1.1	-0.5534	ug/L	-0.5534	ppb	17:32:08
2	B 249.677†	-246.9	339.5	8.5413	ug/L	8.5413	ppb	17:32:08
2	Ba 233.527†	28.5	27.4	0.2649	ug/L	0.2649	ppb	17:32:08
2	Be 313.107†	-4539.0	45.7	0.0187	ug/L	0.0187	ppb	17:31:48
2	Cd 226.502†	-197.7	18.4	0.2699	ug/L	0.2699	ppb	17:32:08
2	Co 228.616†	-58.3	2.2	0.0547	ug/L	0.0547	ppb	17:32:08
2	Cr 267.716†	89.0	-3.5	-0.0529	ug/L	-0.0529	ppb	17:32:08
2	Cu 324.752†	5735.2	-30.4	-0.1029	ug/L	-0.1029	ppb	17:31:48
2	Mn 257.610†	615.3	162.0	0.2090	ug/L	0.2090	ppb	17:32:08
2	Mo 202.031†	15.9	3.2	0.3041	ug/L	0.3041	ppb	17:32:08
2	Ni 231.604†	77.1	1.4	0.0442	ug/L	0.0442	ppb	17:32:08

2	P 214.914†	211.6	-9.8	-6.2398 ug/L	-6.2398 ppb	17:32:08
2	Pb 220.353†	-65.2	2.7	0.4234 ug/L	0.4234 ppb	17:32:08
2	S 181.975 Axial†	42.4	1.6	2.3491 ug/L	2.3491 ppb	17:32:08
2	Sb 206.836†	38.7	6.5	2.6054 ug/L	2.6054 ppb	17:32:08
2	Se 196.026†	-25.7	-3.2	-2.3930 ug/L	-2.3930 ppb	17:32:08
2	Si 251.611†	9143.4	8523.0	312.01 ug/L	312.01 ppb	17:31:48
2	Sn 189.927†	6.4	2.2	0.5123 ug/L	0.5123 ppb	17:32:08
2	Ti 334.940†	-1384.1	56.1	0.1001 ug/L	0.1001 ppb	17:31:48
2	Tl 190.801†	-36.8	1.6	0.6348 ug/L	0.6348 ppb	17:32:08
2	U 409.014†	-2361.7	76.7	2.9553 ug/L	2.9553 ppb	17:31:48
2	V 292.402†	-1720.8	18.9	0.1764 ug/L	0.1764 ppb	17:31:48
2	Zn 213.857†	753.3	78.5	0.8981 ug/L	0.8981 ppb	17:32:08
2	SiO2†	9065.4	8403.5	663.50 ug/L	663.50 ppb	17:32:44
3	Sc Radial	3905.4	3905.4	102 %		17:31:16
3	Y RADIAL	4337.5	4337.5	100.1 %		17:30:56
3	Al 396.153Radial†	-103.1	-9.1	-9.5634 ug/L	-9.5634 ppb	17:30:56
3	Ca 317.933Radial†	19.9	0.9	1.8417 ug/L	1.8417 ppb	17:31:16
3	Fe 238.204 Radial†	7.2	0.9	11.653 ug/L	11.653 ppb	17:31:16
3	K 766.490 Radial†	3267.5	215.8	40.101 ug/L	40.101 ppb	17:30:56
3	Mg 279.077 IEC†	2.1	-0.9	-38.272 ug/L	-38.272 ppb	17:31:16
3	Na 589.592 Radial†	-933.7	160.1	70.468 ug/L	70.468 ppb	17:30:56
3	Sr 421.552†	55.8	41.0	0.3933 ug/L	0.3933 ppb	17:30:56
3	Sc 361.383	690453.9	690453.9	100.13 %		17:32:14
3	Y 371.029	540342.2	540342.2	99.727 %		17:32:14
3	Ag 328.068†	156.9	56.8	0.3189 ug/L	0.3189 ppb	17:32:14
3	As 188.979†	-32.8	-10.0	-4.9524 ug/L	-4.9524 ppb	17:32:34
3	B 249.677†	-231.2	352.1	8.8580 ug/L	8.8580 ppb	17:32:34
3	Ba 233.527†	-4.2	-4.9	-0.0472 ug/L	-0.0472 ppb	17:32:34
3	Be 313.107†	-4491.6	37.3	0.0160 ug/L	0.0160 ppb	17:32:14
3	Cd 226.502†	-211.9	1.8	0.0254 ug/L	0.0254 ppb	17:32:34
3	Co 228.616†	-65.6	-5.8	-0.1446 ug/L	-0.1446 ppb	17:32:34
3	Cr 267.716†	89.7	-1.7	-0.0227 ug/L	-0.0227 ppb	17:32:34
3	Cu 324.752†	5636.3	-58.8	-0.1938 ug/L	-0.1938 ppb	17:32:14
3	Mn 257.610†	602.5	156.7	0.2055 ug/L	0.2055 ppb	17:32:34
3	Mo 202.031†	16.0	3.5	0.3385 ug/L	0.3385 ppb	17:32:34
3	Ni 231.604†	84.5	9.7	0.3179 ug/L	0.3179 ppb	17:32:34
3	P 214.914†	233.6	14.8	9.4825 ug/L	9.4825 ppb	17:32:34
3	Pb 220.353†	-74.7	-7.6	-1.2039 ug/L	-1.2039 ppb	17:32:34
3	S 181.975 Axial†	43.4	3.1	4.6853 ug/L	4.6853 ppb	17:32:34
3	Sb 206.836†	30.7	-1.0	-0.3684 ug/L	-0.3684 ppb	17:32:34
3	Se 196.026†	-29.6	-7.5	-5.5268 ug/L	-5.5268 ppb	17:32:34
3	Si 251.611†	9031.8	8523.9	312.05 ug/L	312.05 ppb	17:32:14
3	Sn 189.927†	14.4	10.2	2.3519 ug/L	2.3519 ppb	17:32:34
3	Ti 334.940†	-1209.3	213.7	0.3923 ug/L	0.3923 ppb	17:32:14
3	Tl 190.801†	-36.5	1.5	0.5887 ug/L	0.5887 ppb	17:32:34
3	U 409.014†	-2470.5	-60.9	-2.3457 ug/L	-2.3457 ppb	17:32:14
3	V 292.402†	-1710.6	7.9	0.0673 ug/L	0.0673 ppb	17:32:14
3	Zn 213.857†	771.4	105.8	1.2071 ug/L	1.2071 ppb	17:32:34
3	SiO2†	9072.8	8522.3	672.87 ug/L	672.87 ppb	17:32:49

Mean Data: 1202060852|960825|5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	696044.2	100.94	%	0.703				0.70%
Sc Radial	3918.2	102	%	0.9				0.91%
Y 371.029	544714.3	100.53	%	0.706				0.70%
Y RADIAL	4447.4	102.7	%	2.20				2.15%
Ag 328.068†	31.4	0.1750	ug/L	0.13563	0.1750	ppb	0.13563	77.50%
Al 396.153Radial†	6.9	7.2053	ug/L	14.52739	7.2053	ppb	14.52739	201.62%
As 188.979†	-4.1	-2.0431	ug/L	2.51981	-2.0431	ppb	2.51981	123.33%
B 249.677†	341.3	8.5843	ug/L	0.25499	8.5843	ppb	0.25499	2.97%
Ba 233.527†	6.8	0.0660	ug/L	0.17280	0.0660	ppb	0.17280	261.72%
Be 313.107†	50.1	0.0208	ug/L	0.00609	0.0208	ppb	0.00609	29.36%
Ca 317.933Radial†	3.5	6.7956	ug/L	5.24045	6.7956	ppb	5.24045	77.12%
Cd 226.502†	11.3	0.1651	ug/L	0.12596	0.1651	ppb	0.12596	76.28%
Co 228.616†	0.1	0.0028	ug/L	0.12942	0.0028	ppb	0.12942	>999.9%
Cr 267.716†	0.1	0.0020	ug/L	0.07054	0.0020	ppb	0.07054	>999.9%
Cu 324.752†	-24.0	-0.0808	ug/L	0.12552	-0.0808	ppb	0.12552	155.33%
Fe 238.204 Radial†	1.1	14.060	ug/L	15.5366	14.060	ppb	15.5366	110.50%
K 766.490 Radial†	157.9	29.345	ug/L	9.6037	29.345	ppb	9.6037	32.73%

Mg 279.077 IEC†	-0.3	-12.693	ug/L	26.8317	-12.693	ppb	26.8317 211.40%
Mn 257.610†	155.3	0.2029	ug/L	0.00776	0.2029	ppb	0.00776 3.83%
Mo 202.031†	2.9	0.2772	ug/L	0.07834	0.2772	ppb	0.07834 28.26%
Na 589.592 Radial†	135.1	59.466	ug/L	9.8127	59.466	ppb	9.8127 16.50%
Ni 231.604†	6.9	0.2260	ug/L	0.15743	0.2260	ppb	0.15743 69.66%
P 214.914†	0.3	0.1893	ug/L	8.24318	0.1893	ppb	8.24318 >999.9%
Pb 220.353†	-4.9	-0.7651	ug/L	1.04101	-0.7651	ppb	1.04101 136.06%
S 181.975 Axial†	3.3	4.9889	ug/L	2.80385	4.9889	ppb	2.80385 56.20%
Sb 206.836†	3.1	1.2710	ug/L	1.51019	1.2710	ppb	1.51019 118.82%
Se 196.026†	-4.2	-3.0808	ug/L	2.18491	-3.0808	ppb	2.18491 70.92%
Si 251.611†	8526.5	312.14	ug/L	0.193	312.14	ppb	0.193 0.06%
Sn 189.927†	3.5	0.7995	ug/L	1.43063	0.7995	ppb	1.43063 178.94%
Sr 421.552†	44.3	0.4251	ug/L	0.24202	0.4251	ppb	0.24202 56.93%
Ti 334.940†	129.5	0.2356	ug/L	0.14726	0.2356	ppb	0.14726 62.50%
Tl 190.801†	0.6	0.2230	ug/L	0.67366	0.2230	ppb	0.67366 302.02%
U 409.014†	79.4	3.0581	ug/L	5.45598	3.0581	ppb	5.45598 178.41%
V 292.402†	3.8	0.0408	ug/L	0.15053	0.0408	ppb	0.15053 368.68%
Zn 213.857†	88.3	1.0064	ug/L	0.17396	1.0064	ppb	0.17396 17.28%
SiO2†	8422.2	664.97	ug/L	7.279	664.97	ppb	7.279 1.09%

Sequence No.: 34
Sample ID: 248375002|960825|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 63
Date Collected: 4/1/2010 17:35:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 248375002|960825|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	3985.6	3985.6	104	%			17:36:54
1	Y RADIAL	4349.1	4349.1	100.4	%			17:36:54
1	Al 396.153Radial†	-76.7	18.3	19.305	ug/L	19.305	ppb	17:36:54
1	Ca 317.933Radial†	30.1	10.3	20.294	ug/L	20.294	ppb	17:37:14
1	Fe 238.204 Radial†	6.4	-0.0	-0.2338	ug/L	-0.2338	ppb	17:37:14
1	K 766.490 Radial†	4102.6	955.4	177.61	ug/L	177.61	ppb	17:36:54
1	Mg 279.077 IEC†	0.4	-2.6	-106.96	ug/L	-106.96	ppb	17:37:14
1	Na 589.592 Radial†	-727.6	377.0	165.95	ug/L	165.95	ppb	17:36:54
1	Sr 421.552†	63.1	46.9	0.4504	ug/L	0.4504	ppb	17:36:54
1	Sc 361.383	697761.0	697761.0	101.19	%			17:38:10
1	Y 371.029	546065.0	546065.0	100.78	%			17:38:10
1	Ag 328.068†	110.2	9.0	0.0421	ug/L	0.0421	ppb	17:38:10
1	As 188.979†	-22.5	0.6	0.2771	ug/L	0.2771	ppb	17:38:30
1	B 249.677†	449.2	1027.0	25.838	ug/L	25.838	ppb	17:38:10
1	Ba 233.527†	24.6	23.6	0.2261	ug/L	0.2261	ppb	17:38:30
1	Be 313.107†	-4548.6	27.9	0.0119	ug/L	0.0119	ppb	17:38:10
1	Cd 226.502†	-191.4	24.3	0.3567	ug/L	0.3567	ppb	17:38:30
1	Co 228.616†	-55.4	4.9	0.1205	ug/L	0.1205	ppb	17:38:30
1	Cr 267.716†	89.0	-3.3	-0.0518	ug/L	-0.0518	ppb	17:38:30
1	Cu 324.752†	5738.9	-16.3	-0.0568	ug/L	-0.0568	ppb	17:38:10
1	Mn 257.610†	1254.1	794.4	1.0322	ug/L	1.0322	ppb	17:38:30
1	Mo 202.031†	11.9	-0.7	-0.0712	ug/L	-0.0712	ppb	17:38:30
1	Ni 231.604†	75.6	0.1	0.0024	ug/L	0.0024	ppb	17:38:30
1	P 214.914†	224.6	3.4	2.1980	ug/L	2.1980	ppb	17:38:30
1	Pb 220.353†	-69.1	-1.3	-0.1925	ug/L	-0.1925	ppb	17:38:30
1	S 181.975 Axial†	45.9	5.1	7.6443	ug/L	7.6443	ppb	17:38:30
1	Sb 206.836†	33.0	0.8	0.3267	ug/L	0.3267	ppb	17:38:30
1	Se 196.026†	-28.8	-6.4	-4.7201	ug/L	-4.7201	ppb	17:38:30
1	Si 251.611†	42775.2	41777.6	1529.4	ug/L	1529.4	ppb	17:38:10
1	Sn 189.927†	2.5	-1.7	-0.3814	ug/L	-0.3814	ppb	17:38:30
1	Ti 334.940†	-1294.4	142.3	0.2676	ug/L	0.2676	ppb	17:38:10
1	Tl 190.801†	-27.9	10.3	3.9851	ug/L	3.9851	ppb	17:38:30
1	U 409.014†	-2311.7	121.9	4.6946	ug/L	4.6946	ppb	17:38:10
1	V 292.402†	-1827.4	-89.6	-0.7841	ug/L	-0.7841	ppb	17:38:10
1	Zn 213.857†	855.3	180.7	2.0667	ug/L	2.0667	ppb	17:38:30
1	SiO2†	41483.5	40458.4	3194.4	ug/L	3194.4	ppb	17:39:27
2	Sc Radial	4028.9	4028.9	105	%			17:37:19
2	Y RADIAL	4360.2	4360.2	100.7	%			17:37:19
2	Al 396.153Radial†	-81.4	14.7	15.412	ug/L	15.412	ppb	17:37:19
2	Ca 317.933Radial†	33.2	12.9	25.398	ug/L	25.398	ppb	17:37:39
2	Fe 238.204 Radial†	6.8	0.3	3.5132	ug/L	3.5132	ppb	17:37:39
2	K 766.490 Radial†	4045.8	858.9	159.65	ug/L	159.65	ppb	17:37:19
2	Mg 279.077 IEC†	1.7	-1.3	-55.556	ug/L	-55.556	ppb	17:37:39
2	Na 589.592 Radial†	-736.2	376.4	165.65	ug/L	165.65	ppb	17:37:19
2	Sr 421.552†	29.7	14.4	0.1385	ug/L	0.1385	ppb	17:37:19
2	Sc 361.383	696254.7	696254.7	100.97	%			17:38:36
2	Y 371.029	544987.4	544987.4	100.58	%			17:38:36
2	Ag 328.068†	162.2	60.7	0.3325	ug/L	0.3325	ppb	17:38:36
2	As 188.979†	-27.9	-4.8	-2.3858	ug/L	-2.3858	ppb	17:38:56
2	B 249.677†	439.0	1017.8	25.607	ug/L	25.607	ppb	17:38:36
2	Ba 233.527†	18.7	17.7	0.1705	ug/L	0.1705	ppb	17:38:56
2	Be 313.107†	-4560.6	6.4	0.0029	ug/L	0.0029	ppb	17:38:36
2	Cd 226.502†	-221.8	-6.3	-0.0916	ug/L	-0.0916	ppb	17:38:56
2	Co 228.616†	-57.8	2.4	0.0638	ug/L	0.0638	ppb	17:38:56
2	Cr 267.716†	94.9	2.6	0.0383	ug/L	0.0383	ppb	17:38:56
2	Cu 324.752†	5834.4	90.5	0.3012	ug/L	0.3012	ppb	17:38:36
2	Mn 257.610†	1263.9	806.8	1.0466	ug/L	1.0466	ppb	17:38:56
2	Mo 202.031†	28.3	15.6	1.4983	ug/L	1.4983	ppb	17:38:56
2	Ni 231.604†	82.6	7.2	0.2339	ug/L	0.2339	ppb	17:38:56

2	P 214.914†	239.0	18.2	11.608	ug/L	11.608 ppb	17:38:56
2	Pb 220.353†	-50.8	16.7	2.6319	ug/L	2.6319 ppb	17:38:56
2	S 181.975 Axial†	49.4	8.7	13.100	ug/L	13.100 ppb	17:38:56
2	Sb 206.836†	37.3	5.2	2.1485	ug/L	2.1485 ppb	17:38:56
2	Se 196.026†	-19.7	2.6	1.9582	ug/L	1.9582 ppb	17:38:56
2	Si 251.611†	42575.3	41671.0	1525.5	ug/L	1525.5 ppb	17:38:36
2	Sn 189.927†	16.3	12.1	2.7762	ug/L	2.7762 ppb	17:38:56
2	Ti 334.940†	-1351.7	82.7	0.1576	ug/L	0.1576 ppb	17:38:36
2	Tl 190.801†	-38.0	0.3	0.1312	ug/L	0.1312 ppb	17:38:56
2	U 409.014†	-2403.2	26.3	1.0134	ug/L	1.0134 ppb	17:38:36
2	V 292.402†	-1790.4	-56.8	-0.4797	ug/L	-0.4797 ppb	17:38:36
2	Zn 213.857†	864.9	192.0	2.1934	ug/L	2.1934 ppb	17:38:56
2	SiO2†	42678.2	41730.4	3294.8	ug/L	3294.8 ppb	17:39:32
3	Sc Radial	4071.0	4071.0	106	%		17:37:44
3	Y RADIAL	4437.8	4437.8	102.4	%		17:37:44
3	Al 396.153Radial†	-68.9	27.3	28.707	ug/L	28.707 ppb	17:37:44
3	Ca 317.933Radial†	37.3	16.5	32.430	ug/L	32.430 ppb	17:38:04
3	Fe 238.204 Radial†	3.4	-3.0	-38.259	ug/L	-38.259 ppb	17:38:04
3	K 766.490 Radial†	4206.5	970.5	180.41	ug/L	180.41 ppb	17:37:44
3	Mg 279.077 IEC†	1.1	-2.0	-80.328	ug/L	-80.328 ppb	17:38:04
3	Na 589.592 Radial†	-700.8	417.0	183.55	ug/L	183.55 ppb	17:37:44
3	Sr 421.552†	58.8	41.6	0.3993	ug/L	0.3993 ppb	17:37:44
3	Sc 361.383	688910.0	688910.0	99.902	%		17:39:01
3	Y 371.029	538732.3	538732.3	99.430	%		17:39:01
3	Ag 328.068†	49.4	-50.4	-0.2875	ug/L	-0.2875 ppb	17:39:01
3	As 188.979†	-24.7	-1.9	-0.9441	ug/L	-0.9441 ppb	17:39:21
3	B 249.677†	470.2	1053.7	26.517	ug/L	26.517 ppb	17:39:01
3	Ba 233.527†	4.3	3.5	0.0329	ug/L	0.0329 ppb	17:39:21
3	Be 313.107†	-4481.7	37.1	0.0156	ug/L	0.0156 ppb	17:39:01
3	Cd 226.502†	-233.5	-20.2	-0.2928	ug/L	-0.2928 ppb	17:39:21
3	Co 228.616†	-72.9	-13.3	-0.3278	ug/L	-0.3278 ppb	17:39:21
3	Cr 267.716†	106.8	15.6	0.2269	ug/L	0.2269 ppb	17:39:21
3	Cu 324.752†	5711.6	29.3	0.0967	ug/L	0.0967 ppb	17:39:01
3	Mn 257.610†	1257.8	814.0	1.0528	ug/L	1.0528 ppb	17:39:21
3	Mo 202.031†	18.3	5.8	0.5584	ug/L	0.5584 ppb	17:39:21
3	Ni 231.604†	60.3	-14.3	-0.4676	ug/L	-0.4676 ppb	17:39:21
3	P 214.914†	232.6	14.4	9.2144	ug/L	9.2144 ppb	17:39:21
3	Pb 220.353†	-71.8	-4.9	-0.7540	ug/L	-0.7540 ppb	17:39:21
3	S 181.975 Axial†	50.1	10.0	14.956	ug/L	14.956 ppb	17:39:21
3	Sb 206.836†	29.6	-2.1	-0.8104	ug/L	-0.8104 ppb	17:39:21
3	Se 196.026†	-23.0	-0.9	-0.7578	ug/L	-0.7578 ppb	17:39:21
3	Si 251.611†	42224.3	41769.2	1529.1	ug/L	1529.1 ppb	17:39:01
3	Sn 189.927†	7.6	3.5	0.8016	ug/L	0.8016 ppb	17:39:21
3	Ti 334.940†	-1264.1	156.1	0.2951	ug/L	0.2951 ppb	17:39:01
3	Tl 190.801†	-32.6	5.3	2.0584	ug/L	2.0584 ppb	17:39:21
3	U 409.014†	-2460.8	-56.7	-2.1820	ug/L	-2.1820 ppb	17:39:01
3	V 292.402†	-1692.4	22.4	0.2045	ug/L	0.2045 ppb	17:39:01
3	Zn 213.857†	860.3	196.6	2.2573	ug/L	2.2573 ppb	17:39:21
3	SiO2†	42094.8	41597.0	3284.3	ug/L	3284.3 ppb	17:39:37

Mean Data: 248375002|960825|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	694308.6	100.68	%	0.687				0.68%
Sc Radial	4028.5	105	%	1.1				1.06%
Y 371.029	543261.6	100.27	%	0.731				0.73%
Y RADIAL	4382.4	101.2	%	1.12				1.10%
Ag 328.068†	6.4	0.0290	ug/L	0.31021	0.0290	ppb	0.31021	>999.9%
Al 396.153Radial†	20.1	21.142	ug/L	6.8350	21.142	ppb	6.8350	32.33%
As 188.979†	-2.1	-1.0176	ug/L	1.33297	-1.0176	ppb	1.33297	130.99%
B 249.677†	1032.8	25.987	ug/L	0.4735	25.987	ppb	0.4735	1.82%
Ba 233.527†	14.9	0.1432	ug/L	0.09949	0.1432	ppb	0.09949	69.50%
Be 313.107†	23.8	0.0101	ug/L	0.00654	0.0101	ppb	0.00654	64.44%
Ca 317.933Radial†	13.3	26.041	ug/L	6.0935	26.041	ppb	6.0935	23.40%
Cd 226.502†	-0.7	-0.0092	ug/L	0.33247	-0.0092	ppb	0.33247	>999.9%
Co 228.616†	-2.0	-0.0478	ug/L	0.24414	-0.0478	ppb	0.24414	510.48%
Cr 267.716†	5.0	0.0711	ug/L	0.14225	0.0711	ppb	0.14225	199.97%
Cu 324.752†	34.5	0.1137	ug/L	0.17960	0.1137	ppb	0.17960	157.93%
Fe 238.204 Radial†	-0.9	-11.660	ug/L	23.1114	-11.660	ppb	23.1114	198.22%
K 766.490 Radial†	928.3	172.55	ug/L	11.262	172.55	ppb	11.262	6.53%

Mg 279.077 IEC†	-2.0	-80.949	ug/L	25.7083	-80.949	ppb	25.7083 31.76%
Mn 257.610†	805.1	1.0439	ug/L	0.01053	1.0439	ppb	0.01053 1.01%
Mo 202.031†	6.9	0.6619	ug/L	0.78986	0.6619	ppb	0.78986 119.34%
Na 589.592 Radial†	390.1	171.71	ug/L	10.249	171.71	ppb	10.249 5.97%
Ni 231.604†	-2.4	-0.0771	ug/L	0.35744	-0.0771	ppb	0.35744 463.57%
P 214.914†	12.0	7.6736	ug/L	4.89074	7.6736	ppb	4.89074 63.73%
Pb 220.353†	3.5	0.5618	ug/L	1.81461	0.5618	ppb	1.81461 322.98%
S 181.975 Axial†	7.9	11.900	ug/L	3.8007	11.900	ppb	3.8007 31.94%
Sb 206.836†	1.3	0.5549	ug/L	1.49257	0.5549	ppb	1.49257 268.97%
Se 196.026†	-1.6	-1.1732	ug/L	3.35845	-1.1732	ppb	3.35845 286.25%
Si 251.611†	41739.3	1528.0	ug/L	2.18	1528.0	ppb	2.18 0.14%
Sn 189.927†	4.6	1.0655	ug/L	1.59528	1.0655	ppb	1.59528 149.72%
Sr 421.552†	34.3	0.3294	ug/L	0.16731	0.3294	ppb	0.16731 50.79%
Ti 334.940†	127.0	0.2401	ug/L	0.07277	0.2401	ppb	0.07277 30.31%
Tl 190.801†	5.3	2.0582	ug/L	1.92696	2.0582	ppb	1.92696 93.62%
U 409.014†	30.5	1.1753	ug/L	3.44119	1.1753	ppb	3.44119 292.79%
V 292.402†	-41.4	-0.3531	ug/L	0.50631	-0.3531	ppb	0.50631 143.38%
Zn 213.857†	189.7	2.1725	ug/L	0.09700	2.1725	ppb	0.09700 4.47%
SiO2†	41261.9	3257.9	ug/L	55.18	3257.9	ppb	55.18 1.69%

Sequence No.: 35
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 4/1/2010 17:41:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3850.8	3850.8	100	%			17:43:59
1	Y RADIAL	4131.6	4131.6	95.38	%			17:43:39
1	Al 396.153Radial†	4547.5	4625.4	4845.2	ug/L	4845.2	ppb	17:43:39
1	Ca 317.933Radial†	2651.0	2623.9	5152.2	ug/L	5152.2	ppb	17:43:59
1	Fe 238.204 Radial†	394.3	386.8	4931.2	ug/L	4931.2	ppb	17:43:59
1	K 766.490 Radial†	29310.4	26221.5	4870.3	ug/L	4870.3	ppb	17:43:39
1	Mg 279.077 IEC†	126.4	123.0	5066.6	ug/L	5066.6	ppb	17:43:59
1	Na 589.592 Radial†	19989.2	21003.6	9244.4	ug/L	9244.4	ppb	17:43:39
1	Sr 421.552†	47670.7	47505.6	456.09	ug/L	456.09	ppb	17:43:39
1	Sc 361.383	683435.8	683435.8	99.108	%			17:44:56
1	Y 371.029	464550.1	464550.1	85.738	%			17:45:01
1	Ag 328.068†	88154.0	88847.6	492.52	ug/L	492.52	ppb	17:45:01
1	As 188.979†	956.1	987.5	493.16	ug/L	493.16	ppb	17:45:21
1	B 249.677†	18306.0	19053.8	477.15	ug/L	477.15	ppb	17:45:01
1	Ba 233.527†	50254.2	50705.8	491.29	ug/L	491.29	ppb	17:45:01
1	Be 313.107†	1198081.0	1213388.7	491.17	ug/L	491.17	ppb	17:44:56
1	Cd 226.502†	32920.7	33430.5	488.64	ug/L	488.64	ppb	17:45:01
1	Co 228.616†	20064.0	20304.3	503.01	ug/L	503.01	ppb	17:45:01
1	Cr 267.716†	32806.9	33010.9	487.98	ug/L	487.98	ppb	17:45:01
1	Cu 324.752†	149944.5	145606.2	484.96	ug/L	484.96	ppb	17:45:01
1	Mn 257.610†	378428.5	381389.9	493.77	ug/L	493.77	ppb	17:44:56
1	Mo 202.031†	5083.8	5117.1	491.98	ug/L	491.98	ppb	17:45:21
1	Ni 231.604†	15207.6	15269.8	497.62	ug/L	497.62	ppb	17:45:01
1	P 214.914†	4001.9	3819.4	2347.0	ug/L	2347.0	ppb	17:45:21
1	Pb 220.353†	3001.9	3096.0	488.74	ug/L	488.74	ppb	17:45:21
1	S 181.975 Axial†	685.8	651.8	978.38	ug/L	978.38	ppb	17:45:21
1	Sb 206.836†	1259.7	1239.3	513.48	ug/L	513.48	ppb	17:45:21
1	Se 196.026†	628.0	655.8	502.33	ug/L	502.33	ppb	17:45:21
1	Si 251.611†	67171.2	67279.2	2457.0	ug/L	2457.0	ppb	17:45:01
1	Sn 189.927†	2125.5	2140.5	492.65	ug/L	492.65	ppb	17:45:21
1	Ti 334.940†	267101.8	270927.6	491.60	ug/L	491.60	ppb	17:45:01
1	Tl 190.801†	1224.1	1273.0	493.05	ug/L	493.05	ppb	17:45:21
1	U 409.014†	9845.2	12340.3	473.69	ug/L	473.69	ppb	17:45:01
1	V 292.402†	52877.9	55070.3	492.01	ug/L	492.01	ppb	17:45:01
1	Zn 213.857†	43046.8	42769.7	484.65	ug/L	484.65	ppb	17:45:01
1	SiO2†	68044.2	68117.6	5364.9	ug/L	5364.9	ppb	17:46:29
2	Sc Radial	3854.7	3854.7	100	%			17:44:24
2	Y RADIAL	4280.4	4280.4	98.81	%			17:44:04
2	Al 396.153Radial†	4650.3	4723.1	4948.2	ug/L	4948.2	ppb	17:44:04
2	Ca 317.933Radial†	2648.2	2618.5	5141.6	ug/L	5141.6	ppb	17:44:24
2	Fe 238.204 Radial†	391.4	383.6	4890.3	ug/L	4890.3	ppb	17:44:24
2	K 766.490 Radial†	29867.5	26747.0	4967.9	ug/L	4967.9	ppb	17:44:04
2	Mg 279.077 IEC†	128.1	124.5	5129.5	ug/L	5129.5	ppb	17:44:24
2	Na 589.592 Radial†	20414.9	21407.6	9422.2	ug/L	9422.2	ppb	17:44:04
2	Sr 421.552†	48847.0	48629.3	466.88	ug/L	466.88	ppb	17:44:04
2	Sc 361.383	690970.4	690970.4	100.20	%			17:45:27
2	Y 371.029	463893.1	463893.1	85.617	%			17:45:32
2	Ag 328.068†	87244.7	86970.3	482.13	ug/L	482.13	ppb	17:45:32
2	As 188.979†	958.1	979.0	488.87	ug/L	488.87	ppb	17:45:52
2	B 249.677†	18047.4	18594.3	465.62	ug/L	465.62	ppb	17:45:32
2	Ba 233.527†	49767.4	49667.0	481.23	ug/L	481.23	ppb	17:45:32
2	Be 313.107†	1207379.5	1209486.7	489.57	ug/L	489.57	ppb	17:45:27
2	Cd 226.502†	32502.7	32651.1	477.24	ug/L	477.24	ppb	17:45:32
2	Co 228.616†	19817.9	19837.9	491.47	ug/L	491.47	ppb	17:45:32
2	Cr 267.716†	32560.8	32404.4	479.02	ug/L	479.02	ppb	17:45:32
2	Cu 324.752†	148094.1	142109.8	473.32	ug/L	473.32	ppb	17:45:32
2	Mn 257.610†	380847.8	379640.7	491.50	ug/L	491.50	ppb	17:45:27
2	Mo 202.031†	5122.3	5099.6	490.29	ug/L	490.29	ppb	17:45:52
2	Ni 231.604†	15098.6	14993.7	488.63	ug/L	488.63	ppb	17:45:32

2	P 214.914†	4029.0	3802.5	2338.6 ug/L	2338.6 ppb	17:45:52
2	Pb 220.353†	3037.5	3098.5	489.17 ug/L	489.17 ppb	17:45:52
2	S 181.975 Axial†	702.8	661.2	992.51 ug/L	992.51 ppb	17:45:52
2	Sb 206.836†	1269.5	1235.2	511.77 ug/L	511.77 ppb	17:45:52
2	Se 196.026†	641.3	662.1	506.96 ug/L	506.96 ppb	17:45:52
2	Si 251.611†	66298.9	65669.7	2398.1 ug/L	2398.1 ppb	17:45:32
2	Sn 189.927†	2147.0	2138.6	492.21 ug/L	492.21 ppb	17:45:52
2	Ti 334.940†	264409.1	265301.5	481.39 ug/L	481.39 ppb	17:45:32
2	Tl 190.801†	1226.9	1262.4	488.93 ug/L	488.93 ppb	17:45:52
2	U 409.014†	9824.6	12211.5	468.75 ug/L	468.75 ppb	17:45:32
2	V 292.402†	52532.7	54144.0	483.83 ug/L	483.83 ppb	17:45:32
2	Zn 213.857†	42375.1	41625.7	471.64 ug/L	471.64 ppb	17:45:32
2	SiO2†	68630.7	67954.2	5352.0 ug/L	5352.0 ppb	17:46:34
3	Sc Radial	3808.7	3808.7	99.2 %		17:44:49
3	Y RADIAL	4241.5	4241.5	97.92 %		17:44:29
3	Al 396.153Radial†	4625.6	4754.2	4980.8 ug/L	4980.8 ppb	17:44:29
3	Ca 317.933Radial†	2619.0	2621.0	5146.4 ug/L	5146.4 ppb	17:44:49
3	Fe 238.204 Radial†	387.0	383.9	4893.9 ug/L	4893.9 ppb	17:44:49
3	K 766.490 Radial†	29629.8	26866.8	4990.2 ug/L	4990.2 ppb	17:44:29
3	Mg 279.077 IEC†	126.3	124.3	5120.0 ug/L	5120.0 ppb	17:44:49
3	Na 589.592 Radial†	20199.8	21436.3	9434.9 ug/L	9434.9 ppb	17:44:29
3	Sr 421.552†	48340.1	48706.0	467.62 ug/L	467.62 ppb	17:44:29
3	Sc 361.383	686670.1	686670.1	99.577 %		17:45:58
3	Y 371.029	466081.0	466081.0	86.021 %		17:46:03
3	Ag 328.068†	88388.9	88664.5	491.49 ug/L	491.49 ppb	17:46:03
3	As 188.979†	966.1	993.0	495.85 ug/L	495.85 ppb	17:46:23
3	B 249.677†	18392.7	19053.9	477.16 ug/L	477.16 ppb	17:46:03
3	Ba 233.527†	50259.3	50472.1	489.03 ug/L	489.03 ppb	17:46:03
3	Be 313.107†	1207381.5	1217034.8	492.64 ug/L	492.64 ppb	17:45:58
3	Cd 226.502†	32925.5	33278.9	486.43 ug/L	486.43 ppb	17:46:03
3	Co 228.616†	20045.9	20190.7	500.20 ug/L	500.20 ppb	17:46:03
3	Cr 267.716†	33004.5	33053.5	488.61 ug/L	488.61 ppb	17:46:03
3	Cu 324.752†	150015.8	144965.2	482.83 ug/L	482.83 ppb	17:46:03
3	Mn 257.610†	379982.4	381151.9	493.46 ug/L	493.46 ppb	17:45:58
3	Mo 202.031†	5126.8	5136.1	493.80 ug/L	493.80 ppb	17:46:23
3	Ni 231.604†	15196.4	15186.3	494.90 ug/L	494.90 ppb	17:46:03
3	P 214.914†	4045.8	3844.5	2363.6 ug/L	2363.6 ppb	17:46:23
3	Pb 220.353†	3057.5	3137.5	495.33 ug/L	495.33 ppb	17:46:23
3	S 181.975 Axial†	706.1	668.8	1004.0 ug/L	1004.0 ppb	17:46:23
3	Sb 206.836†	1271.2	1244.9	515.78 ug/L	515.78 ppb	17:46:23
3	Se 196.026†	631.6	656.4	502.73 ug/L	502.73 ppb	17:46:23
3	Si 251.611†	67180.0	66968.8	2445.6 ug/L	2445.6 ppb	17:46:03
3	Sn 189.927†	2149.3	2154.3	495.83 ug/L	495.83 ppb	17:46:23
3	Ti 334.940†	267606.4	270164.9	490.21 ug/L	490.21 ppb	17:46:03
3	Tl 190.801†	1241.4	1284.6	497.51 ug/L	497.51 ppb	17:46:23
3	U 409.014†	9944.3	12393.0	475.73 ug/L	475.73 ppb	17:46:03
3	V 292.402†	53108.1	55050.2	491.87 ug/L	491.87 ppb	17:46:03
3	Zn 213.857†	42922.9	42440.7	480.91 ug/L	480.91 ppb	17:46:03
3	SiO2†	67702.1	67450.6	5312.2 ug/L	5312.2 ppb	17:46:39

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	687025.4	99.628	%	0.5481				0.55%
Sc Radial	3838.1	100.0	%	0.66				0.66%
Y 371.029	464841.4	85.792	%	0.2072				0.24%
Y RADIAL	4217.8	97.37	%	1.781				1.83%
Ag 328.068†	88160.8	488.72	ug/L	5.723	488.72	ppb	5.723	1.17%
QC value within limits for Ag 328.068 Recovery = 97.74%								
Al 396.153Radial†	4700.9	4924.7	ug/L	70.76	4924.7	ppb	70.76	1.44%
QC value within limits for Al 396.153Radial Recovery = 98.49%								
As 188.979†	986.5	492.62	ug/L	3.521	492.62	ppb	3.521	0.71%
QC value within limits for As 188.979 Recovery = 98.52%								
B 249.677†	18900.7	473.31	ug/L	6.657	473.31	ppb	6.657	1.41%
QC value within limits for B 249.677 Recovery = 94.66%								
Ba 233.527†	50281.6	487.19	ug/L	5.278	487.19	ppb	5.278	1.08%
QC value within limits for Ba 233.527 Recovery = 97.44%								
Be 313.107†	1213303.4	491.12	ug/L	1.535	491.12	ppb	1.535	0.31%
QC value within limits for Be 313.107 Recovery = 98.22%								
Ca 317.933Radial†	2621.1	5146.7	ug/L	5.29	5146.7	ppb	5.29	0.10%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.93%
Cd 226.502†            33120.1      484.10 ug/L         6.043      484.10 ppb          6.043   1.25%
   QC value within limits for Cd 226.502  Recovery = 96.82%
Co 228.616†            20111.0      498.23 ug/L         6.016      498.23 ppb          6.016   1.21%
   QC value within limits for Co 228.616  Recovery = 99.65%
Cr 267.716†            32822.9      485.21 ug/L         5.363      485.21 ppb          5.363   1.11%
   QC value within limits for Cr 267.716  Recovery = 97.04%
Cu 324.752†           144227.1      480.37 ug/L         6.199      480.37 ppb          6.199   1.29%
   QC value within limits for Cu 324.752  Recovery = 96.07%
Fe 238.204 Radial†       384.8      4905.1 ug/L        22.69      4905.1 ppb         22.69   0.46%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.10%
K 766.490 Radial†      26611.8      4942.8 ug/L        63.79      4942.8 ppb         63.79   1.29%
   QC value within limits for K 766.490 Radial  Recovery = 98.86%
Mg 279.077 IEC†          123.9      5105.4 ug/L        33.89      5105.4 ppb         33.89   0.66%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.11%
Mn 257.610†           380727.5      492.91 ug/L         1.230      492.91 ppb          1.230   0.25%
   QC value within limits for Mn 257.610  Recovery = 98.58%
Mo 202.031†             5117.6      492.02 ug/L         1.754      492.02 ppb          1.754   0.36%
   QC value within limits for Mo 202.031  Recovery = 98.40%
Na 589.592 Radial†     21282.5      9367.2 ug/L       106.49      9367.2 ppb        106.49   1.14%
   QC value within limits for Na 589.592 Radial  Recovery = 93.67%
Ni 231.604†            15150.0      493.72 ug/L         4.614      493.72 ppb          4.614   0.93%
   QC value within limits for Ni 231.604  Recovery = 98.74%
P 214.914†              3822.1      2349.7 ug/L        12.71      2349.7 ppb         12.71   0.54%
   QC value within limits for P 214.914  Recovery = 93.99%
Pb 220.353†             3110.7      491.08 ug/L         3.684      491.08 ppb          3.684   0.75%
   QC value within limits for Pb 220.353  Recovery = 98.22%
S 181.975 Axial†         660.6      991.63 ug/L        12.834      991.63 ppb         12.834   1.29%
   QC value within limits for S 181.975 Axial  Recovery = 99.16%
Sb 206.836†             1239.8      513.68 ug/L         2.011      513.68 ppb          2.011   0.39%
   QC value within limits for Sb 206.836  Recovery = 102.74%
Se 196.026†              658.1      504.01 ug/L         2.564      504.01 ppb          2.564   0.51%
   QC value within limits for Se 196.026  Recovery = 100.80%
Si 251.611†            66639.2      2433.5 ug/L        31.24      2433.5 ppb         31.24   1.28%
   QC value within limits for Si 251.611  Recovery = 97.34%
Sn 189.927†             2144.4      493.56 ug/L         1.976      493.56 ppb          1.976   0.40%
   QC value within limits for Sn 189.927  Recovery = 98.71%
Sr 421.552†            48280.3      463.53 ug/L         6.452      463.53 ppb          6.452   1.39%
   QC value within limits for Sr 421.552  Recovery = 92.71%
Ti 334.940†           268798.0      487.73 ug/L         5.538      487.73 ppb          5.538   1.14%
   QC value within limits for Ti 334.940  Recovery = 97.55%
Tl 190.801†             1273.4      493.16 ug/L         4.288      493.16 ppb          4.288   0.87%
   QC value within limits for Tl 190.801  Recovery = 98.63%
U 409.014†             12314.9      472.72 ug/L         3.585      472.72 ppb          3.585   0.76%
   QC value within limits for U 409.014  Recovery = 94.54%
V 292.402†             54754.8      489.24 ug/L         4.682      489.24 ppb          4.682   0.96%
   QC value within limits for V 292.402  Recovery = 97.85%
Zn 213.857†            42278.7      479.07 ug/L         6.697      479.07 ppb          6.697   1.40%
   QC value within limits for Zn 213.857  Recovery = 95.81%
SiO2†                  67840.8      5343.0 ug/L        27.48      5343.0 ppb         27.48   0.51%
   QC value within limits for SiO2  Recovery = 99.92%
All analyte(s) passed QC.
```

Sequence No.: 36
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 4/1/2010 17:48:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3961.3	3961.3	103	%			17:51:00
1	Y RADIAL	4387.0	4387.0	101.3	%			17:50:40
1	Al 396.153Radial†	-98.5	-3.2	-3.4263	ug/L	-3.4263	ppb	17:51:00
1	Ca 317.933Radial†	16.9	-2.3	-4.5381	ug/L	-4.5381	ppb	17:51:00
1	Fe 238.204 Radial†	7.2	0.8	10.254	ug/L	10.254	ppb	17:51:00
1	K 766.490 Radial†	2947.2	-140.0	-26.035	ug/L	-26.035	ppb	17:50:40
1	Mg 279.077 IEC†	2.4	-0.7	-27.744	ug/L	-27.744	ppb	17:51:00
1	Na 589.592 Radial†	-1054.1	56.4	24.819	ug/L	24.819	ppb	17:50:40
1	Sr 421.552†	22.5	8.0	0.0764	ug/L	0.0764	ppb	17:50:40
1	Sc 361.383	679821.4	679821.4	98.584	%			17:51:57
1	Y 371.029	533135.7	533135.7	98.397	%			17:51:57
1	Ag 328.068†	137.3	39.4	0.2242	ug/L	0.2242	ppb	17:51:57
1	As 188.979†	-23.1	-0.6	-0.3060	ug/L	-0.3060	ppb	17:52:17
1	B 249.677†	-440.4	136.3	3.4289	ug/L	3.4289	ppb	17:52:17
1	Ba 233.527†	-7.1	-8.0	-0.0776	ug/L	-0.0776	ppb	17:52:17
1	Be 313.107†	-4513.9	-55.5	-0.0230	ug/L	-0.0230	ppb	17:51:57
1	Cd 226.502†	-214.0	-3.6	-0.0546	ug/L	-0.0546	ppb	17:52:17
1	Co 228.616†	-69.3	-10.6	-0.2622	ug/L	-0.2622	ppb	17:52:17
1	Cr 267.716†	97.1	7.2	0.1094	ug/L	0.1094	ppb	17:52:17
1	Cu 324.752†	5413.5	-196.7	-0.6509	ug/L	-0.6509	ppb	17:51:57
1	Mn 257.610†	462.9	24.6	0.0339	ug/L	0.0339	ppb	17:52:17
1	Mo 202.031†	16.4	4.1	0.3979	ug/L	0.3979	ppb	17:52:17
1	Ni 231.604†	80.6	7.1	0.2328	ug/L	0.2328	ppb	17:52:17
1	P 214.914†	230.8	15.6	10.093	ug/L	10.093	ppb	17:52:17
1	Pb 220.353†	-62.1	4.0	0.6249	ug/L	0.6249	ppb	17:52:17
1	S 181.975 Axial†	49.0	9.4	14.169	ug/L	14.169	ppb	17:52:17
1	Sb 206.836†	46.9	15.8	6.3696	ug/L	6.3696	ppb	17:52:17
1	Se 196.026†	-33.9	-12.3	-9.0694	ug/L	-9.0694	ppb	17:52:17
1	Si 251.611†	511.9	22.7	0.8250	ug/L	0.8250	ppb	17:52:17
1	Sn 189.927†	10.8	6.8	1.5700	ug/L	1.5700	ppb	17:52:17
1	Ti 334.940†	-1539.8	-140.4	-0.2502	ug/L	-0.2502	ppb	17:51:57
1	Tl 190.801†	-37.2	0.2	0.0679	ug/L	0.0679	ppb	17:52:17
1	U 409.014†	-2546.8	-176.9	-6.8142	ug/L	-6.8142	ppb	17:51:57
1	V 292.402†	-1739.4	-48.0	-0.4322	ug/L	-0.4322	ppb	17:51:57
1	Zn 213.857†	625.3	-30.3	-0.3487	ug/L	-0.3487	ppb	17:52:17
1	SiO2†	513.1	-18.7	-1.4902	ug/L	-1.4902	ppb	17:53:13
2	Sc Radial	3908.4	3908.4	102	%			17:51:25
2	Y RADIAL	4350.1	4350.1	100.4	%			17:51:05
2	Al 396.153Radial†	-91.3	2.5	2.6152	ug/L	2.6152	ppb	17:51:25
2	Ca 317.933Radial†	16.7	-2.3	-4.5092	ug/L	-4.5092	ppb	17:51:25
2	Fe 238.204 Radial†	3.5	-2.7	-34.777	ug/L	-34.777	ppb	17:51:25
2	K 766.490 Radial†	3031.8	-18.1	-3.3579	ug/L	-3.3579	ppb	17:51:05
2	Mg 279.077 IEC†	4.1	1.0	40.377	ug/L	40.377	ppb	17:51:25
2	Na 589.592 Radial†	-1161.4	-62.9	-27.665	ug/L	-27.665	ppb	17:51:05
2	Sr 421.552†	20.8	6.6	0.0630	ug/L	0.0630	ppb	17:51:05
2	Sc 361.383	671957.3	671957.3	97.443	%			17:52:22
2	Y 371.029	527594.9	527594.9	97.374	%			17:52:22
2	Ag 328.068†	117.9	21.1	0.1008	ug/L	0.1008	ppb	17:52:22
2	As 188.979†	-16.4	6.0	2.9532	ug/L	2.9532	ppb	17:52:42
2	B 249.677†	-436.5	135.1	3.4054	ug/L	3.4054	ppb	17:52:42
2	Ba 233.527†	-0.3	-1.1	-0.0133	ug/L	-0.0133	ppb	17:52:42
2	Be 313.107†	-4356.1	52.8	0.0210	ug/L	0.0210	ppb	17:52:22
2	Cd 226.502†	-224.5	-17.0	-0.2442	ug/L	-0.2442	ppb	17:52:42
2	Co 228.616†	-61.5	-3.5	-0.0821	ug/L	-0.0821	ppb	17:52:42
2	Cr 267.716†	73.3	-16.1	-0.2436	ug/L	-0.2436	ppb	17:52:42
2	Cu 324.752†	5438.5	-106.8	-0.3589	ug/L	-0.3589	ppb	17:52:22
2	Mn 257.610†	460.4	27.5	0.0305	ug/L	0.0305	ppb	17:52:42
2	Mo 202.031†	24.9	13.0	1.2500	ug/L	1.2500	ppb	17:52:42
2	Ni 231.604†	69.2	-3.6	-0.1187	ug/L	-0.1187	ppb	17:52:42

2	P 214.914†	234.9	22.5	14.508 ug/L	14.508 ppb	17:52:42
2	Pb 220.353†	-61.9	3.5	0.5530 ug/L	0.5530 ppb	17:52:42
2	S 181.975 Axial†	40.0	0.8	1.1475 ug/L	1.1475 ppb	17:52:42
2	Sb 206.836†	35.8	5.0	2.0460 ug/L	2.0460 ppb	17:52:42
2	Se 196.026†	-25.5	-4.1	-3.1037 ug/L	-3.1037 ppb	17:52:42
2	Si 251.611†	505.3	22.0	0.7897 ug/L	0.7897 ppb	17:52:42
2	Sn 189.927†	9.0	5.1	1.1659 ug/L	1.1659 ppb	17:52:42
2	Ti 334.940†	-1476.8	-94.1	-0.1755 ug/L	-0.1755 ppb	17:52:22
2	Tl 190.801†	-27.7	9.5	3.6603 ug/L	3.6603 ppb	17:52:42
2	U 409.014†	-2287.1	59.4	2.2914 ug/L	2.2914 ppb	17:52:22
2	V 292.402†	-1751.2	-80.8	-0.6841 ug/L	-0.6841 ppb	17:52:22
2	Zn 213.857†	622.8	-25.4	-0.2844 ug/L	-0.2844 ppb	17:52:42
2	SiO2†	507.1	-18.7	-1.5117 ug/L	-1.5117 ppb	17:53:18
3	Sc Radial	3868.8	3868.8	101 %		17:51:50
3	Y RADIAL	4361.6	4361.6	100.7 %		17:51:30
3	Al 396.153Radial†	-104.3	-11.3	-11.965 ug/L	-11.965 ppb	17:51:50
3	Ca 317.933Radial†	17.7	-1.1	-2.1604 ug/L	-2.1604 ppb	17:51:50
3	Fe 238.204 Radial†	6.8	0.6	7.6655 ug/L	7.6655 ppb	17:51:50
3	K 766.490 Radial†	3064.6	44.8	8.3371 ug/L	8.3371 ppb	17:51:30
3	Mg 279.077 IEC†	5.3	2.3	93.227 ug/L	93.227 ppb	17:51:50
3	Na 589.592 Radial†	-1084.1	2.2	0.9681 ug/L	0.9681 ppb	17:51:30
3	Sr 421.552†	38.2	24.1	0.2310 ug/L	0.2310 ppb	17:51:30
3	Sc 361.383	684559.1	684559.1	99.271 %		17:52:47
3	Y 371.029	536803.7	536803.7	99.074 %		17:52:47
3	Ag 328.068†	97.0	-2.1	-0.0083 ug/L	-0.0083 ppb	17:52:47
3	As 188.979†	-18.6	4.1	2.0148 ug/L	2.0148 ppb	17:53:07
3	B 249.677†	-414.3	165.6	4.1657 ug/L	4.1657 ppb	17:53:07
3	Ba 233.527†	-9.2	-10.0	-0.0974 ug/L	-0.0974 ppb	17:53:07
3	Be 313.107†	-4411.7	79.2	0.0316 ug/L	0.0316 ppb	17:52:47
3	Cd 226.502†	-196.0	16.0	0.2331 ug/L	0.2331 ppb	17:53:07
3	Co 228.616†	-56.3	3.0	0.0786 ug/L	0.0786 ppb	17:53:07
3	Cr 267.716†	87.8	-2.9	-0.0413 ug/L	-0.0413 ppb	17:53:07
3	Cu 324.752†	5582.8	-64.1	-0.2115 ug/L	-0.2115 ppb	17:52:47
3	Mn 257.610†	426.6	-15.2	-0.0228 ug/L	-0.0228 ppb	17:53:07
3	Mo 202.031†	31.7	19.4	1.8677 ug/L	1.8677 ppb	17:53:07
3	Ni 231.604†	65.8	-8.4	-0.2724 ug/L	-0.2724 ppb	17:53:07
3	P 214.914†	204.9	-12.1	-7.6725 ug/L	-7.6725 ppb	17:53:07
3	Pb 220.353†	-66.4	0.1	0.0121 ug/L	0.0121 ppb	17:53:07
3	S 181.975 Axial†	38.4	-1.5	-2.2668 ug/L	-2.2668 ppb	17:53:07
3	Sb 206.836†	33.8	2.3	0.9842 ug/L	0.9842 ppb	17:53:07
3	Se 196.026†	-23.9	-2.0	-1.4630 ug/L	-1.4630 ppb	17:53:07
3	Si 251.611†	507.5	14.7	0.5135 ug/L	0.5135 ppb	17:53:07
3	Sn 189.927†	7.0	2.9	0.6723 ug/L	0.6723 ppb	17:53:07
3	Ti 334.940†	-1501.1	-90.7	-0.1712 ug/L	-0.1712 ppb	17:52:47
3	Tl 190.801†	-21.8	16.0	6.1392 ug/L	6.1392 ppb	17:53:07
3	U 409.014†	-2465.7	-77.3	-2.9774 ug/L	-2.9774 ppb	17:52:47
3	V 292.402†	-1740.8	-37.2	-0.3065 ug/L	-0.3065 ppb	17:52:47
3	Zn 213.857†	642.4	-17.4	-0.1986 ug/L	-0.1986 ppb	17:53:07
3	SiO2†	513.3	-22.1	-1.7925 ug/L	-1.7925 ppb	17:53:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	678779.3	98.433	%	0.9230				0.94%
Sc Radial	3912.8	102	%	1.2				1.19%
Y 371.029	532511.4	98.282	%	0.8556				0.87%
Y RADIAL	4366.2	100.8	%	0.44				0.43%
Ag 328.068†	19.5	0.1056	ug/L	0.11629	0.1056	ppb	0.11629	110.14%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.0	-4.2587	ug/L	7.32565	-4.2587	ppb	7.32565	172.02%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.2	1.5540	ug/L	1.67773	1.5540	ppb	1.67773	107.96%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	145.7	3.6666	ug/L	0.43235	3.6666	ppb	0.43235	11.79%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-6.4	-0.0628	ug/L	0.04395	-0.0628	ppb	0.04395	70.02%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	25.5	0.0099	ug/L	0.02893	0.0099	ppb	0.02893	293.34%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.9	-3.7359	ug/L	1.36448	-3.7359	ppb	1.36448	36.52%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -1.5     -0.0219 ug/L       0.24033     -0.0219 ppb        0.24033 >999.9%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -3.7     -0.0886 ug/L       0.17051     -0.0886 ppb        0.17051 192.46%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -3.9     -0.0585 ug/L       0.17710     -0.0585 ppb        0.17710 302.78%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -122.5     -0.4071 ug/L       0.22363     -0.4071 ppb        0.22363  54.93%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.4     -5.6192 ug/L      25.28451     -5.6192 ppb       25.28451 449.96%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -37.7     -7.0186 ug/L      17.47604     -7.0186 ppb       17.47604 248.99%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.9      35.287 ug/L       60.6460      35.287 ppb        60.6460 171.87%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              12.3      0.0139 ug/L       0.03180      0.0139 ppb        0.03180 228.91%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              12.2      1.1719 ug/L       0.73799      1.1719 ppb        0.73799  62.97%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -1.4     -0.6259 ug/L      26.27838     -0.6259 ppb       26.27838 >999.9%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -1.6     -0.0528 ug/L       0.25896     -0.0528 ppb        0.25896 490.73%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                8.7      5.6428 ug/L      11.74075      5.6428 ppb       11.74075 208.07%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               2.5      0.3967 ug/L       0.33495      0.3967 ppb        0.33495  84.44%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          2.9      4.3498 ug/L       8.67317      4.3498 ppb        8.67317 199.39%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               7.7      3.1332 ug/L       2.85258      3.1332 ppb        2.85258  91.04%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -6.1     -4.5454 ug/L       4.00291     -4.5454 ppb        4.00291  88.07%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              19.8      0.7094 ug/L       0.17058      0.7094 ppb        0.17058  24.04%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               4.9      1.1361 ug/L       0.44959      1.1361 ppb        0.44959  39.57%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              12.9      0.1235 ug/L       0.09333      0.1235 ppb        0.09333  75.59%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†            -108.4     -0.1990 ug/L       0.04443     -0.1990 ppb        0.04443  22.33%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               8.6      3.2891 ug/L       3.05262      3.2891 ppb        3.05262  92.81%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -64.9     -2.5001 ug/L       4.57151     -2.5001 ppb        4.57151 182.85%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -55.3     -0.4742 ug/L       0.19228     -0.4742 ppb        0.19228  40.55%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -24.4     -0.2772 ug/L       0.07531     -0.2772 ppb        0.07531  27.17%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    -19.8     -1.5981 ug/L       0.16869     -1.5981 ppb        0.16869  10.56%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS#3 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Wednesday, April 21, 2010 15:09:19
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.8306
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	684.8	684.816	22.333	3.3
	Mg	24.0	5446.2	5446.238	74.552	1.4
	Co	58.9	14308.0	14307.962	178.365	1.2
	Rh	102.9	53512.0	53512.045	561.686	1.0
	In	114.9	72302.1	72302.119	744.681	1.0
	Pb	208.0	71192.6	71192.555	291.091	0.4
⌈>	Ba	137.9	67886.2	67886.152	498.754	0.7
⌊	Ba++	69.0	1019.3	0.015	0.000	2.9
⌈>	Ce	139.9	87835.2	87835.215	773.982	0.9
⌊	CeO	155.9	2501.7	0.028	0.000	1.4
	Bkgd	220.0	3.2	3.200	1.204	37.6

Current Optimization File Data

Current Value	Description
1.06	Nebulizer Gas Flow
6.00	Lens Voltage
1450.00	ICP RF Power
-1975.00	Analog Stage Voltage
1400.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-7.00	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	5.8	950.4
Co	59	13	6.5	21779.6
In	115	13	7.3	124445.3

ICPMS#3 Instrument Tuning Report

File Name: 100421.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	590	2060	0.644
Be	9.0	9.0	2072	2040	0.675
Mg	24.0	24.0	5706	2110	0.654
Mg	25.0	25.0	5881	2020	0.684
Mg	26.0	26.0	6225	2140	0.641
Co	58.9	58.9	14206	2115	0.652
Rh	102.9	102.9	24905	2165	0.661
In	114.9	114.9	27830	2180	0.657
Ce	139.9	140.0	33930	2220	0.621
Pb	206.0	206.0	49991	2280	0.667
Pb	207.0	207.0	50272	2310	0.657
Pb	208.0	208.0	50486	2300	0.652
U	238.1	238.1	57845	2340	0.683

ICPMS#3 - Summary Report

Sample ID: Blank
Sample Date/Time: Wednesday, April 21, 2010 16:18:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\Blank.348

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9		ug/L		3	
>	Sc	45		ug/L		295852	
	Mn	55		ug/L		253	
	Cd	111		ug/L		1	
	Cd	114		ug/L		9	
>	In	115		ug/L		129005	
	Sb	121		ug/L		39	
	Sb	123		ug/L		34	
>	Lu	175		ug/L		247247	
	Tl	205		ug/L		127	
	Pb	208		ug/L		175	
	U	238		ug/L		24	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Simple Linear	
Sc	45	Simple Linear	
Mn	55	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Lu	175	Simple Linear	
Tl	205	Simple Linear	
Pb	208	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45					
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115					
	Sb	121					
	Sb	123					
>	Lu	175					
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Wednesday, April 21, 2010 16:22:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\Standard 1.349

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	10.000	ug/L	9.673	1643	0.005
>	Sc	45		ug/L		296355	296355.010
	Mn	55	10.000	ug/L	3.721	32659	0.110
	Cd	111	10.000	ug/L	0.952	7619	0.058
	Cd	114		ug/L		17589	0.135
>	In	115		ug/L		130538	130537.747
	Sb	121	10.000	ug/L	0.056	24919	0.191
	Sb	123		ug/L		19434	0.149
>	Lu	175		ug/L		248753	248753.428
	Tl	205	10.000	ug/L	0.811	122606	0.492
	Pb	208	10.000	ug/L	0.505	153343	0.616
	U	238	10.000	ug/L	1.659	180729	0.727

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45					
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115					
	Sb	121					
	Sb	123					
>	Lu	175					
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Wednesday, April 21, 2010 16:25:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\Standard 2.350

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**99.962**	**ug/L**	10.910	14474	0.053
>	Sc	45		**ug/L**		271703	271702.514
	Mn	55	**100.012**	**ug/L**	3.353	301130	1.110
	Cd	111	**99.995**	**ug/L**	0.628	72512	0.581
	Cd	114		**ug/L**		168751	1.351
>	In	115		**ug/L**		124905	124905.208
	Sb	121	**100.012**	**ug/L**	1.316	240932	1.930
	Sb	123		**ug/L**		185422	1.485
>	Lu	175		**ug/L**		240552	240551.876
	Tl	205	**100.001**	**ug/L**	1.308	1185340	4.929
	Pb	208	**99.979**	**ug/L**	1.709	1450384	6.032
	U	238	**99.974**	**ug/L**	2.239	1702134	7.082

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45					
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115					
	Sb	121					
	Sb	123					
>	Lu	175					
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Wednesday, April 21, 2010 16:28:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 1.351

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**52.251**	**ug/L**	10.015	7938	0.028
>	Sc	45		**ug/L**		285058	285058.412
	Mn	55	**51.742**	**ug/L**	2.645	163626	0.574
	Cd	111	**50.623**	**ug/L**	0.945	37914	0.294
	Cd	114		**ug/L**		89100	0.691
>	In	115		**ug/L**		128998	128997.942
	Sb	121	**49.267**	**ug/L**	0.816	122658	0.951
	Sb	123		**ug/L**		94523	0.732
>	Lu	175		**ug/L**		245974	245973.862
	Tl	205	**50.434**	**ug/L**	0.574	611549	2.486
	Pb	208	**51.299**	**ug/L**	0.315	761443	3.095
	U	238	**53.597**	**ug/L**	0.824	933769	3.796

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	104.502				
>	Sc	45		96.4			
	Mn	55	103.485				
	Cd	111	101.247				
	Cd	114					
>	In	115		100.0			
	Sb	121	98.534				
	Sb	123					
>	Lu	175		99.5			
	Tl	205	100.867				
	Pb	208	102.598				
	U	238	107.194				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Wednesday, April 21, 2010 16:32:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 2.352

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.011**	**ug/L**	90.250	5	0.000
>	Sc	45		**ug/L**		298450	298450.309
	Mn	55	**-0.011**	**ug/L**	12.122	219	-0.000
	Cd	111	**0.003**	**ug/L**	106.773	3	0.000
	Cd	114		**ug/L**		10	0.000
>	In	115		**ug/L**		132358	132357.756
	Sb	121	**0.039**	**ug/L**	7.002	138	0.001
	Sb	123		**ug/L**		111	0.001
>	Lu	175		**ug/L**		250648	250647.563
	Tl	205	**0.473**	**ug/L**	15.372	5946	0.023
	Pb	208	**0.002**	**ug/L**	26.063	210	0.000
	U	238	**0.003**	**ug/L**	5.593	82	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		100.9			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		102.6			
	Sb	121					
	Sb	123					
>	Lu	175		101.4			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Wednesday, April 21, 2010 16:35:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 3.353

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.728**	**ug/L**	1.621	116	0.000
>	Sc	45		**ug/L**		293993	293992.674
	Mn	55	**5.930**	**ug/L**	3.542	19543	0.066
	Cd	111	**1.232**	**ug/L**	2.325	930	0.007
	Cd	114		**ug/L**		2108	0.016
>	In	115		**ug/L**		129990	129990.378
	Sb	121	**2.941**	**ug/L**	0.842	7418	0.057
	Sb	123		**ug/L**		5710	0.044
>	Lu	175		**ug/L**		245879	245878.528
	Tl	205	**1.316**	**ug/L**	2.160	16069	0.065
	Pb	208	**2.388**	**ug/L**	1.183	35582	0.144
	U	238	**0.291**	**ug/L**	0.555	5098	0.021

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	145.520				
>	Sc	45		99.4			
	Mn	55	118.598				
	Cd	111	123.200				
	Cd	114					
>	In	115		100.8			
	Sb	121	98.037				
	Sb	123					
>	Lu	175		99.4			
	Tl	205	131.626				
	Pb	208	119.377				
	U	238	145.638				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 3	Be	9CRDL is out of limits
QC Std 3	Tl	205CRDL is out of limits
QC Std 3	U	238CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Wednesday, April 21, 2010 16:38:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 4.354

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.102**	**ug/L**	0.868	13	0.000
>	Sc	45		**ug/L**		194754	194753.853
	Mn	55	**5.867**	**ug/L**	1.766	12843	0.065
	Cd	111	**0.481**	**ug/L**	10.350	260	0.003
	Cd	114		**ug/L**		4073	0.044
>	In	115		**ug/L**		92793	92793.163
	Sb	121	**0.120**	**ug/L**	14.923	242	0.002
	Sb	123		**ug/L**		188	0.002
>	Lu	175		**ug/L**		187851	187851.055
	Tl	205	**0.119**	**ug/L**	9.474	1198	0.006
	Pb	208	**0.217**	**ug/L**	2.003	2596	0.013
	U	238	**0.003**	**ug/L**	32.018	53	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45			65.8		
	Mn	55	101.159				
	Cd	111	108.279				
	Cd	114					
>	In	115			71.9		
	Sb	121					
	Sb	123					
>	Lu	175			76.0		
	Tl	205					
	Pb	208	114.941				
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC	Sc	45	
In 115 Int Std for QC	In	115	
Lu 175 Int Std for QC	Lu	175	

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Wednesday, April 21, 2010 16:42:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 5.355

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**15.187**	**ug/L**	3.049	1567	0.008
>	Sc	45		**ug/L**		194552	194551.588
	Mn	55	**27.071**	**ug/L**	2.334	58568	0.300
	Cd	111	**20.131**	**ug/L**	1.138	10950	0.117
	Cd	114		**ug/L**		28538	0.305
>	In	115		**ug/L**		93708	93708.407
	Sb	121	**19.461**	**ug/L**	0.909	35208	0.375
	Sb	123		**ug/L**		27098	0.289
>	Lu	175		**ug/L**		188363	188362.582
	Tl	205	**18.911**	**ug/L**	0.374	175689	0.932
	Pb	208	**19.878**	**ug/L**	1.013	226007	1.199
	U	238	**21.879**	**ug/L**	0.773	291903	1.550

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	75.934				
>	Sc	45		65.8			
	Mn	55	104.926				
	Cd	111	98.468				
	Cd	114					
>	In	115		72.6			
	Sb	121	97.303				
	Sb	123					
>	Lu	175		76.2			
	Tl	205	94.554				
	Pb	208	98.458				
	U	238	109.394				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Std 5	Be	9ICSAB is out of limits
Sc 45 Int Std for QC	Sc	45
In 115 Int Std for QC	In	115
Lu 175 Int Std for QC	Lu	175

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, April 21, 2010 16:45:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 6.356

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**51.845**	**ug/L**	10.969	8013	0.027
>	Sc	45		**ug/L**		289903	289902.656
	Mn	55	**51.647**	**ug/L**	2.949	166093	0.573
	Cd	111	**51.320**	**ug/L**	0.554	38743	0.298
	Cd	114		**ug/L**		90600	0.697
>	In	115		**ug/L**		130034	130033.889
	Sb	121	**49.537**	**ug/L**	0.591	124329	0.956
	Sb	123		**ug/L**		96000	0.738
>	Lu	175		**ug/L**		245010	245010.326
	Tl	205	**49.905**	**ug/L**	0.479	602824	2.460
	Pb	208	**50.932**	**ug/L**	0.908	753066	3.073
	U	238	**52.855**	**ug/L**	0.364	917280	3.744

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	103.689				
>	Sc	45		98.0			
	Mn	55	103.295				
	Cd	111	102.639				
	Cd	114					
>	In	115		100.8			
	Sb	121	99.073				
	Sb	123					
>	Lu	175		99.1			
	Tl	205	99.809				
	Pb	208	101.865				
	U	238	105.711				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, April 21, 2010 16:49:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 7.357

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	0.005	ug/L	332.359	4	0.000
>	Sc	45		ug/L		304617	304617.128
	Mn	55	-0.017	ug/L	17.055	203	-0.000
	Cd	111	0.008	ug/L	59.486	7	0.000
	Cd	114		ug/L		20	0.000
>	In	115		ug/L		132468	132467.576
	Sb	121	0.051	ug/L	19.429	168	0.001
	Sb	123		ug/L		147	0.001
>	Lu	175		ug/L		250029	250029.441
	Tl	205	0.444	ug/L	13.932	5575	0.022
	Pb	208	0.006	ug/L	20.488	272	0.000
	U	238	0.005	ug/L	14.651	108	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		103.0			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		102.7			
	Sb	121					
	Sb	123					
>	Lu	175		101.1			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, April 21, 2010 17:26:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 6.368

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**51.439**	**ug/L**	8.889	7861	0.027
>	Sc	45		**ug/L**		286862	286861.889
	Mn	55	**50.139**	**ug/L**	3.287	159471	0.556
	Cd	111	**50.760**	**ug/L**	1.031	36984	0.295
	Cd	114		**ug/L**		86369	0.688
>	In	115		**ug/L**		125495	125495.422
	Sb	121	**48.965**	**ug/L**	0.686	118587	0.945
	Sb	123		**ug/L**		91669	0.730
>	Lu	175		**ug/L**		238568	238568.010
	Tl	205	**50.048**	**ug/L**	0.309	588646	2.467
	Pb	208	**51.403**	**ug/L**	0.730	740098	3.101
	U	238	**53.624**	**ug/L**	0.699	905998	3.798

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	102.878				
>	Sc	45		97.0			
	Mn	55	100.279				
	Cd	111	101.521				
	Cd	114					
>	In	115		97.3			
	Sb	121	97.930				
	Sb	123					
>	Lu	175		96.5			
	Tl	205	100.095				
	Pb	208	102.806				
	U	238	107.248				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, April 21, 2010 17:29:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 7.369

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.002**	**ug/L**	424.050	4	0.000
>	Sc	45		**ug/L**		301345	301345.127
	Mn	55	**-0.013**	**ug/L**	71.381	211	-0.000
	Cd	111	**-0.001**	**ug/L**	1455.359	0	-0.000
	Cd	114		**ug/L**		11	0.000
>	In	115		**ug/L**		127577	127576.667
	Sb	121	**0.049**	**ug/L**	6.480	159	0.001
	Sb	123		**ug/L**		129	0.001
>	Lu	175		**ug/L**		242772	242771.644
	Tl	205	**0.733**	**ug/L**	10.439	8866	0.036
	Pb	208	**0.001**	**ug/L**	85.196	192	0.000
	U	238	**0.004**	**ug/L**	8.957	92	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		101.9			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		98.9			
	Sb	121					
	Sb	123					
>	Lu	175		98.2			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, April 21, 2010 17:56:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 6.377

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**51.343**	**ug/L**	8.839	7875	0.027
>	Sc	45		**ug/L**		287982	287982.279
	Mn	55	**49.607**	**ug/L**	3.407	158390	0.551
	Cd	111	**51.246**	**ug/L**	1.373	36897	0.298
	Cd	114		**ug/L**		85144	0.687
>	In	115		**ug/L**		124023	124023.444
	Sb	121	**48.822**	**ug/L**	1.423	116898	0.942
	Sb	123		**ug/L**		90040	0.726
>	Lu	175		**ug/L**		236517	236517.080
	Tl	205	**49.102**	**ug/L**	0.847	572687	2.420
	Pb	208	**51.513**	**ug/L**	0.450	735194	3.108
	U	238	**53.744**	**ug/L**	0.576	900312	3.807

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	102.686				
>	Sc	45		97.3			
	Mn	55	99.213				
	Cd	111	102.493				
	Cd	114					
>	In	115		96.1			
	Sb	121	97.644				
	Sb	123					
>	Lu	175		95.7			
	Tl	205	98.203				
	Pb	208	103.026				
	U	238	107.488				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, April 21, 2010 17:59:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 7.378

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.002	ug/L	456.770	3	-0.000
>	Sc	45		ug/L		302481	302481.121
	Mn	55	-0.009	ug/L	63.691	228	-0.000
	Cd	111	0.009	ug/L	94.527	7	0.000
	Cd	114		ug/L		9	0.000
>	In	115		ug/L		125339	125339.037
	Sb	121	0.048	ug/L	10.434	154	0.001
	Sb	123		ug/L		114	0.001
>	Lu	175		ug/L		238221	238220.957
	Tl	205	1.262	ug/L	5.590	14920	0.062
	Pb	208	0.002	ug/L	55.664	203	0.000
	U	238	0.004	ug/L	19.718	91	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		102.2			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		97.2			
	Sb	121					
	Sb	123					
>	Lu	175		96.3			
	Tl	205					
	Pb	208					
	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#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, April 21, 2010 18:33:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 6.388

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**49.811**	**ug/L**	8.078	7553	0.026
>	Sc	45		**ug/L**		284761	284760.640
	Mn	55	**50.198**	**ug/L**	2.929	158532	0.557
	Cd	111	**50.891**	**ug/L**	1.065	36142	0.295
	Cd	114		**ug/L**		83491	0.683
>	In	115		**ug/L**		122352	122352.327
	Sb	121	**48.809**	**ug/L**	0.738	115218	0.942
	Sb	123		**ug/L**		88928	0.727
>	Lu	175		**ug/L**		231118	231118.313
	Tl	205	**49.731**	**ug/L**	0.466	566651	2.451
	Pb	208	**51.170**	**ug/L**	0.221	713664	3.087
	U	238	**53.418**	**ug/L**	0.911	874266	3.784

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	99.622				
>	Sc	45		96.3			
	Mn	55	100.397				
	Cd	111	101.783				
	Cd	114					
>	In	115		94.8			
	Sb	121	97.618				
	Sb	123					
>	Lu	175		93.5			
	Tl	205	99.461				
	Pb	208	102.340				
	U	238	106.835				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, April 21, 2010 18:37:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 7.389

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.002	ug/L	100.917	3	-0.000
>	Sc	45		ug/L		301535	301534.905
	Mn	55	0.041	ug/L	6.345	395	0.000
	Cd	111	0.013	ug/L	4.311	11	0.000
	Cd	114		ug/L		15	0.000
>	In	115		ug/L		125126	125125.991
	Sb	121	0.041	ug/L	5.033	137	0.001
	Sb	123		ug/L		126	0.001
>	Lu	175		ug/L		234211	234211.044
	Tl	205	0.552	ug/L	10.983	6470	0.027
	Pb	208	0.003	ug/L	7.015	213	0.000
	U	238	0.004	ug/L	13.733	85	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		101.9			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		97.0			
	Sb	121					
	Sb	123					
>	Lu	175		94.7			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, April 21, 2010 19:07:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 6.395

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**49.426**	**ug/L**	10.144	7466	0.026
>	Sc	45		**ug/L**		283505	283505.049
	Mn	55	**49.447**	**ug/L**	1.862	155630	0.549
	Cd	111	**50.819**	**ug/L**	0.920	35717	0.295
	Cd	114		**ug/L**		82996	0.686
>	In	115		**ug/L**		121076	121076.084
	Sb	121	**48.739**	**ug/L**	0.865	113864	0.940
	Sb	123		**ug/L**		87616	0.723
>	Lu	175		**ug/L**		229962	229962.193
	Tl	205	**49.318**	**ug/L**	0.805	559227	2.431
	Pb	208	**50.562**	**ug/L**	0.451	701618	3.051
	U	238	**52.594**	**ug/L**	1.139	856470	3.725

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	98.852				
>	Sc	45		95.8			
	Mn	55	98.894				
	Cd	111	101.637				
	Cd	114					
>	In	115		93.9			
	Sb	121	97.477				
	Sb	123					
>	Lu	175		93.0			
	Tl	205	98.636				
	Pb	208	101.124				
	U	238	105.188				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, April 21, 2010 19:10:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 7.396

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.001	ug/L	941.322	3	-0.000
>	Sc	45		ug/L		299718	299718.430
	Mn	55	0.038	ug/L	11.935	383	0.000
	Cd	111	0.012	ug/L	66.230	10	0.000
	Cd	114		ug/L		19	0.000
>	In	115		ug/L		124074	124074.349
	Sb	121	0.042	ug/L	11.964	138	0.001
	Sb	123		ug/L		106	0.001
>	Lu	175		ug/L		231362	231362.421
	Tl	205	0.406	ug/L	14.852	4730	0.020
	Pb	208	0.006	ug/L	18.536	245	0.000
	U	238	0.005	ug/L	14.127	103	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		101.3			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		96.2			
	Sb	121					
	Sb	123					
>	Lu	175		93.6			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202060853
Sample Date/Time: Wednesday, April 21, 2010 19:13:54
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 960827|1|dlm
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\1202060853.397

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.004	ug/L	398.414	3	-0.000
>	Sc	45		ug/L		296742	296741.711
	Mn	55	0.103	ug/L	11.410	594	0.001
	Cd	111	0.002	ug/L	175.836	3	0.000
	Cd	114		ug/L		9	0.000
>	In	115		ug/L		124055	124054.654
	Sb	121	0.017	ug/L	13.638	78	0.000
	Sb	123		ug/L		50	0.000
>	Lu	175		ug/L		230313	230313.484
	Tl	205	0.158	ug/L	1.733	1909	0.008
	Pb	208	0.017	ug/L	1.587	393	0.001
	U	238	0.003	ug/L	9.510	70	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		100.3			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		96.2			
	Sb	121					
	Sb	123					
>	Lu	175		93.2			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202060854
Sample Date/Time: Wednesday, April 21, 2010 19:17:17
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 960827|1|dlm
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\1202060854.398

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**29.403**	**ug/L**	9.173	4589	0.016
>	Sc	45		**ug/L**		292970	292970.488
	Mn	55	**25.738**	**ug/L**	1.488	83857	0.286
	Cd	111	**27.829**	**ug/L**	0.722	19786	0.162
	Cd	114		**ug/L**		45782	0.374
>	In	115		**ug/L**		122486	122486.259
	Sb	121	**26.924**	**ug/L**	0.610	63675	0.519
	Sb	123		**ug/L**		48946	0.399
>	Lu	175		**ug/L**		229600	229600.056
	Tl	205	**24.784**	**ug/L**	0.138	280608	1.222
	Pb	208	**26.793**	**ug/L**	0.664	371276	1.617
	U	238	**27.796**	**ug/L**	1.008	451958	1.969

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		99.0			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		94.9			
	Sb	121					
	Sb	123					
>	Lu	175		92.9			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, April 21, 2010 19:20:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 6.399

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**49.465**	**ug/L**	8.403	7510	0.026
|>	Sc	45		**ug/L**		285227	285227.077
⌊	Mn	55	**48.894**	**ug/L**	2.555	154735	0.543
⌈	Cd	111	**50.865**	**ug/L**	0.921	35633	0.295
|	Cd	114		**ug/L**		82967	0.688
|>	In	115		**ug/L**		120617	120617.472
|	Sb	121	**49.020**	**ug/L**	1.015	114159	0.946
⌊	Sb	123		**ug/L**		88072	0.730
⌈>	Lu	175		**ug/L**		225716	225715.678
|	Tl	205	**50.520**	**ug/L**	0.434	562211	2.490
|	Pb	208	**51.176**	**ug/L**	0.827	696977	3.088
⌊	U	238	**53.250**	**ug/L**	1.469	851068	3.772

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9	98.931				
|>	Sc	45		96.4			
⌊	Mn	55	97.789				
⌈	Cd	111	101.730				
|	Cd	114					
|>	In	115		93.5			
|	Sb	121	98.039				
⌊	Sb	123					
⌈>	Lu	175		91.3			
|	Tl	205	101.039				
|	Pb	208	102.351				
⌊	U	238	106.501				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, April 21, 2010 19:24:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 7.400

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	0.009	ug/L	227.653	5	0.000
>	Sc	45		ug/L		301372	301372.431
	Mn	55	0.018	ug/L	43.566	316	0.000
	Cd	111	0.009	ug/L	37.451	7	0.000
	Cd	114		ug/L		18	0.000
>	In	115		ug/L		124146	124145.925
	Sb	121	0.058	ug/L	17.216	176	0.001
	Sb	123		ug/L		130	0.001
>	Lu	175		ug/L		230067	230066.993
	Tl	205	0.602	ug/L	11.089	6931	0.030
	Pb	208	0.006	ug/L	22.827	243	0.000
	U	238	0.007	ug/L	4.505	141	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		101.9			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		96.2			
	Sb	121					
	Sb	123					
>	Lu	175		93.1			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 248375001
Sample Date/Time: Wednesday, April 21, 2010 19:27:26
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960827|1|dlm
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\248375001.401

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.004**	**ug/L**	368.142	4	0.000
>	Sc	45		**ug/L**		289547	289547.350
	Mn	55	**0.623**	**ug/L**	3.499	2249	0.007
	Cd	111	**0.014**	**ug/L**	17.345	10	0.000
	Cd	114		**ug/L**		12	0.000
>	In	115		**ug/L**		116815	116815.113
	Sb	121	**0.060**	**ug/L**	15.009	169	0.001
	Sb	123		**ug/L**		131	0.001
>	Lu	175		**ug/L**		219453	219453.009
	Tl	205	**0.232**	**ug/L**	6.262	2621	0.011
	Pb	208	**0.100**	**ug/L**	2.510	1475	0.006
	U	238	**0.007**	**ug/L**	12.954	134	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		97.9			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		90.6			
	Sb	121					
	Sb	123					
>	Lu	175		88.8			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202060855
Sample Date/Time: Wednesday, April 21, 2010 19:30:49
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 960827|1|dlm
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\1202060855.402

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	0.002	ug/L	504.156	4	0.000
>	Sc	45		ug/L		296694	296693.531
	Mn	55	0.603	ug/L	2.056	2240	0.007
	Cd	111	0.005	ug/L	62.530	5	0.000
	Cd	114		ug/L		9	0.000
>	In	115		ug/L		117420	117419.662
	Sb	121	0.040	ug/L	9.083	126	0.001
	Sb	123		ug/L		105	0.001
>	Lu	175		ug/L		223036	223036.343
	Tl	205	0.157	ug/L	4.829	1847	0.008
	Pb	208	0.094	ug/L	1.729	1418	0.006
	U	238	0.005	ug/L	8.716	103	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		100.3			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		91.0			
	Sb	121					
	Sb	123					
>	Lu	175		90.2			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202060856
Sample Date/Time: Wednesday, April 21, 2010 19:34:12
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 960827|1|dlm
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\1202060856.403

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**58.076**	**ug/L**	10.474	9281	0.031
>	Sc	45		**ug/L**		299793	299792.815
	Mn	55	**50.297**	**ug/L**	2.177	167344	0.558
	Cd	111	**11.325**	**ug/L**	1.497	7841	0.066
	Cd	114		**ug/L**		18118	0.152
>	In	115		**ug/L**		119278	119277.868
	Sb	121	**199.280**	**ug/L**	0.686	458741	3.845
	Sb	123		**ug/L**		353795	2.965
>	Lu	175		**ug/L**		227987	227986.532
	Tl	205	**86.455**	**ug/L**	2.077	972354	4.262
	Pb	208	**42.124**	**ug/L**	0.974	579528	2.542
	U	238	**54.040**	**ug/L**	1.504	872486	3.828

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		101.3			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		92.5			
	Sb	121					
	Sb	123					
>	Lu	175		92.2			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202060857
Sample Date/Time: Wednesday, April 21, 2010 19:38:35
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 960827|5|dlm
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\1202060857.404

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**-0.005**	**ug/L**	200.903	3	-0.000
>	Sc	45		**ug/L**		304093	304093.421
	Mn	55	**0.126**	**ug/L**	9.119	688	0.001
	Cd	111	**0.007**	**ug/L**	75.724	6	0.000
	Cd	114		**ug/L**		12	0.000
>	In	115		**ug/L**		123269	123268.809
	Sb	121	**0.041**	**ug/L**	12.890	135	0.001
	Sb	123		**ug/L**		113	0.001
>	Lu	175		**ug/L**		232155	232154.855
	Tl	205	**2.276**	**ug/L**	5.012	26120	0.112
	Pb	208	**0.020**	**ug/L**	11.933	441	0.001
	U	238	**0.004**	**ug/L**	18.363	87	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		102.8			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		95.6			
	Sb	121					
	Sb	123					
>	Lu	175		93.9			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 248375002
Sample Date/Time: Wednesday, April 21, 2010 19:47:10
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960827|1|dlm
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\248375002.406

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	-0.002	ug/L	229.728	3	-0.000
|>	Sc	45		ug/L		296476	296475.917
⌊	Mn	55	0.519	ug/L	0.950	1960	0.006
⌈	Cd	111	0.013	ug/L	33.083	10	0.000
|	Cd	114		ug/L		20	0.000
|>	In	115		ug/L		118010	118010.335
|	Sb	121	0.042	ug/L	1.922	131	0.001
⌊	Sb	123		ug/L		94	0.001
⌈>	Lu	175		ug/L		224502	224502.406
|	Tl	205	0.524	ug/L	1.871	5919	0.026
|	Pb	208	0.103	ug/L	2.103	1549	0.006
⌊	U	238	0.013	ug/L	7.528	233	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45		100.2			
⌊	Mn	55					
⌈	Cd	111					
|	Cd	114					
|>	In	115		91.5			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		90.8			
|	Tl	205					
|	Pb	208					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, April 21, 2010 19:50:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 6.407

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**49.957**	**ug/L**	8.321	7740	0.026
|>	Sc	45		**ug/L**		290960	290960.265
⌊	Mn	55	**48.718**	**ug/L**	3.084	157208	0.541
⌈	Cd	111	**50.904**	**ug/L**	0.232	36036	0.296
|	Cd	114		**ug/L**		83565	0.685
|>	In	115		**ug/L**		121934	121933.943
|	Sb	121	**49.084**	**ug/L**	0.280	115502	0.947
⌊	Sb	123		**ug/L**		88941	0.729
⌈>	Lu	175		**ug/L**		230426	230426.465
|	Tl	205	**48.799**	**ug/L**	0.852	554471	2.405
|	Pb	208	**50.535**	**ug/L**	0.267	702716	3.049
⌊	U	238	**52.691**	**ug/L**	1.104	860002	3.732

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9	99.913				
|>	Sc	45		98.3			
⌊	Mn	55	97.436				
⌈	Cd	111	101.809				
|	Cd	114					
|>	In	115		94.5			
|	Sb	121	98.168				
⌊	Sb	123					
⌈>	Lu	175		93.2			
|	Tl	205	97.598				
|	Pb	208	101.070				
⌊	U	238	105.381				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, April 21, 2010 19:53:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\misc.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 7.408

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.005**	**ug/L**	374.569	4	0.000
|>	Sc	45		**ug/L**		306812	306811.826
⌊	Mn	55	**0.012**	**ug/L**	43.295	301	0.000
⌈	Cd	111	**0.010**	**ug/L**	31.881	8	0.000
|	Cd	114		**ug/L**		18	0.000
|>	In	115		**ug/L**		123744	123743.724
|	Sb	121	**0.049**	**ug/L**	5.578	155	0.001
⌊	Sb	123		**ug/L**		115	0.001
⌈>	Lu	175		**ug/L**		232414	232414.007
|	Tl	205	**0.729**	**ug/L**	6.239	8452	0.036
|	Pb	208	**0.004**	**ug/L**	17.823	227	0.000
⌊	U	238	**0.007**	**ug/L**	10.607	134	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
|>	Sc	45		103.7			
⌊	Mn	55					
⌈	Cd	111					
|	Cd	114					
|>	In	115		95.9			
|	Sb	121					
⌊	Sb	123					
⌈>	Lu	175		94.0			
|	Tl	205					
|	Pb	208					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Blank
Sample Date/Time: Thursday, April 22, 2010 11:10:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\Blank.649

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L		3	
Sc	45		ug/L		198433	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Simple Linear	
Sc	45	Simple Linear	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Thursday, April 22, 2010 11:12:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\Standard 1.650

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	12.728	860	0.004
Sc	45		ug/L		201913	201913.424

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Thursday, April 22, 2010 11:13:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\Standard 2.651

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	99.975	ug/L	9.436	8083	0.041
⌊>	Sc	45		ug/L		195597	195597.220

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
⌊>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Thursday, April 22, 2010 11:15:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 1.652

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	50.952	ug/L	10.119	4183	0.021
⌊>	Sc	45		ug/L		198445	198445.103

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9	101.904				
⌊>	Sc	45		100.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 22, 2010 11:17:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 2.653

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. intens. Mean	Net Intens. Mean
⌈	Be	9	-0.008	ug/L	166.810	2	-0.000
⌊>	Sc	45		ug/L		203158	203158.300

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
⌊>	Sc	45		102.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Thursday, April 22, 2010 11:18:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 3.654

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.580	ug/L	12.341	50	0.000
⌊>	Sc	45		ug/L		199077	199077.275

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9	115.955				
⌊>	Sc	45		100.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Thursday, April 22, 2010 11:20:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 4.655

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.069	ug/L	86.028	7	0.000
Sc	45		ug/L		164231	164230.634

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
Sc	45		82.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, April 22, 2010 11:22:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 5.656

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	17.574	ug/L	7.734	1514	0.007
⌊>	Sc	45		ug/L		208244	208243.508

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9	87.870				
⌊>	Sc	45		104.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, April 22, 2010 11:23:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 6.657

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	53.125	ug/L	8.466	4497	0.022
⌊>	Sc	45		ug/L		204785	204784.869

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9	106.249				
⌊>	Sc	45		103.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, April 22, 2010 11:25:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 7.658

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.019	ug/L	139.577	4	0.000
Sc	45		ug/L		205507	205507.473

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
Sc	45		103.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202060853
Sample Date/Time: Thursday, April 22, 2010 11:27:23
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 960827|1|dlm
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\1202060853.659

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.007	ug/L	255.065	3	0.000
⌊>	Sc	45		ug/L		203113	203113.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
⌊>	Sc	45		102.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202060854
Sample Date/Time: Thursday, April 22, 2010 11:29:08
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 960827|1|dlm
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\1202060854.660

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	26.919	ug/L	10.428	2280	0.011
⌊>	Sc	45		ug/L		204657	204656.980

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
⌊>	Sc	45		103.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 248375001
Sample Date/Time: Thursday, April 22, 2010 11:33:07
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960827|1|dlm
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\248375001.662

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.004	ug/L	756.831	3	0.000
Sc	45		ug/L		203501	203500.643

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
Sc	45		102.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202060855
Sample Date/Time: Thursday, April 22, 2010 11:34:53
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 960827|1|dlm
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\1202060855.663

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.009	ug/L	118.093	3	0.000
⌊>	Sc	45		ug/L		198326	198325.802

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
⌊>	Sc	45		99.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202060856
Sample Date/Time: Thursday, April 22, 2010 11:36:39
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 960827|1|dlm
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\1202060856.664

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	55.768	ug/L	7.906	4799	0.023
⌊>	Sc	45		ug/L		208099	208098.777

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
⌊>	Sc	45		104.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202060857
Sample Date/Time: Thursday, April 22, 2010 11:38:24
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 960827|5|dlm
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\1202060857.665

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.059	ug/L	62.236	8	0.000
⌊>	Sc	45		ug/L		208449	208448.601

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
⌊>	Sc	45		105.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 248375002
Sample Date/Time: Thursday, April 22, 2010 11:40:08
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 960827|1|dlm
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\248375002.666

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.004	ug/L	431.018	2	-0.000
Sc	45		ug/L		198318	198317.643

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
Sc	45		99.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, April 22, 2010 11:41:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 6.667

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	53.128	ug/L	10.228	4529	0.022
Sc	45		ug/L		206028	206028.059

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9	106.257				
Sc	45		103.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, April 22, 2010 11:43:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\100419\QC Std 7.668

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.008	ug/L	276.491	3	0.000
⌊>	Sc	45		ug/L		205618	205617.935

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Be	9					
⌊>	Sc	45		103.6			

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\030410W1.SIF
Batch ID:
Results Data Set: 030410W1
Results Library: C:\data-AA\Administrator\Results\Results.mdb

==========

Method Loaded
Method Name: WATER **Method Last Saved: 2/8/2010 13:04:57**
Method Description: 7470A, 245.2, ILM04 ANALYST JXL

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: Calib Blank **Date Collected: 3/4/2010 09:18:51**
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]	0.0008	0.0032	0.0008	09:19:53	Yes
2		[0.00]	0.0008	0.0041	0.0008	09:20:28	Yes
Mean:		[0.00]	0.0008				
SD:		0.00	0.0001				
%RSD:		0.00	6.49				

Auto-zero performed.

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 3/4/2010 09:20:47**
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]	0.0023	0.0156	0.0031	09:21:47	Yes
2		[0.2]	0.0022	0.0148	0.0030	09:22:22	Yes
Mean:		[0.2]	0.0022				
SD:		0.0	0.0000				
%RSD:		0.0	2.12				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01119 Intercept: 0.00000

==========

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 3/4/2010 09:22:41**
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]	0.0059	0.0346	0.0067	09:23:42	Yes
2		[0.5]	0.0058	0.0340	0.0066	09:24:17	Yes
Mean:		[0.5]	0.0058				
SD:		0.0	0.0001				
%RSD:		0.0	1.05				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999845 Slope: 0.01167 Intercept: -0.00004

==========

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 3/4/2010 09:24:36**
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]	0.0239	0.1321	0.0247	09:25:38	Yes
2		[2.0]	0.0237	0.1302	0.0245	09:26:13	Yes
Mean:		[2.0]	0.0238				
SD:		0.0	0.0001				
%RSD:		0.0	0.60				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999979 Slope: 0.01194 Intercept: -0.00009

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 3/4/2010 09:26:33**
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]	0.0592	0.3238	0.0600	09:27:34	Yes
2		[5.0]	0.0584	0.3189	0.0592	09:28:09	Yes
Mean:		[5.0]	0.0588				
SD:		0.0	0.0006				
%RSD:		0.0	1.01				

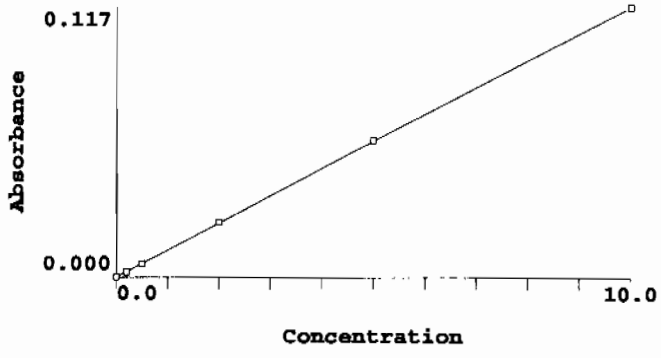
Standard number 4 applied. [5.0]
Correlation Coef.: 0.999982 Slope: 0.01178 Intercept: -0.00001

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 3/4/2010 09:28:30**
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]	0.1166	0.6357	0.1174	09:29:30	Yes
2		[10.0]	0.1175	0.6344	0.1183	09:30:04	Yes
Mean:		[10.0]	0.1170				
SD:		0.0	0.0007				
%RSD:		0.0	0.58				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999991 Slope: 0.01171 Intercept: 0.00007



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	-0.006	0.00	6.5
S0.2	0.0022	0.2	0.185	0.00	2.1
S0.5	0.0058	0.5	0.491	0.00	1.0
S2.0	0.0238	2.0	2.026	0.00	0.6

S5.0	0.0588	5.0	5.015	0.00	1.0
S10.0	0.1170	10.0	9.988	0.00	0.6

Correlation Coef.: 0.999991 Slope: 0.01171 Intercept: 0.00007

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 3/4/2010 09:30:23**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.150	5.150	0.0604	0.3271	0.0612	09:31:25	Yes
2	5.134	5.134	0.0602	0.3201	0.0610	09:31:59	Yes
Mean:	5.142	5.142	0.0603				
SD:	0.011	0.011	0.0001				
%RSD:	0.217	0.217	0.22				

QC value within limits for Hg 253.7 Recovery = 102.85%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 3/4/2010 09:32:19**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.033	-0.033	-0.0003	0.0023	0.0005	09:33:20	Yes
2	-0.029	-0.029	-0.0003	0.0026	0.0005	09:33:55	Yes
Mean:	-0.031	-0.031	-0.0003				
SD:	0.003	0.003	0.0000				
%RSD:	9.003	9.003	11.15				

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: 3/4/2010 09:34:15**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.166	0.166	0.0020	0.0138	0.0028	09:35:16	Yes
2	0.171	0.171	0.0021	0.0142	0.0029	09:35:52	Yes
Mean:	0.169	0.169	0.0020				
SD:	0.003	0.003	0.0000				
%RSD:	1.950	1.950	1.88				

QC value within limits for Hg 253.7 Recovery = 84.28%
All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/4/2010 09:36:12**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.080	5.080	0.0596	0.3157	0.0604	09:37:12	Yes
2	5.044	5.044	0.0591	0.3092	0.0599	09:37:47	Yes
Mean:	5.062	5.062	0.0594				
SD:	0.025	0.025	0.0003				
%RSD:	0.502	0.502	0.50				

QC value within limits for Hg 253.7 Recovery = 101.25%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 3/4/2010 09:38:06
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.039	-0.039	-0.0004	0.0014	0.0004	09:39:07	Yes
2	-0.039	-0.039	-0.0004	0.0014	0.0004	09:39:42	Yes
Mean:	-0.039	-0.039	-0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.362	0.362	0.43				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: 1202056675|959010|1
Analyst: JXL
Autosampler Location: 12
Date Collected: 3/4/2010 09:40:01
Data Type: Original

Replicate Data: 1202056675|959010|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.037	-0.037	-0.0004	0.0017	0.0004	09:41:02	Yes
2	-0.032	-0.032	-0.0003	0.0021	0.0005	09:41:37	Yes
Mean:	-0.034	-0.034	-0.0003				
SD:	0.003	0.003	0.0000				
%RSD:	10.12	10.12	12.22				

Sequence No.: 13
Sample ID: 247650001|959010|1
Analyst: JXL
Autosampler Location: 13
Date Collected: 3/4/2010 09:41:57
Data Type: Original

Replicate Data: 247650001|959010|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.162	0.162	0.0020	0.0133	0.0028	09:42:59	Yes
2	0.163	0.163	0.0020	0.0134	0.0028	09:43:34	Yes
Mean:	0.162	0.162	0.0020				
SD:	0.001	0.001	0.0000				
%RSD:	0.826	0.826	0.80				

Sequence No.: 14
Sample ID: 247650002|959010|1
Analyst: JXL
Autosampler Location: 14
Date Collected: 3/4/2010 09:43:54
Data Type: Original

Replicate Data: 247650002|959010|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.174	0.174	0.0021	0.0147	0.0029	09:44:55	Yes
2	0.169	0.169	0.0020	0.0134	0.0028	09:45:30	Yes
Mean:	0.171	0.171	0.0021				
SD:	0.003	0.003	0.0000				
%RSD:	1.998	1.998	1.93				

Sequence No.: 15
Sample ID: 247650003|959010|1
Analyst: JXL
Autosampler Location: 15
Date Collected: 3/4/2010 09:45:49
Data Type: Original

Replicate Data: 247650003|959010|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

Replicate Data: 1202055858|958590|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.088	2.088	0.0245	0.1279	0.0253	09:56:22	Yes
2	2.079	2.079	0.0244	0.1269	0.0252	09:56:57	Yes
Mean:	2.083	2.083	0.0245				
SD:	0.006	0.006	0.0001				
%RSD:	0.310	0.310	0.31				

Sequence No.: 21 Autosampler Location: 21
Sample ID: 1202055859|958590|5 Date Collected: 3/4/2010 09:57:16
Analyst: JXL Data Type: Original

Replicate Data: 1202055859|958590|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.028	-0.028	-0.0003	0.0034	0.0005	09:58:18	Yes
2	-0.026	-0.026	-0.0002	0.0037	0.0006	09:58:53	Yes
Mean:	-0.027	-0.027	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	6.445	6.445	8.25				

Sequence No.: 22 Autosampler Location: 7
Sample ID: CCV Date Collected: 3/4/2010 09:59:12
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.150	5.150	0.0604	0.3077	0.0612	10:00:13	Yes
2	5.125	5.125	0.0601	0.3058	0.0609	10:00:48	Yes
Mean:	5.138	5.138	0.0602				
SD:	0.017	0.017	0.0002				
%RSD:	0.335	0.335	0.34				

QC value within limits for Hg 253.7 Recovery = 102.75%
All analyte(s) passed QC.

Sequence No.: 23 Autosampler Location: 8
Sample ID: CCB Date Collected: 3/4/2010 10:01:07
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.041	-0.041	-0.0004	0.0010	0.0004	10:02:07	Yes
2	-0.038	-0.038	-0.0004	0.0014	0.0004	10:02:42	Yes
Mean:	-0.040	-0.040	-0.0004				
SD:	0.002	0.002	0.0000				
%RSD:	5.377	5.377	6.31				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24 Autosampler Location: 22
Sample ID: 248164002|958590|1 Date Collected: 3/4/2010 10:03:02
Analyst: JXL Data Type: Original

Replicate Data: 248164002|958590|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.039	-0.039	-0.0004	0.0010	0.0004	10:04:03	Yes
2	-0.030	-0.030	-0.0003	0.0022	0.0005	10:04:38	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.036	-0.036	-0.0004	0.0023	0.0004	10:13:44	Yes
2	-0.037	-0.037	-0.0004	0.0017	0.0004	10:14:19	Yes
Mean:	-0.037	-0.037	-0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	1.111	1.111	1.32				

==========

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: 248382002|960288|1 **Date Collected: 3/4/2010 10:14:39**
Analyst: JXL **Data Type: Original**

Replicate Data: 248382002|960288|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.032	-0.032	-0.0003	0.0023	0.0005	10:15:39	Yes
2	-0.043	-0.043	-0.0004	0.0011	0.0004	10:16:14	Yes
Mean:	-0.037	-0.037	-0.0004				
SD:	0.008	0.008	0.0001				
%RSD:	21.22	21.22	25.21				

==========

Sequence No.: 31 **Autosampler Location: 29**
Sample ID: 248382003|960288|1 **Date Collected: 3/4/2010 10:16:33**
Analyst: JXL **Data Type: Original**

Replicate Data: 248382003|960288|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.036	-0.036	-0.0004	0.0020	0.0004	10:17:34	Yes
2	-0.026	-0.026	-0.0002	0.0033	0.0006	10:18:09	Yes
Mean:	-0.031	-0.031	-0.0003				
SD:	0.007	0.007	0.0001				
%RSD:	21.97	21.97	27.11				

==========

Sequence No.: 32 **Autosampler Location: 30**
Sample ID: 248382004|960288|1 **Date Collected: 3/4/2010 10:18:28**
Analyst: JXL **Data Type: Original**

Replicate Data: 248382004|960288|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.024	-0.024	-0.0002	0.0035	0.0006	10:19:29	Yes
2	-0.031	-0.031	-0.0003	0.0026	0.0005	10:20:03	Yes
Mean:	-0.027	-0.027	-0.0003				
SD:	0.005	0.005	0.0001				
%RSD:	17.68	17.68	22.54				

==========

Sequence No.: 33 **Autosampler Location: 31**
Sample ID: 248401001|960288|1 **Date Collected: 3/4/2010 10:20:22**
Analyst: JXL **Data Type: Original**

Replicate Data: 248401001|960288|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.031	-0.031	-0.0003	0.0031	0.0005	10:21:23	Yes
2	-0.034	-0.034	-0.0003	0.0025	0.0005	10:21:58	Yes
Mean:	-0.032	-0.032	-0.0003				
SD:	0.002	0.002	0.0000				
%RSD:	6.076	6.076	7.43				

==========

Sequence No.: 34 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/4/2010 10:22:17**

Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.913	4.913	0.0576	0.2922	0.0584	10:23:18	Yes
2	4.924	4.924	0.0577	0.2916	0.0585	10:23:53	Yes
Mean:	4.918	4.918	0.0577				
SD:	0.008	0.008	0.0001				
%RSD:	0.157	0.157	0.16				

QC value within limits for Hg 253.7 Recovery = 98.36%
All analyte(s) passed QC.

Sequence No.: 35 Autosampler Location: 8
Sample ID: CCB Date Collected: 3/4/2010 10:24:11
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.031	-0.031	-0.0003	0.0026	0.0005	10:25:12	Yes
2	-0.032	-0.032	-0.0003	0.0028	0.0005	10:25:48	Yes
Mean:	-0.032	-0.032	-0.0003				
SD:	0.001	0.001	0.0000				
%RSD:	1.597	1.597	1.96				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36 Autosampler Location: 32
Sample ID: 1202059761|960288|1 Date Collected: 3/4/2010 10:26:07
Analyst: JXL Data Type: Original

Replicate Data: 1202059761|960288|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.026	-0.026	-0.0002	0.0038	0.0006	10:27:08	Yes
2	-0.023	-0.023	-0.0002	0.0038	0.0006	10:27:43	Yes
Mean:	-0.024	-0.024	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	9.552	9.552	12.60				

Sequence No.: 37 Autosampler Location: 33
Sample ID: 1202059762|960288|1 Date Collected: 3/4/2010 10:28:02
Analyst: JXL Data Type: Original

Replicate Data: 1202059762|960288|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.039	2.039	0.0239	0.1246	0.0247	10:29:03	Yes
2	2.035	2.035	0.0239	0.1238	0.0247	10:29:38	Yes
Mean:	2.037	2.037	0.0239				
SD:	0.003	0.003	0.0000				
%RSD:	0.132	0.132	0.13				

Sequence No.: 38 Autosampler Location: 34
Sample ID: 1202059767|960288|5 Date Collected: 3/4/2010 10:29:58
Analyst: JXL Data Type: Original

Replicate Data: 1202059767|960288|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.033	-0.033	-0.0003	0.0028	0.0005	10:30:59	Yes

Replicate Data: 248401006|960288|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.036	-0.036	-0.0003	0.0021	0.0004	10:40:40	Yes
2	-0.032	-0.032	-0.0003	0.0025	0.0005	10:41:15	Yes
Mean:	-0.034	-0.034	-0.0003				
SD:	0.003	0.003	0.0000				
%RSD:	8.719	8.719	10.57				

==========

Sequence No.: 44 Autosampler Location: 40
Sample ID: 1202056658|958996|1 Date Collected: 3/4/2010 10:41:34
Analyst: JXL Data Type: Original

Replicate Data: 1202056658|958996|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.048	-0.048	-0.0005	0.0004	0.0003	10:42:35	Yes
2	-0.034	-0.034	-0.0003	0.0023	0.0005	10:43:10	Yes
Mean:	-0.041	-0.041	-0.0004				
SD:	0.010	0.010	0.0001				
%RSD:	24.98	24.98	29.18				

==========

Sequence No.: 45 Autosampler Location: 41
Sample ID: 1202056659|958996|1 Date Collected: 3/4/2010 10:43:30
Analyst: JXL Data Type: Original

Replicate Data: 1202056659|958996|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.953	1.953	0.0229	0.1179	0.0237	10:44:31	Yes
2	1.952	1.952	0.0229	0.1182	0.0237	10:45:05	Yes
Mean:	1.953	1.953	0.0229				
SD:	0.000	0.000	0.0000				
%RSD:	0.017	0.017	0.02				

==========

Sequence No.: 46 Autosampler Location: 7
Sample ID: CCV Date Collected: 3/4/2010 10:45:25
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.914	4.914	0.0576	0.2919	0.0584	10:46:25	Yes
2	4.905	4.905	0.0575	0.2920	0.0583	10:47:00	Yes
Mean:	4.909	4.909	0.0576				
SD:	0.006	0.006	0.0001				
%RSD:	0.132	0.132	0.13				

QC value within limits for Hg 253.7 Recovery = 98.19%
All analyte(s) passed QC.

==========

Sequence No.: 47 Autosampler Location: 8
Sample ID: CCB Date Collected: 3/4/2010 10:47:19
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.022	-0.022	-0.0002	0.0036	0.0006	10:48:20	Yes
2	-0.035	-0.035	-0.0003	0.0024	0.0005	10:48:55	Yes
Mean:	-0.029	-0.029	-0.0003				
SD:	0.009	0.009	0.0001				
%RSD:	30.96	30.96	38.98				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 48
Sample ID: 248261001|958996|1
Analyst: JXL
Autosampler Location: 42
Date Collected: 3/4/2010 10:49:14
Data Type: Original

Replicate Data: 248261001|958996|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.032	-0.032	-0.0003	0.0022	0.0005	10:50:15	Yes
2	-0.036	-0.036	-0.0004	0.0017	0.0004	10:50:50	Yes
Mean:	-0.034	-0.034	-0.0003				
SD:	0.003	0.003	0.0000				
%RSD:	8.798	8.798	10.63				

Sequence No.: 49
Sample ID: 1202056660|958996|1
Analyst: JXL
Autosampler Location: 43
Date Collected: 3/4/2010 10:51:10
Data Type: Original

Replicate Data: 1202056660|958996|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.026	-0.026	-0.0002	0.0032	0.0006	10:52:11	Yes
2	-0.028	-0.028	-0.0003	0.0027	0.0005	10:52:46	Yes
Mean:	-0.027	-0.027	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	5.165	5.165	6.63				

Sequence No.: 50
Sample ID: 1202056661|958996|1
Analyst: JXL
Autosampler Location: 44
Date Collected: 3/4/2010 10:53:06
Data Type: Original

Replicate Data: 1202056661|958996|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.016	2.016	0.0237	0.1227	0.0245	10:54:07	Yes
2	1.999	1.999	0.0235	0.1201	0.0243	10:54:41	Yes
Mean:	2.007	2.007	0.0236				
SD:	0.012	0.012	0.0001				
%RSD:	0.591	0.591	0.59				

Sequence No.: 51
Sample ID: 1202056662|958996|5
Analyst: JXL
Autosampler Location: 45
Date Collected: 3/4/2010 10:55:01
Data Type: Original

Replicate Data: 1202056662|958996|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.034	-0.034	-0.0003	0.0025	0.0005	10:56:02	Yes
2	-0.035	-0.035	-0.0003	0.0021	0.0005	10:56:37	Yes
Mean:	-0.035	-0.035	-0.0003				
SD:	0.001	0.001	0.0000				
%RSD:	1.538	1.538	1.85				

Sequence No.: 52
Sample ID: 1202059702|960265|1
Analyst: JXL
Autosampler Location: 46
Date Collected: 3/4/2010 10:56:57
Data Type: Original

Replicate Data: 1202059702|960265|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	-0.040	-0.040	-0.0004	0.0019	0.0004	10:57:58	Yes
2	-0.038	-0.038	-0.0004	0.0020	0.0004	10:58:33	Yes
Mean:	-0.039	-0.039	-0.0004				
SD:	0.002	0.002	0.0000				
%RSD:	4.764	4.764	5.61				

Sequence No.: 53 **Autosampler Location: 47**
Sample ID: 1202059703|960265|1 **Date Collected: 3/4/2010 10:58:53**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202059703|960265|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.982	1.982	0.0233	0.1201	0.0241	10:59:54	Yes
2	1.976	1.976	0.0232	0.1196	0.0240	11:00:29	Yes
Mean:	1.979	1.979	0.0232				
SD:	0.004	0.004	0.0000				
%RSD:	0.199	0.199	0.20				

Sequence No.: 54 **Autosampler Location: 48**
Sample ID: 248375001|960265|1 **Date Collected: 3/4/2010 11:00:49**
Analyst: JXL **Data Type: Original**

Replicate Data: 248375001|960265|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.036	-0.036	-0.0004	0.0020	0.0004	11:01:51	Yes
2	-0.037	-0.037	-0.0004	0.0023	0.0004	11:02:25	Yes
Mean:	-0.037	-0.037	-0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	1.897	1.897	2.26				

Sequence No.: 55 **Autosampler Location: 49**
Sample ID: 248375002|960265|1 **Date Collected: 3/4/2010 11:02:46**
Analyst: JXL **Data Type: Original**

Replicate Data: 248375002|960265|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.034	-0.034	-0.0003	0.0026	0.0005	11:03:47	Yes
2	-0.039	-0.039	-0.0004	0.0020	0.0004	11:04:23	Yes
Mean:	-0.037	-0.037	-0.0004				
SD:	0.004	0.004	0.0000				
%RSD:	10.54	10.54	12.56				

Sequence No.: 56 **Autosampler Location: 50**
Sample ID: 248397001|960265|1 **Date Collected: 3/4/2010 11:04:43**
Analyst: JXL **Data Type: Original**

Replicate Data: 248397001|960265|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.034	-0.034	-0.0003	0.0022	0.0005	11:05:44	Yes
2	-0.035	-0.035	-0.0003	0.0023	0.0005	11:06:20	Yes
Mean:	-0.035	-0.035	-0.0003				
SD:	0.001	0.001	0.0000				
%RSD:	2.405	2.405	2.90				

Sequence No.: 57 **Autosampler Location: 51**
Sample ID: 248397002|960265|1 **Date Collected: 3/4/2010 11:06:39**
Analyst: JXL **Data Type: Original**

Replicate Data: 248397002|960265|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.035	-0.035	-0.0003	0.0024	0.0005	11:07:40	Yes
2	-0.039	-0.039	-0.0004	0.0020	0.0004	11:08:15	Yes
Mean:	-0.037	-0.037	-0.0004				
SD:	0.002	0.002	0.0000				
%RSD:	6.635	6.635	7.89				

Sequence No.: 58
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 3/4/2010 11:08:35
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.959	4.959	0.0581	0.2963	0.0589	11:09:35	Yes
2	4.959	4.959	0.0581	0.2962	0.0589	11:10:10	Yes
Mean:	4.959	4.959	0.0581				
SD:	0.000	0.000	0.0000				
%RSD:	0.002	0.002	0.00				

QC value within limits for Hg 253.7 Recovery = 99.17%
All analyte(s) passed QC.

Sequence No.: 59
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 3/4/2010 11:10:29
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.038	-0.038	-0.0004	0.0021	0.0004	11:11:30	Yes
2	-0.041	-0.041	-0.0004	0.0016	0.0004	11:12:05	Yes
Mean:	-0.039	-0.039	-0.0004				
SD:	0.002	0.002	0.0000				
%RSD:	5.761	5.761	6.79				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60
Sample ID: 248407001|960265|1
Analyst: JXL
Autosampler Location: 52
Date Collected: 3/4/2010 11:12:24
Data Type: Original

Replicate Data: 248407001|960265|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.038	-0.038	-0.0004	0.0020	0.0004	11:13:25	Yes
2	-0.035	-0.035	-0.0003	0.0023	0.0005	11:14:00	Yes
Mean:	-0.037	-0.037	-0.0004				
SD:	0.002	0.002	0.0000				
%RSD:	6.663	6.663	7.94				

Sequence No.: 61
Sample ID: 248419001|960265|1
Analyst: JXL
Autosampler Location: 53
Date Collected: 3/4/2010 11:14:19
Data Type: Original

Replicate Data: 248419001|960265|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.038	-0.038	-0.0004	0.0019	0.0004	11:15:21	Yes
2	-0.038	-0.038	-0.0004	0.0020	0.0004	11:15:55	Yes
Mean:	-0.038	-0.038	-0.0004				

SD:	0.000	0.000	0.0000
%RSD:	0.575	0.575	0.68

==========

Sequence No.: 62 **Autosampler Location: 54**
Sample ID: 1202059704|960265|1 **Date Collected: 3/4/2010 11:16:15**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202059704|960265|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.038	-0.038	-0.0004	0.0018	0.0004	11:17:16	Yes
2	-0.038	-0.038	-0.0004	0.0018	0.0004	11:17:51	Yes
Mean:	-0.038	-0.038	-0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.649	0.649	0.77				

==========

Sequence No.: 63 **Autosampler Location: 55**
Sample ID: 1202059705|960265|1 **Date Collected: 3/4/2010 11:18:11**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202059705|960265|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.068	2.068	0.0243	0.1249	0.0251	11:19:12	Yes
2	2.069	2.069	0.0243	0.1238	0.0251	11:19:46	Yes
Mean:	2.068	2.068	0.0243				
SD:	0.000	0.000	0.0000				
%RSD:	0.006	0.006	0.01				

==========

Sequence No.: 64 **Autosampler Location: 56**
Sample ID: 1202059706|960265|5 **Date Collected: 3/4/2010 11:20:06**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202059706|960265|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	-0.0004	0.0013	0.0004	11:21:07	Yes
2	-0.039	-0.039	-0.0004	0.0015	0.0004	11:21:42	Yes
Mean:	-0.039	-0.039	-0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	1.895	1.895	2.23				

==========

Sequence No.: 65 **Autosampler Location: 57**
Sample ID: 248419002|960265|1 **Date Collected: 3/4/2010 11:22:02**
Analyst: JXL **Data Type: Original**

Replicate Data: 248419002|960265|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.031	-0.031	-0.0003	0.0021	0.0005	11:23:03	Yes
2	-0.035	-0.035	-0.0003	0.0020	0.0005	11:23:38	Yes
Mean:	-0.033	-0.033	-0.0003				
SD:	0.003	0.003	0.0000				
%RSD:	7.865	7.865	9.57				

==========

Sequence No.: 66 **Autosampler Location: 58**
Sample ID: 1202056663|958999|1 **Date Collected: 3/4/2010 11:23:57**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202056663|958999|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.037	-0.037	-0.0004	0.0019	0.0004	11:24:59	Yes
2	-0.035	-0.035	-0.0003	0.0024	0.0005	11:25:34	Yes
Mean:	-0.036	-0.036	-0.0004				
SD:	0.002	0.002	0.0000				
%RSD:	5.445	5.445	6.51				

==========

Sequence No.: 67 **Autosampler Location: 59**
Sample ID: 247602001|958999|1 **Date Collected: 3/4/2010 11:25:54**
Analyst: JXL **Data Type: Original**

Replicate Data: 247602001|958999|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.167	0.167	0.0020	0.0138	0.0028	11:26:55	Yes
2	0.164	0.164	0.0020	0.0141	0.0028	11:27:30	Yes
Mean:	0.165	0.165	0.0020				
SD:	0.002	0.002	0.0000				
%RSD:	1.239	1.239	1.20				

==========

Sequence No.: 68 **Autosampler Location: 60**
Sample ID: 247602002|958999|1 **Date Collected: 3/4/2010 11:27:50**
Analyst: JXL **Data Type: Original**

Replicate Data: 247602002|958999|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.167	0.167	0.0020	0.0140	0.0028	11:28:51	Yes
2	0.172	0.172	0.0021	0.0145	0.0029	11:29:26	Yes
Mean:	0.170	0.170	0.0021				
SD:	0.003	0.003	0.0000				
%RSD:	1.976	1.976	1.91				

==========

Sequence No.: 69 **Autosampler Location: 61**
Sample ID: 247602003|958999|1 **Date Collected: 3/4/2010 11:29:46**
Analyst: JXL **Data Type: Original**

Replicate Data: 247602003|958999|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.159	0.159	0.0019	0.0135	0.0027	11:30:48	Yes
2	0.162	0.162	0.0020	0.0132	0.0028	11:31:24	Yes
Mean:	0.161	0.161	0.0020				
SD:	0.002	0.002	0.0000				
%RSD:	1.221	1.221	1.18				

==========

Sequence No.: 70 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/4/2010 11:31:44**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.033	5.033	0.0590	0.3001	0.0598	11:32:45	Yes
2	5.008	5.008	0.0587	0.2977	0.0595	11:33:20	Yes
Mean:	5.020	5.020	0.0589				
SD:	0.018	0.018	0.0002				
%RSD:	0.359	0.359	0.36				

QC value within limits for Hg 253.7 Recovery = 100.41%
All analyte(s) passed QC.

==========

Sequence No.: 71 **Autosampler Location: 8**

Sample ID: CCB
Analyst:
Date Collected: 3/4/2010 11:33:39
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.036	-0.036	-0.0003	0.0024	0.0004	11:34:39	Yes
2	-0.037	-0.037	-0.0004	0.0017	0.0004	11:35:14	Yes
Mean:	-0.036	-0.036	-0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	2.254	2.254	2.69				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72
Sample ID: 1202057526|960230|1
Analyst: JXL
Autosampler Location: 62
Date Collected: 3/4/2010 11:35:34
Data Type: Original

Replicate Data: 1202057526|960230|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.038	-0.038	-0.0004	0.0014	0.0004	11:36:35	Yes
2	-0.032	-0.032	-0.0003	0.0022	0.0005	11:37:10	Yes
Mean:	-0.035	-0.035	-0.0003				
SD:	0.004	0.004	0.0000				
%RSD:	12.03	12.03	14.43				

Sequence No.: 73
Sample ID: 1202059607|960230|1
Analyst: JXL
Autosampler Location: 63
Date Collected: 3/4/2010 11:37:29
Data Type: Original

Replicate Data: 1202059607|960230|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.036	-0.036	-0.0004	0.0020	0.0004	11:38:31	Yes
2	-0.037	-0.037	-0.0004	0.0019	0.0004	11:39:06	Yes
Mean:	-0.037	-0.037	-0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	1.491	1.491	1.78				

Sequence No.: 74
Sample ID: 1202059608|960230|1
Analyst: JXL
Autosampler Location: 64
Date Collected: 3/4/2010 11:39:25
Data Type: Original

Replicate Data: 1202059608|960230|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.041	2.041	0.0240	0.1248	0.0248	11:40:27	Yes
2	2.008	2.008	0.0236	0.1218	0.0244	11:41:01	Yes
Mean:	2.024	2.024	0.0238				
SD:	0.023	0.023	0.0003				
%RSD:	1.129	1.129	1.13				

Sequence No.: 75
Sample ID: 247198001|960230|1
Analyst: JXL
Autosampler Location: 65
Date Collected: 3/4/2010 11:41:21
Data Type: Original

Replicate Data: 247198001|960230|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	-0.0004	0.0017	0.0004	11:42:22	Yes
2	-0.035	-0.035	-0.0003	0.0020	0.0005	11:42:57	Yes

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: **960826.0** Verified by: _____

Analyst: Louis Hall

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	1202060854	ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).	UI1268746-A	.25	mL
LCS	1202060854	MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).	UI1268749-B	.25	mL
MS	1202060856	ICP-MS DOE liquid Spike Solution A	UI1268752-A	.5	mL
MS	1202060856	ICP-MS DOE Liquid Spike Solution B	UI1268755-B	.5	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202060853 MB	12-MAR-2010 10:00:00	Water	50	50	1	<2
1202060854 LCS	12-MAR-2010 10:00:00	Water	50	50	1	<2
248375001	12-MAR-2010 10:00:00	Water	50	50	1	<2
1202060855 DUP (248375001)	12-MAR-2010 10:00:00	Water	50	50	1	<2
1202060856 MS (248375001)	12-MAR-2010 10:00:00	Water	50	50	1	<2
1202060857 SDILT (248375001)	12-MAR-2010 10:00:00	Water	50	50	1	<2
248375002	12-MAR-2010 10:00:00	Water	50	50	1	<2

Reagent/Solvent Lot ID	Description	Amount
1277916	HYDROCHLORIC ACID	2.5 mL
1282566	Nitric Acid CONC.	1 mL

Comments:

Prep Logbook

Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Batch ID: **960260.0** 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	1202059703	Mercury working intermediate standard for LCS/MS	WHG100303-13	.2	mL
MS	1202059705	Mercury working intermediate standard for LCS/MS	WHG100303-13	.2	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202059702 MB	03-MAR-2010 13:40:00	Water	20	20	1	<2
1202059703 LCS	03-MAR-2010 13:40:00	Water	20	20	1	<2
248375001	03-MAR-2010 13:40:00	Water	20	20	1	<2
248375002	03-MAR-2010 13:40:00	Water	20	20	1	<2
248397001	03-MAR-2010 13:40:00	Water	20	20	1	<2
248397002	03-MAR-2010 13:40:00	Water	20	20	1	<2
248407001	03-MAR-2010 13:40:00	Water	20	20	1	<2
248419001	03-MAR-2010 13:40:00	Water	20	20	1	<2
1202059704 DUP (248419001)	03-MAR-2010 13:40:00	Water	20	20	1	<2
1202059705 MS (248419001)	03-MAR-2010 13:40:00	Water	20	20	1	<2
1202059706 SDILT (248419001)	03-MAR-2010 13:40:00	Water	20	20	1	<2
248419002	03-MAR-2010 13:40:00	Water	20	20	1	<2

Reagent/Solvent Lot ID	Description	Amount
1176183	Sulfuric Acid, Concentrated	1 mL
1255532-C	Hg reducing agent	1 mL
1274391-1	NITRIC ACID	.5 mL
1276435-C	5% Potassium Persulfate	1.5 mL
1277238-C	5% KMnO4 solution	3 mL
WHG100303-01a	Mercury Working 1st Source CAL 0.2/CRA	20 uL
WHG100303-02	Mercury Working 1st Source CAL 0.5	50 uL
WHG100303-03	Mercury Working 1st Source CAL 2.0	200 uL
WHG100303-04	Mercury Working 1st Source CAL 5.0/CCV	500 uL
WHG100303-05	Mercury Working 1st Source CAL 10.0	1 mL
WHG100303-06	Mercury Working 2nd Source 5.0/ICV	500 uL

Comments:

Digestion Start Date: 03-MAR-10 13:40

Digestion End Date: 03-MAR-10 15:40

Prep Logbook

Acid Digestion of Total Recoverable or Dissolved Metals in Surface and Groundwater Samples for Analysis by ICP or ICP-MS

Batch ID: **960824.0** Verified by: _____

Analyst: Anthony Green

Method: SW846 3005A

Lab SOP: GL-MA-E-006 REV# 9

Instrument: Metals Manual Instrument

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202060849	Metals Spike Mix I	UI1286772-01	.125	mL
LCS	1202060849	Metals Spike Mix II	UI1286774-06	.125	mL
MS	1202060851	Metals Spike Mix I	UI1286772-01	.125	mL
MS	1202060851	Metals Spike Mix II	UI1286774-06	.125	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202060848 MB	01-APR-2010 08:15:00	Water	25	25	1	<2
1202060849 LCS	01-APR-2010 08:15:00	Water	25	25	1	<2
248375001	01-APR-2010 08:15:00	Water	25	25	1	<2
1202060850 DUP (248375001)	01-APR-2010 08:15:00	Water	25	25	1	<2
1202060851 MS (248375001)	01-APR-2010 08:15:00	Water	25	25	1	<2
1202060852 SDILT (248375001)	01-APR-2010 08:15:00	Water	25	25	1	<2
248375002	01-APR-2010 08:15:00	Water	25	25	1	<2

Reagent/Solvent Lot ID	Description	Amount
1282564	HYDROCHLORIC ACID	1.25 mL
1291278	Nitric Acid CONC.	.5 mL

Comments:

Standard Logbook

Serial ID:	UHG1167639-01	**Opened:**	13-AUG-09	**Amount :**	125 mL
Name:	MHGSTOCK1	**Received:**	13-AUG-09	**Catalog Number :**	PLHG4-2Y
Type:	Source Material	**Expires:**	13-AUG-10	**Lot Number :**	15-37HG
Employee:	Bryan Davis			**Solvent :**	10% HNO3
Supplier:	Spex				
Description:	Mercury Source Standard #1 1,000 mg/L				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID:	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:**	22-APR-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 Camello			**Solvent :**	5%HNO3,TR.HF
Supplier:	SPECTRO PURE				
Description:	SECOND SOURCE STD #1B				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID:	UI091015-42	**Opened:**	28-OCT-09	**Amount :**	500 mL
Name:	SI 1000mg/L	**Received:**	15-OCT-09	**Catalog Number :**	060014-02-03
Type:	Source Material	**Expires:**	28-OCT-10	**Lot Number :**	1017581
Employee:	Helen Camello			**Solvent :**	0.3%H2O(NH4)2SiF6
Supplier:	o2si				
Description:	Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID:	UI091102-40	**Opened:**	16-NOV-09	**Amount :**	500 mL
Name:	TRACE CALSTD#1A SOUF	**Received:**	02-NOV-09	**Catalog Number :**	HP2270-1-500
Type:	Source Material	**Expires:**	31-OCT-10	**Lot Number :**	0930215
Employee:	Helen Camello			**Solvent :**	HNO3
Supplier:	Environmental Express				
Description:	Trace Calibration Std #1A				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L

Analyte	Concentration	Analyte	Concentration
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

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: 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

Standard Logbook

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: 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

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
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI100415-11 **Opened:** 15-APR-10 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 15-APR-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 15-APR-11 **Lot Number :** 1018321
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Standard Logbook

Serial ID: UI1268746-A **Opened:** 11-FEB-10 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 11-FEB-10 **Lot Number :** 1018516
Type: Source Material **Expires:** 11-FEB-11
Employee: Bryan Davis
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI1268749-B **Opened:** 11-FEB-10 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 11-FEB-10 **Lot Number :** 1018516
Type: Source Material **Expires:** 11-FEB-11
Employee: Bryan Davis
Supplier: O2si
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI1268752-A **Opened:** 11-FEB-10 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 11-FEB-10 **Lot Number :** 1017434
Type: Source Material **Expires:** 11-FEB-11
Employee: Bryan Davis **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

Serial ID: UI1268755-B **Opened:** 11-FEB-10 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 11-FEB-10 **Lot Number :** 1017434
Type: Source Material **Expires:** 11-FEB-11
Employee: Bryan Davis **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: UI1286772-01 **Opened:** 16-MAR-10 **Lot Number :** 1019097
Name: METALSPIKE-1 **Received:** 16-MAR-10
Type: Source Material **Expires:** 16-MAR-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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI1286774-06 **Opened:** 16-MAR-10 **Lot Number :** 1018913
Name: METALSPIKE-2 **Received:** 16-MAR-10
Type: Source Material **Expires:** 16-MAR-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
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: UMS100415-01 **Opened:** 15-APR-10 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 15-APR-10 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-11 **Lot Number :** 22-20JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Standard Logbook

Serial ID: UMS100415-02 **Opened:** 15-APR-10 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 15-APR-10 **Lot Number :** 22-21JB
Type: Source Material **Expires:** 28-FEB-11
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS100415-03 **Opened:** 15-APR-10 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 15-APR-10 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-11 **Lot Number :** 22-22JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG100303-01 **Opened:** 03-MAR-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 03-MAR-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 04-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: IHG100303-02 **Opened:** 03-MAR-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 03-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Intermediate **Expires:** 04-MAR-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Standard Logbook

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: WHG100303-01a **Opened:** 03-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 03-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 10-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.
IHG100303-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG100303-02 **Opened:** 03-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 03-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 10-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.
IHG100303-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG100303-03 **Opened:** 03-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 03-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 10-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.
IHG100303-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG100303-04 **Opened:** 03-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 03-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 10-MAR-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 5.0/CCV
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100303-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100303-05 **Opened:** 03-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 03-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 10-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.
IHG100303-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG100303-06 **Opened:** 03-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 03-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 10-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.
IHG100303-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100303-13 **Opened:** 03-MAR-10 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 03-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 10-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: WI100401-42 **Opened:** 01-APR-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 02-APR-10 **Solvent :** 3%HCL and 1%HNO3 -1293083
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100401-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100401-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100401-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100401-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100401-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100401-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100401-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100401-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100401-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100401-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100401-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100401-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100401-43 **Opened:** 01-APR-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 02-APR-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI100401-44 **Opened:** 01-APR-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 02-APR-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI100401-45 **Opened:** 01-APR-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 02-APR-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

Standard Logbook

Serial ID: WI100401-46 **Opened:** 01-APR-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 02-APR-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
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Standard Logbook

Serial ID:	WI100401-47	**Opened:**	01-APR-10	**Balance Id :**	216
Name:	PQL Working Standard	**Received:**	30-JUN-09	**Pipet Id :**	3581809
Type:	Working	**Expires:**	02-APR-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
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:	WMS100421-04	**Opened:**	21-APR-10	**Amount :**	50 mL
Name:	ICPMS Cal Standard 100	**Received:**	21-APR-10	**Balance Id :**	4025216
Type:	Working	**Expires:**	22-APR-10	**Pipet Id :**	3541598
Employee:	Paul Boyd			**Solvent :**	2%HNO3/1%HCl-1303289
Supplier:	GEL				

Standard Logbook

Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100415-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100415-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100421-04A **Opened:** 21-APR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 21-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 22-APR-10 **Solvent :** 2%HNO3/1%HCl - 1303289
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100421-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100421-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100421-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100421-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100421-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100421-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100421-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100421-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100421-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100421-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100421-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100421-05 **Opened:** 21-APR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 21-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 22-APR-10 **Solvent :** 2%HNO3/1%HCl - 1303289
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI100317-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WMS100421-06 **Opened:** 21-APR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 21-APR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 22-APR-10 **Solvent :** 2%HNO3/1%HCl - 1303289
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100421-07 **Opened:** 21-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 21-APR-10 **Lot Number :** 1010773
Type: Working **Expires:** 22-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1303289
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100415-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Carbon	2000 mg/L	5 mL	50 mL	200000 ug/L
UI100415-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100415-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100415-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100415-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100421-08 **Opened:** 21-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 21-APR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 22-APR-10 **Solvent :** 2%HNO3/1%HCl - 1303289
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100405-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI100405-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI100405-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI100405-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI100405-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI100405-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI100405-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI100405-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI100405-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100415-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Carbon	2000 mg/L	5 mL	50 mL	200000 ug/L
UI100415-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100415-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100415-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100415-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1176183 **Opened:** 24-AUG-09 **Lot Number :** H20001
Name: B-H2SO4-MER **Received:** 24-AUG-09
Type: Reagent/Solvent **Expires:** 24-AUG-10
Employee: Tara Griffin
Supplier: Mallinckrodt
Description: Sulfuric Acid, Concentrated
Comments: None

Serial ID: 1215906 **Opened:** 06-NOV-09 **Lot Number :** H44465
Name: B-K2S2O8S-MER **Received:** 06-NOV-09
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Tara Griffin
Supplier: J.T BAKER
Description: Potassium Persulfate Concentrate.
Comments: None

Serial ID: 1228372-A **Opened:** 12-NOV-09 **Lot Number :** 49215936
Name: B-NH2OH.HCl-MER **Received:** 12-NOV-09
Type: Reagent/Solvent **Expires:** 12-NOV-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Standard Logbook

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: 1276435-C **Opened:** 28-FEB-10 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 28-FEB-10
Type: Reagent/Solvent **Expires:** 28-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% Potassium Persulfate
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1215906	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Serial ID: 1277238-C **Opened:** 01-MAR-10 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-MAR-10
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Standard Logbook

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: 1282564 **Opened:** 09-MAR-10 **Lot Number :** J02039
Name: I-HCL **Received:** 09-MAR-10 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 09-MAR-11
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1282566 **Opened:** 09-MAR-10 **Lot Number :** J 04043 L
Name: I-HNO3 **Received:** 09-MAR-10
Type: Reagent/Solvent **Expires:** 09-MAR-11
Employee: Anthony Green
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

Standard Logbook

Serial ID: 1302252 **Opened:** 15-APR-10 **Lot Number :** J 10027 L
Name: I-HNO3 **Received:** 15-APR-10
Type: Reagent/Solvent **Expires:** 15-APR-11
Employee: Louis Hall
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1302255 **Opened:** 15-APR-10 **Lot Number :** J07033
Name: I-HCL **Received:** 15-APR-10 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 15-APR-11
Employee: Louis Hall
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1303289 **Opened:** 19-APR-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 19-APR-10
Type: Reagent/Solvent **Expires:** 26-APR-10
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1302252	I-HNO3	69.0-70.0	160 mL	9 l	N/A
1302255	I-HCL	36.5-38.0	80 mL	9 l	N/A

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2155

Method/Analysis Information

Product: pH

Analytical Batch: 961559 **Method:** SW9045C pH

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9045C/9045D:

Sample ID	Client ID
248374001	RE36-10-7494
248374002	RE36-10-7493
248374003	RE36-10-7492
248374004	RE36-10-7491
248374005	RE36-10-7496
248374006	RE36-10-7499
248374007	RE36-10-7497
248374008	RE36-10-7495
248374009	RE36-10-7498
248374010	RE36-10-7500
248374011	RE36-10-7523
248374012	RE36-10-7522
248374013	RE36-10-7521
1202062451	248374001(RE36-10-7494) Sample Duplicate (DUP)
1202062452	248374002(RE36-10-7493) Sample Duplicate (DUP)
1202062453	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 LogR pH/ISE.

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: 248374001 (RE36-10-7494) and 248374002 (RE36-10-7493).

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: 248374001 (RE36-10-7494), 248374002 (RE36-10-7493), 248374003 (RE36-10-7492), 248374004 (RE36-10-7491), 248374005 (RE36-10-7496), 248374006 (RE36-10-7499), 248374007 (RE36-10-7497), 248374008 (RE36-10-7495), 248374009 (RE36-10-7498), 248374010 (RE36-10-7500), 248374011 (RE36-10-7523), 248374012 (RE36-10-7522) and 248374013 (RE36-10-7521).

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:	960263 and 960266	**Method:**	SW9012A Cyanide and Total
Prep Batch :	960261 and 960264	**Method:**	SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
248374001	RE36-10-7494
248374002	RE36-10-7493
248374003	RE36-10-7492
248374004	RE36-10-7491
248374005	RE36-10-7496
248374006	RE36-10-7499
248374007	RE36-10-7497
248374008	RE36-10-7495
248374009	RE36-10-7498
248374010	RE36-10-7500
248374011	RE36-10-7523
248374012	RE36-10-7522
248374013	RE36-10-7521
1202059686	Method Blank (MB)
1202059687	248371008(RE36-10-7490) Sample Duplicate (DUP)
1202059688	248371009(RE36-10-7487) Sample Duplicate (DUP)
1202059689	248371008(RE36-10-7490) Matrix Spike (MS)
1202059690	248371009(RE36-10-7487) Matrix Spike (MS)
1202059691	248371008(RE36-10-7490) Matrix Spike Duplicate (MSD)
1202059692	248371009(RE36-10-7487) Matrix Spike Duplicate (MSD)
1202059693	Laboratory Control Sample (LCS)
1202059694	Method Blank (MB)
1202059695	248374008(RE36-10-7495) Sample Duplicate (DUP)
1202059696	248374009(RE36-10-7498) Sample Duplicate (DUP)
1202059697	248374008(RE36-10-7495) Matrix Spike (MS)
1202059698	248374009(RE36-10-7498) Matrix Spike (MS)
1202059699	248374008(RE36-10-7495) Matrix Spike Duplicate (MSD)
1202059700	248374009(RE36-10-7498) Matrix Spike Duplicate (MSD)
1202059701	Laboratory Control Sample (LCS)

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

SOP Reference

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

GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 248371008 (RE36-10-7490), 248371009 (RE36-10-7487)- Batch 960263, 248374008 (RE36-10-7495) and 248374009 (RE36-10-7498)- Batch 960266.

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. 1202059687 (RE36-10-7490) and 1202059688 (RE36-10-7487)- Batch 960263.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following samples in this sample group were diluted due to high concentration: 1202059693 (LCS)- Batch 960263 and 1202059701 (LCS)- Batch 960266.

Sample Re-analysis
The following sample was re-analyzed due to instrument failure: 248374001 (RE36-10-7494)- Batch 960263.

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:	967051	**Method:**	EPA 300.0 Nitrate in Soil
Prep Batch :	967025	**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
248374001	RE36-10-7494
248374002	RE36-10-7493
248374003	RE36-10-7492
248374004	RE36-10-7491
248374005	RE36-10-7496
248374006	RE36-10-7499
248374007	RE36-10-7497
248374008	RE36-10-7495
248374009	RE36-10-7498
248374010	RE36-10-7500
248374011	RE36-10-7523
248374012	RE36-10-7522
248374013	RE36-10-7521
1202075482	Method Blank (MB)
1202075483	248250001(RE36-10-8285) Sample Duplicate (DUP)
1202075484	248374013(RE36-10-7521) Sample Duplicate (DUP)
1202075485	248250001(RE36-10-8285) Matrix Spike (MS)
1202075486	248374013(RE36-10-7521) Matrix Spike (MS)
1202075487	248250001(RE36-10-8285) Matrix Spike Duplicate (MSD)
1202075488	248374013(RE36-10-7521) Matrix Spike Duplicate (MSD)
1202075489	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: 248250001 (RE36-10-8285) and 248374013 (RE36-10-7521).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement

The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times

All samples in this SDG met the specified holding time.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Data Exception (DER) Documentation
A DER was not required for this SDG.

Manual Integrations
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: Nikki Edel Emore **Date:** 3.27.10

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: 10-2155 GEL Work Order: 248374

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 Nikki Edel Amore 3.27.10

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7494	Project:	LANL01004
Sample ID:	248374001	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	12.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 18.1C	H	6.28	0.010	0.100	SU	1	EXF1	03/05/10	1426	961559	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	J	179	69.3	255	ug/kg	1	AXC2	03/10/10	1629	960263	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	0.313	1.04	mg/kg	1	VH1	03/23/10	0057	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1111	960261

The following Analytical Methods were performed

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

GEL LABORATORIES LLC

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Certificate of Analysis

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID: RE36-10-7493
Sample ID: 248374002
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 25.5%

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 17.7C	H	6.34	0.010	0.100	SU	1	EXF1 03/05/10	1431	961559	1
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total		591	84.5	311	ug/kg	1	AXC2 03/10/10	1624	960263	2
Ion Chromatography										
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"										
Nitrate-N	U	ND	0.349	1.16	mg/kg	1	VH1 03/23/10	0215	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1111	960261

The following Analytical Methods were performed

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

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Certificate of Analysis

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7492	Project:	LANL01004
Sample ID:	248374003	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	21.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 18.1C	H	6.28	0.010	0.100	SU	1	EXF1	03/05/10	1437	961559	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total		305	78.4	288	ug/kg	1	AXC2	03/10/10	1625	960263	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N		5.34	0.324	1.08	mg/kg	1	VH1	03/23/10	0241	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1111	960261

The following Analytical Methods were performed

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

GEL LABORATORIES LLC

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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 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7491	Project:	LANL01004
Sample ID:	248374004	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	35.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 19.0C	H	6.71	0.010	0.100	SU	1	EXF1	03/05/10	1440	961559	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total		697	92.1	339	ug/kg	1	AXC2	03/10/10	1630	960263	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N		1.93	0.408	1.36	mg/kg	1	VH1	03/23/10	0308	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1111	960261

The following Analytical Methods were performed

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

GEL LABORATORIES LLC

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Certificate of Analysis

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7496	Project:	LANL01004
Sample ID:	248374005	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	11.4%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 18.1C	H	6.07	0.010	0.100	SU	1	EXF1	03/05/10	1443	961559	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	J	143	72.4	266	ug/kg	1	AXC2	03/10/10	1631	960263	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N		5.04	0.287	0.957	mg/kg	1	VH1	03/23/10	0334	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1111	960261

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 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7499	Project:	LANL01004
Sample ID:	248374006	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	27%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 18.4C	H	6.76	0.010	0.100	SU	1	EXF1	03/05/10	1444	961559	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	J	276	84.7	311	ug/kg	1	AXC2	03/10/10	1632	960263	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N		1.55	0.368	1.23	mg/kg	1	VH1	03/23/10	0400	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1111	960261

The following Analytical Methods were performed

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

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Certificate of Analysis

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7497	Project:	LANL01004
Sample ID:	248374007	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	32.5%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Electrode Analysis										
SW9045C pH "As Received"										
pH at Temp 18.7C	H	6.44	0.010	0.100	SU	1	EXF1 03/05/10	1446	961559	1
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	J	213	95.0	349	ug/kg	1	AXC2 03/10/10	1633	960263	2
Ion Chromatography										
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"										
Nitrate-N		2.91	0.436	1.45	mg/kg	1	VH1 03/23/10	0426	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1111	960261

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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Project: **LANL ER Project**

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID: RE36-10-7495
Sample ID: 248374008
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 27.3%

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 18.1C	H	6.17	0.010	0.100	SU	1	EXF1	03/05/10	1451	961559	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total		355	82.0	302	ug/kg	1	AXC2	03/10/10	1533	960266	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N		1.81	0.378	1.26	mg/kg	1	VH1	03/23/10	0452	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1109	960264

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7498	Project:	LANL01004
Sample ID:	248374009	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	22.7%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 18.8C	H	6.49	0.010	0.100	SU	1	EXF1	03/05/10	1455	961559	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	J	192	83.0	305	ug/kg	1	AXC2	03/10/10	1540	960266	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N		1.90	0.387	1.29	mg/kg	1	VH1	03/23/10	0518	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1109	960264

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 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7500	Project:	LANL01004
Sample ID:	248374010	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	21.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 18.2C	H	6.85	0.010	0.100	SU	1	EXF1	03/05/10	1456	961559	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	J	103	83.7	308	ug/kg	1	AXC2	03/10/10	1543	960266	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N		2.61	0.350	1.17	mg/kg	1	VH1	03/23/10	0544	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1109	960264

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7523	Project:	LANL01004
Sample ID:	248374011	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	15.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 19.0C	H	6.14	0.010	0.100	SU	1	EXF1	03/05/10	1458	961559	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	U	ND	76.2	280	ug/kg	1	AXC2	03/10/10	1544	960266	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	0.309	1.03	mg/kg	1	VH1	03/23/10	0610	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1109	960264

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7522	Project:	LANL01004
Sample ID:	248374012	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	11.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 18.5C	H	6.70	0.010	0.100	SU	1	EXF1	03/05/10	1501	961559	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	U	ND	75.1	276	ug/kg	1	AXC2	03/10/10	1545	960266	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N		1.35	0.281	0.937	mg/kg	1	VH1	03/23/10	0728	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1109	960264

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

Report Date: March 26, 2010

Client SDG: 10-2155

Client Sample ID:	RE36-10-7521	Project:	LANL01004
Sample ID:	248374013	Client ID:	LANL010
Matrix:	R		
Collect Date:	24-FEB-10 12:00		
Receive Date:	02-MAR-10		
Collector:	Client		
Moisture:	22.9%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
SW9045C pH "As Received"											
pH at Temp 18.7C	H	6.85	0.010	0.100	SU	1	EXF1	03/05/10	1506	961559	1
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total		580	81.7	300	ug/kg	1	AXC2	03/10/10	1546	960266	2
Ion Chromatography											
EPA 300.0 Nitrate in Soil "Dry Weight Corrected"											
Nitrate-N	U	ND	0.380	1.27	mg/kg	1	VH1	03/23/10	0755	967051	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	VH1	03/22/10	1747	967025
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1109	960264

The following Analytical Methods were performed

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

Quality Control Summary

GEL LABORATORIES LLC

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QC Summary

Report Date: March 26, 2010

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

Contact: Ms. Joylene Valdez

Workorder: 248374

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Electrode Analysis											
Batch 961559											
QC1202062451 248374001 DUP											
pH		H	6.28	H	6.30	SU	0.318		(0%-10%)	EXF1	03/05/10 14:30
QC1202062452 248374002 DUP											
pH		H	6.34	H	6.41	SU	1.10		(0%-10%)		03/05/10 14:33
QC1202062453 LCS											
pH	7.00				7.03	SU		100	(95%-105%)		03/05/10 14:24
Flow Injection Analysis											
Batch 960263											
QC1202059687 248371008 DUP											
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			AXC2	03/10/10 15:59
QC1202059688 248371009 DUP											
Cyanide, Total		U	ND	U	ND	ug/kg	N/A				03/10/10 16:07
QC1202059693 LCS											
Cyanide, Total	67900				64300	ug/kg		94.6	(32%-157%)		03/10/10 15:58
QC1202059686 MB											
Cyanide, Total				U	250	ug/kg					03/10/10 15:57
QC1202059689 248371008 MS											
Cyanide, Total	6250	U	ND		5070	ug/kg		81.1	(26%-158%)		03/10/10 16:04
QC1202059690 248371009 MS											
Cyanide, Total	6020	U	ND		4780	ug/kg		78.5	(26%-158%)		03/10/10 16:08
QC1202059691 248371008 MSD											
Cyanide, Total	5720	U	ND		4710	ug/kg	7.50	82.2	(0%-30%)		03/10/10 16:05
QC1202059692 248371009 MSD											
Cyanide, Total	5810	U	ND		4870	ug/kg	1.95	83	(0%-30%)		03/10/10 16:08
Batch 960266											
QC1202059695 248374008 DUP											
Cyanide, Total			355	J	266	ug/kg	28.5 ^		(+/-291)	AXC2	03/10/10 15:34
QC1202059696 248374009 DUP											
Cyanide, Total		J	192	J	191	ug/kg	0.368 ^		(+/-317)		03/10/10 15:41
QC1202059701 LCS											
Cyanide, Total	67900				84800	ug/kg		125	(32%-157%)		03/10/10 15:22
QC1202059694 MB											
Cyanide, Total				U	250	ug/kg					03/10/10 15:21
QC1202059697 248374008 MS											
Cyanide, Total	5930		355		5040	ug/kg		79	(26%-158%)		03/10/10 15:35
QC1202059698 248374009 MS											
Cyanide, Total	6470	J	192		6080	ug/kg		91	(26%-158%)		03/10/10 15:42
QC1202059699 248374008 MSD											
Cyanide, Total	5830		355		4940	ug/kg	1.94	78.7	(0%-30%)		03/10/10 15:39
QC1202059700 248374009 MSD											
Cyanide, Total	5990	J	192		5620	ug/kg	7.80	90.7	(0%-30%)		03/10/10 15:43
Ion Chromatography											
Batch 967051											

QC Summary

Workorder: 248374

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Ion Chromatography											
Batch 967051											
QC1202075483 248250001 DUP											
Nitrate-N			1.92		1.88	mg/kg	2.42 ^		(+/-1.26)	VH1	03/22/10 22:21
QC1202075484 248374013 DUP											
Nitrate-N		U	ND	U	ND	mg/kg	N/A				03/23/10 08:21
QC1202075489 LCS											
Nitrate-N	50.0				47.6	mg/kg		95.3	(90%-110%)		03/22/10 21:28
QC1202075482 MB											
Nitrate-N				U	1.00	mg/kg					03/22/10 21:02
QC1202075485 248250001 MS											
Nitrate-N	62.9		1.92		60.0	mg/kg		92.3	(90%-110%)		03/22/10 22:47
QC1202075486 248374013 MS											
Nitrate-N	62.5	U	ND		60.1	mg/kg		96.2	(90%-110%)		03/23/10 08:47
QC1202075487 248250001 MSD											
Nitrate-N	63.3		1.92		60.3	mg/kg	0.552	92.2	(0%-20%)		03/22/10 23:13
QC1202075488 248374013 MSD											
Nitrate-N	63.6	U	ND		61.3	mg/kg	1.94	96.4	(0%-20%)		03/23/10 09:13

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

QC Summary

Workorder: 248374

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

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

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: 26-MAR-2010 15:05

GEL Laboratories LLC

Contract: **LANL01004**

SDG #: **10-2155**

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	**10-MAR-2010 10:58:04**	**OM_3-10-2010_10-49-24**	**146**	**150**	**97.3**	**(90%-110%)**	**Yes**
CCV	10-MAR-2010 15:11:01	OM_3-10-2010_14-44-38	102	100	102	(90%-110%)	Yes
CCV	10-MAR-2010 15:23:25	OM_3-10-2010_14-44-38	101	100	101	(90%-110%)	Yes
CCV	10-MAR-2010 15:35:55	OM_3-10-2010_14-44-38	101	100	101	(90%-110%)	Yes
CCV	10-MAR-2010 15:48:24	OM_3-10-2010_14-44-38	100	100	100	(90%-110%)	Yes
CCV	10-MAR-2010 16:00:49	OM_3-10-2010_14-44-38	101	100	101	(90%-110%)	Yes
CCV	10-MAR-2010 16:13:24	OM_3-10-2010_14-44-38	99.9	100	99.9	(90%-110%)	Yes
CCV	10-MAR-2010 16:25:56	OM_3-10-2010_14-44-38	100	100	100	(90%-110%)	Yes
CCV	10-MAR-2010 16:38:27	OM_3-10-2010_14-44-38	104	100	104	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**10-MAR-2010 10:59:54**	**OM_3-10-2010_10-49-24**	**-0.144**	**10**	**Yes**
CCB	10-MAR-2010 15:12:52	OM_3-10-2010_14-44-38	-2.08	10	Yes
CCB	10-MAR-2010 15:25:14	OM_3-10-2010_14-44-38	-1.31	10	Yes
CCB	10-MAR-2010 15:37:45	OM_3-10-2010_14-44-38	-1.31	10	Yes
CCB	10-MAR-2010 15:50:14	OM_3-10-2010_14-44-38	-2.34	10	Yes
CCB	10-MAR-2010 16:02:39	OM_3-10-2010_14-44-38	-1.38	10	Yes
CCB	10-MAR-2010 16:15:15	OM_3-10-2010_14-44-38	-1.22	10	Yes
CCB	10-MAR-2010 16:27:46	OM_3-10-2010_14-44-38	-1.22	10	Yes
CCB	10-MAR-2010 16:40:17	OM_3-10-2010_14-44-38	-1.45	10	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 26-MAR-2010 15:05

GEL Laboratories LLC

Contract: **LANL01004**

SDG #: **10-2155**

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	**22-MAR-2010 14:31:00**	**100322**	**4.7703**	**5**	**95.4**	**(90%-110%)**	**Yes**
CCV	22-MAR-2010 20:10:00	100322	7.2466	7.5	96.6	(90%-110%)	Yes
CCV	23-MAR-2010 01:23:00	100322	4.7583	5	95.2	(90%-110%)	Yes
CCV	23-MAR-2010 06:36:00	100322	7.2521	7.5	96.7	(90%-110%)	Yes
CCV	23-MAR-2010 09:39:00	100322	4.7662	5	95.3	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**22-MAR-2010 14:57:00**	**100322**	**0**	**0.1**	**Yes**
CCB	22-MAR-2010 20:36:00	100322	0	0.1	Yes
CCB	23-MAR-2010 01:49:00	100322	0	0.1	Yes
CCB	23-MAR-2010 07:02:00	100322	0	0.1	Yes
CCB	23-MAR-2010 10:05:00	100322	0	0.1	Yes

Cyanide, Total

Prep Logbook

Cyanide Sample Distillation

Batch ID: **960264.0** 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	1202059701	Total Cyanide Solid LCS	URF1200957-01	.25	g
MS	1202059697	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202059698	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202059699	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202059700	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
1202059694 MB	10-MAR-2010 11:09:00	Soil	0.5	25	50	>12
1202059701 LCS	10-MAR-2010 11:09:00	Soil	0.25	25	100	>12
248256001	10-MAR-2010 11:09:00	Soil	0.55	25	45.45455	>12
248256002	10-MAR-2010 11:09:00	Soil	0.58	25	43.10345	>12
248256003	10-MAR-2010 11:09:00	Soil	0.55	25	45.45455	>12
248256004	10-MAR-2010 11:09:00	Soil	0.51	25	49.01961	>12
248256005	10-MAR-2010 11:09:00	Soil	0.56	25	44.64286	>12
248256006	10-MAR-2010 11:09:00	Soil	0.51	25	49.01961	>12
248256007	10-MAR-2010 11:09:00	Soil	0.52	25	48.07692	>12
248374008	10-MAR-2010 11:09:00	Soil	0.57	25	43.85965	>12
1202059695 DUP (248374008)	10-MAR-2010 11:09:00	Soil	0.59	25	42.37288	>12
1202059697 MS (248374008)	10-MAR-2010 11:09:00	Soil	0.58	25	43.10345	>12
1202059699 MSD (248374008)	10-MAR-2010 11:09:00	Soil	0.59	25	42.37288	>12
248374009	10-MAR-2010 11:09:00	Soil	0.53	25	47.16981	>12
1202059696 DUP (248374009)	10-MAR-2010 11:09:00	Soil	0.51	25	49.01961	>12
1202059698 MS (248374009)	10-MAR-2010 11:09:00	Soil	0.5	25	50	>12
1202059700 MSD (248374009)	10-MAR-2010 11:09:00	Soil	0.54	25	46.2963	>12
248374010	10-MAR-2010 11:09:00	Soil	0.52	25	48.07692	>12
248374011	10-MAR-2010 11:09:00	Soil	0.53	25	47.16981	>12
248374012	10-MAR-2010 11:09:00	Soil	0.51	25	49.01961	>12
248374013	10-MAR-2010 11:09:00	Soil	0.54	25	46.2963	>12

Prep Logbook

Batch ID: **960264.0** 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	1202059701	Total Cyanide Solid LCS	URF1200957-01	.25	g
MS	1202059697	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202059698	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202059699	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202059700	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
248389002	10-MAR-2010 11:09:00	Soil	0.58	25	43.10345	>12
248389003	10-MAR-2010 11:09:00	Soil	0.5	25	50	>12
248396001	10-MAR-2010 11:09:00	Soil	0.57	25	43.85965	>12
248396002	10-MAR-2010 11:09:00	Soil	0.5	25	50	>12
248396003	10-MAR-2010 11:09:00	Soil	0.51	25	49.01961	>12
248396004	10-MAR-2010 11:09:00	Soil	0.59	25	42.37288	>12
248396005	10-MAR-2010 11:09:00	Soil	0.52	25	48.07692	>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
WCN100310-07	150 ppb CN Distilled ICV Standard	.0375 mL

Comments:

Prep Logbook

Cyanide Sample Distillation

Batch ID: **960261.0** 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	1202059693	Total Cyanide Solid LCS	URF1200957-01	.25	g
MS	1202059689	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202059690	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202059691	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202059692	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
1202059686 MB	10-MAR-2010 11:11:00	Soil	0.5	25	50	>12
1202059693 LCS	10-MAR-2010 11:11:00	Soil	0.25	25	100	>12
248371008	10-MAR-2010 11:11:00	Soil	0.59	25	42.37288	>12
1202059687 DUP (248371008)	10-MAR-2010 11:11:00	Soil	0.53	25	47.16981	>12
1202059689 MS (248371008)	10-MAR-2010 11:11:00	Soil	0.54	25	46.2963	>12
1202059691 MSD (248371008)	10-MAR-2010 11:11:00	Soil	0.59	25	42.37288	>12
248371009	10-MAR-2010 11:11:00	Soil	0.56	25	44.64286	>12
1202059688 DUP (248371009)	10-MAR-2010 11:11:00	Soil	0.51	25	49.01961	>12
1202059690 MS (248371009)	10-MAR-2010 11:11:00	Soil	0.55	25	45.45455	>12
1202059692 MSD (248371009)	10-MAR-2010 11:11:00	Soil	0.57	25	43.85965	>12
248371010	10-MAR-2010 11:11:00	Soil	0.5	25	50	>12
248371011	10-MAR-2010 11:11:00	Soil	0.53	25	47.16981	>12
248371012	10-MAR-2010 11:11:00	Soil	0.58	25	43.10345	>12
248371013	10-MAR-2010 11:11:00	Soil	0.5	25	50	>12
248371014	10-MAR-2010 11:11:00	Soil	0.5	25	50	>12
248371015	10-MAR-2010 11:11:00	Soil	0.55	25	45.45455	>12
248371016	10-MAR-2010 11:11:00	Soil	0.53	25	47.16981	>12
248371017	10-MAR-2010 11:11:00	Soil	0.5	25	50	>12
248371018	10-MAR-2010 11:11:00	Soil	0.54	25	46.2963	>12
248371019	10-MAR-2010 11:11:00	Soil	0.57	25	43.85965	>12
248371020	10-MAR-2010 11:11:00	Soil	0.59	25	42.37288	>12

Prep Logbook

Batch ID: **960261.0** 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	1202059693	Total Cyanide Solid LCS	URF1200957-01	.25	g
MS	1202059689	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202059690	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202059691	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202059692	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
248374001	10-MAR-2010 11:11:00	Soil	0.56	25	44.64286	>12
248374002	10-MAR-2010 11:11:00	Soil	0.54	25	46.2963	>12
248374003	10-MAR-2010 11:11:00	Soil	0.55	25	45.45455	>12
248374004	10-MAR-2010 11:11:00	Soil	0.57	25	43.85965	>12
248374005	10-MAR-2010 11:11:00	Soil	0.53	25	47.16981	>12
248374006	10-MAR-2010 11:11:00	Soil	0.55	25	45.45455	>12
248374007	10-MAR-2010 11:11:00	Soil	0.53	25	47.16981	>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
WCN100310-07	150 ppb CN Distilled ICV Standard	.0375 mL

Comments:

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	3/10/2010 10:50:55	OM_3-10-2010_10-49-24
150 ppb		1	axc2	3/10/2010 10:51:47	OM_3-10-2010_10-49-24
100 ppb		1	axc2	3/10/2010 10:52:40	OM_3-10-2010_10-49-24
50 ppb		1	axc2	3/10/2010 10:53:32	OM_3-10-2010_10-49-24
10 ppb		1	axc2	3/10/2010 10:54:26	OM_3-10-2010_10-49-24
CRDL 5.0 ppb		1	axc2	3/10/2010 10:55:20	OM_3-10-2010_10-49-24
ICAL-00		1	axc2	3/10/2010 10:56:14	OM_3-10-2010_10-49-24
ICV		1	axc2	3/10/2010 10:58:04	OM_3-10-2010_10-49-24
ICB		1	axc2	3/10/2010 10:59:54	OM_3-10-2010_10-49-24
CRDL		1	axc2	3/10/2010 11:01:43	OM_3-10-2010_10-49-24
1202066540	963300	1	axc2	3/10/2010 11:03:32	OM_3-10-2010_10-49-24
1202066541	963300	1	axc2	3/10/2010 11:04:26	OM_3-10-2010_10-49-24
248455001	963300	1	axc2	3/10/2010 11:05:19	OM_3-10-2010_10-49-24
248455002	963300	1	axc2	3/10/2010 11:06:12	OM_3-10-2010_10-49-24
248455003	963300	1	axc2	3/10/2010 11:07:05	OM_3-10-2010_10-49-24
248523001	963300	1	axc2	3/10/2010 11:07:58	OM_3-10-2010_10-49-24
248792001	963300	1	axc2	3/10/2010 11:08:51	OM_3-10-2010_10-49-24
1202066542	963300	1	axc2	3/10/2010 11:09:43	OM_3-10-2010_10-49-24
1202066543	963300	1	axc2	3/10/2010 11:10:36	OM_3-10-2010_10-49-24
1202066544	963300	1	axc2	3/10/2010 11:11:28	OM_3-10-2010_10-49-24
CCV		1	axc2	3/10/2010 11:12:20	OM_3-10-2010_10-49-24
CCB		1	axc2	3/10/2010 11:14:10	OM_3-10-2010_10-49-24
1202057145	959212	1	axc2	3/10/2010 11:15:58	OM_3-10-2010_10-49-24
1202057152	959212	25	axc2	3/10/2010 11:16:50	OM_3-10-2010_10-49-24
248159003	959212	1	axc2	3/10/2010 11:17:42	OM_3-10-2010_10-49-24
1202057146	959212	1	axc2	3/10/2010 11:18:34	OM_3-10-2010_10-49-24
1202057148	959212	1	axc2	3/10/2010 11:19:25	OM_3-10-2010_10-49-24
1202057150	959212	1	axc2	3/10/2010 11:20:19	OM_3-10-2010_10-49-24
248159004	959212	1	axc2	3/10/2010 11:21:13	OM_3-10-2010_10-49-24
1202057147	959212	1	axc2	3/10/2010 11:22:06	OM_3-10-2010_10-49-24
1202057149	959212	1	axc2	3/10/2010 11:23:00	OM_3-10-2010_10-49-24
1202057151	959212	1	axc2	3/10/2010 11:23:53	OM_3-10-2010_10-49-24
CCV		1	axc2	3/10/2010 11:24:45	OM_3-10-2010_10-49-24
CCB		1	axc2	3/10/2010 11:26:35	OM_3-10-2010_10-49-24
248159005	959212	1	axc2	3/10/2010 11:28:24	OM_3-10-2010_10-49-24
248159006	959212	1	axc2	3/10/2010 11:29:17	OM_3-10-2010_10-49-24
248163001	959212	1	axc2	3/10/2010 11:30:10	OM_3-10-2010_10-49-24
248163002	959212	1	axc2	3/10/2010 11:31:02	OM_3-10-2010_10-49-24
248163003	959212	1	axc2	3/10/2010 11:31:55	OM_3-10-2010_10-49-24
248163004	959212	1	axc2	3/10/2010 11:32:48	OM_3-10-2010_10-49-24
248163005	959212	1	axc2	3/10/2010 11:33:40	OM_3-10-2010_10-49-24
248163006	959212	1	axc2	3/10/2010 11:34:32	OM_3-10-2010_10-49-24
248163007	959212	1	axc2	3/10/2010 11:35:24	OM_3-10-2010_10-49-24
248163008	959212	1	axc2	3/10/2010 11:36:15	OM_3-10-2010_10-49-24
CCV		1	axc2	3/10/2010 11:37:08	OM_3-10-2010_10-49-24
CCB		1	axc2	3/10/2010 11:38:58	OM_3-10-2010_10-49-24
248163009	959212	1	axc2	3/10/2010 11:40:49	OM_3-10-2010_10-49-24
248163010	959212	1	axc2	3/10/2010 11:41:42	OM_3-10-2010_10-49-24
248163011	959212	1	axc2	3/10/2010 11:42:36	OM_3-10-2010_10-49-24
248163012	959212	1	axc2	3/10/2010 11:43:29	OM_3-10-2010_10-49-24
248163013	959212	1	axc2	3/10/2010 11:44:22	OM_3-10-2010_10-49-24
248163014	959212	1	axc2	3/10/2010 11:45:16	OM_3-10-2010_10-49-24
248241001	959212	1	axc2	3/10/2010 11:46:08	OM_3-10-2010_10-49-24
248241002	959212	1	axc2	3/10/2010 11:47:02	OM_3-10-2010_10-49-24
1202061941	961284	1	axc2	3/10/2010 11:47:54	OM_3-10-2010_10-49-24
1202061948	961284	25	axc2	3/10/2010 11:48:47	OM_3-10-2010_10-49-24
CCV		1	axc2	3/10/2010 11:49:39	OM_3-10-2010_10-49-24
CCB		1	axc2	3/10/2010 11:51:29	OM_3-10-2010_10-49-24

247914001	961284	1	axc2	3/10/2010	11:53:18	OM_3-10-2010_10-49-24
247923001	961284	1	axc2	3/10/2010	11:54:10	OM_3-10-2010_10-49-24
247927001	961284	1	axc2	3/10/2010	11:55:02	OM_3-10-2010_10-49-24
247930001	961284	1	axc2	3/10/2010	11:55:55	OM_3-10-2010_10-49-24
247933001	961284	1	axc2	3/10/2010	11:56:46	OM_3-10-2010_10-49-24
247939001	961284	1	axc2	3/10/2010	11:57:41	OM_3-10-2010_10-49-24
247941001	961284	1	axc2	3/10/2010	11:58:34	OM_3-10-2010_10-49-24
247943001	961284	1	axc2	3/10/2010	11:59:28	OM_3-10-2010_10-49-24
247945001	961284	1	axc2	3/10/2010	12:00:22	OM_3-10-2010_10-49-24
248515001	961284	1	axc2	3/10/2010	12:01:15	OM_3-10-2010_10-49-24
CCV		1	axc2	3/10/2010	12:02:08	OM_3-10-2010_10-49-24
CCB		1	axc2	3/10/2010	12:03:58	OM_3-10-2010_10-49-24
1202061942	961284	1	axc2	3/10/2010	12:05:48	OM_3-10-2010_10-49-24
1202061944	961284	1	axc2	3/10/2010	12:06:40	OM_3-10-2010_10-49-24
1202061946	961284	1	axc2	3/10/2010	12:07:33	OM_3-10-2010_10-49-24
248515002	961284	1	axc2	3/10/2010	12:08:26	OM_3-10-2010_10-49-24
1202061943	961284	1	axc2	3/10/2010	12:09:19	OM_3-10-2010_10-49-24
1202061945	961284	1	axc2	3/10/2010	12:10:11	OM_3-10-2010_10-49-24
1202061947	961284	1	axc2	3/10/2010	12:11:04	OM_3-10-2010_10-49-24
248515003	961284	1	axc2	3/10/2010	12:11:56	OM_3-10-2010_10-49-24
248526001	961284	1	axc2	3/10/2010	12:12:49	OM_3-10-2010_10-49-24
248560001	961284	1	axc2	3/10/2010	12:13:41	OM_3-10-2010_10-49-24
CCV		1	axc2	3/10/2010	12:14:33	OM_3-10-2010_10-49-24
CCB		1	axc2	3/10/2010	12:16:23	OM_3-10-2010_10-49-24
248560002	961284	1	axc2	3/10/2010	12:18:13	OM_3-10-2010_10-49-24
248560003	961284	1	axc2	3/10/2010	12:19:08	OM_3-10-2010_10-49-24
248560004	961284	1	axc2	3/10/2010	12:20:02	OM_3-10-2010_10-49-24
248560005	961284	1	axc2	3/10/2010	12:20:55	OM_3-10-2010_10-49-24
248560006	961284	1	axc2	3/10/2010	12:21:49	OM_3-10-2010_10-49-24
248560007	961284	1	axc2	3/10/2010	12:22:42	OM_3-10-2010_10-49-24
1202061965	961291	1	axc2	3/10/2010	12:23:36	OM_3-10-2010_10-49-24
1202061967	961291	1	axc2	3/10/2010	12:24:29	OM_3-10-2010_10-49-24
247914001	961291	1	axc2	3/10/2010	12:25:23	OM_3-10-2010_10-49-24
247923001	961291	1	axc2	3/10/2010	12:26:15	OM_3-10-2010_10-49-24
CCV		1	axc2	3/10/2010	12:27:07	OM_3-10-2010_10-49-24
CCB		1	axc2	3/10/2010	12:28:57	OM_3-10-2010_10-49-24
247927001	961291	1	axc2	3/10/2010	12:30:46	OM_3-10-2010_10-49-24
247930001	961291	1	axc2	3/10/2010	12:31:39	OM_3-10-2010_10-49-24
247933001	961291	1	axc2	3/10/2010	12:32:31	OM_3-10-2010_10-49-24
247939001	961291	1	axc2	3/10/2010	12:33:24	OM_3-10-2010_10-49-24
1202061966	961291	1	axc2	3/10/2010	12:34:16	OM_3-10-2010_10-49-24
247941001	961291	1	axc2	3/10/2010	12:35:10	OM_3-10-2010_10-49-24
247943001	961291	1	axc2	3/10/2010	12:36:04	OM_3-10-2010_10-49-24
247945001	961291	1	axc2	3/10/2010	12:36:58	OM_3-10-2010_10-49-24
247927001*	961291	10	axc2	3/10/2010	12:39:51	OM_3-10-2010_10-49-24
	961291	1	axc2	3/10/2010	12:40:44	OM_3-10-2010_10-49-24
CCV		1	axc2	3/10/2010	12:41:37	OM_3-10-2010_10-49-24
CCB		1	axc2	3/10/2010	12:43:27	OM_3-10-2010_10-49-24
247927001	961291	2	axc2	3/10/2010	12:45:16	OM_3-10-2010_10-49-24
CCV		1	axc2	3/10/2010	12:46:09	OM_3-10-2010_10-49-24
CCB		1	axc2	3/10/2010	12:47:59	OM_3-10-2010_10-49-24

Author: axc2 Date : 3/10/2010

Original Run Filename: OM_3-10-2010_10-49-24.OMN created 3/10/2010 10:49:24
Original Run Author's Signature: [axc2]
Current Run Filename: OM_3-10-2010_10-49-24.OMN last modified 3/10/2010 12:49:04
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
WCN100310-01	1	S1	200	11.1	3/10/2010@10:50:55			200 ppb
WCN100310-02	1	S2	150	8.08	3/10/2010@10:51:47			150 ppb
WCN100310-03	1	S3	100	5.35	3/10/2010@10:52:40			100 ppb
WCN100310-04	1	S4	50.0	2.95	3/10/2010@10:53:32			50 ppb
WCN100310-05	1	S5	10.0	0.687	3/10/2010@10:54:26			10 ppb
WCN100310-06	1	S6	5.00	0.407	3/10/2010@10:55:20			CRDL 5.0 ppb
WCN100310-08	1	S7	0.00	0.0471	3/10/2010@10:56:14			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99958 > 0.99500					
Message			Pass					
Action			Continue					
WCN100310-07	1	S8	146	8.03	3/10/2010@10:58:04			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-2.4 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-2.4 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100310-08	1	S7	-0.144	0.0944	3/10/2010@10:59:54			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-0.144 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.144 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100310-06	1	S6	6.05	0.429	3/10/2010@11:01:43			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			6.05 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			6.05 > 2.50					
Message			Pass					
Action			None					
1202066540|963300|MB	1	1	-0.804	0.0587	3/10/2010@11:03:32			
1202066541||LCS	1	2	48.9	2.75	3/10/2010@11:04:26			
248455001	1	3	-0.811	0.0583	3/10/2010@11:05:19			
248455002	1	4	-0.508	0.0747	3/10/2010@11:06:12			
248455003	1	5	0.519	0.130	3/10/2010@11:07:05			
248523001	1	6	-1.98	-0.00475	3/10/2010@11:07:58			
248792001	1	7	-1.30	0.0317	3/10/2010@11:08:51			
1202066542||DUP	1	8	-1.63	0.0140	3/10/2010@11:09:43			
1202066543||MS	1	9	102	5.61	3/10/2010@11:10:36			
1202066544||MSD	1	10	103	5.67	3/10/2010@11:11:28			
WCN100310-03	1	S3	101	5.56	3/10/2010@11:12:20			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			0.8 < 10.0					

		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	0.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-1.88	3.30e-4	3/10/2010@11:14:10			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.88 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.88 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202057145|959212|MB	1	11	-1.54	0.0188	3/10/2010@11:15:58			
1202057152||LCS	1	12	24.9	1.45	3/10/2010@11:16:50		25.00	
248159003	1	13	-0.859	0.0557	3/10/2010@11:17:42			
1202057146||DUP	1	14	-0.0820	0.0977	3/10/2010@11:18:34			
1202057148||MS	1	15	93.7	5.17	3/10/2010@11:19:25			
1202057150||MSD	1	16	88.3	4.88	3/10/2010@11:20:19			
248159004	1	17	1.45	0.181	3/10/2010@11:21:13			
1202057147||DUP	1	18	1.28	0.171	3/10/2010@11:22:06			
1202057149||MS	1	19	77.1	4.28	3/10/2010@11:23:00			
1202057151||MSD	1	20	85.3	4.72	3/10/2010@11:23:53			
WCN100310-03	1	S3	101	5.56	3/10/2010@11:24:45			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	0.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	0.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-1.09	0.0433	3/10/2010@11:26:35			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.09 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.09 > -5.00					
		Message	CCB Passed					
		Action	Continue					
248159005	1	21	0.0956	0.107	3/10/2010@11:28:24			
248159006	1	22	-0.492	0.0755	3/10/2010@11:29:17			
248163001	1	23	-1.05	0.0453	3/10/2010@11:30:10			
248163002	1	24	-1.26	0.0340	3/10/2010@11:31:02			
248163003	1	25	-0.725	0.0630	3/10/2010@11:31:55			
248163004	1	26	-1.30	0.0320	3/10/2010@11:32:48			
248163005	1	27	-0.971	0.0496	3/10/2010@11:33:40			
248163006	1	28	-0.534	0.0733	3/10/2010@11:34:32			
248163007	1	29	-0.822	0.0577	3/10/2010@11:35:24			
248163008	1	30	-1.89	-3.60e-4	3/10/2010@11:36:15			
WCN100310-03	1	S3	99.6	5.49	3/10/2010@11:37:08			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	-0.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	-0.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-0.973	0.0495	3/10/2010@11:38:58			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
		Result:	-0.973 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.973 > -5.00					
		Message	CCB Passed					
		Action	Continue					
248163009	1	31	-1.13	0.0408	3/10/2010@11:40:49			
248163010	1	32	-1.06	0.0447	3/10/2010@11:41:42			
248163011	1	33	-0.202	0.0912	3/10/2010@11:42:36			
248163012	1	34	-0.820	0.0578	3/10/2010@11:43:29			
248163013	1	35	-0.101	0.0967	3/10/2010@11:44:22			
248163014	1	36	-1.03	0.0465	3/10/2010@11:45:16			
248241001	1	37	6.98	0.480	3/10/2010@11:46:08			
248241002	1	38	4.24	0.332	3/10/2010@11:47:02			
1202061941|961284|MB	1	39	-1.88	1.84e-4	3/10/2010@11:47:54			
1202061948||LCS	1	40	30.0	1.73	3/10/2010@11:48:47		25.00	
WCN100310-03	1	S3	101	5.59	3/10/2010@11:49:39			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	1.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	1.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-2.16	-0.0149	3/10/2010@11:51:29			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.16 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.16 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247914001	1	41	-0.276	0.0873	3/10/2010@11:53:18			
247923001	1	42	25.1	1.46	3/10/2010@11:54:10			
247927001	1	43	140	7.65	3/10/2010@11:55:02			
247930001	1	44	81.5	4.51	3/10/2010@11:55:55			
247933001	1	45	25.7	1.49	3/10/2010@11:56:46			
247939001	1	46	22.4	1.32	3/10/2010@11:57:41			
247941001	1	47	36.9	2.10	3/10/2010@11:58:34			
247943001	1	48	55.1	3.08	3/10/2010@11:59:28			
247945001	1	49	2.04	0.213	3/10/2010@12:00:22			
248515001	1	50	-0.256	0.0883	3/10/2010@12:01:15			
WCN100310-03	1	S3	101	5.55	3/10/2010@12:02:08			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-1.39	0.0269	3/10/2010@12:03:58			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.39 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.39 > -5.00					
		Message	CCB Passed					
		Action	Continue					

1202061942||DUP	1	51	-0.751	0.0615	3/10/2010@12:05:48			
1202061944||MS	1	52	73.9	4.10	3/10/2010@12:06:40			
1202061946||MSD	1	53	86.2	4.76	3/10/2010@12:07:33			
248515002	1	54	10.0	0.646	3/10/2010@12:08:26			
1202061943||DUP	1	55	3.99	0.318	3/10/2010@12:09:19			
1202061945||MS	1	56	55.5	3.11	3/10/2010@12:10:11			
1202061947||MSD	1	57	70.4	3.91	3/10/2010@12:11:04			
248515003	1	58	1.39	0.177	3/10/2010@12:11:56			
248526001	1	59	0.704	0.140	3/10/2010@12:12:49			
248560001	1	60	-0.799	0.0590	3/10/2010@12:13:41			
WCN100310-03	1	S3	100	5.53	3/10/2010@12:14:33			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	0.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	0.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-1.48	0.0223	3/10/2010@12:16:23			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.48 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.48 > -5.00					
		Message	CCB Passed					
		Action	Continue					
248560002	1	61	-1.89	0.00	3/10/2010@12:18:13			
248560003	1	62	-0.0166	0.101	3/10/2010@12:19:08			
248560004	1	63	0.426	0.125	3/10/2010@12:20:02			
248560005	1	64	-0.706	0.0640	3/10/2010@12:20:55			
248560006	1	65	-0.316	0.0851	3/10/2010@12:21:49			
248560007	1	66	-1.15	0.0398	3/10/2010@12:22:42			
1202061965|961291|MB	1	67	-1.97	-0.00435	3/10/2010@12:23:36			
1202061967||LCS	1	68	-0.934	0.0516	3/10/2010@12:24:29			
247914001	1	69	5.31	0.389	3/10/2010@12:25:23			
247923001	1	70	30.3	1.74	3/10/2010@12:26:15			
WCN100310-03	1	S3	102	5.61	3/10/2010@12:27:07			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	1.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	1.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-1.89	-2.03e-4	3/10/2010@12:28:57			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.89 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.89 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247927001	1	71	225	12.3	3/10/2010@12:30:46			
247930001	1	72	92.5	5.11	3/10/2010@12:31:39			
247933001	1	73	66.3	3.69	3/10/2010@12:32:31			
247939001	1	74	74.5	4.13	3/10/2010@12:33:24			
1202061966||DUP	1	75	60.7	3.39	3/10/2010@12:34:16			
247941001	1	76	42.1	2.38	3/10/2010@12:35:10			
247943001	1	77	80.7	4.47	3/10/2010@12:36:04			
247945001	1	78	0.195	0.113	3/10/2010@12:36:58			

247927001	1	71	381	20.7	3/10/2010@12:39:51	10.00		
Sample106	1	1	-1.79	0.00544	3/10/2010@12:40:44			
WCN100310-03	1	S3	100	5.51	3/10/2010@12:41:37			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	0.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	0.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-2.00	-0.00603	3/10/2010@12:43:27			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.00 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.00 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247927001	1	71	114	6.29	3/10/2010@12:45:16		2.00	
WCN100310-03	1	S3	101	5.58	3/10/2010@12:46:09			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	1.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	1.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-1.89	1.71e-4	3/10/2010@12:47:59			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.89 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.89 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_3-10-2010_10-49-24.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 : 3/10/2010

Channel 1: Current View

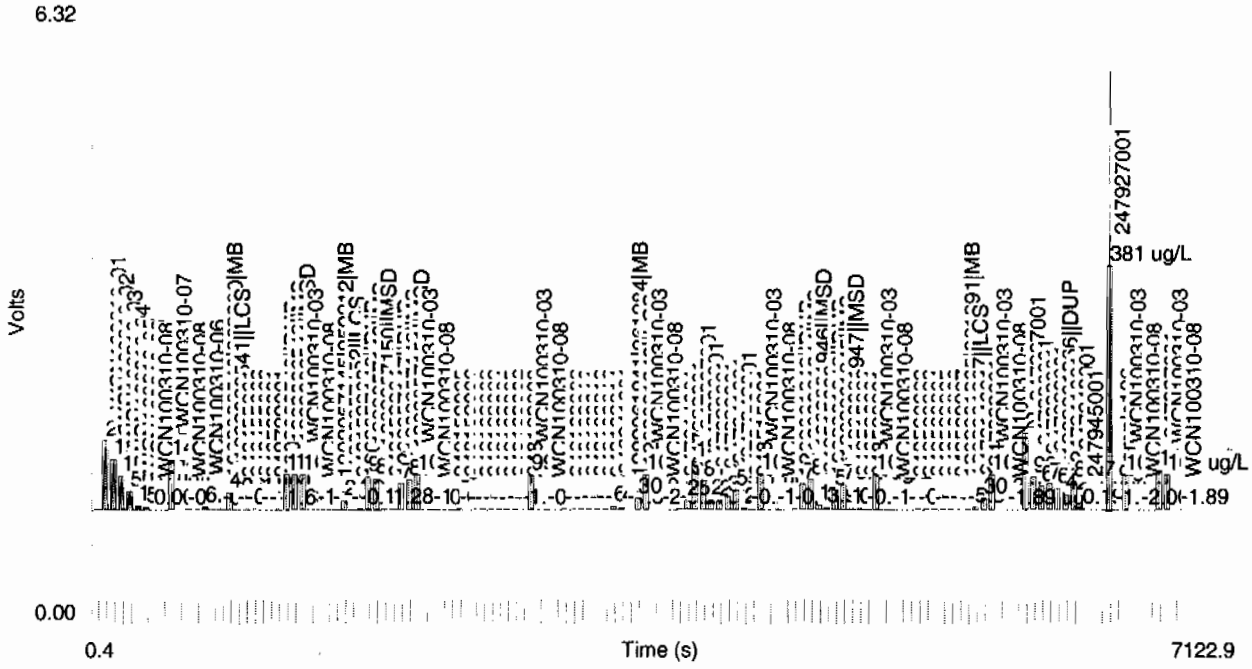
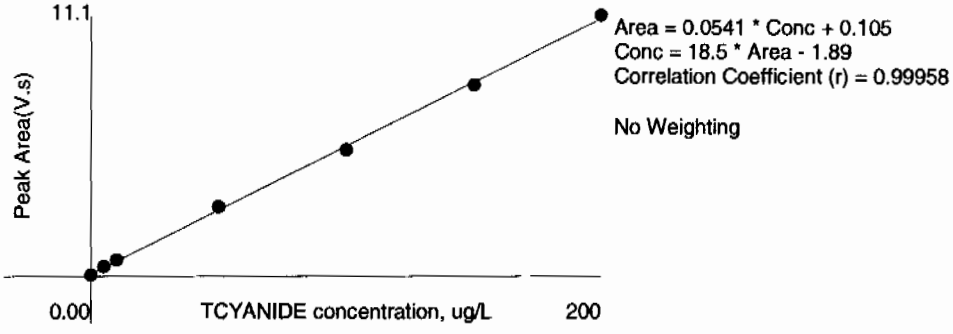


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	11.1	0.707	-1.3	3/10/2010	10:51:58
2	150	1	8.08	0.519	1.6	3/10/2010	10:52:50
3	100	1	5.35	0.347	3.0	3/10/2010	10:53:42
4	50.0	1	2.95	0.188	-5.0	3/10/2010	10:54:35
5	10.0	1	0.687	0.0433	-6.4	3/10/2010	10:55:28
6	5.00	1	0.407	0.0241	-8.2	3/10/2010	10:56:22
7	0.00	1	0.0471	0.00103		3/10/2010	10:57:16

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	3/10/2010 14:46:09	OM_3-10-2010_14-44-38
CCB		1	axc2	3/10/2010 14:47:59	OM_3-10-2010_14-44-38
1202057153	959214	1	axc2	3/10/2010 14:49:49	OM_3-10-2010_14-44-38
1202057160	959214	25	axc2	3/10/2010 14:50:42	OM_3-10-2010_14-44-38
248241003	959214	1	axc2	3/10/2010 14:51:36	OM_3-10-2010_14-44-38
1202057154	959214	1	axc2	3/10/2010 14:52:29	OM_3-10-2010_14-44-38
1202057156	959214	1	axc2	3/10/2010 14:53:21	OM_3-10-2010_14-44-38
1202057158	959214	1	axc2	3/10/2010 14:54:14	OM_3-10-2010_14-44-38
248241004	959214	1	axc2	3/10/2010 14:55:07	OM_3-10-2010_14-44-38
1202057155	959214	1	axc2	3/10/2010 14:55:59	OM_3-10-2010_14-44-38
1202057157	959214	1	axc2	3/10/2010 14:56:52	OM_3-10-2010_14-44-38
1202057159	959214	1	axc2	3/10/2010 14:57:44	OM_3-10-2010_14-44-38
CCV		1	axc2	3/10/2010 14:58:37	OM_3-10-2010_14-44-38
CCB		1	axc2	3/10/2010 15:00:26	OM_3-10-2010_14-44-38
248241005	959214	1	axc2	3/10/2010 15:02:15	OM_3-10-2010_14-44-38
248241006	959214	1	axc2	3/10/2010 15:03:07	OM_3-10-2010_14-44-38
248241007	959214	1	axc2	3/10/2010 15:03:58	OM_3-10-2010_14-44-38
248241008	959214	1	axc2	3/10/2010 15:04:50	OM_3-10-2010_14-44-38
248241009	959214	1	axc2	3/10/2010 15:05:41	OM_3-10-2010_14-44-38
248241010	959214	1	axc2	3/10/2010 15:06:35	OM_3-10-2010_14-44-38
248247001	959214	1	axc2	3/10/2010 15:07:29	OM_3-10-2010_14-44-38
248247002	959214	1	axc2	3/10/2010 15:08:23	OM_3-10-2010_14-44-38
248247003	959214	1	axc2	3/10/2010 15:09:16	OM_3-10-2010_14-44-38
248247004	959214	1	axc2	3/10/2010 15:10:09	OM_3-10-2010_14-44-38
CCV		1	axc2	3/10/2010 15:11:01	OM_3-10-2010_14-44-38
CCB		1	axc2	3/10/2010 15:12:52	OM_3-10-2010_14-44-38
248247005	959214	1	axc2	3/10/2010 15:14:40	OM_3-10-2010_14-44-38
248247006	959214	1	axc2	3/10/2010 15:15:34	OM_3-10-2010_14-44-38
248247007	959214	1	axc2	3/10/2010 15:16:26	OM_3-10-2010_14-44-38
248247008	959214	1	axc2	3/10/2010 15:17:19	OM_3-10-2010_14-44-38
248250001	959214	1	axc2	3/10/2010 15:18:11	OM_3-10-2010_14-44-38
248250002	959214	1	axc2	3/10/2010 15:19:04	OM_3-10-2010_14-44-38
248250003	959214	1	axc2	3/10/2010 15:19:56	OM_3-10-2010_14-44-38
248250004	959214	1	axc2	3/10/2010 15:20:48	OM_3-10-2010_14-44-38
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1202059701	960266	25	axc2	3/10/2010 15:22:31	OM_3-10-2010_14-44-38
CCV		1	axc2	3/10/2010 15:23:25	OM_3-10-2010_14-44-38
CCB		1	axc2	3/10/2010 15:25:14	OM_3-10-2010_14-44-38
248256001	960266	1	axc2	3/10/2010 15:27:04	OM_3-10-2010_14-44-38
248256002	960266	1	axc2	3/10/2010 15:27:58	OM_3-10-2010_14-44-38
248256003	960266	1	axc2	3/10/2010 15:28:51	OM_3-10-2010_14-44-38
248256004	960266	1	axc2	3/10/2010 15:29:45	OM_3-10-2010_14-44-38
248256005	960266	1	axc2	3/10/2010 15:30:38	OM_3-10-2010_14-44-38
248256006	960266	1	axc2	3/10/2010 15:31:31	OM_3-10-2010_14-44-38
248256007	960266	1	axc2	3/10/2010 15:32:25	OM_3-10-2010_14-44-38
248374008	960266	1	axc2	3/10/2010 15:33:18	OM_3-10-2010_14-44-38
1202059695	960266	1	axc2	3/10/2010 15:34:10	OM_3-10-2010_14-44-38
1202059697	960266	1	axc2	3/10/2010 15:35:02	OM_3-10-2010_14-44-38
CCV		1	axc2	3/10/2010 15:35:55	OM_3-10-2010_14-44-38
CCB		1	axc2	3/10/2010 15:37:45	OM_3-10-2010_14-44-38
1202059699	960266	1	axc2	3/10/2010 15:39:33	OM_3-10-2010_14-44-38
248374009	960266	1	axc2	3/10/2010 15:40:26	OM_3-10-2010_14-44-38
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1202059698	960266	1	axc2	3/10/2010 15:42:10	OM_3-10-2010_14-44-38
1202059700	960266	1	axc2	3/10/2010 15:43:02	OM_3-10-2010_14-44-38
248374010	960266	1	axc2	3/10/2010 15:43:56	OM_3-10-2010_14-44-38
248374011	960266	1	axc2	3/10/2010 15:44:50	OM_3-10-2010_14-44-38
248374012	960266	1	axc2	3/10/2010 15:45:44	OM_3-10-2010_14-44-38

248374013	960266	1	axc2	3/10/2010	15:46:37	OM_3-10-2010_14-44-38
248389002	960266	1	axc2	3/10/2010	15:47:31	OM_3-10-2010_14-44-38
CCV		1	axc2	3/10/2010	15:48:24	OM_3-10-2010_14-44-38
CCB		1	axc2	3/10/2010	15:50:14	OM_3-10-2010_14-44-38
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CCB		1	axc2	3/10/2010	16:02:39	OM_3-10-2010_14-44-38
1202059689	960263	1	axc2	3/10/2010	16:04:30	OM_3-10-2010_14-44-38
1202059691	960263	1	axc2	3/10/2010	16:05:24	OM_3-10-2010_14-44-38
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1202059692	960263	1	axc2	3/10/2010	16:08:59	OM_3-10-2010_14-44-38
248371010	960263	1	axc2	3/10/2010	16:09:53	OM_3-10-2010_14-44-38
248371011	960263	1	axc2	3/10/2010	16:10:45	OM_3-10-2010_14-44-38
248371012	960263	1	axc2	3/10/2010	16:11:38	OM_3-10-2010_14-44-38
248371013	960263	1	axc2	3/10/2010	16:12:32	OM_3-10-2010_14-44-38
CCV		1	axc2	3/10/2010	16:13:24	OM_3-10-2010_14-44-38
CCB		1	axc2	3/10/2010	16:15:15	OM_3-10-2010_14-44-38
248371014	960263	1	axc2	3/10/2010	16:17:03	OM_3-10-2010_14-44-38
248371015	960263	1	axc2	3/10/2010	16:17:55	OM_3-10-2010_14-44-38
248371016	960263	1	axc2	3/10/2010	16:18:48	OM_3-10-2010_14-44-38
248371017	960263	1	axc2	3/10/2010	16:19:40	OM_3-10-2010_14-44-38
248371018	960263	1	axc2	3/10/2010	16:20:32	OM_3-10-2010_14-44-38
248371019	960263	1	axc2	3/10/2010	16:21:27	OM_3-10-2010_14-44-38
248371020	960263	1	axc2	3/10/2010	16:22:22	OM_3-10-2010_14-44-38
248374001*	960263	1	axc2	3/10/2010	16:23:16	OM_3-10-2010_14-44-38
248374002	960263	1	axc2	3/10/2010	16:24:10	OM_3-10-2010_14-44-38
248374003	960263	1	axc2	3/10/2010	16:25:04	OM_3-10-2010_14-44-38
CCV		1	axc2	3/10/2010	16:25:56	OM_3-10-2010_14-44-38
CCB		1	axc2	3/10/2010	16:27:46	OM_3-10-2010_14-44-38
248374001	960263	1	axc2	3/10/2010	16:29:36	OM_3-10-2010_14-44-38
248374004	960263	1	axc2	3/10/2010	16:30:31	OM_3-10-2010_14-44-38
248374005	960263	1	axc2	3/10/2010	16:31:23	OM_3-10-2010_14-44-38
248374006	960263	1	axc2	3/10/2010	16:32:18	OM_3-10-2010_14-44-38
248374007	960263	1	axc2	3/10/2010	16:33:10	OM_3-10-2010_14-44-38
1202059677	960259	1	axc2	3/10/2010	16:34:03	OM_3-10-2010_14-44-38
1202059684	960259	25	axc2	3/10/2010	16:34:56	OM_3-10-2010_14-44-38
248371001	960259	1	axc2	3/10/2010	16:35:49	OM_3-10-2010_14-44-38
248371002	960259	1	axc2	3/10/2010	16:36:41	OM_3-10-2010_14-44-38
248371003	960259	1	axc2	3/10/2010	16:37:34	OM_3-10-2010_14-44-38
CCV		1	axc2	3/10/2010	16:38:27	OM_3-10-2010_14-44-38
CCB		1	axc2	3/10/2010	16:40:17	OM_3-10-2010_14-44-38
248371004	960259	1	axc2	3/10/2010	16:42:05	OM_3-10-2010_14-44-38
248371005	960259	1	axc2	3/10/2010	16:43:00	OM_3-10-2010_14-44-38
248371006	960259	1	axc2	3/10/2010	16:43:54	OM_3-10-2010_14-44-38
248371007	960259	1	axc2	3/10/2010	16:44:49	OM_3-10-2010_14-44-38
248408015	960259	1	axc2	3/10/2010	16:45:43	OM_3-10-2010_14-44-38
1202059678	960259	1	axc2	3/10/2010	16:46:37	OM_3-10-2010_14-44-38
1202059680	960259	1	axc2	3/10/2010	16:47:31	OM_3-10-2010_14-44-38
1202059682	960259	1	axc2	3/10/2010	16:48:25	OM_3-10-2010_14-44-38

248408016	960259	1	axc2	3/10/2010	16:49:18	OM_3-10-2010_14-44-38
1202059679	960259	1	axc2	3/10/2010	16:50:12	OM_3-10-2010_14-44-38
CCV		1	axc2	3/10/2010	16:51:04	OM_3-10-2010_14-44-38
CCB		1	axc2	3/10/2010	16:52:54	OM_3-10-2010_14-44-38
1202059681	960259	1	axc2	3/10/2010	16:54:44	OM_3-10-2010_14-44-38
1202059683	960259	1	axc2	3/10/2010	16:55:37	OM_3-10-2010_14-44-38
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248408018	960259	1	axc2	3/10/2010	16:57:23	OM_3-10-2010_14-44-38
248418001	960259	1	axc2	3/10/2010	16:58:15	OM_3-10-2010_14-44-38
248418002	960259	1	axc2	3/10/2010	16:59:08	OM_3-10-2010_14-44-38
248418003	960259	1	axc2	3/10/2010	17:00:02	OM_3-10-2010_14-44-38
248418004	960259	1	axc2	3/10/2010	17:00:57	OM_3-10-2010_14-44-38
248418005	960259	1	axc2	3/10/2010	17:01:51	OM_3-10-2010_14-44-38
248418006	960259	1	axc2	3/10/2010	17:02:45	OM_3-10-2010_14-44-38
CCV		1	axc2	3/10/2010	17:03:38	OM_3-10-2010_14-44-38
CCB		1	axc2	3/10/2010	17:05:28	OM_3-10-2010_14-44-38
248418007	960259	1	axc2	3/10/2010	17:07:18	OM_3-10-2010_14-44-38
248418008	960259	1	axc2	3/10/2010	17:08:12	OM_3-10-2010_14-44-38
248418009	960259	1	axc2	3/10/2010	17:09:07	OM_3-10-2010_14-44-38
1202059669	960257	1	axc2	3/10/2010	17:10:01	OM_3-10-2010_14-44-38
1202059676	960257	25	axc2	3/10/2010	17:10:54	OM_3-10-2010_14-44-38
248383001	960257	1	axc2	3/10/2010	17:11:48	OM_3-10-2010_14-44-38
1202059670	960257	1	axc2	3/10/2010	17:12:41	OM_3-10-2010_14-44-38
1202059672	960257	1	axc2	3/10/2010	17:13:34	OM_3-10-2010_14-44-38
1202059674	960257	1	axc2	3/10/2010	17:14:27	OM_3-10-2010_14-44-38
248383002	960257	1	axc2	3/10/2010	17:15:20	OM_3-10-2010_14-44-38
CCV		1	axc2	3/10/2010	17:16:12	OM_3-10-2010_14-44-38
CCB		1	axc2	3/10/2010	17:18:03	OM_3-10-2010_14-44-38
1202059671	960257	1	axc2	3/10/2010	17:19:52	OM_3-10-2010_14-44-38
1202059673	960257	1	axc2	3/10/2010	17:20:46	OM_3-10-2010_14-44-38
1202059675	960257	1	axc2	3/10/2010	17:21:41	OM_3-10-2010_14-44-38
248383003	960257	1	axc2	3/10/2010	17:22:36	OM_3-10-2010_14-44-38
248383004	960257	1	axc2	3/10/2010	17:23:30	OM_3-10-2010_14-44-38
248383005	960257	1	axc2	3/10/2010	17:24:25	OM_3-10-2010_14-44-38
248383006	960257	1	axc2	3/10/2010	17:25:19	OM_3-10-2010_14-44-38
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248408002	960257	1	axc2	3/10/2010	17:27:07	OM_3-10-2010_14-44-38
248408003	960257	1	axc2	3/10/2010	17:28:01	OM_3-10-2010_14-44-38
CCV		1	axc2	3/10/2010	17:28:53	OM_3-10-2010_14-44-38
CCB		1	axc2	3/10/2010	17:30:44	OM_3-10-2010_14-44-38
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248408005	960257	1	axc2	3/10/2010	17:33:26	OM_3-10-2010_14-44-38
248408006	960257	1	axc2	3/10/2010	17:34:20	OM_3-10-2010_14-44-38
248408007	960257	1	axc2	3/10/2010	17:35:13	OM_3-10-2010_14-44-38
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248408010	960257	1	axc2	3/10/2010	17:37:54	OM_3-10-2010_14-44-38
248408011	960257	1	axc2	3/10/2010	17:38:49	OM_3-10-2010_14-44-38
248408012	960257	1	axc2	3/10/2010	17:39:43	OM_3-10-2010_14-44-38
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CCB		1	axc2	3/10/2010	17:43:21	OM_3-10-2010_14-44-38
248408014	960257	1	axc2	3/10/2010	17:45:11	OM_3-10-2010_14-44-38
1202061972*	961296	1	axc2	3/10/2010	17:46:05	OM_3-10-2010_14-44-38
1202061982	961296	1	axc2	3/10/2010	17:46:59	OM_3-10-2010_14-44-38
248321002	961296	1	axc2	3/10/2010	17:47:53	OM_3-10-2010_14-44-38
1202061973	961296	1	axc2	3/10/2010	17:48:48	OM_3-10-2010_14-44-38
1202061976	961296	1	axc2	3/10/2010	17:49:42	OM_3-10-2010_14-44-38
1202061979	961296	1	axc2	3/10/2010	17:50:35	OM_3-10-2010_14-44-38
248547001	961296	1	axc2	3/10/2010	17:51:28	OM_3-10-2010_14-44-38

1202061975	961296	1	axc2	3/10/2010 17:52:22	OM_3-10-2010_14-44-38
1202061978	961296	1	axc2	3/10/2010 17:53:15	OM_3-10-2010_14-44-38
CCV		1	axc2	3/10/2010 17:54:08	OM_3-10-2010_14-44-38
CCB		1	axc2	3/10/2010 17:55:58	OM_3-10-2010_14-44-38
1202061981	961296	1	axc2	3/10/2010 17:57:47	OM_3-10-2010_14-44-38
248605001	961296	1	axc2	3/10/2010 17:58:42	OM_3-10-2010_14-44-38
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248622002	961296	1	axc2	3/10/2010 18:00:32	OM_3-10-2010_14-44-38
248622003	961296	1	axc2	3/10/2010 18:01:26	OM_3-10-2010_14-44-38
248622004	961296	1	axc2	3/10/2010 18:02:21	OM_3-10-2010_14-44-38
248622005	961296	1	axc2	3/10/2010 18:03:15	OM_3-10-2010_14-44-38
248622006	961296	1	axc2	3/10/2010 18:04:10	OM_3-10-2010_14-44-38
248626002	961296	1	axc2	3/10/2010 18:05:04	OM_3-10-2010_14-44-38
248629002	961296	1	axc2	3/10/2010 18:05:58	OM_3-10-2010_14-44-38
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CCB		1	axc2	3/10/2010 18:08:41	OM_3-10-2010_14-44-38
248668001	961296	1	axc2	3/10/2010 18:10:31	OM_3-10-2010_14-44-38
1202064174	961296	1	axc2	3/10/2010 18:11:25	OM_3-10-2010_14-44-38
1202064175	961296	1	axc2	3/10/2010 18:12:18	OM_3-10-2010_14-44-38
1202064176	961296	1	axc2	3/10/2010 18:13:12	OM_3-10-2010_14-44-38
248668003	961296	1	axc2	3/10/2010 18:14:05	OM_3-10-2010_14-44-38
248668006	961296	1	axc2	3/10/2010 18:14:58	OM_3-10-2010_14-44-38
248690002	961296	1	axc2	3/10/2010 18:15:54	OM_3-10-2010_14-44-38
1202061974	961296	1	axc2	3/10/2010 18:16:49	OM_3-10-2010_14-44-38
1202061977	961296	1	axc2	3/10/2010 18:17:44	OM_3-10-2010_14-44-38
1202061980	961296	1	axc2	3/10/2010 18:18:39	OM_3-10-2010_14-44-38
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CCB		1	axc2	3/10/2010 18:21:22	OM_3-10-2010_14-44-38
1202061972*	961296	1	axc2	3/10/2010 18:23:12	OM_3-10-2010_14-44-38
1202064171	962270	1	axc2	3/10/2010 18:24:07	OM_3-10-2010_14-44-38
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248632001	962270	1	axc2	3/10/2010 18:25:56	OM_3-10-2010_14-44-38
1202064172	962270	1	axc2	3/10/2010 18:26:50	OM_3-10-2010_14-44-38
248726001	962270	1	axc2	3/10/2010 18:27:44	OM_3-10-2010_14-44-38
248727001	962270	1	axc2	3/10/2010 18:28:39	OM_3-10-2010_14-44-38
1202061114	960944	1	axc2	3/10/2010 18:29:33	OM_3-10-2010_14-44-38
1202061116	960944	250	axc2	3/10/2010 18:30:27	OM_3-10-2010_14-44-38
247941001	960944	1	axc2	3/10/2010 18:31:20	OM_3-10-2010_14-44-38
CCV		1	axc2	3/10/2010 18:32:13	OM_3-10-2010_14-44-38
CCB		1	axc2	3/10/2010 18:34:04	OM_3-10-2010_14-44-38
247943001	960944	1	axc2	3/10/2010 18:35:54	OM_3-10-2010_14-44-38
248227001	960944	1	axc2	3/10/2010 18:36:47	OM_3-10-2010_14-44-38
1202061115	960944	1	axc2	3/10/2010 18:37:43	OM_3-10-2010_14-44-38
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1202061972	961296	1	axc2	3/10/2010 18:39:33	OM_3-10-2010_14-44-38
CCV		1	axc2	3/10/2010 18:40:26	OM_3-10-2010_14-44-38
CCB		1	axc2	3/10/2010 18:42:16	OM_3-10-2010_14-44-38

Author: axc2 Date : 3/10/2010

Original Run Filename: OM_3-10-2010_14-44-38.OMN created 3/10/2010 14:44:38
Original Run Author's Signature: [axc2]
Current Run Filename: OM_3-10-2010_14-44-38.OMN last modified 3/10/2010 18:43:21
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
WCN100310-03	1	S3	101	5.59	3/10/2010@14:46:09			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	1.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	1.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN100310-08	1	S7	-1.25	0.0344	3/10/2010@14:47:59			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.25 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.25 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202057153|959214|MB	1	1	-1.89	-2.63e-4	3/10/2010@14:49:49			
1202057160||LCS	1	2	23.9	1.40	3/10/2010@14:50:42		25.00	
248241003	1	3	-0.868	0.0552	3/10/2010@14:51:36			
1202057154||DUP	1	4	-0.808	0.0585	3/10/2010@14:52:29			
1202057156||MS	1	5	93.2	5.15	3/10/2010@14:53:21			
1202057158||MSD	1	6	97.1	5.35	3/10/2010@14:54:14			
248241004	1	7	2.02	0.212	3/10/2010@14:55:07			
1202057155||DUP	1	8	2.93	0.261	3/10/2010@14:55:59			
1202057157||MS	1	9	91.5	5.06	3/10/2010@14:56:52			
1202057159||MSD	1	10	94.1	5.19	3/10/2010@14:57:44			
WCN100310-03	1	S3	99.4	5.48	3/10/2010@14:58:37			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	-0.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	-0.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-1.36	0.0284	3/10/2010@15:00:26			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.36 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.36 > -5.00					
		Message	CCB Passed					
		Action	Continue					
248241005	1	11	2.21	0.222	3/10/2010@15:02:15			
248241006	1	12	9.19	0.600	3/10/2010@15:03:07			
248241007	1	13	23.5	1.38	3/10/2010@15:03:58			
248241008	1	14	18.9	1.12	3/10/2010@15:04:50			
248241009	1	15	5.54	0.402	3/10/2010@15:05:41			

248241010	1	16	10.9	0.691	3/10/2010@15:06:35			
248247001	1	17	-0.0248	0.101	3/10/2010@15:07:29			
248247002	1	18	-0.174	0.0928	3/10/2010@15:08:23			
248247003	1	19	0.0492	0.105	3/10/2010@15:09:16			
248247004	1	20	-0.0334	0.100	3/10/2010@15:10:09			
WCN100310-03	1	S3	102	5.60	3/10/2010@15:11:01			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		1.7 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		1.7 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN100310-08	1	S7	-2.08	-0.0106	3/10/2010@15:12:52			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-2.08 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-2.08 > -5.00					
	Message		CCB Passed					
	Action		Continue					
248247005	1	21	-0.240	0.0892	3/10/2010@15:14:40			
248247006	1	22	0.203	0.113	3/10/2010@15:15:34			
248247007	1	23	-0.185	0.0922	3/10/2010@15:16:26			
248247008	1	24	0.122	0.109	3/10/2010@15:17:19			
248250001	1	25	24.9	1.45	3/10/2010@15:18:11			
248250002	1	26	27.8	1.60	3/10/2010@15:19:04			
248250003	1	27	45.7	2.58	3/10/2010@15:19:56			
248250004	1	28	15.9	0.964	3/10/2010@15:20:48			
1202059694|960266|MB	1	29	-1.07	0.0444	3/10/2010@15:21:40			
1202059701||LCS	1	30	33.9	1.94	3/10/2010@15:22:31		25.00	
WCN100310-03	1	S3	101	5.58	3/10/2010@15:23:25			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		1.2 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		1.2 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN100310-08	1	S7	-1.31	0.0313	3/10/2010@15:25:14			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-1.31 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-1.31 > -5.00					
	Message		CCB Passed					
	Action		Continue					
248256001	1	31	-0.892	0.0539	3/10/2010@15:27:04			
248256002	1	32	-1.06	0.0447	3/10/2010@15:27:58			
248256003	1	33	-1.19	0.0378	3/10/2010@15:28:51			
248256004	1	34	-1.41	0.0256	3/10/2010@15:29:45			
248256005	1	35	0.792	0.145	3/10/2010@15:30:38			
248256006	1	36	-1.39	0.0271	3/10/2010@15:31:31			
248256007	1	37	-1.28	0.0330	3/10/2010@15:32:25			
248374008	1	38	5.88	0.420	3/10/2010@15:33:18			
1202059695||DUP	1	39	4.57	0.349	3/10/2010@15:34:10			
1202059697||MS	1	40	85.0	4.70	3/10/2010@15:35:02			
WCN100310-03	1	S3	101	5.58	3/10/2010@15:35:55			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								

		Result:	1.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	1.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-1.31	0.0311	3/10/2010@15:37:45			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.31 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.31 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202059699||MSD	1	41	84.8	4.69	3/10/2010@15:39:33			
248374009	1	42	3.15	0.272	3/10/2010@15:40:26			
1202059696||DUP	1	43	3.02	0.265	3/10/2010@15:41:18			
1202059698||MS	1	44	94.0	5.19	3/10/2010@15:42:10			
1202059700||MSD	1	45	93.9	5.18	3/10/2010@15:43:02			
248374010	1	46	1.68	0.193	3/10/2010@15:43:56			
248374011	1	47	0.479	0.128	3/10/2010@15:44:50			
248374012	1	48	0.249	0.116	3/10/2010@15:45:44			
248374013	1	49	9.65	0.624	3/10/2010@15:46:37			
248389002	1	50	-1.29	0.0321	3/10/2010@15:47:31			
WCN100310-03	1	S3	100	5.52	3/10/2010@15:48:24			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	0.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	0.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-2.34	-0.0244	3/10/2010@15:50:14			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					
248389003	1	51	-1.16	0.0394	3/10/2010@15:52:03			
248396001	1	52	-1.18	0.0381	3/10/2010@15:52:56			
248396002	1	53	-1.36	0.0285	3/10/2010@15:53:49			
248396003	1	54	-1.30	0.0318	3/10/2010@15:54:43			
248396004	1	55	-1.19	0.0380	3/10/2010@15:55:35			
248396005	1	56	-1.31	0.0315	3/10/2010@15:56:28			
1202059686|960263|MB	1	57	-1.34	0.0298	3/10/2010@15:57:20			
1202059693||LCS	1	58	25.7	1.49	3/10/2010@15:58:12		25.00	
248371008	1	59	-0.223	0.0901	3/10/2010@15:59:05			
1202059687||DUP	1	60	-0.110	0.0962	3/10/2010@15:59:56			
WCN100310-03	1	S3	101	5.57	3/10/2010@16:00:49			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	1.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	1.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-1.38	0.0278	3/10/2010@16:02:39			CCB

		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.38 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.38 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202059689||MS	1	61	81.1	4.49	3/10/2010@16:04:30			
1202059691||MSD	1	62	82.2	4.55	3/10/2010@16:05:24			
248371009	1	63	0.778	0.144	3/10/2010@16:06:18			
1202059688||DUP	1	64	0.979	0.155	3/10/2010@16:07:12			
1202059690||MS	1	65	79.3	4.39	3/10/2010@16:08:05			
1202059692||MSD	1	66	83.8	4.64	3/10/2010@16:08:59			
248371010	1	67	6.81	0.471	3/10/2010@16:09:53			
248371011	1	68	-0.217	0.0904	3/10/2010@16:10:45			
248371012	1	69	-0.606	0.0694	3/10/2010@16:11:38			
248371013	1	70	-0.723	0.0631	3/10/2010@16:12:32			
WCN100310-03	1	S3	99.9	5.51	3/10/2010@16:13:24			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	-0.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	-0.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-1.22	0.0361	3/10/2010@16:15:15			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.22 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.22 > -5.00					
		Message	CCB Passed					
		Action	Continue					
248371014	1	71	0.304	0.119	3/10/2010@16:17:03			
248371015	1	72	0.547	0.132	3/10/2010@16:17:55			
248371016	1	73	-0.154	0.0938	3/10/2010@16:18:48			
248371017	1	74	1.73	0.196	3/10/2010@16:19:40			
248371018	1	75	2.61	0.243	3/10/2010@16:20:32			
248371019	1	76	0.297	0.118	3/10/2010@16:21:27			
248371020	1	77	2.04	0.213	3/10/2010@16:22:22			
248374001	1	78	5.50	0.400	3/10/2010@16:23:16			
248374002	1	79	9.51	0.616	3/10/2010@16:24:10			
248374003	1	80	5.30	0.389	3/10/2010@16:25:04			
WCN100310-03	1	S3	100	5.52	3/10/2010@16:25:56			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	0.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	0.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-1.22	0.0359	3/10/2010@16:27:46			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.22 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.22 > -5.00					
		Message	CCB Passed					

		Action	Continue					
248374001	1	78	3.52	0.293	3/10/2010@16:29:36			
248374004	1	81	10.3	0.658	3/10/2010@16:30:31			
248374005	1	82	2.68	0.247	3/10/2010@16:31:23			
248374006	1	83	4.44	0.342	3/10/2010@16:32:18			
248374007	1	84	3.05	0.267	3/10/2010@16:33:10			
1202059677|960259|MB	1	85	-1.17	0.0391	3/10/2010@16:34:03			
1202059684||LCS	1	86	22.9	1.34	3/10/2010@16:34:56		25.00	
248371001	1	87	8.42	0.558	3/10/2010@16:35:49			
248371002	1	88	1.39	0.177	3/10/2010@16:36:41			
248371003	1	89	1.33	0.174	3/10/2010@16:37:34			
WCN100310-03	1	S3	104	5.73	3/10/2010@16:38:27			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	3.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	3.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-1.45	0.0234	3/10/2010@16:40:17			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.45 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.45 > -5.00					
		Message	CCB Passed					
		Action	Continue					
248371004	1	90	2.35	0.229	3/10/2010@16:42:05			
248371005	1	91	3.82	0.309	3/10/2010@16:43:00			
248371006	1	92	1.71	0.194	3/10/2010@16:43:54			
248371007	1	93	1.33	0.174	3/10/2010@16:44:49			
248408015	1	94	4.84	0.364	3/10/2010@16:45:43			
1202059678||DUP	1	95	27.2	1.58	3/10/2010@16:46:37			
1202059680||MS	1	96	82.3	4.56	3/10/2010@16:47:31			
1202059682||MSD	1	97	88.5	4.89	3/10/2010@16:48:25			
248408016	1	98	0.241	0.115	3/10/2010@16:49:18			
1202059679||DUP	1	99	0.124	0.109	3/10/2010@16:50:12			
WCN100310-03	1	S3	104	5.73	3/10/2010@16:51:04			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	4.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	4.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-2.02	-0.00711	3/10/2010@16:52:54			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-2.02 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-2.02 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202059681||MS	1	100	96.2	5.31	3/10/2010@16:54:44			
1202059683||MSD	1	101	95.6	5.27	3/10/2010@16:55:37			
248408017	1	102	10.2	0.656	3/10/2010@16:56:30			
248408018	1	103	0.330	0.120	3/10/2010@16:57:23			
248418001	1	104	-0.290	0.0865	3/10/2010@16:58:15			
248418002	1	105	-0.923	0.0522	3/10/2010@16:59:08			
248418003	1	106	0.887	0.150	3/10/2010@17:00:02			

248418004	1	107	-0.602	0.0696	3/10/2010@17:00:57			
248418005	1	108	-0.0596	0.0989	3/10/2010@17:01:51			
248418006	1	109	0.649	0.137	3/10/2010@17:02:45			
WCN100310-03	1	S3	106	5.85	3/10/2010@17:03:38			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					
WCN100310-08	1	S7	-2.06	-0.00904	3/10/2010@17:05:28			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-2.06 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-2.06 > -5.00					
	Message		CCB Passed					
	Action		Continue					
248418007	1	110	2.86	0.257	3/10/2010@17:07:18			
248418008	1	111	-0.216	0.0905	3/10/2010@17:08:12			
248418009	1	112	10.2	0.655	3/10/2010@17:09:07			
1202059669|960257|MB	1	113	-1.02	0.0470	3/10/2010@17:10:01			
1202059676||LCS	1	114	24.4	1.42	3/10/2010@17:10:54		25.00	
248383001	1	115	-0.461	0.0772	3/10/2010@17:11:48			
1202059670||DUP	1	116	-0.401	0.0805	3/10/2010@17:12:41			
1202059672||MS	1	117	92.5	5.11	3/10/2010@17:13:34			
1202059674||MSD	1	118	98.3	5.42	3/10/2010@17:14:27			
248383002	1	119	2.54	0.240	3/10/2010@17:15:20			
WCN100310-03	1	S3	104	5.73	3/10/2010@17:16:12			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		4.0 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		4.0 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN100310-08	1	S7	-1.33	0.0300	3/10/2010@17:18:03			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-1.33 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-1.33 > -5.00					
	Message		CCB Passed					
	Action		Continue					
1202059671||DUP	1	120	2.11	0.216	3/10/2010@17:19:52			
1202059673||MS	1	121	95.8	5.29	3/10/2010@17:20:46			
1202059675||MSD	1	122	96.6	5.33	3/10/2010@17:21:41			
248383003	1	123	1.20	0.167	3/10/2010@17:22:36			
248383004	1	124	-0.736	0.0624	3/10/2010@17:23:30			
248383005	1	125	-0.877	0.0547	3/10/2010@17:24:25			
248383006	1	126	-0.944	0.0511	3/10/2010@17:25:19			
248408001	1	127	1.28	0.171	3/10/2010@17:26:13			
248408002	1	128	6.21	0.438	3/10/2010@17:27:07			
248408003	1	129	75.3	4.18	3/10/2010@17:28:01			
WCN100310-03	1	S3	104	5.72	3/10/2010@17:28:53			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		3.8 < 10.0					
	Message		CCV Passed					

		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	3.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-1.42	0.0253	3/10/2010@17:30:44			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	-1.42 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	-1.42 > -5.00					
		Message	CCB Passed					
		Action	Continue					
248408004	1	130	-0.845	0.0564	3/10/2010@17:32:33			
248408005	1	131	-0.117	0.0958	3/10/2010@17:33:26			
248408006	1	132	0.423	0.125	3/10/2010@17:34:20			
248408007	1	133	2.01	0.211	3/10/2010@17:35:13			
248408008	1	134	0.455	0.127	3/10/2010@17:36:06			
248408009	1	135	1.57	0.187	3/10/2010@17:36:59			
248408010	1	136	-1.32	0.0308	3/10/2010@17:37:54			
248408011	1	137	0.684	0.139	3/10/2010@17:38:49			
248408012	1	138	0.769	0.144	3/10/2010@17:39:43			
248408013	1	139	-0.833	0.0571	3/10/2010@17:40:38			
WCN100310-03	1	S3	104	5.72	3/10/2010@17:41:31			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	3.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	3.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-0.935	0.0516	3/10/2010@17:43:21			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	-0.935 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	-0.935 > -5.00					
		Message	CCB Passed					
		Action	Continue					
248408014	1	140	-0.494	0.0754	3/10/2010@17:45:11			
1202061972|961296|MB	1	141	12.6	0.782	3/10/2010@17:46:05			
1202061982||LCS	1	142	51.3	2.88	3/10/2010@17:46:59			
248321002	1	143	-0.134	0.0949	3/10/2010@17:47:53			
1202061973||DUP	1	144	-0.820	0.0578	3/10/2010@17:48:48			
1202061976||MS	1	145	103	5.68	3/10/2010@17:49:42			
1202061979||MSD	1	146	86.4	4.78	3/10/2010@17:50:35			
248547001	1	147	-1.23	0.0354	3/10/2010@17:51:28			
1202061975||DUP	1	148	-1.51	0.0202	3/10/2010@17:52:22			
1202061978||MS	1	149	74.2	4.12	3/10/2010@17:53:15			
WCN100310-03	1	S3	104	5.75	3/10/2010@17:54:08			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	4.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	4.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-1.38	0.0274	3/10/2010@17:55:58			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						

		Result:	-1.38 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.38 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202061981||MSD	1	150	84.0	4.65	3/10/2010@17:57:47			
248605001	1	151	39.4	2.23	3/10/2010@17:58:42			
248622001	1	152	-0.368	0.0823	3/10/2010@17:59:37			
248622002	1	153	-0.636	0.0678	3/10/2010@18:00:32			
248622003	1	154	-0.771	0.0604	3/10/2010@18:01:26			
248622004	1	155	-0.412	0.0799	3/10/2010@18:02:21			
248622005	1	156	-0.857	0.0558	3/10/2010@18:03:15			
248622006	1	157	0.861	0.149	3/10/2010@18:04:10			
248626002	1	158	0.246	0.115	3/10/2010@18:05:04			
248629002	1	159	20.9	1.23	3/10/2010@18:05:58			
WCN100310-03	1	S3	104	5.75	3/10/2010@18:06:50			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	4.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	4.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100310-08	1	S7	-1.02	0.0470	3/10/2010@18:08:41			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.02 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.02 > -5.00					
		Message	CCB Passed					
		Action	Continue					
248668001	1	160	-1.80	0.00460	3/10/2010@18:10:31			
1202064174||DUP	1	161	-1.28	0.0327	3/10/2010@18:11:25			
1202064175||MS	1	162	76.1	4.22	3/10/2010@18:12:18			
1202064176||MSD	1	163	79.7	4.41	3/10/2010@18:13:12			
248668003	1	164	-1.22	0.0361	3/10/2010@18:14:05			
248668006	1	165	-1.44	0.0240	3/10/2010@18:14:58			
248690002	1	166	-1.12	0.0415	3/10/2010@18:15:54			
1202061974||DUP	1	167	-0.892	0.0539	3/10/2010@18:16:49			
1202061977||MS	1	168	102	5.63	3/10/2010@18:17:44			
1202061980||MSD	1	169	98.3	5.42	3/10/2010@18:18:39			
WCN100310-03	1	S3	105	5.77	3/10/2010@18:19:31			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					
WCN100310-08	1	S7	-2.37	-0.0259	3/10/2010@18:21:22			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-2.37 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-2.37 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202061972|961296|MB	1	141	12.8	0.797	3/10/2010@18:23:12			

1202064171|962270|MB	1	170	-1.59	0.0162	3/10/2010@18:24:07			
1202064173||LCS	1	171	84.7	4.68	3/10/2010@18:25:01		250.00	
248632001	1	172	2.73	0.250	3/10/2010@18:25:56			
1202064172||DUP	1	173	-1.87	0.00117	3/10/2010@18:26:50			
248726001	1	174	-1.42	0.0252	3/10/2010@18:27:44			
248727001	1	175	-1.40	0.0261	3/10/2010@18:28:39			
1202061114|960944|MB	1	176	-1.77	0.00623	3/10/2010@18:29:33			
1202061116||LCS	1	177	77.2	4.28	3/10/2010@18:30:27		250.00	
247941001	1	178	-1.64	0.0137	3/10/2010@18:31:20			
WCN100310-03	1	S3	106	5.83	3/10/2010@18:32:13			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					
WCN100310-08	1	S7	-0.983	0.0490	3/10/2010@18:34:04			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
Result:			-0.983 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.983 > -5.00					
Message			CCB Passed					
Action			Continue					
247943001	1	179	-2.19	-0.0161	3/10/2010@18:35:54			
248227001	1	180	-1.83	0.00300	3/10/2010@18:36:47			
1202061115||DUP	1	181	-2.26	-0.0203	3/10/2010@18:37:43			
248228001	1	182	14.5	0.889	3/10/2010@18:38:38			
1202061972|961296|MB	1	141	-1.54	0.0186	3/10/2010@18:39:33			
WCN100310-03	1	S3	105	5.79	3/10/2010@18:40:26			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
Result:			5.0 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			5.0 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100310-08	1	S7	-1.35	0.0290	3/10/2010@18:42:16			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
Result:			-1.35 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.35 > -5.00					
Message			CCB Passed					
Action			Continue					

Analyte Properties Table for OM_3-10-2010_14-44-38.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

Author: axc2

Date : 3/10/2010

Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

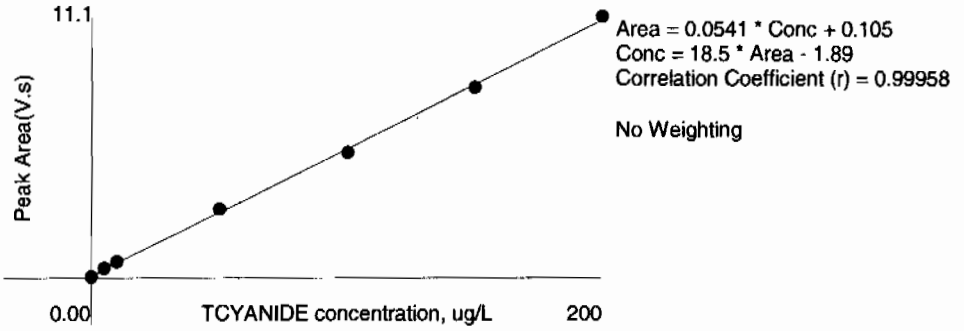
Channel 1: Current View

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	11.1	0.707	-1.3	3/10/2010	10:51:58
2	150	1	8.08	0.519	1.6	3/10/2010	10:52:50
3	100	1	5.35	0.347	3.0	3/10/2010	10:53:42
4	50.0	1	2.95	0.188	-5.0	3/10/2010	10:54:35
5	10.0	1	0.687	0.0433	-6.4	3/10/2010	10:55:28
6	5.00	1	0.407	0.0241	-8.2	3/10/2010	10:56:22
7	0.00	1	0.0471	0.00103		3/10/2010	10:57:16

Author: axc2 Date : 3/10/2010

Figure 1: TCYANIDE



Ion Chromatography

Prep Logbook

Ion Chromatography (IC)

Batch ID: **967025.0** Verified by: _____

Analyst: Virginia Wininger

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	1202075489	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MS	1202075485	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MS	1202075486	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MSD	1202075487	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MSD	1202075488	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
1202075482 MB	22-MAR-2010 17:47:00	Soil	4	40	10	
1202075489 LCS	22-MAR-2010 17:47:00	Soil	4	40	10	
248250001	22-MAR-2010 17:47:00	Soil	4.37	40	9.15332	
1202075483 DUP (248250001)	22-MAR-2010 17:47:00	Soil	4.4	40	9.09091	
1202075485 MS (248250001)	22-MAR-2010 17:47:00	Soil	4.41	40	9.07029	
1202075487 MSD (248250001)	22-MAR-2010 17:47:00	Soil	4.38	40	9.13242	
248250002	22-MAR-2010 17:47:00	Soil	4.06	40	9.85222	
248250003	22-MAR-2010 17:47:00	Soil	4.53	40	8.83002	
248250004	22-MAR-2010 17:47:00	Soil	4.45	40	8.98876	
248374001	22-MAR-2010 17:47:00	Soil	4.37	40	9.15332	
248374002	22-MAR-2010 17:47:00	Soil	4.62	40	8.65801	
248374003	22-MAR-2010 17:47:00	Soil	4.69	40	8.52878	
248374004	22-MAR-2010 17:47:00	Soil	4.54	40	8.81057	
248374005	22-MAR-2010 17:47:00	Soil	4.72	40	8.47458	
248374006	22-MAR-2010 17:47:00	Soil	4.47	40	8.94855	
248374007	22-MAR-2010 17:47:00	Soil	4.08	40	9.80392	
248374008	22-MAR-2010 17:47:00	Soil	4.37	40	9.15332	
248374009	22-MAR-2010 17:47:00	Soil	4.01	40	9.97506	
248374010	22-MAR-2010 17:47:00	Soil	4.39	40	9.11162	
248374011	22-MAR-2010 17:47:00	Soil	4.62	40	8.65801	
248374012	22-MAR-2010 17:47:00	Soil	4.81	40	8.31601	
248374013	22-MAR-2010 17:47:00	Soil	4.1	40	9.7561	
1202075484 DUP (248374013)	22-MAR-2010 17:47:00	Soil	4.11	40	9.73236	

Prep Logbook

Batch ID: **967025.0** Verified by: _____

Analyst: Virginia Wininger

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	1202075489	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MS	1202075485	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MS	1202075486	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MSD	1202075487	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MSD	1202075488	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
1202075486 MS (248374013)	22-MAR-2010 17:47:00	Soil	4.15	40	9.63855	
1202075488 MSD (248374013)	22-MAR-2010 17:47:00	Soil	4.08	40	9.80392	

Reagent/Solvent Lot ID	Description	Amount

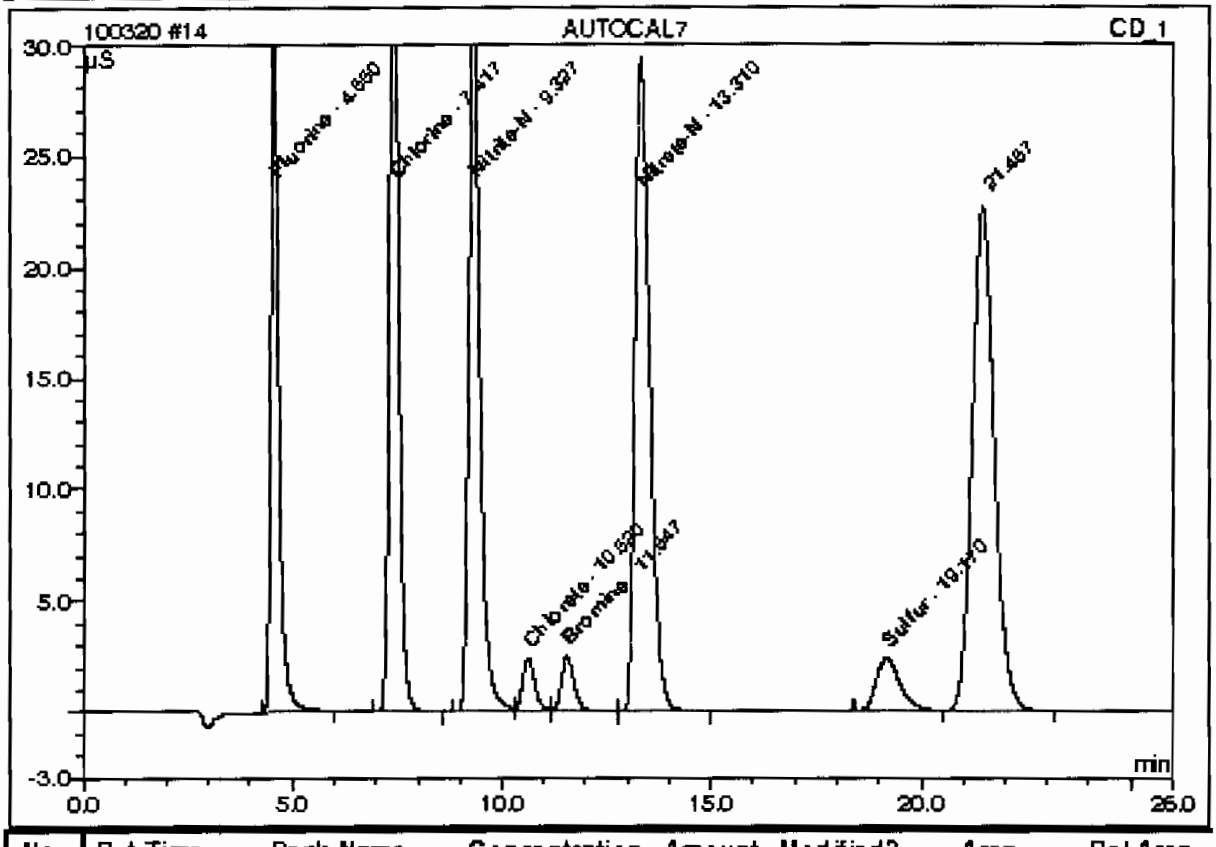
Comments:

This is runlog for Sequence 100325.seq for IC5

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
ICAL-07	03/04/10 14:23		1	100325	VH1
ICAL-06	03/04/10 14:50		1	100325	VH1
ICAL-05	03/04/10 15:16		1	100325	VH1
ICAL-04	03/04/10 15:42		1	100325	VH1
ICAL-03	03/04/10 16:08		1	100325	VH1
ICAL-02	03/04/10 16:34		1	100325	VH1
ICAL-01	03/04/10 17:00		1	100325	VH1
ICAL-07	03/04/10 14:23		1	100325	VH1
ICAL-06	03/04/10 14:50		1	100325	VH1
ICAL-05	03/04/10 15:16		1	100325	VH1
ICAL-04	03/04/10 15:42		1	100325	VH1
ICAL-03	03/04/10 16:08		1	100325	VH1
ICAL-02	03/04/10 16:34		1	100325	VH1
ICAL-01	03/04/10 17:00		1	100325	VH1

14 AUTOCAL7

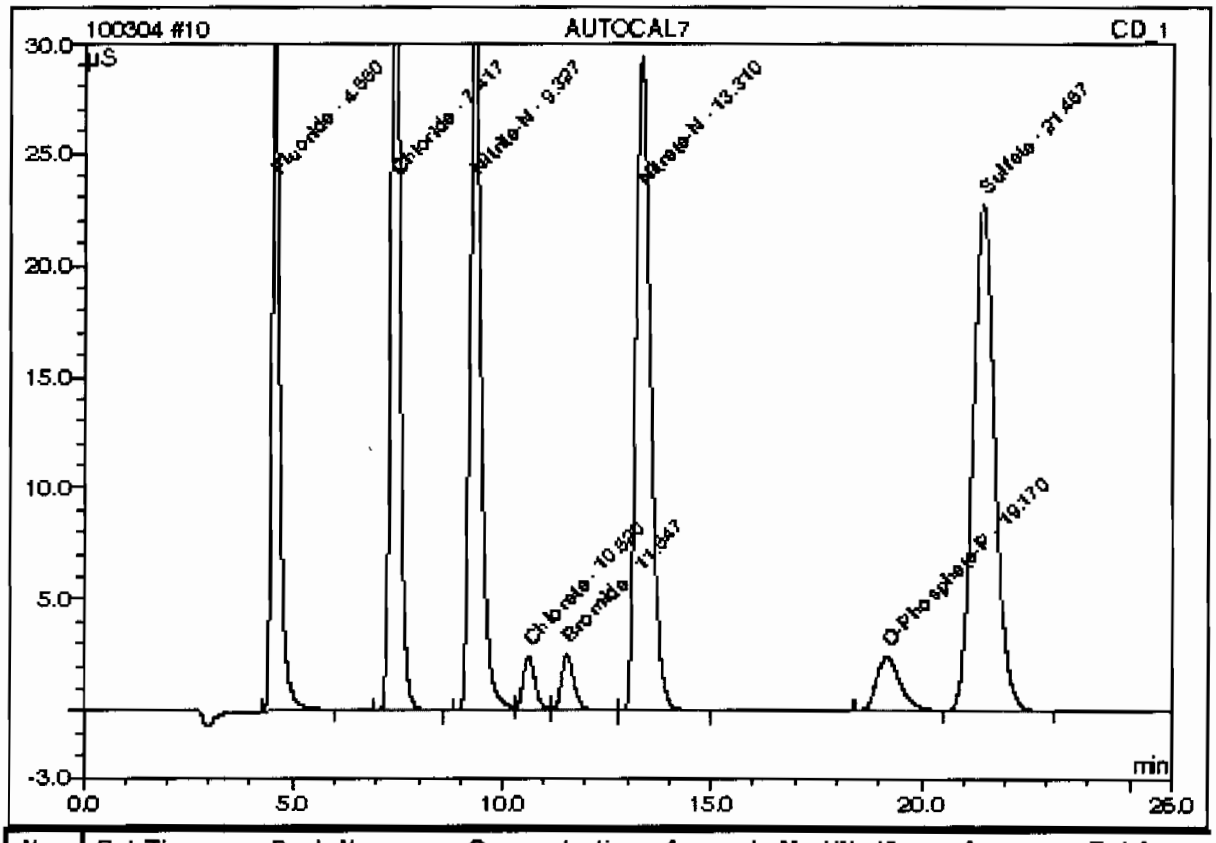
Sample Name:	AUTOCAL7	*Injection Volume:*	50.0
Vial Number:	53	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410b	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 14:23	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.56	Fluorine	10.0000	10.1053		6.78975	12.13
2	7.42	Chlorine	20.0000	20.3932		10.40386	18.58
3	9.33	Nitrite-N	10.0000	10.0724		9.68714	17.30
4	10.62	Chlorate	5.0000	5.0959		0.84685	1.51
5	11.55	Bromine	5.0000	5.0748		0.89683	1.60
6	13.31	Nitrate-N	10.0000	10.1469		11.88216	21.22
n.a.	n.a.	O-Phosphate-P	5.0000	n.a.	n.a.	n.a.	n.a.
7	19.17	Sulfur	13.3320	12.8477		1.56584	2.80
Total:				73.7362	0.000	42.072	75.15

10 AUTOCAL7

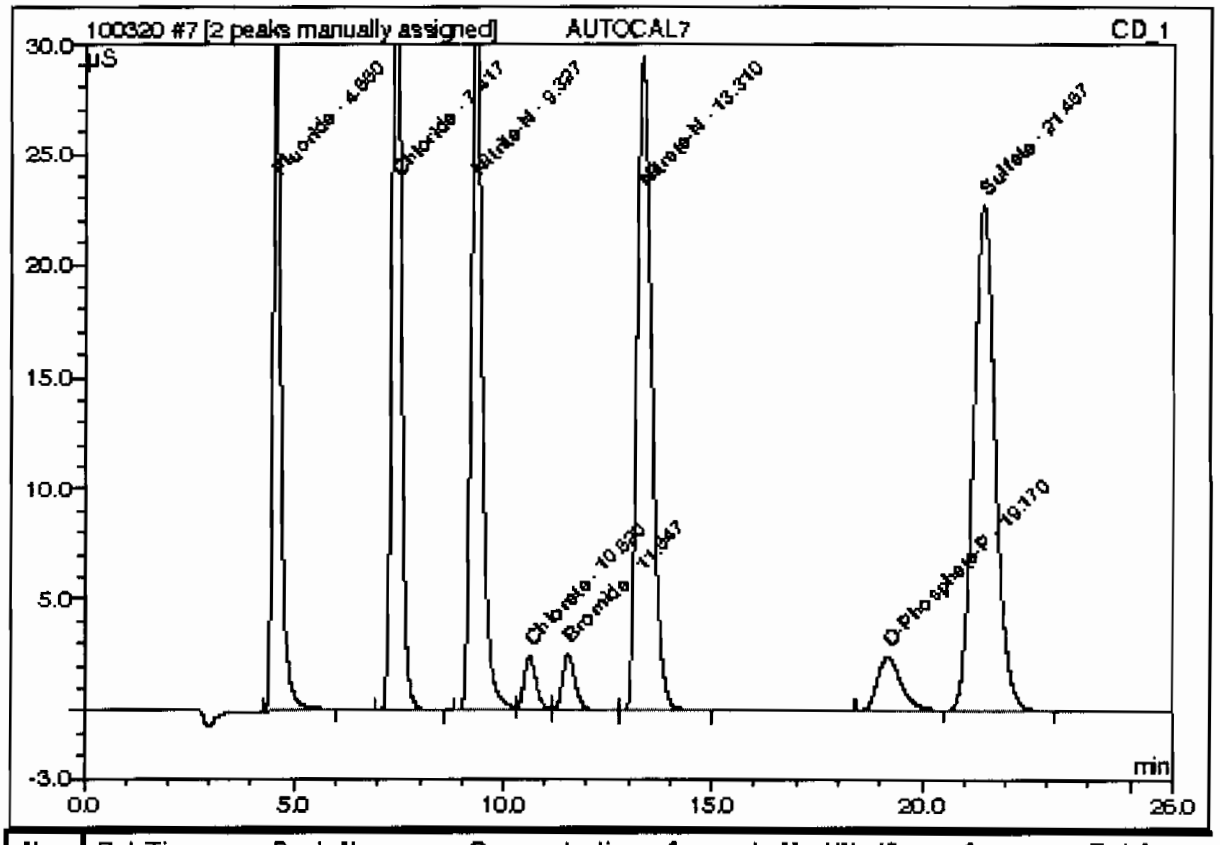
Sample Name:	AUTOCAL7	*Injection Volume:*	50.0
Vial Number:	53	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 14:23	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.56	Fluoride	10.0000	10.1053		6.78975	12.13
2	7.42	Chloride	20.0000	20.4150		10.40386	18.58
3	9.33	Nitrite-N	10.0000	10.0766		9.68714	17.30
4	10.62	Chlorate	5.0000	5.1012		0.84685	1.51
5	11.55	Bromide	5.0000	5.0772		0.89683	1.60
6	13.31	Nitrate-N	10.0000	10.1540		11.88216	21.22
7	19.17	O-Phosphate-P	5.0000	5.0452		1.56584	2.80
8	21.46	Sulfate	40.0000	40.4800		13.91454	24.85
Total:				106.4544	0.000	55.987	100.00

7 AUTOCAL7

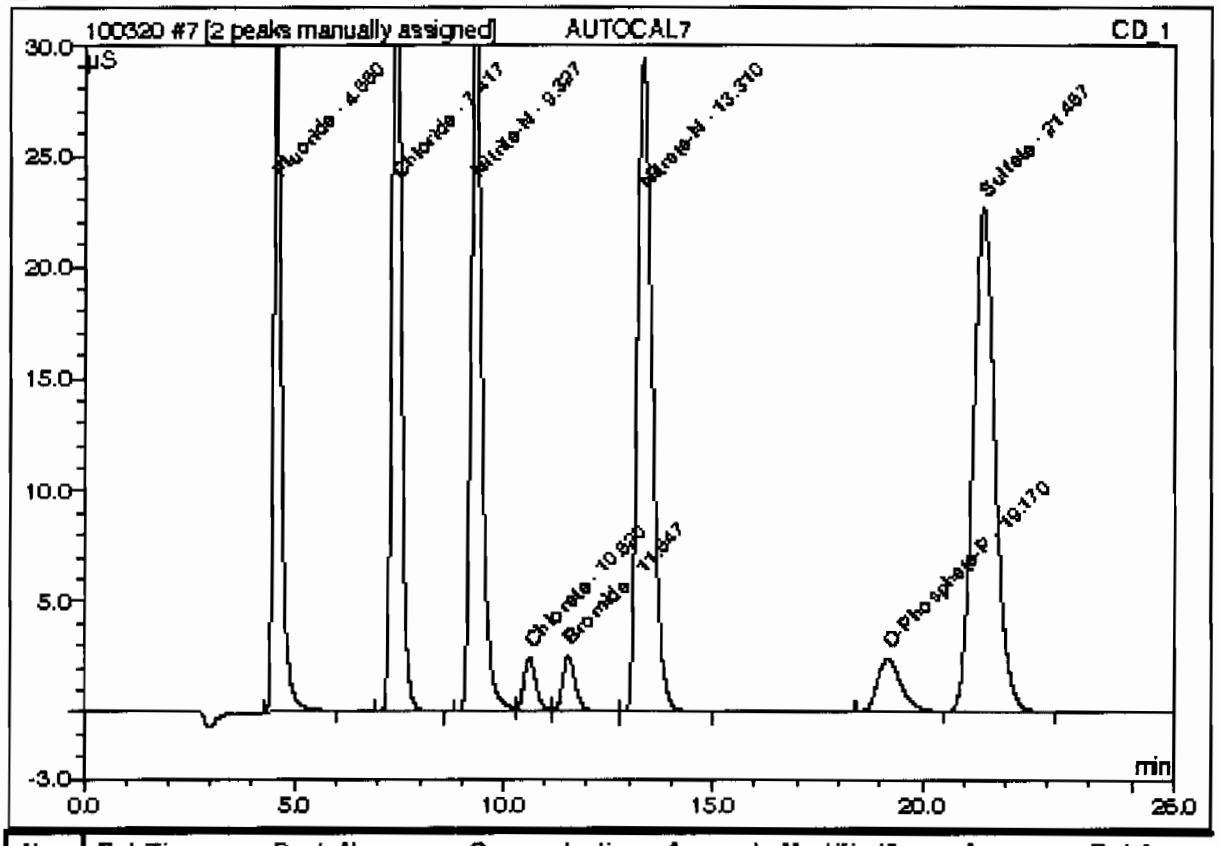
Sample Name:	AUTOCAL7	*Injection Volume:*	50.0
Vial Number:	53	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 14:23	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.56	Fluoride	10.0000	10.1024		6.78975	12.13
2	7.42	Chloride	20.0000	20.3991		10.40386	18.58
3	9.33	Nitrite-N	10.0000	10.0712		9.68714	17.30
4	10.62	Chlorate	5.0000	5.0916		0.84685	1.51
5	11.55	Bromide	5.0000	5.0721		0.89683	1.60
6	13.31	Nitrate-N	10.0000	10.1458		11.88216	21.22
7	19.17	O-Phosphate-P	5.0000	5.0452		1.56584	2.80
8	21.46	Sulfate	40.0000	72.9932		13.91454	24.85
Total:				138.9206	0.000	55.987	100.00

7 AUTOCAL7

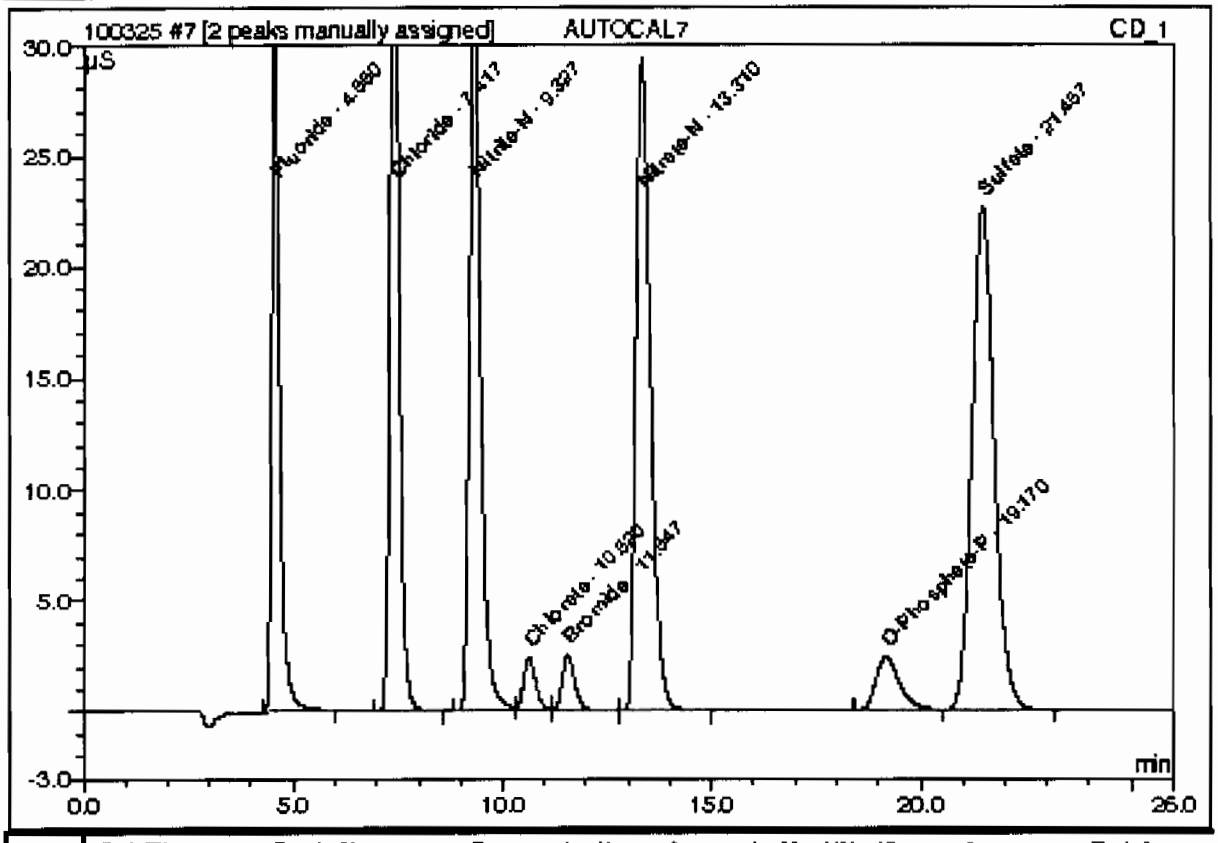
Sample Name:	AUTOCAL7	*Injection Volume:*	50.0
Vial Number:	53	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 14:23	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.56	Fluoride	10.0000	10.1053		6.78975	12.13
2	7.42	Chloride	20.0000	20.4150		10.40386	18.58
3	9.33	Nitrite-N	10.0000	10.0766		9.68714	17.30
4	10.62	Chlorate	5.0000	5.1012		0.84685	1.51
5	11.55	Bromide	5.0000	5.0772		0.89683	1.60
6	13.31	Nitrate-N	10.0000	10.1540		11.88216	21.22
7	19.17	O-Phosphate-P	5.0000	5.0452		1.56584	2.80
8	21.46	Sulfate	40.0000	40.4800		13.91454	24.85
Total:				106.4544	0.000	55.987	100.00

7 AUTOCAL7

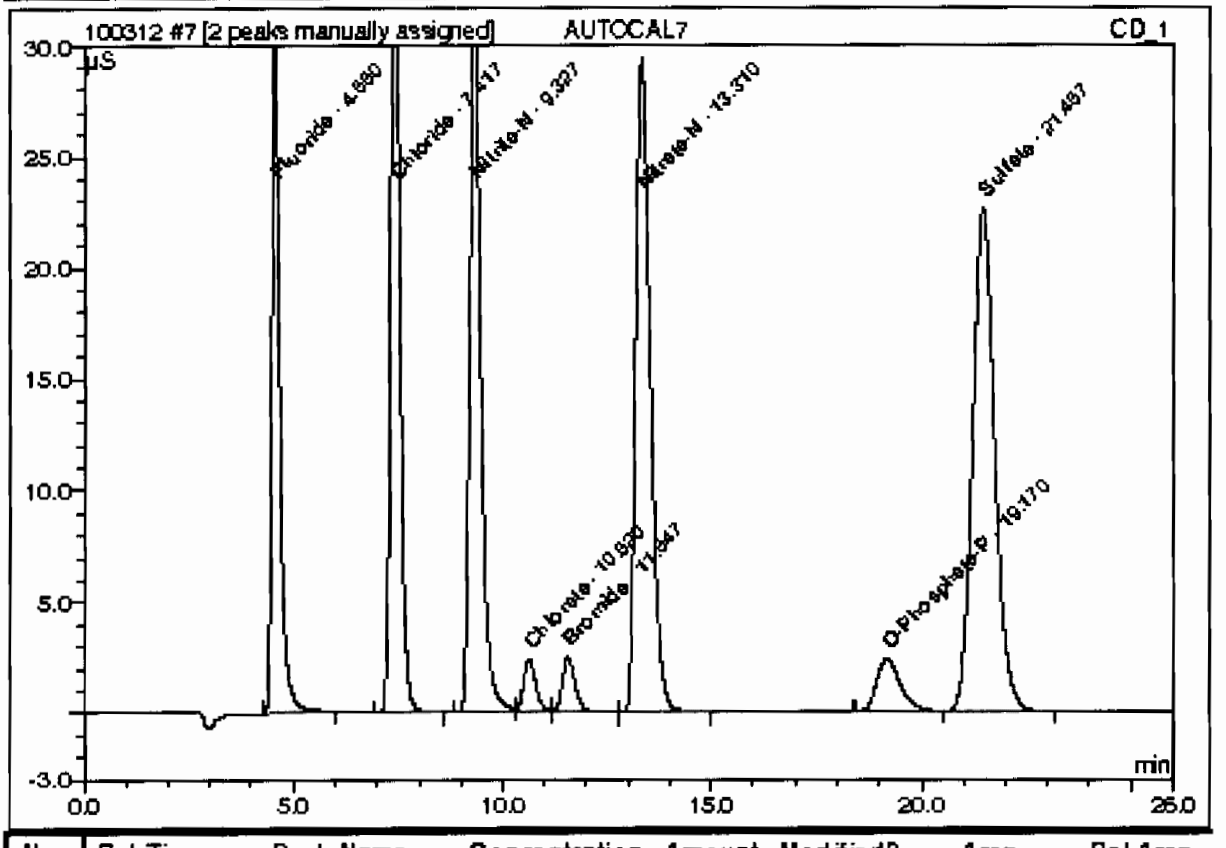
Sample Name:	AUTOCAL7	*Injection Volume:*	50.0
Vial Number:	53	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 14:23	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.56	Fluoride	10.0000	10.1053		6.78975	12.13
2	7.42	Chloride	20.0000	20.4150		10.40386	18.58
3	9.33	Nitrite-N	10.0000	10.0766		9.68714	17.30
4	10.62	Chlorate	5.0000	5.1012		0.84685	1.51
5	11.55	Bromide	5.0000	5.0772		0.89683	1.60
6	13.31	Nitrate-N	10.0000	10.1540		11.88216	21.22
7	19.17	O-Phosphate-P	5.0000	5.0452		1.56584	2.80
8	21.46	Sulfate	40.0000	40.4800		13.91454	24.85
Total:				106.4544	0.000	55.987	100.00

7 AUTOCAL7

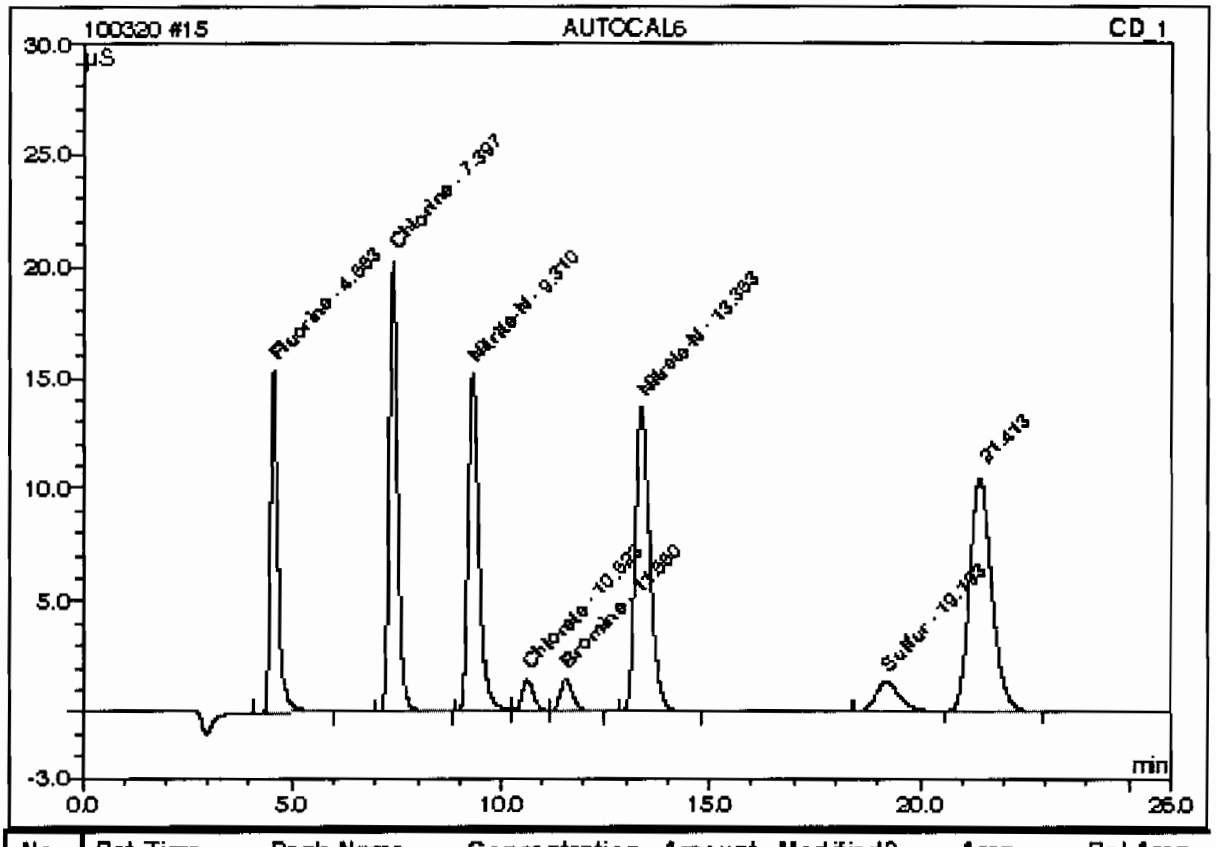
Sample Name:	AUTOCAL7	*Injection Volume:*	50.0
Vial Number:	53	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 14:23	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.56	Fluoride	10.0000	10.1053		6.78975	12.13
2	7.42	Chloride	20.0000	20.4150		10.40386	18.58
3	9.33	Nitrite-N	10.0000	10.0766		9.68714	17.30
4	10.62	Chlorate	5.0000	5.1012		0.84685	1.51
5	11.55	Bromide	5.0000	5.0772		0.89683	1.60
6	13.31	Nitrate-N	10.0000	10.1540		11.88216	21.22
7	19.17	O-Phosphate-P	5.0000	5.0452		1.56584	2.80
8	21.46	Sulfate	40.0000	40.4800		13.91454	24.85
Total:				106.4544	0.000	55.987	100.00

15 AUTOCAL6

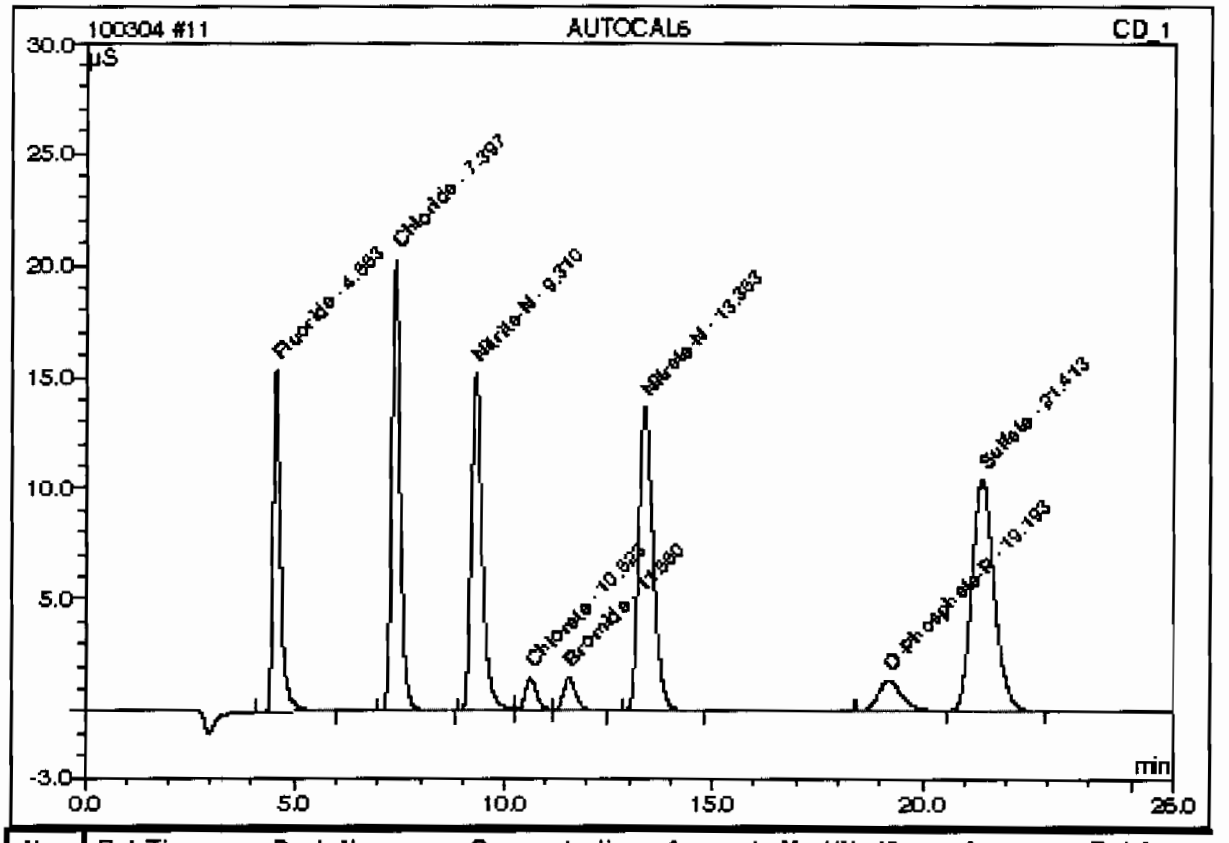
Sample Name:	AUTOCAL6	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410b	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 14:50	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluorine	5.0000	4.8013		3.20119	12.15
2	7.40	Chlorine	10.0000	9.1981		4.64497	17.63
3	9.31	Nitrite-N	5.0000	4.8662		4.63736	17.60
4	10.62	Chlorate	3.0000	2.9882		0.49085	1.86
5	11.55	Bromine	3.0000	2.9849		0.52386	1.99
6	13.35	Nitrate-N	5.0000	4.7160		5.44514	20.66
n.a.	n.a.	O-Phosphate-P	3.0000	n.a.	n.a.	n.a.	n.a.
7	19.19	Sulfur	6.6666	6.0785		0.90545	3.44
Total:				35.6332	0.000	19.849	75.33

11 AUTOCAL6

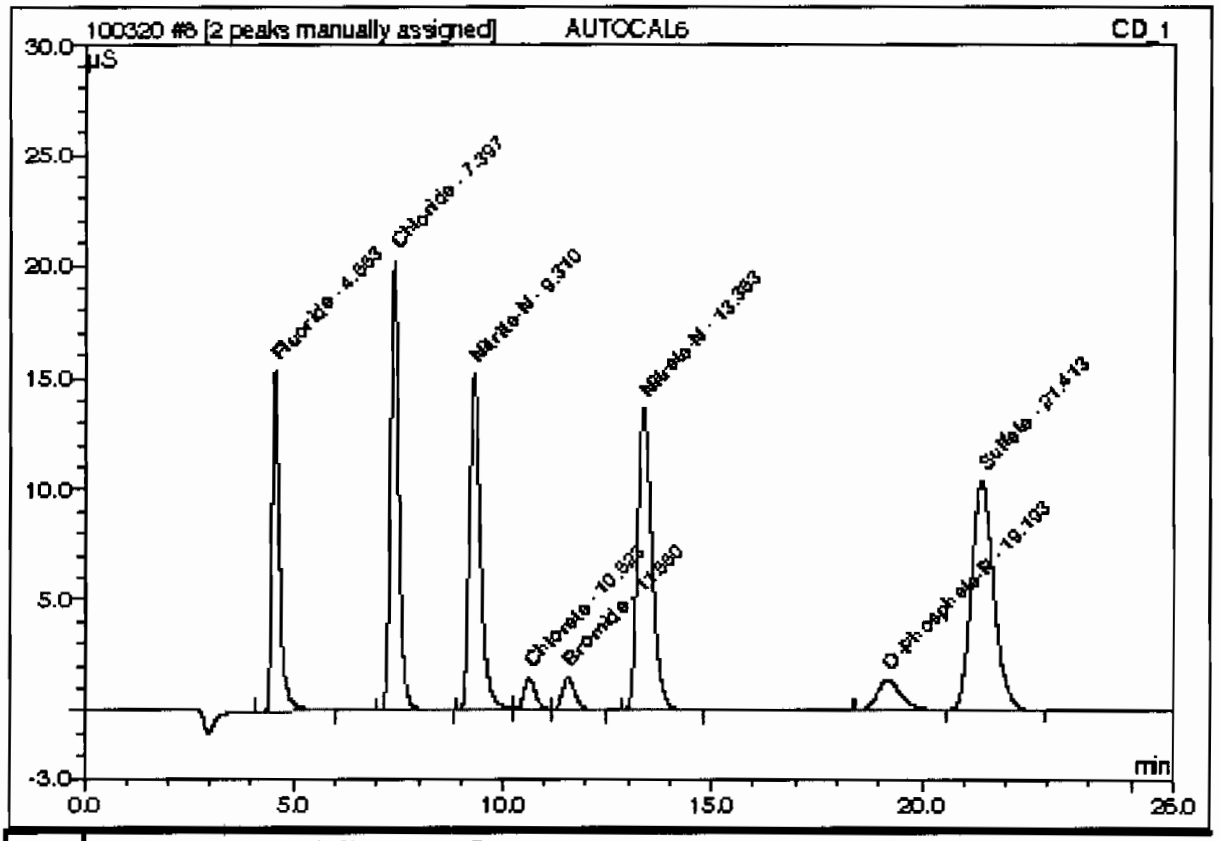
Sample Name:	AUTOCAL6	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 14:50	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	5.0000	4.8013		3.20119	12.15
2	7.40	Chloride	10.0000	9.1707		4.64497	17.63
3	9.31	Nitrite-N	5.0000	4.8611		4.63736	17.60
4	10.62	Chlorate	3.0000	2.9859		0.49085	1.86
5	11.55	Bromide	3.0000	2.9839		0.52386	1.99
6	13.35	Nitrate-N	5.0000	4.7072		5.44514	20.66
7	19.19	O-Phosphate-P	3.0000	2.9592		0.90545	3.44
8	21.41	Sulfate	20.0000	19.0809		6.50161	24.67
Total:				51.5503	0.000	26.350	100.00

8 AUTOCAL6

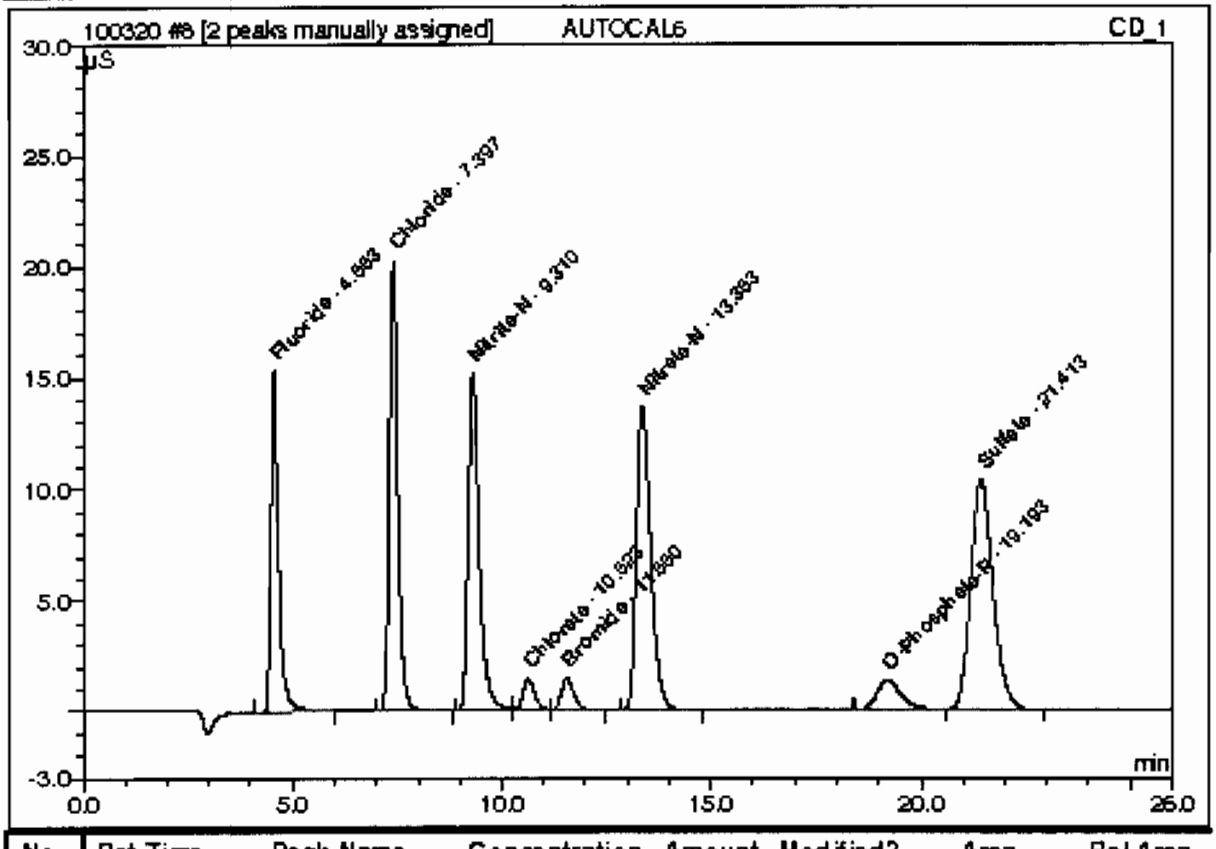
Sample Name:	AUTOCAL6	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 14:50	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	5.0000	4.8043		3.20119	12.15
2	7.40	Chloride	10.0000	9.1896		4.64497	17.63
3	9.31	Nitrite-N	5.0000	4.8670		4.63736	17.60
4	10.62	Chlorate	3.0000	2.9888		0.49085	1.86
5	11.55	Bromide	3.0000	2.9854		0.52386	1.99
6	13.35	Nitrate-N	5.0000	4.7165		5.44514	20.66
7	19.19	O-Phosphate-P	3.0000	2.9592		0.90545	3.44
8	21.41	Sulfate	20.0000	33.7849		6.50161	24.67
Total:				66.2957	0.000	26.350	100.00

8 AUTOCAL6

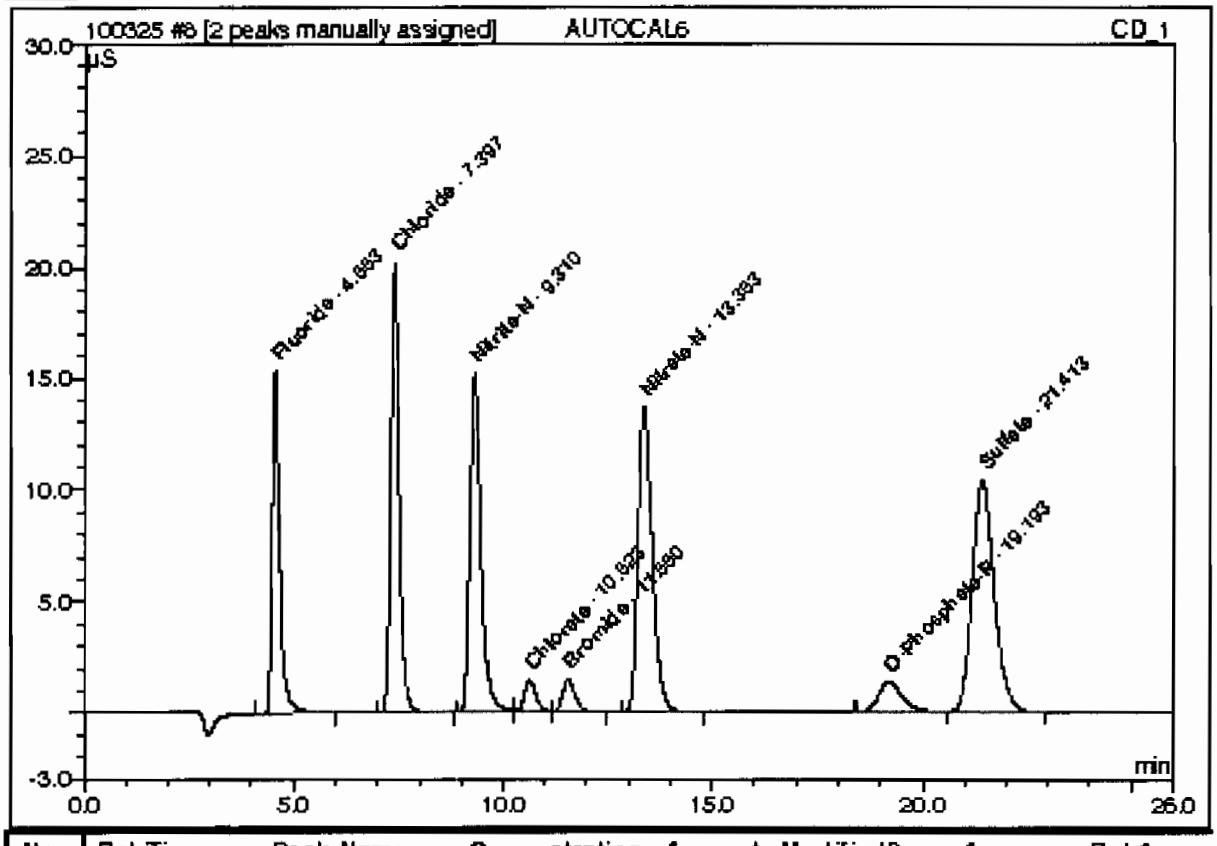
Sample Name:	AUTOCAL6	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 14:50	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	5.0000	4.8013		3.20119	12.15
2	7.40	Chloride	10.0000	9.1707		4.64497	17.63
3	9.31	Nitrite-N	5.0000	4.8611		4.63736	17.60
4	10.62	Chlorate	3.0000	2.9859		0.49085	1.86
5	11.55	Bromide	3.0000	2.9839		0.52386	1.99
6	13.35	Nitrate-N	5.0000	4.7072		5.44514	20.66
7	19.19	O-Phosphate-P	3.0000	2.9592		0.90545	3.44
8	21.41	Sulfate	20.0000	19.0809		6.50161	24.67
Total:				51.5503	0.000	26.350	100.00

8 AUTOCAL6

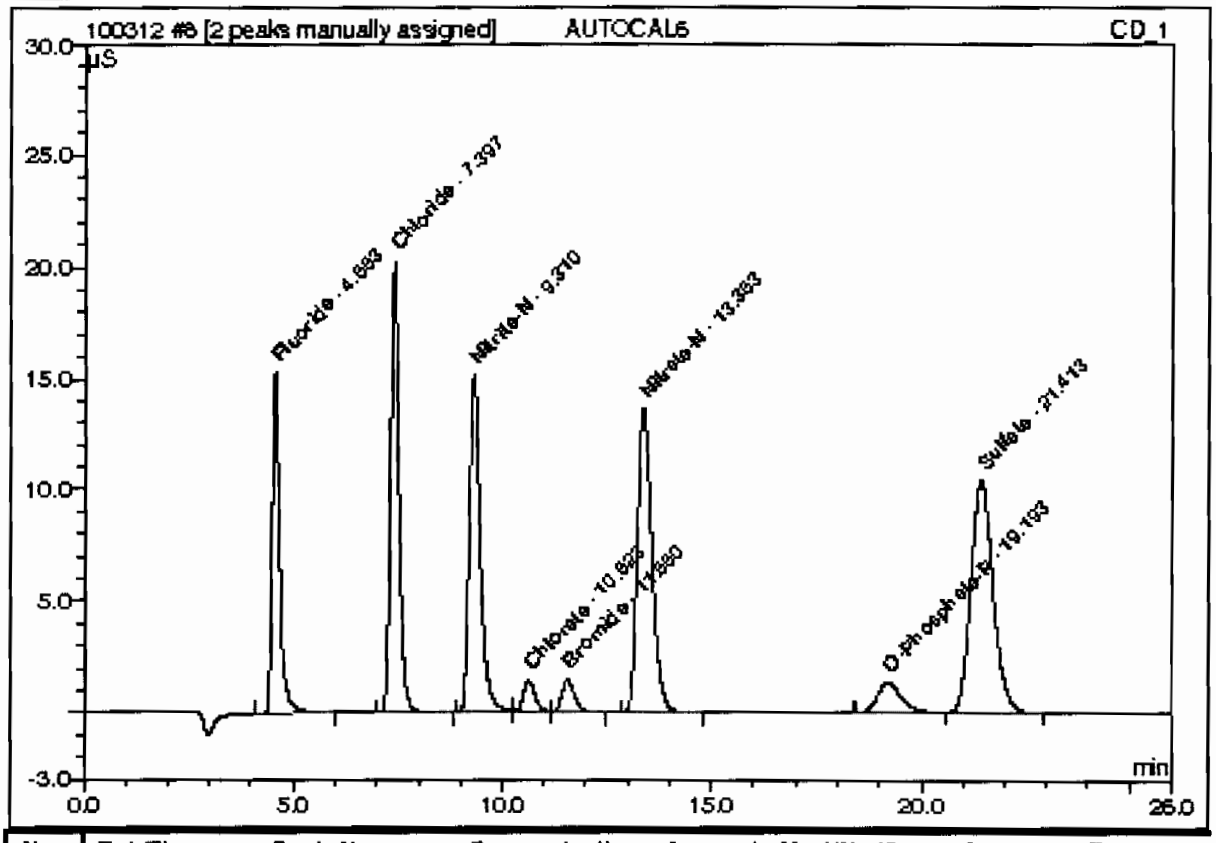
Sample Name:	AUTOCAL6	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 14:50	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	5.0000	4.8013		3.20119	12.15
2	7.40	Chloride	10.0000	9.1707		4.64497	17.63
3	9.31	Nitrite-N	5.0000	4.8611		4.63736	17.60
4	10.62	Chlorate	3.0000	2.9859		0.49085	1.86
5	11.55	Bromide	3.0000	2.9839		0.52386	1.99
6	13.35	Nitrate-N	5.0000	4.7072		5.44514	20.66
7	19.19	O-Phosphate-P	3.0000	2.9592		0.90545	3.44
8	21.41	Sulfate	20.0000	19.0809		6.50161	24.67
Total:				51.5503	0.000	26.350	100.00

8 AUTOCAL6

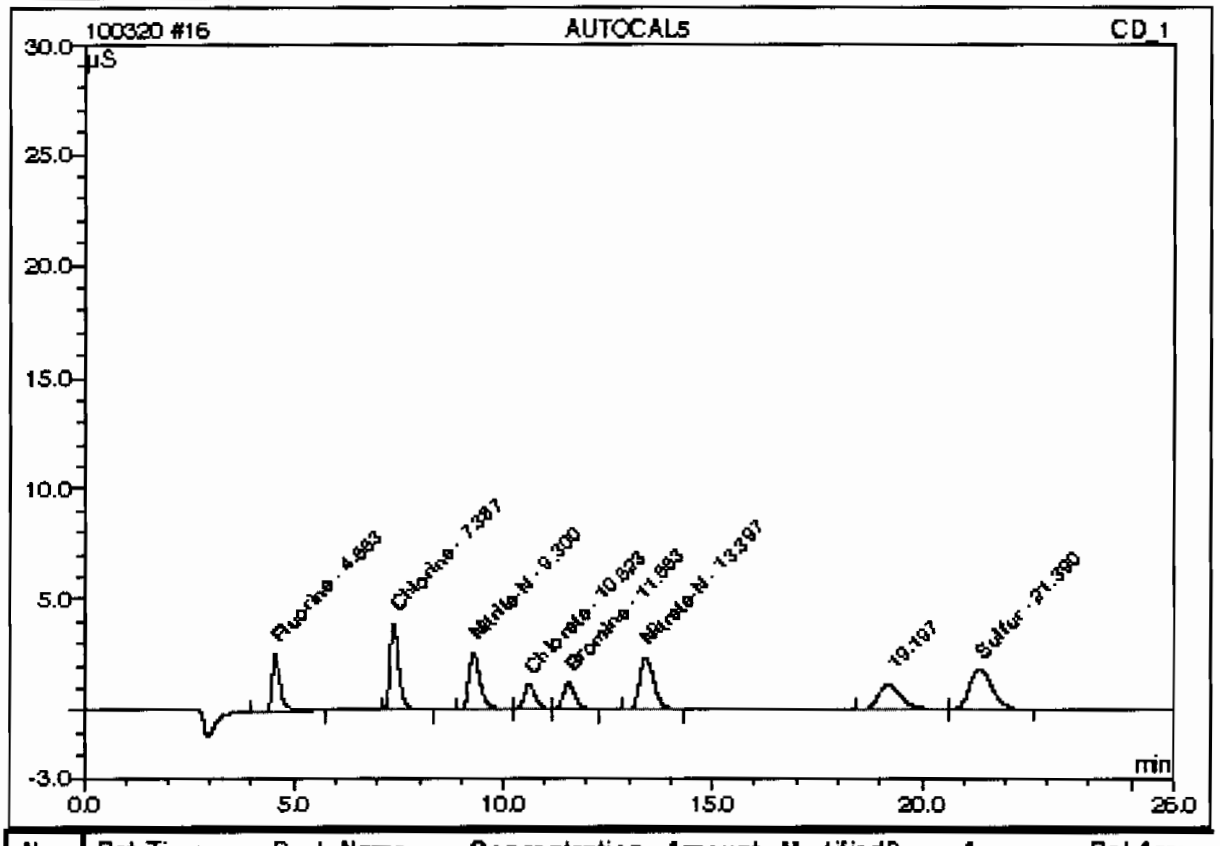
Sample Name:	AUTOCAL6	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 14:50	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	5.0000	4.8013		3.20119	12.15
2	7.40	Chloride	10.0000	9.1707		4.64497	17.63
3	9.31	Nitrite-N	5.0000	4.8611		4.63736	17.60
4	10.62	Chlorate	3.0000	2.9859		0.49085	1.86
5	11.55	Bromide	3.0000	2.9839		0.52386	1.99
6	13.35	Nitrate-N	5.0000	4.7072		5.44514	20.66
7	19.19	O-Phosphate-P	3.0000	2.9592		0.90545	3.44
8	21.41	Sulfate	20.0000	19.0809		6.50161	24.67
Total:				51.5503	0.000	26.350	100.00

16 AUTOCAL5

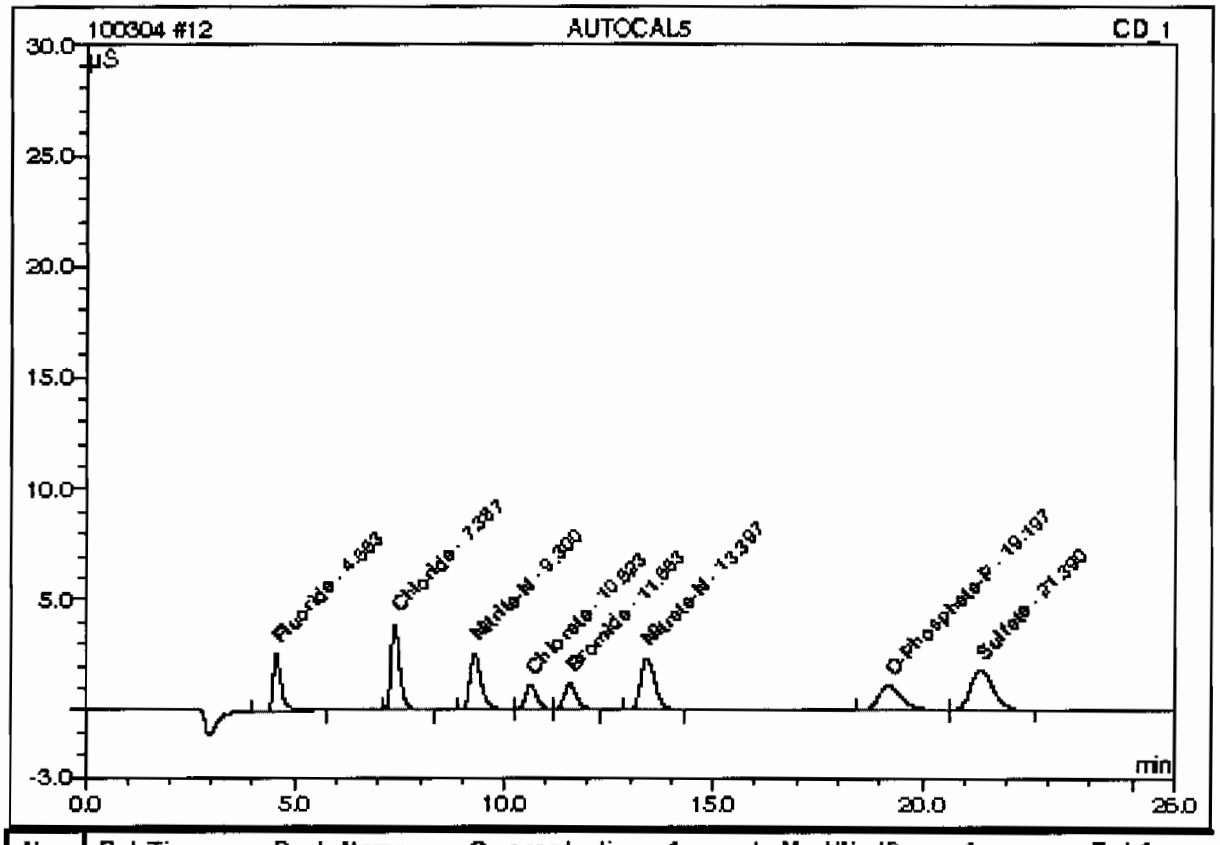
Sample Name:	AUTOCAL5	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410b	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 15:16	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluorine	1.0000	0.9239		0.57776	9.61
2	7.39	Chlorine	2.0000	1.9883		0.93617	15.57
3	9.30	Nitrite-N	1.0000	0.9333		0.82271	13.68
4	10.62	Chlorate	2.5000	2.3242		0.37870	6.30
5	11.55	Bromine	2.5000	2.3659		0.41339	6.88
6	13.40	Nitrate-N	1.0000	0.9227		0.94898	15.78
n.a.	n.a.	O-Phosphate-P	2.5000	n.a.	n.a.	n.a.	n.a.
8	21.39	Sulfur	1.3332	8.9413		1.18473	19.71
Total:				18.3994	0.000	5.262	87.53

12 AUTOCAL5

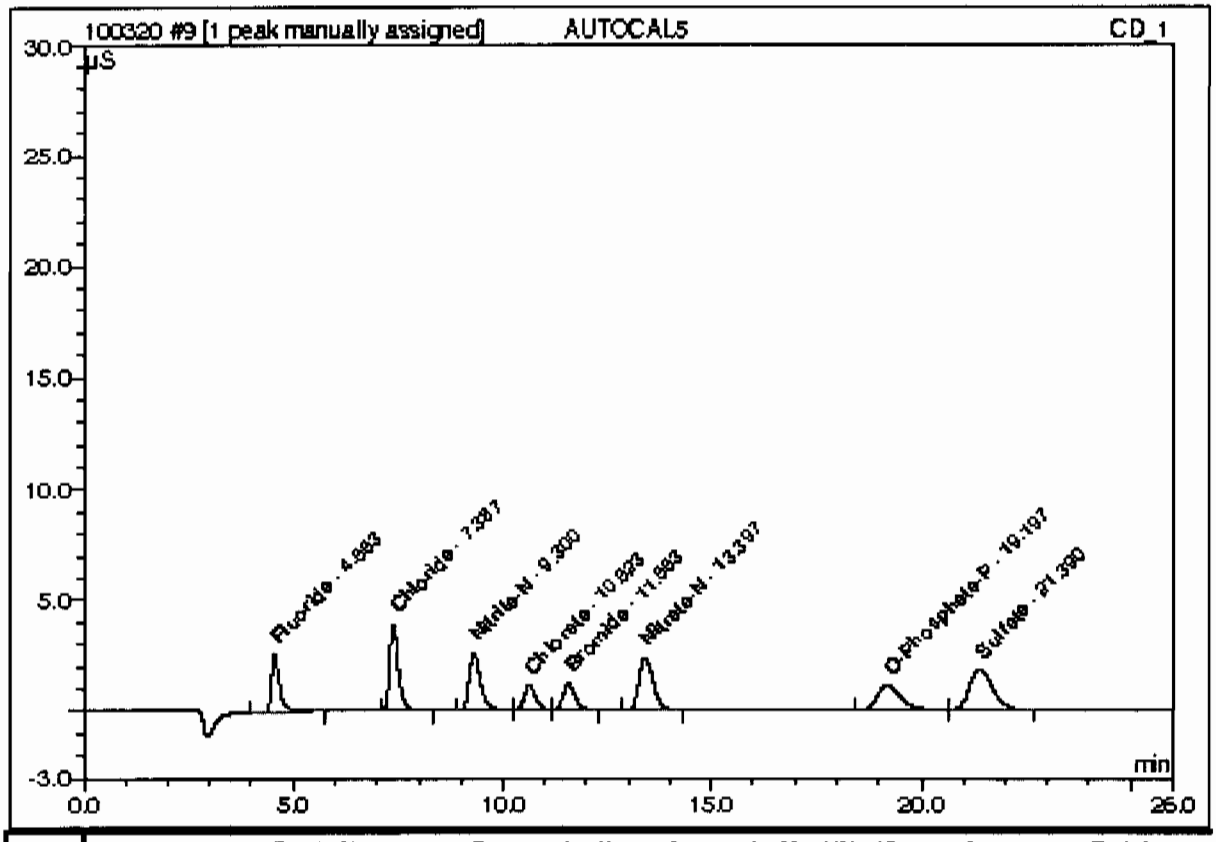
Sample Name:	AUTOCAL5	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 15:16	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	1.0000	0.9239		0.57776	9.61
2	7.39	Chloride	2.0000	1.9292		0.93617	15.57
3	9.30	Nitrite-N	1.0000	0.9213		0.82271	13.68
4	10.62	Chlorate	2.5000	2.3194		0.37870	6.30
5	11.55	Bromide	2.5000	2.3638		0.41339	6.88
6	13.40	Nitrate-N	1.0000	0.9027		0.94898	15.78
7	19.20	O-Phosphate-P	2.5000	2.4675		0.74977	12.47
8	21.39	Sulfate	4.0000	3.7326		1.18473	19.71
Total:				15.5605	0.000	6.012	100.00

9 AUTOCAL5

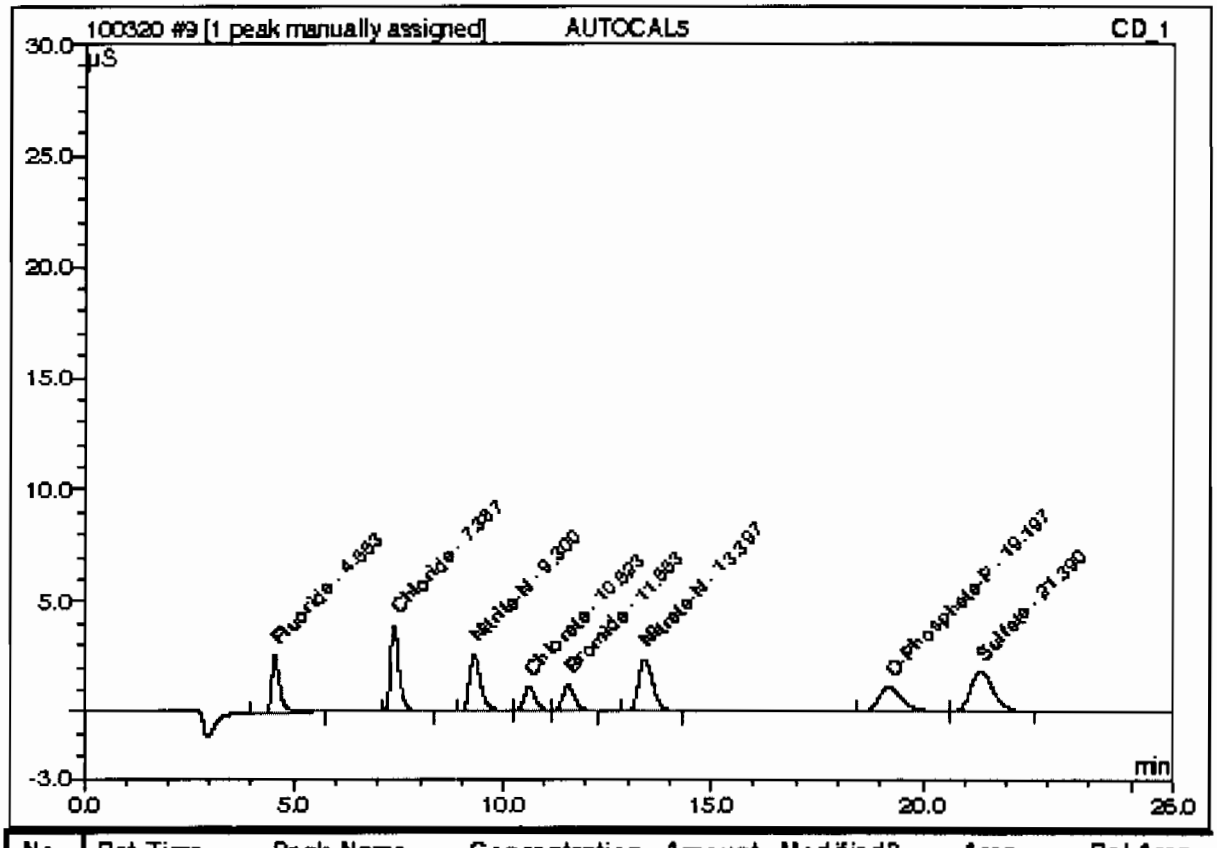
Sample Name:	AUTOCAL5	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 15:16	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	1.0000	0.9311		0.57776	9.61
2	7.39	Chloride	2.0000	1.9705		0.93617	15.57
3	9.30	Nitrite-N	1.0000	0.9357		0.82271	13.68
4	10.62	Chlorate	2.5000	2.3263		0.37870	6.30
5	11.55	Bromide	2.5000	2.3673		0.41339	6.88
6	13.40	Nitrate-N	1.0000	0.9243		0.94898	15.78
7	19.20	O-Phosphate-P	2.5000	2.4675		0.74977	12.47
8	21.39	Sulfate	4.0000	5.6629		1.18473	19.71
Total:				17.5856	0.000	6.012	100.00

9 AUTOCAL5

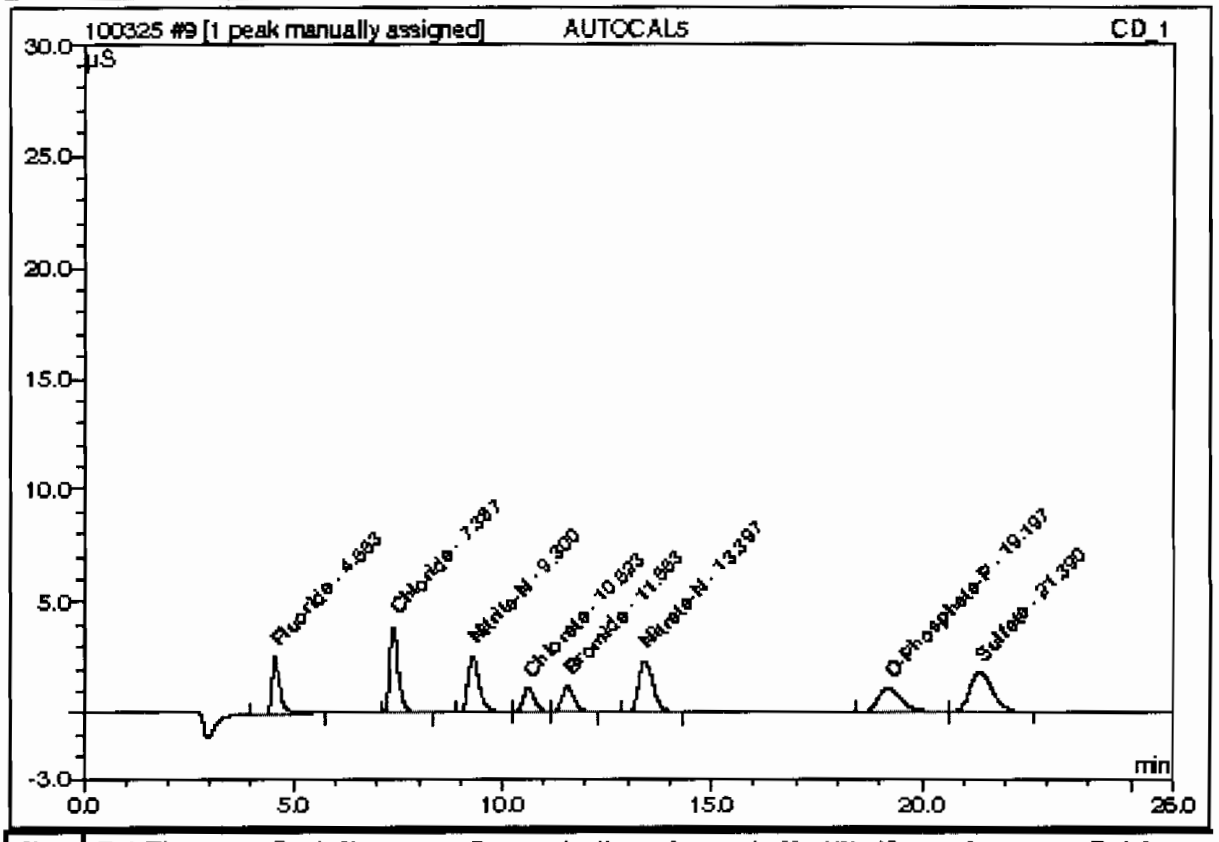
Sample Name:	AUTOCAL5	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 15:16	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	1.0000	0.9239		0.57776	9.61
2	7.39	Chloride	2.0000	1.9292		0.93617	15.57
3	9.30	Nitrite-N	1.0000	0.9213		0.82271	13.68
4	10.62	Chlorate	2.5000	2.3194		0.37870	6.30
5	11.55	Bromide	2.5000	2.3638		0.41339	6.88
6	13.40	Nitrate-N	1.0000	0.9027		0.94898	15.78
7	19.20	O-Phosphate-P	2.5000	2.4675		0.74977	12.47
8	21.39	Sulfate	4.0000	3.7326		1.18473	19.71
Total:				15.5605	0.000	6.012	100.00

9 AUTOCAL5

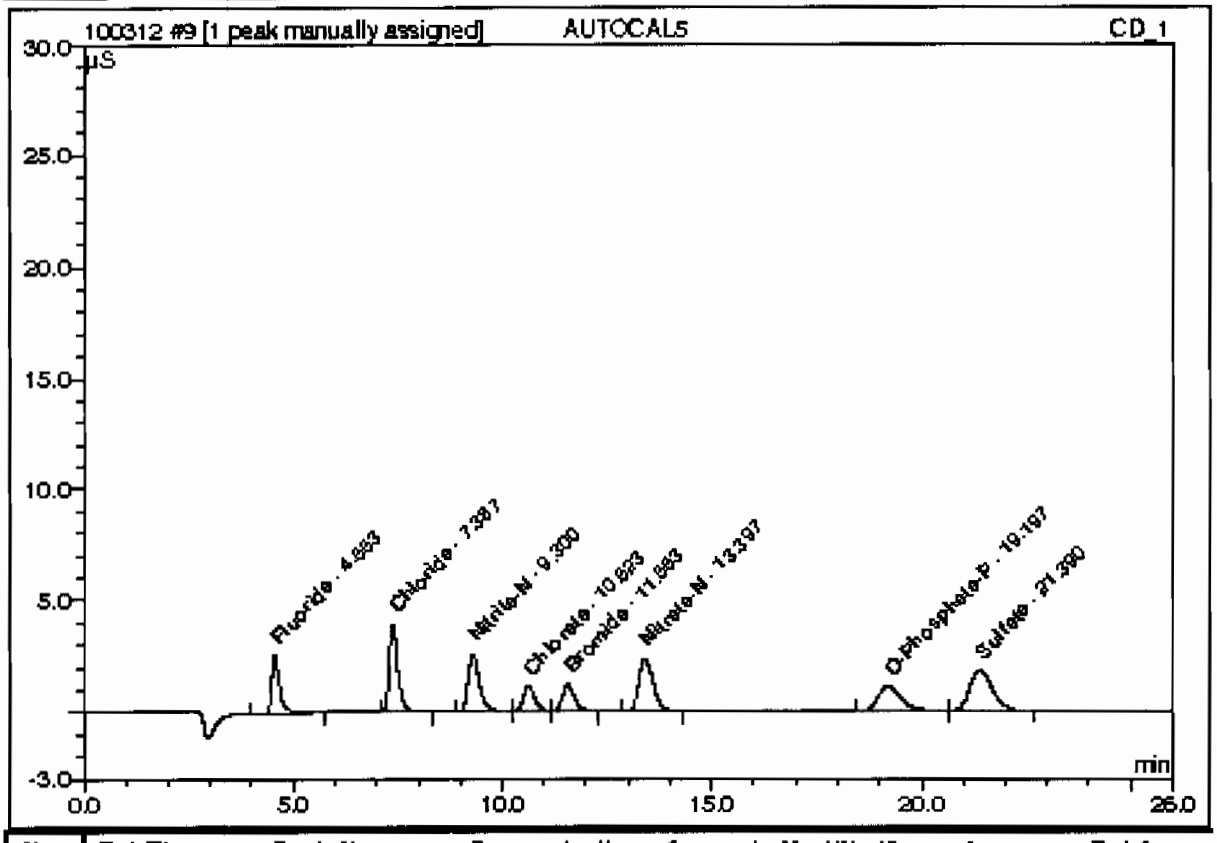
Sample Name:	AUTOCAL5	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 15:16	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	1.0000	0.9239		0.57776	9.61
2	7.39	Chloride	2.0000	1.9292		0.93617	15.57
3	9.30	Nitrite-N	1.0000	0.9213		0.82271	13.68
4	10.62	Chlorate	2.5000	2.3194		0.37870	6.30
5	11.55	Bromide	2.5000	2.3638		0.41339	6.88
6	13.40	Nitrate-N	1.0000	0.9027		0.94898	15.78
7	19.20	O-Phosphate-P	2.5000	2.4675		0.74977	12.47
8	21.39	Sulfate	4.0000	3.7326		1.18473	19.71
Total:				15.5605	0.000	6.012	100.00

9 AUTOCAL5

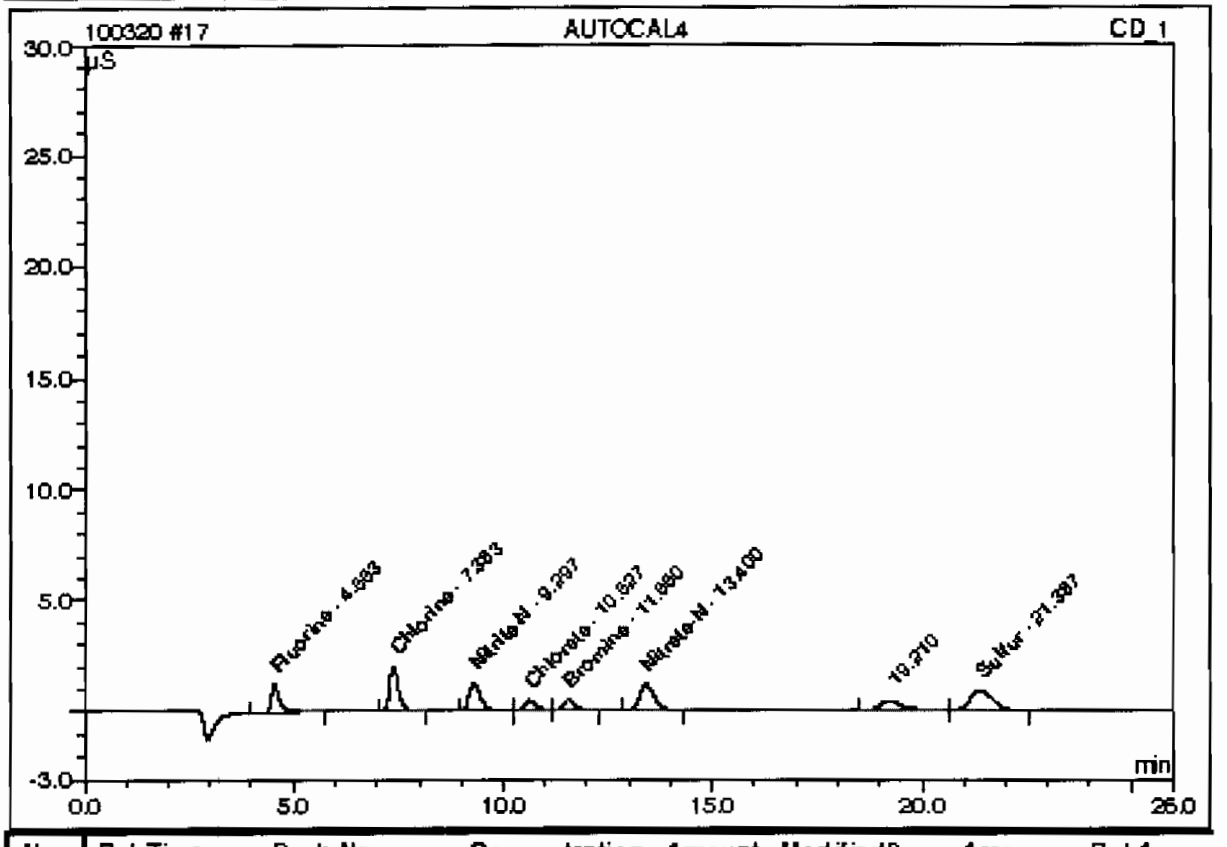
Sample Name:	AUTOCAL5	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 15:16	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	1.0000	0.9239		0.57776	9.61
2	7.39	Chloride	2.0000	1.9292		0.93617	15.57
3	9.30	Nitrite-N	1.0000	0.9213		0.82271	13.68
4	10.62	Chlorate	2.5000	2.3194		0.37870	6.30
5	11.55	Bromide	2.5000	2.3638		0.41339	6.88
6	13.40	Nitrate-N	1.0000	0.9027		0.94898	15.78
7	19.20	O-Phosphate-P	2.5000	2.4675		0.74977	12.47
8	21.39	Sulfate	4.0000	3.7326		1.18473	19.71
Total:				15.5605	0.000	6.012	100.00

17 AUTOCAL4

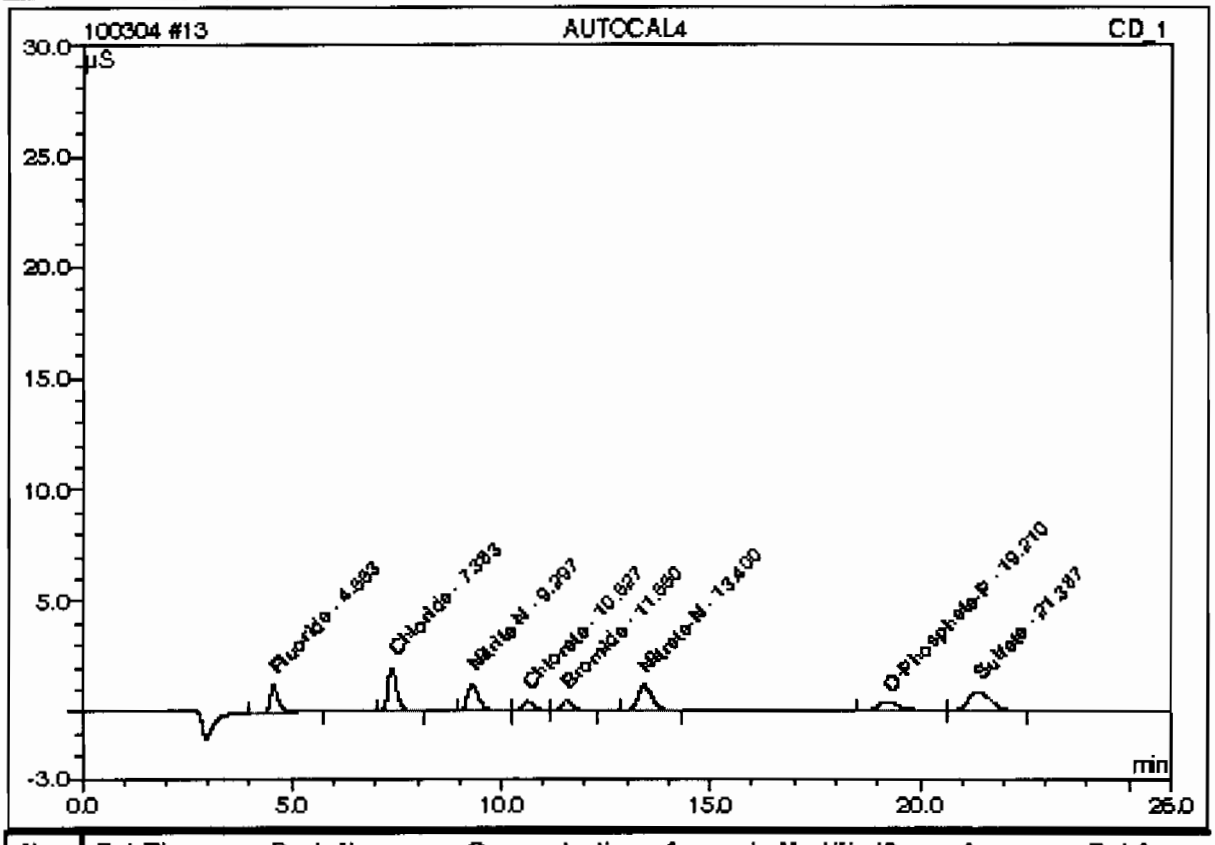
Sample Name:	AUTOCAL4	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410b	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 15:42	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluorine	0.5000	0.5069		0.29564	10.35
2	7.38	Chlorine	1.0000	1.1063		0.48247	16.89
3	9.30	Nitrite-N	0.5000	0.5036		0.40590	14.21
4	10.63	Chlorate	1.0000	0.9818		0.15198	5.32
5	11.55	Bromine	1.0000	0.9917		0.16816	5.89
6	13.40	Nitrate-N	0.5000	0.5217		0.47368	16.58
n.a.	n.a.	O-Phosphate-P	1.0000	n.a.	n.a.	n.a.	n.a.
8	21.39	Sulfur	0.6666	2.8453		0.59002	20.65
Total:				7.4573	0.000	2.568	89.89

13 AUTOCAL4

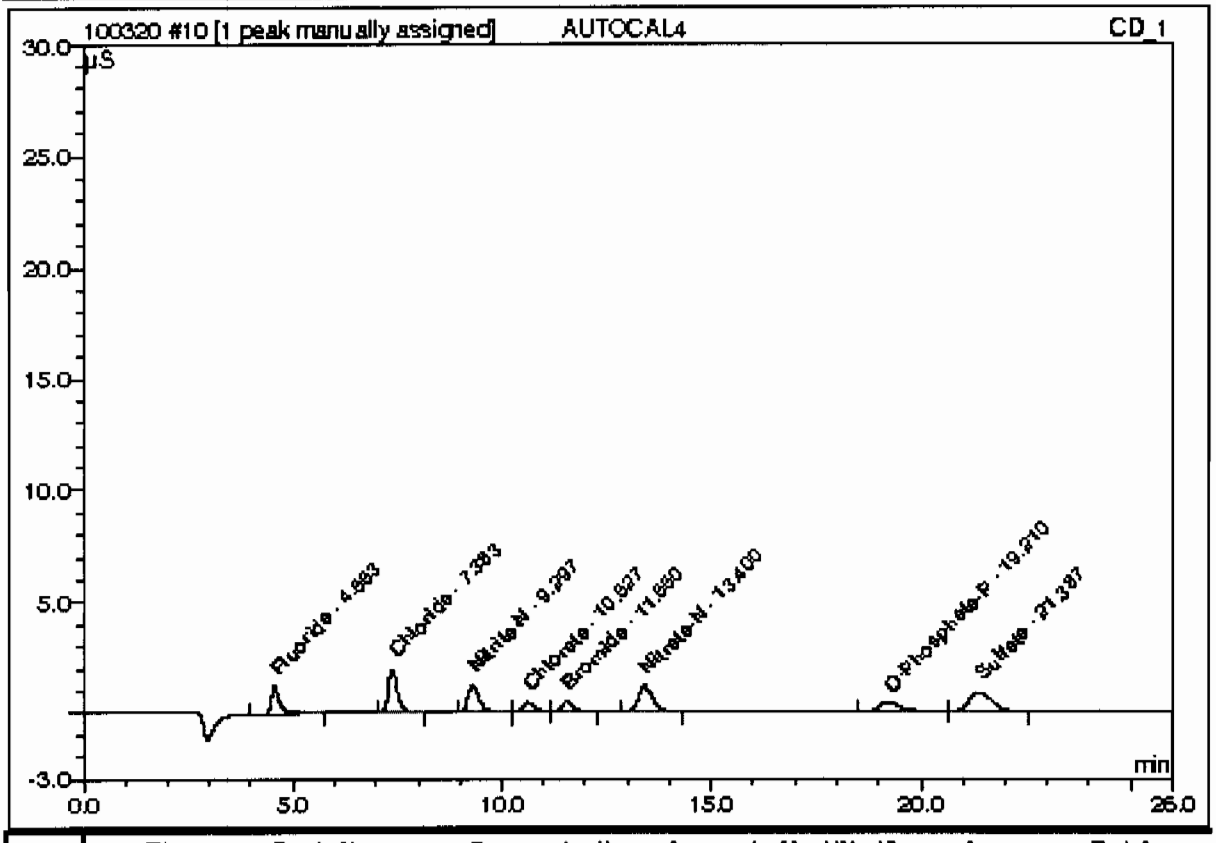
Sample Name:	AUTOCAL4	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 15:42	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	0.5000	0.5069		0.29564	10.35
2	7.38	Chloride	1.0000	1.0433		0.48247	16.89
3	9.30	Nitrite-N	0.5000	0.4909		0.40590	14.21
4	10.63	Chlorate	1.0000	0.9722		0.15198	5.32
5	11.55	Bromide	1.0000	0.9875		0.16816	5.89
6	13.40	Nitrate-N	0.5000	0.5005		0.47368	16.58
7	19.21	O-Phosphate-P	1.0000	1.0113		0.28875	10.11
8	21.39	Sulfate	2.0000	2.0158		0.59002	20.65
Total:				7.5285	0.000	2.857	100.00

10 AUTOCAL4

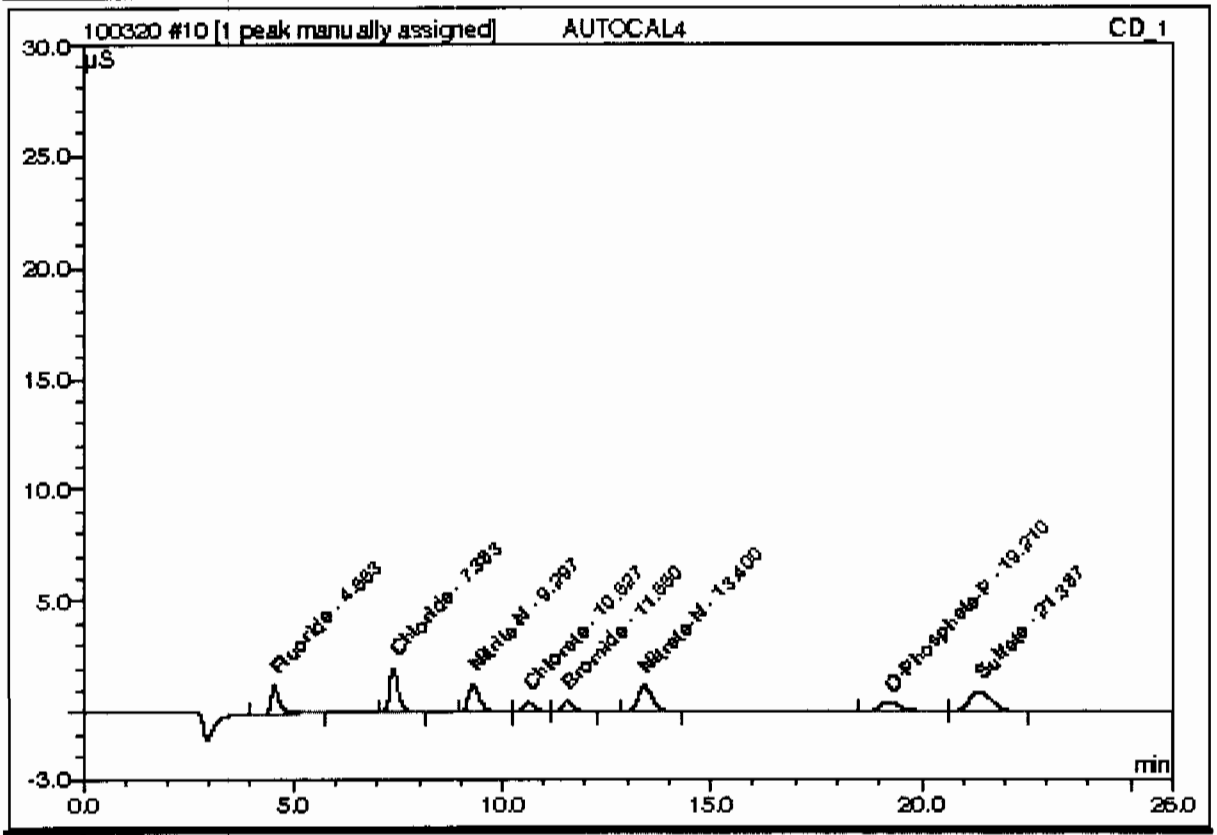
Sample Name:	AUTOCAL4	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 15:42	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	0.5000	0.5146		0.29564	10.35
2	7.38	Chloride	1.0000	1.0874		0.48247	16.89
3	9.30	Nitrite-N	0.5000	0.5061		0.40590	14.21
4	10.63	Chlorate	1.0000	0.9871		0.15198	5.32
5	11.55	Bromide	1.0000	0.9953		0.16816	5.89
6	13.40	Nitrate-N	0.5000	0.5235		0.47368	16.58
7	19.21	O-Phosphate-P	1.0000	1.0113		0.28875	10.11
8	21.39	Sulfate	2.0000	2.5173		0.59002	20.65
Total:				8.1425	0.000	2.857	100.00

10 AUTOCAL4

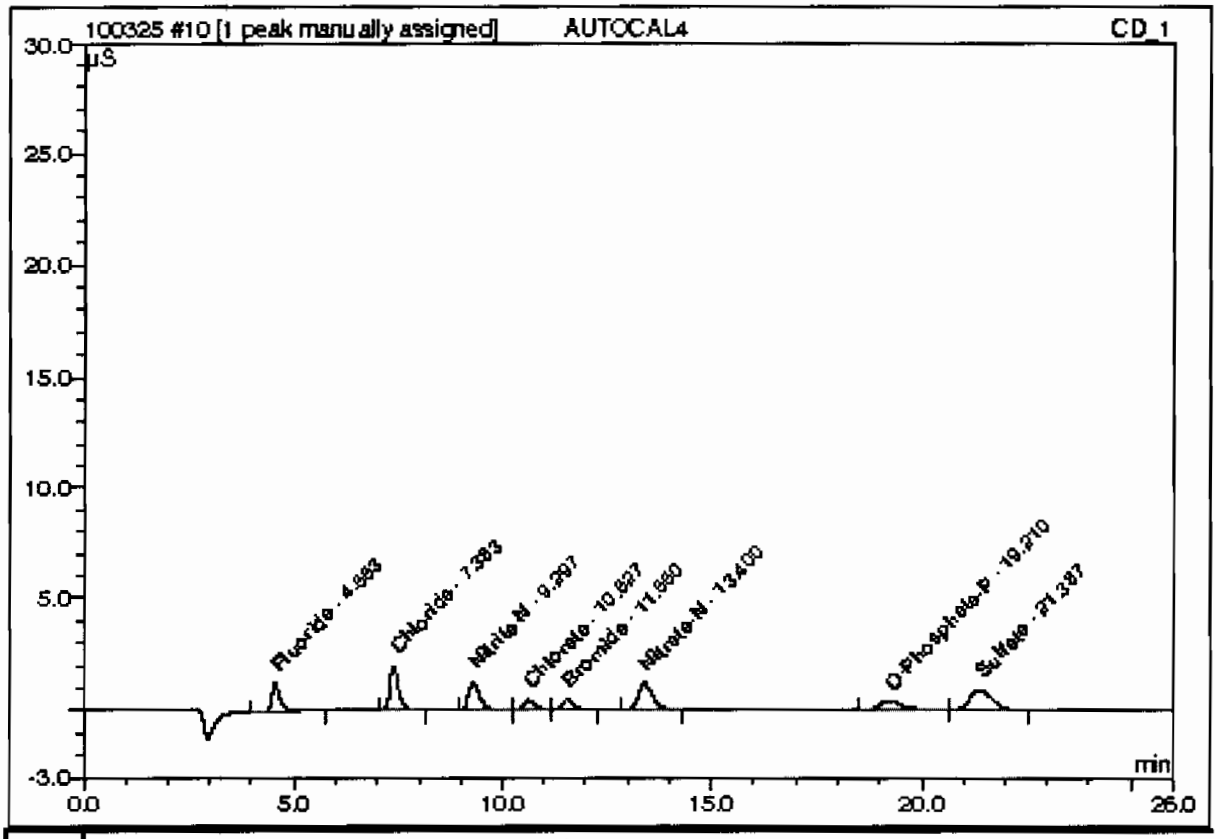
Sample Name:	AUTOCAL4	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 15:42	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	0.5000	0.5069		0.29564	10.35
2	7.38	Chloride	1.0000	1.0433		0.48247	16.89
3	9.30	Nitrite-N	0.5000	0.4909		0.40590	14.21
4	10.63	Chlorate	1.0000	0.9722		0.15198	5.32
5	11.55	Bromide	1.0000	0.9875		0.16816	5.89
6	13.40	Nitrate-N	0.5000	0.5005		0.47368	16.58
7	19.21	O-Phosphate-P	1.0000	1.0113		0.28875	10.11
8	21.39	Sulfate	2.0000	2.0158		0.59002	20.65
Total:				7.5285	0.000	2.857	100.00

10 AUTOCAL4

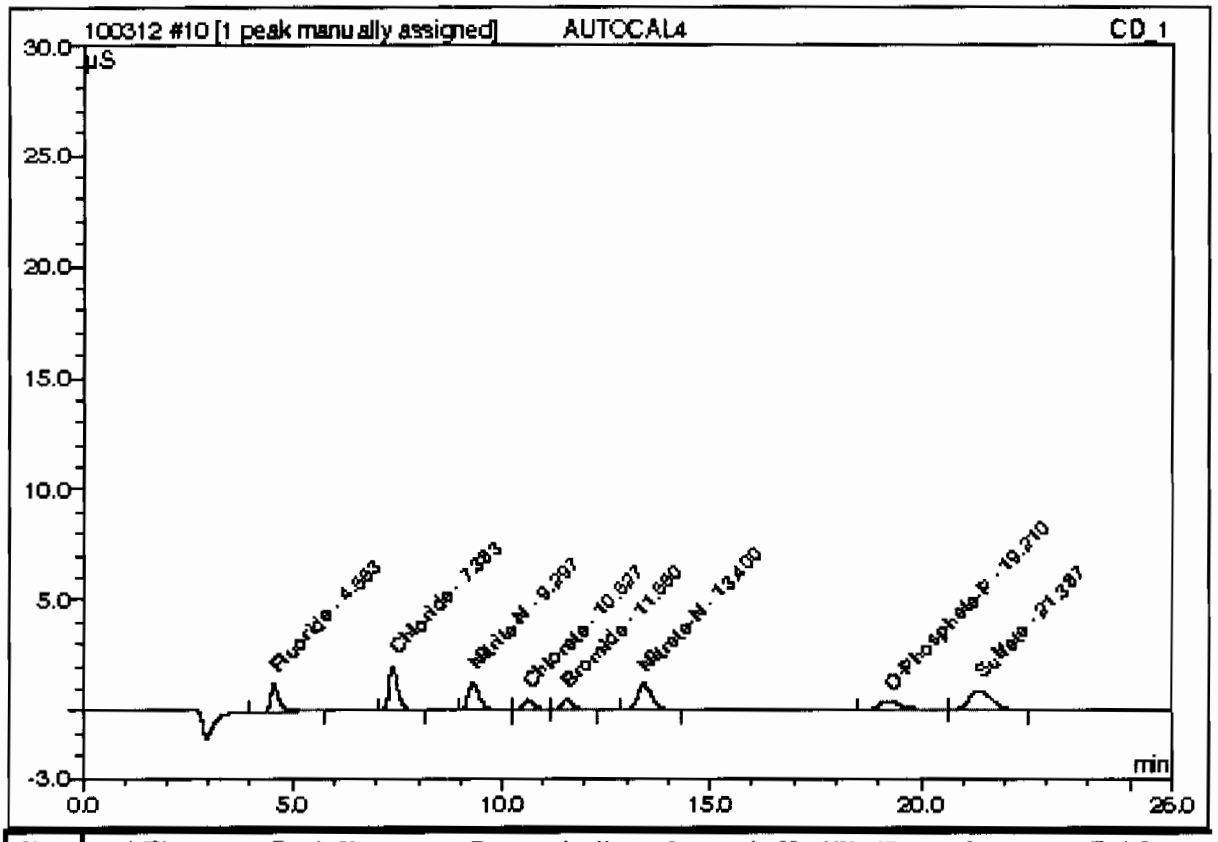
Sample Name:	AUTOCAL4	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 15:42	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	0.5000	0.5069		0.29564	10.35
2	7.38	Chloride	1.0000	1.0433		0.48247	16.89
3	9.30	Nitrite-N	0.5000	0.4909		0.40590	14.21
4	10.63	Chlorate	1.0000	0.9722		0.15198	5.32
5	11.55	Bromide	1.0000	0.9875		0.16816	5.89
6	13.40	Nitrate-N	0.5000	0.5005		0.47368	16.58
7	19.21	O-Phosphate-P	1.0000	1.0113		0.28875	10.11
8	21.39	Sulfate	2.0000	2.0158		0.59002	20.65
Total:				7.5285	0.000	2.857	100.00

10 AUTOCAL4

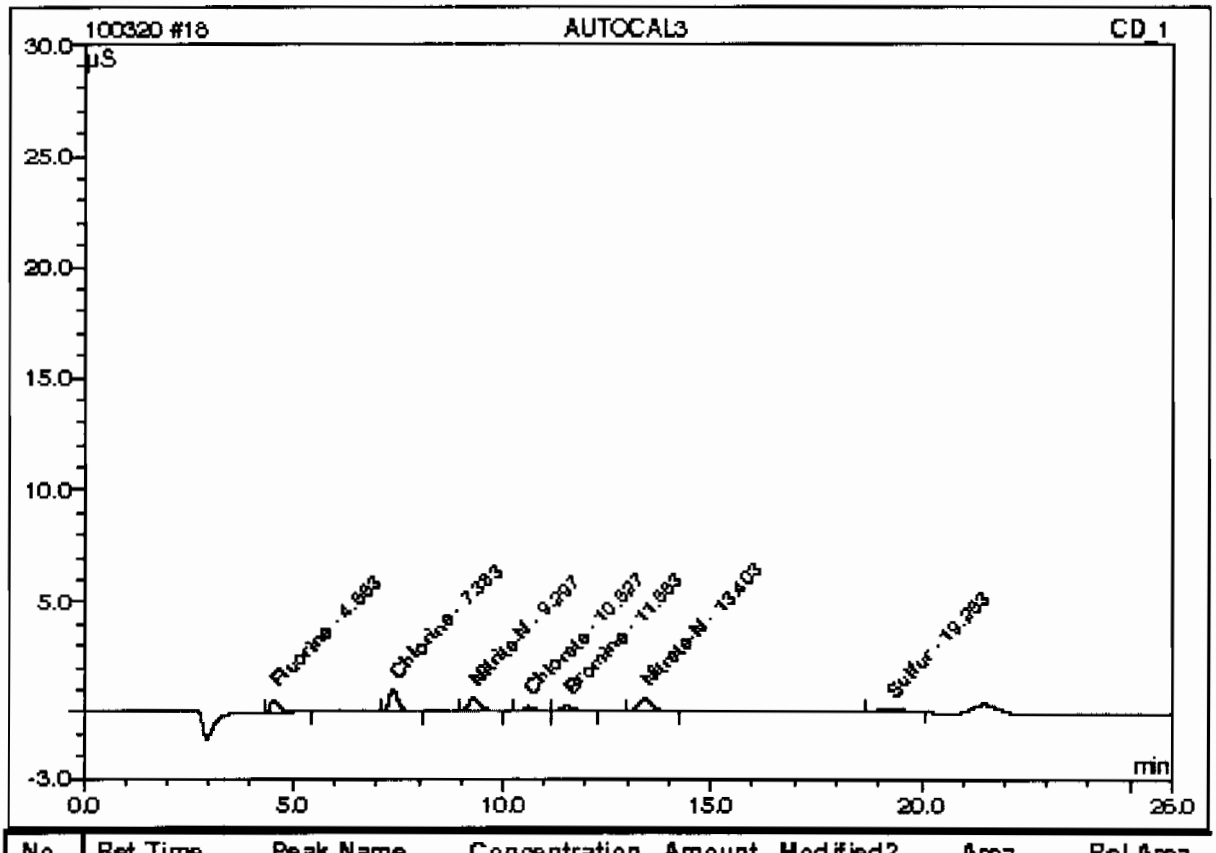
Sample Name:	AUTOCAL4	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 15:42	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	0.5000	0.5069		0.29564	10.35
2	7.38	Chloride	1.0000	1.0433		0.48247	16.89
3	9.30	Nitrite-N	0.5000	0.4909		0.40590	14.21
4	10.63	Chlorate	1.0000	0.9722		0.15198	5.32
5	11.55	Bromide	1.0000	0.9875		0.16816	5.89
6	13.40	Nitrate-N	0.5000	0.5005		0.47368	16.58
7	19.21	O-Phosphate-P	1.0000	1.0113		0.28875	10.11
8	21.39	Sulfate	2.0000	2.0158		0.59002	20.65
Total:				7.5285	0.000	2.857	100.00

18 AUTOCAL3

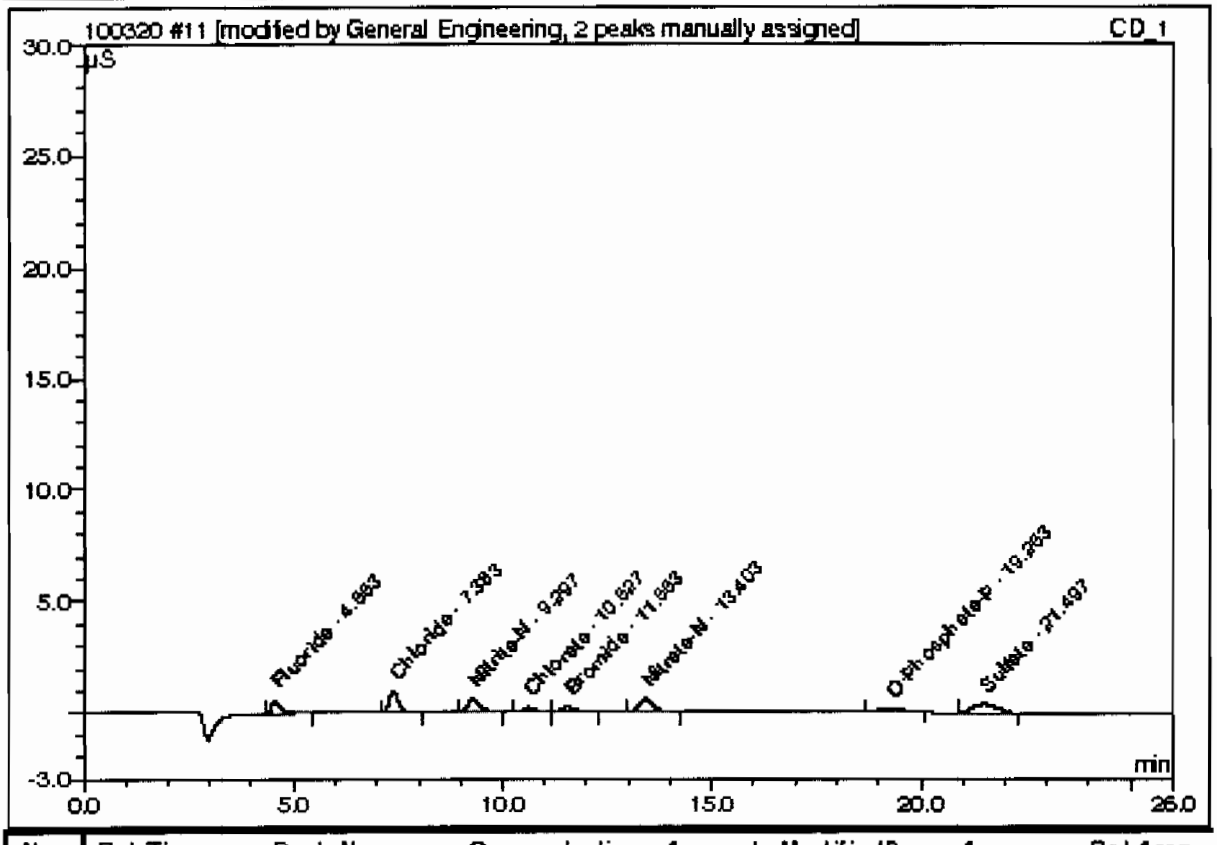
Sample Name:	AUTOCAL3	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410b	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 16:08	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluorine	0.2500	0.2772		0.14021	12.88
2	7.38	Chlorine	0.5000	0.6458		0.24562	22.56
3	9.30	Nitrite-N	0.2500	0.2894		0.19817	18.20
4	10.63	Chlorate	0.5000	0.5279		0.07531	6.92
5	11.55	Bromine	0.5000	0.5268		0.08520	7.82
6	13.40	Nitrate-N	0.2500	0.3208		0.23559	21.64
n.a.	n.a.	O-Phosphate-P	0.5000	n.a.	n.a.	n.a.	n.a.
7	19.25	Sulfur	0.3333	-2.0877		0.10878	9.99
Total:				0.5003	0.000	1.089	100.00

11 AUTOCAL3

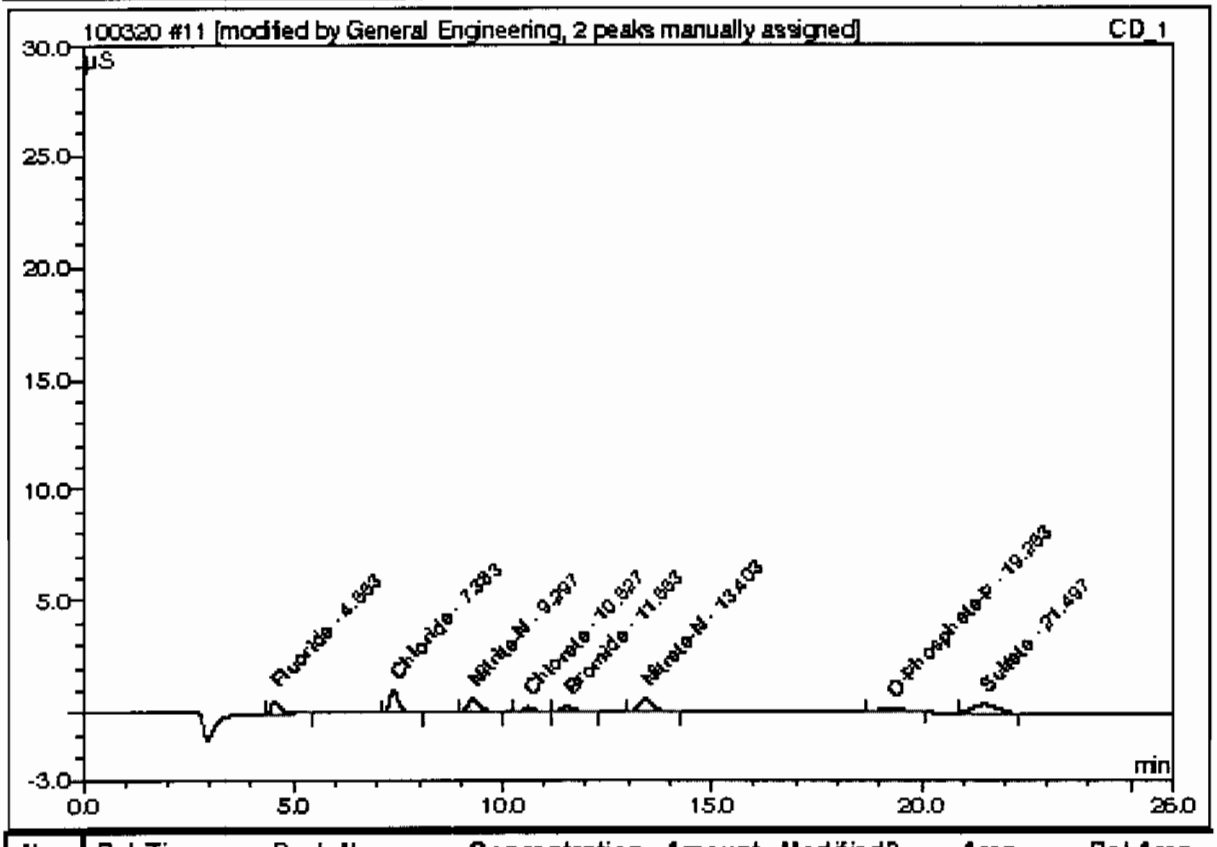
Sample Name:	AUTOCAL3	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 16:08	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	0.2500	0.2851		0.14021	10.26
2	7.38	Chloride	0.5000	0.6264		0.24562	17.97
3	9.30	Nitrite-N	0.2500	0.2920		0.19817	14.50
4	10.63	Chlorate	0.5000	0.5342		0.07531	5.51
5	11.55	Bromide	0.5000	0.5311		0.08520	6.23
6	13.40	Nitrate-N	0.2500	0.3226		0.23559	17.23
7	19.25	O-Phosphate-P	0.5000	0.4428		0.10878	7.96
8	21.50	Sulfate	1.0000	0.8683		0.27825	20.35
Total:				3.9026	0.000	1.367	100.00

11 AUTOCAL3

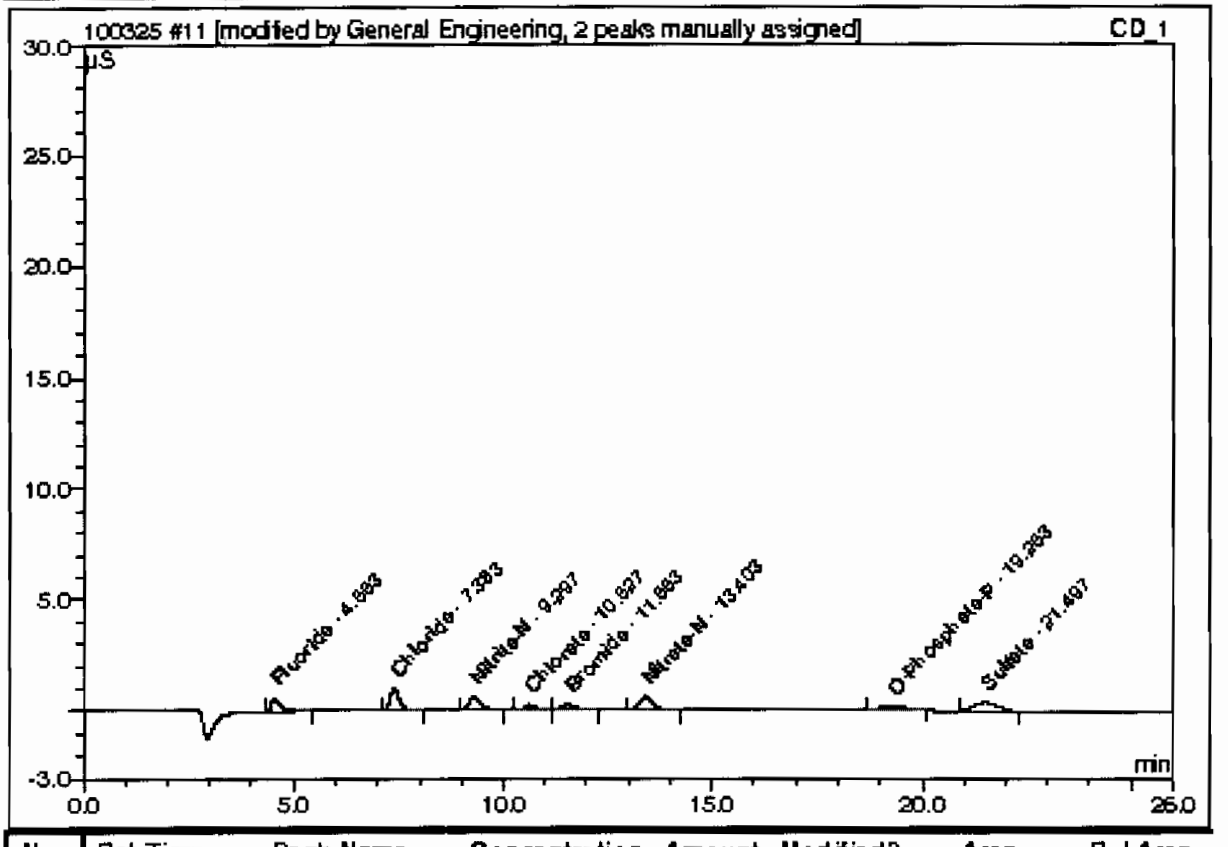
Sample Name:	AUTOCAL3	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 16:08	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	0.2500	0.2772		0.14021	10.26
2	7.38	Chloride	0.5000	0.5809		0.24562	17.97
3	9.30	Nitrite-N	0.2500	0.2763		0.19817	14.50
4	10.63	Chlorate	0.5000	0.5166		0.07531	5.51
5	11.55	Bromide	0.5000	0.5219		0.08520	6.23
6	13.40	Nitrate-N	0.2500	0.2991		0.23559	17.23
7	19.25	O-Phosphate-P	0.5000	0.4428		0.10878	7.96
8	21.50	Sulfate	1.0000	1.1158		0.27825	20.35
Total:				4.0306	0.000	1.367	100.00

11 AUTOCAL3

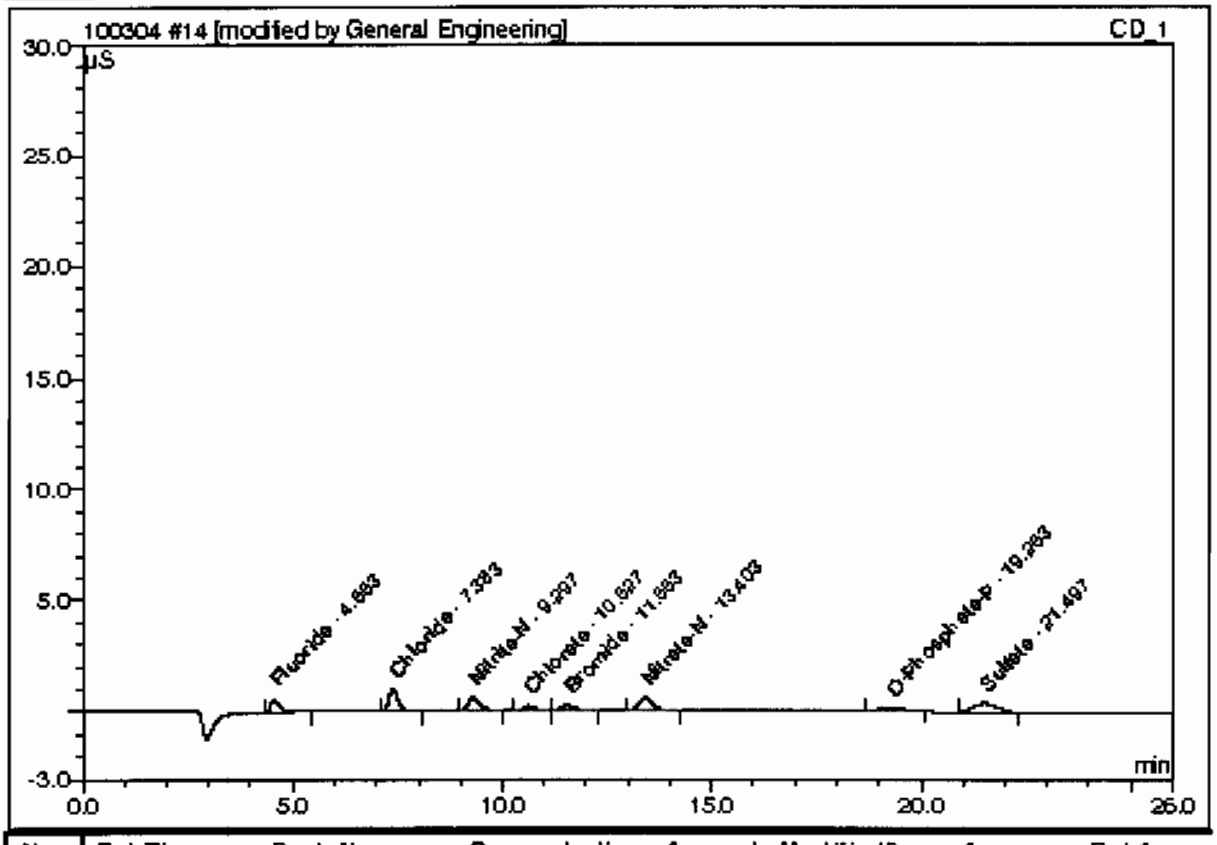
Sample Name:	AUTOCAL3	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 16:08	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	0.2500	0.2772		0.14021	10.26
2	7.38	Chloride	0.5000	0.5809		0.24562	17.97
3	9.30	Nitrite-N	0.2500	0.2763		0.19817	14.50
4	10.63	Chlorate	0.5000	0.5166		0.07531	5.51
5	11.55	Bromide	0.5000	0.5219		0.08520	6.23
6	13.40	Nitrate-N	0.2500	0.2991		0.23559	17.23
7	19.25	O-Phosphate-P	0.5000	0.4428		0.10878	7.96
8	21.50	Sulfate	1.0000	1.1158		0.27825	20.35
Total:				4.0306	0.000	1.367	100.00

14 AUTOCAL3

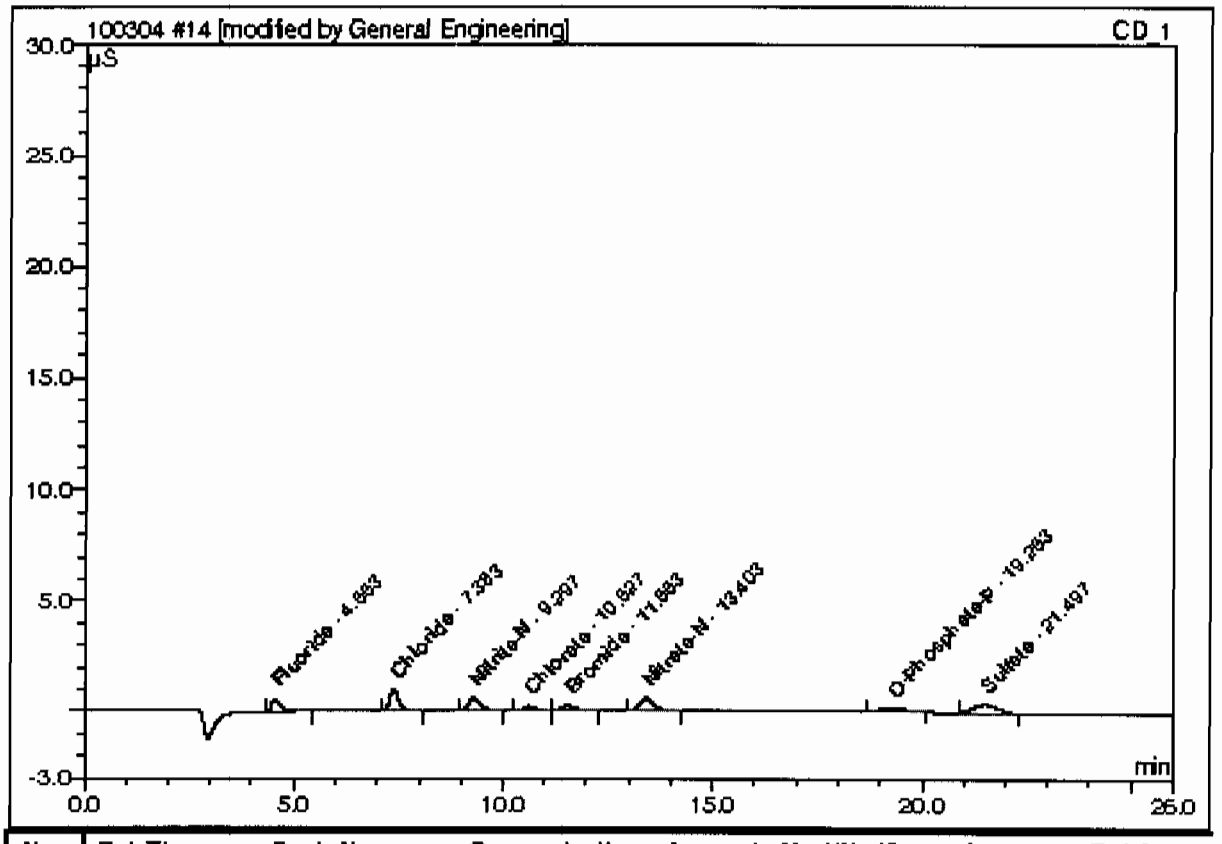
Sample Name:	AUTOCAL3	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 16:08	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	0.2500	0.2772		0.14021	10.26
2	7.38	Chloride	0.5000	0.5809		0.24562	17.97
3	9.30	Nitrite-N	0.2500	0.2763		0.19817	14.50
4	10.63	Chlorate	0.5000	0.5166		0.07531	5.51
5	11.55	Bromide	0.5000	0.5219		0.08520	6.23
6	13.40	Nitrate-N	0.2500	0.2991		0.23559	17.23
7	19.25	O-Phosphate-P	0.5000	0.4428		0.10878	7.96
8	21.50	Sulfate	1.0000	1.1158		0.27825	20.35
Total:				4.0306	0.000	1.367	100.00

14 AUTOCAL3

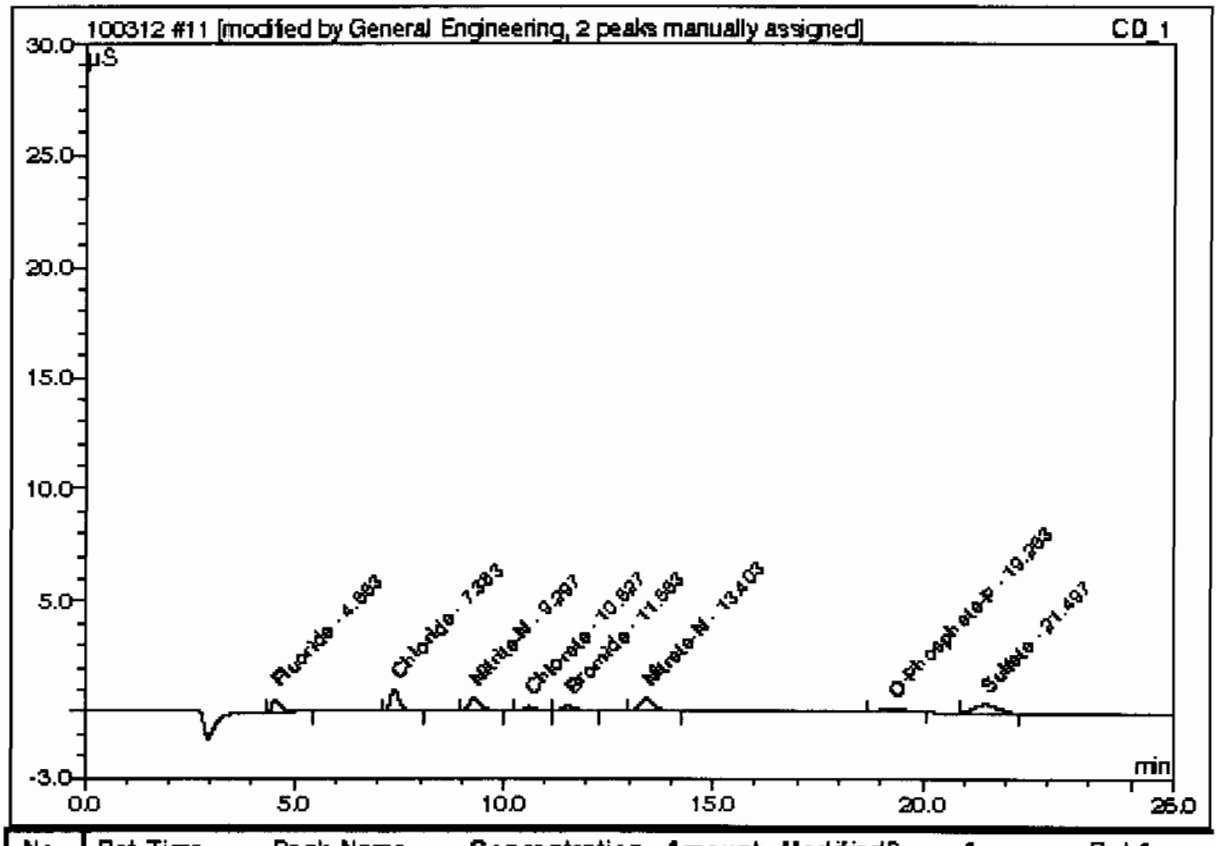
Sample Name:	AUTOCAL3	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 16:08	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	0.2500	0.2772		0.14021	10.26
2	7.38	Chloride	0.5000	0.5809		0.24562	17.97
3	9.30	Nitrite-N	0.2500	0.2763		0.19817	14.50
4	10.63	Chlorate	0.5000	0.5166		0.07531	5.51
5	11.55	Bromide	0.5000	0.5219		0.08520	6.23
6	13.40	Nitrate-N	0.2500	0.2991		0.23559	17.23
7	19.25	O-Phosphate-P	0.5000	0.4428		0.10878	7.96
8	21.50	Sulfate	1.0000	1.1158		0.27825	20.35
Total:				4.0306	0.000	1.367	100.00

11 AUTOCAL3

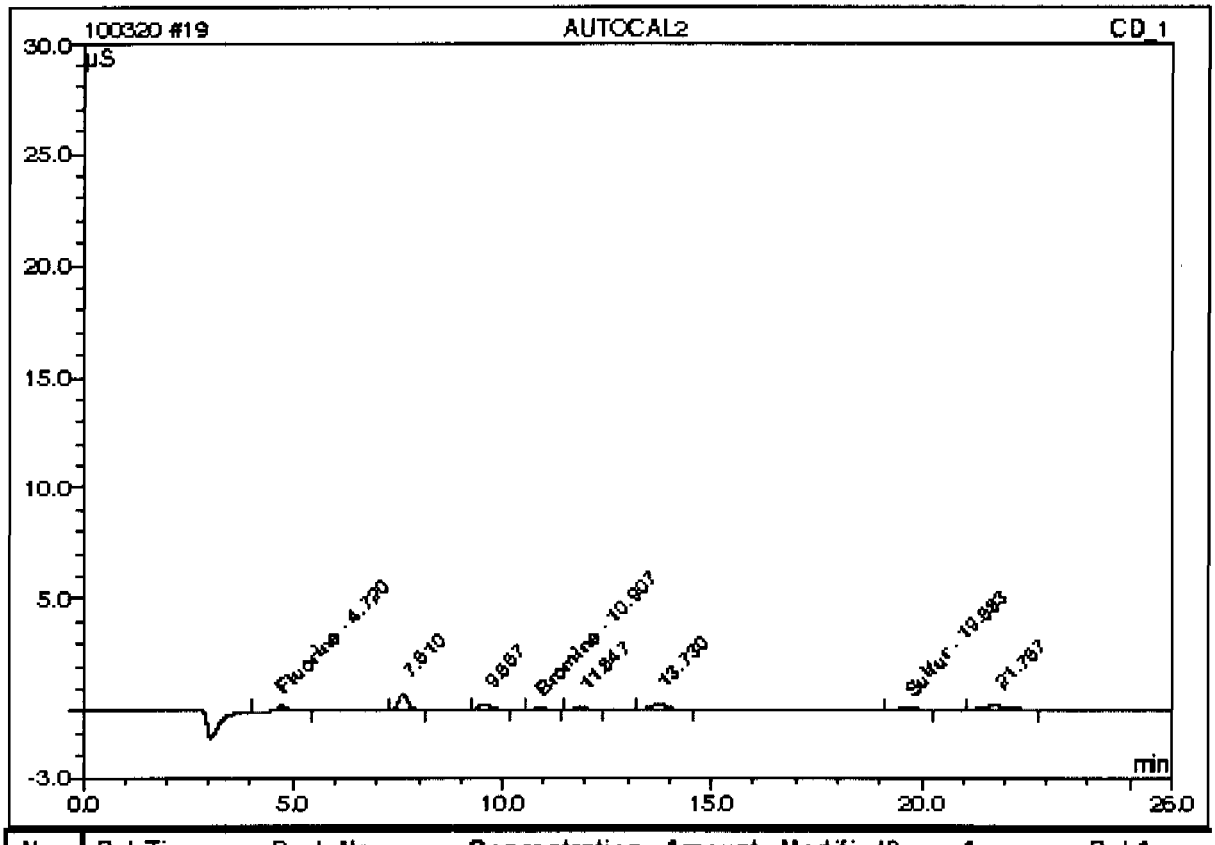
Sample Name:	AUTOCAL3	*Injection Volume:*	50.0
Vial Number:	55	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 16:08	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	0.2500	0.2772		0.14021	10.26
2	7.38	Chloride	0.5000	0.5809		0.24562	17.97
3	9.30	Nitrite-N	0.2500	0.2763		0.19817	14.50
4	10.63	Chlorate	0.5000	0.5166		0.07531	5.51
5	11.55	Bromide	0.5000	0.5219		0.08520	6.23
6	13.40	Nitrate-N	0.2500	0.2991		0.23559	17.23
7	19.25	O-Phosphate-P	0.5000	0.4428		0.10878	7.96
8	21.50	Sulfate	1.0000	1.1158		0.27825	20.35
Total:				4.0306	0.000	1.367	100.00

19 AUTOCAL2

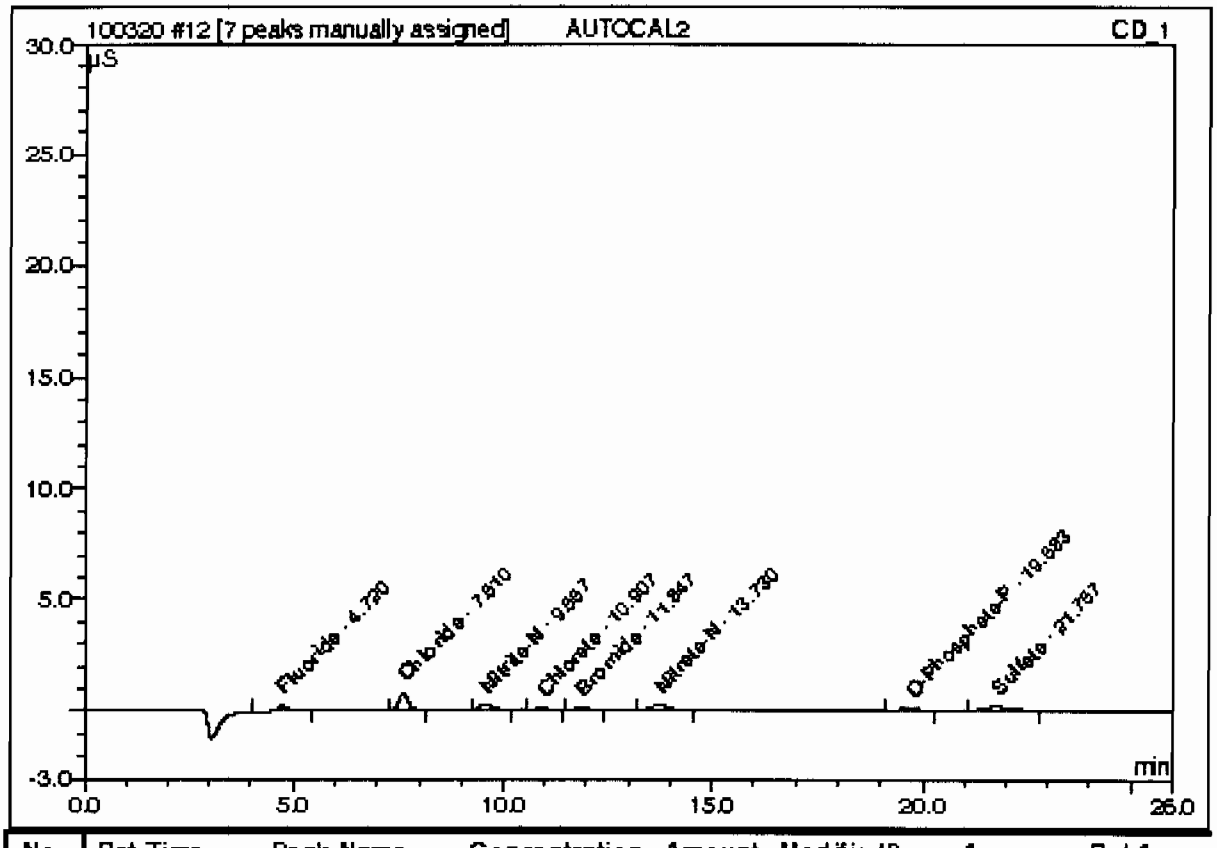
Sample Name:	AUTOCAL2	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410b	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 16:34	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.72	Fluorine	0.1000	0.1654		0.06456	10.19
n.a.	n.a.	Chlorine	0.2000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	0.1000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	0.2000	n.a.	n.a.	n.a.	n.a.
4	10.91	Bromine	0.2000	0.2063		0.02800	4.42
n.a.	n.a.	Nitrate-N	0.1000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	0.2000	n.a.	n.a.	n.a.	n.a.
7	19.68	Sulfur	0.1333	-2.9575		0.02392	3.78
Total:				-2.5857	0.000	0.116	18.38

12 AUTOCAL2

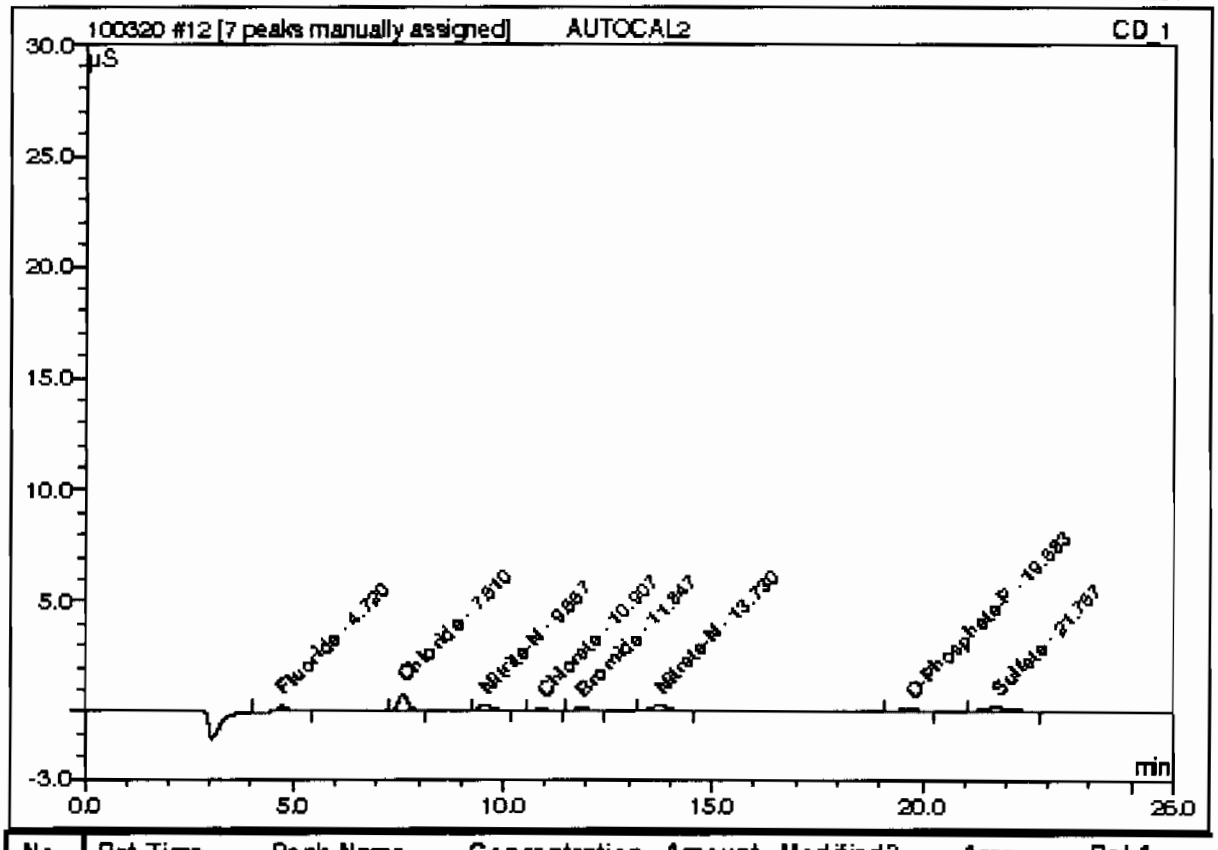
Sample Name:	AUTOCAL2	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 16:34	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.72	Fluoride	0.1000	0.1734		0.06456	10.19
2	7.61	Chloride	0.2000	0.5056		0.18356	28.97
3	9.57	Nitrite-N	0.1000	0.1681		0.07789	12.29
4	10.91	Chlorate	0.2000	0.2547		0.02800	4.42
5	11.85	Bromide	0.2000	0.2322		0.03177	5.01
6	13.73	Nitrate-N	0.1000	0.2106		0.10276	16.22
7	19.68	O-Phosphate-P	0.2000	0.1748		0.02392	3.78
8	21.77	Sulfate	0.4000	0.0374		0.12115	19.12
Total:				1.7568	0.000	0.634	100.00

12 AUTOCAL2

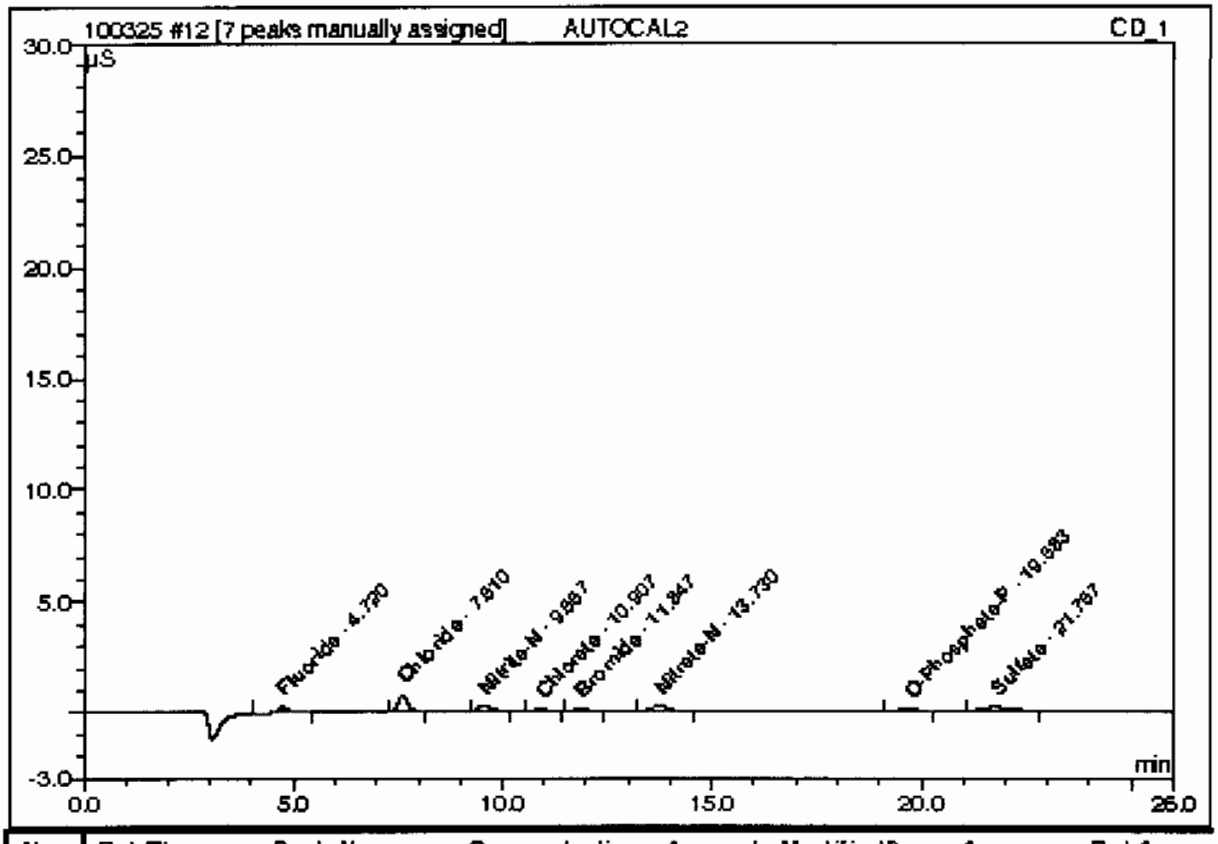
Sample Name:	AUTOCAL2	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 16:34	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.72	Fluoride	0.1000	0.1654		0.06456	10.19
2	7.61	Chloride	0.2000	0.4597		0.18356	28.97
3	9.57	Nitrite-N	0.1000	0.1521		0.07789	12.29
4	10.91	Chlorate	0.2000	0.2355		0.02800	4.42
5	11.85	Bromide	0.2000	0.2220		0.03177	5.01
6	13.73	Nitrate-N	0.1000	0.1867		0.10276	16.22
7	19.68	O-Phosphate-P	0.2000	0.1748		0.02392	3.78
8	21.77	Sulfate	0.4000	0.6623		0.12115	19.12
Total:				2.2585	0.000	0.634	100.00

12 AUTOCAL2

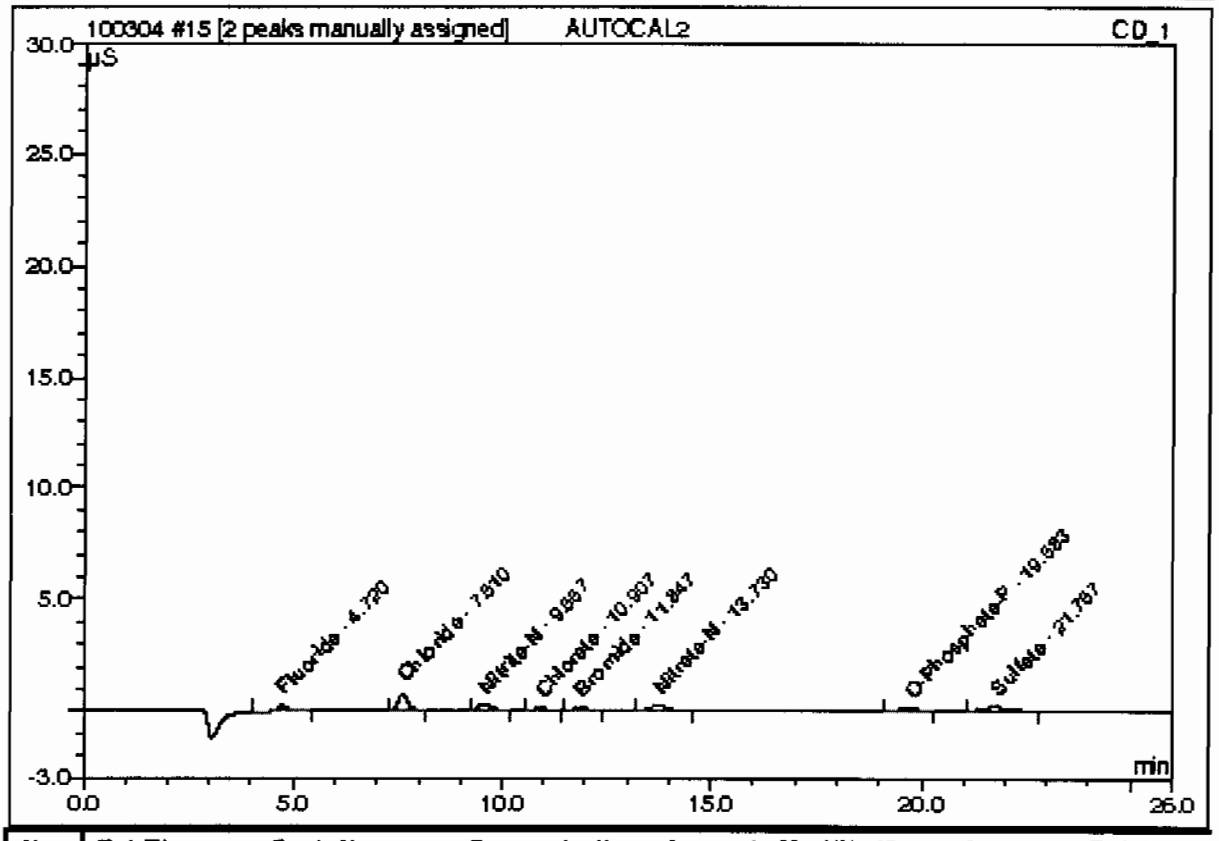
Sample Name:	AUTOCAL2	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 16:34	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.72	Fluoride	0.1000	0.1654		0.06456	10.19
2	7.61	Chloride	0.2000	0.4597		0.18356	28.97
3	9.57	Nitrite-N	0.1000	0.1521		0.07789	12.29
4	10.91	Chlorate	0.2000	0.2355		0.02800	4.42
5	11.85	Bromide	0.2000	0.2220		0.03177	5.01
6	13.73	Nitrate-N	0.1000	0.1867		0.10276	16.22
7	19.68	O-Phosphate-P	0.2000	0.1748		0.02392	3.78
8	21.77	Sulfate	0.4000	0.6623		0.12115	19.12
Total:				2.2585	0.000	0.634	100.00

15 AUTOCAL2

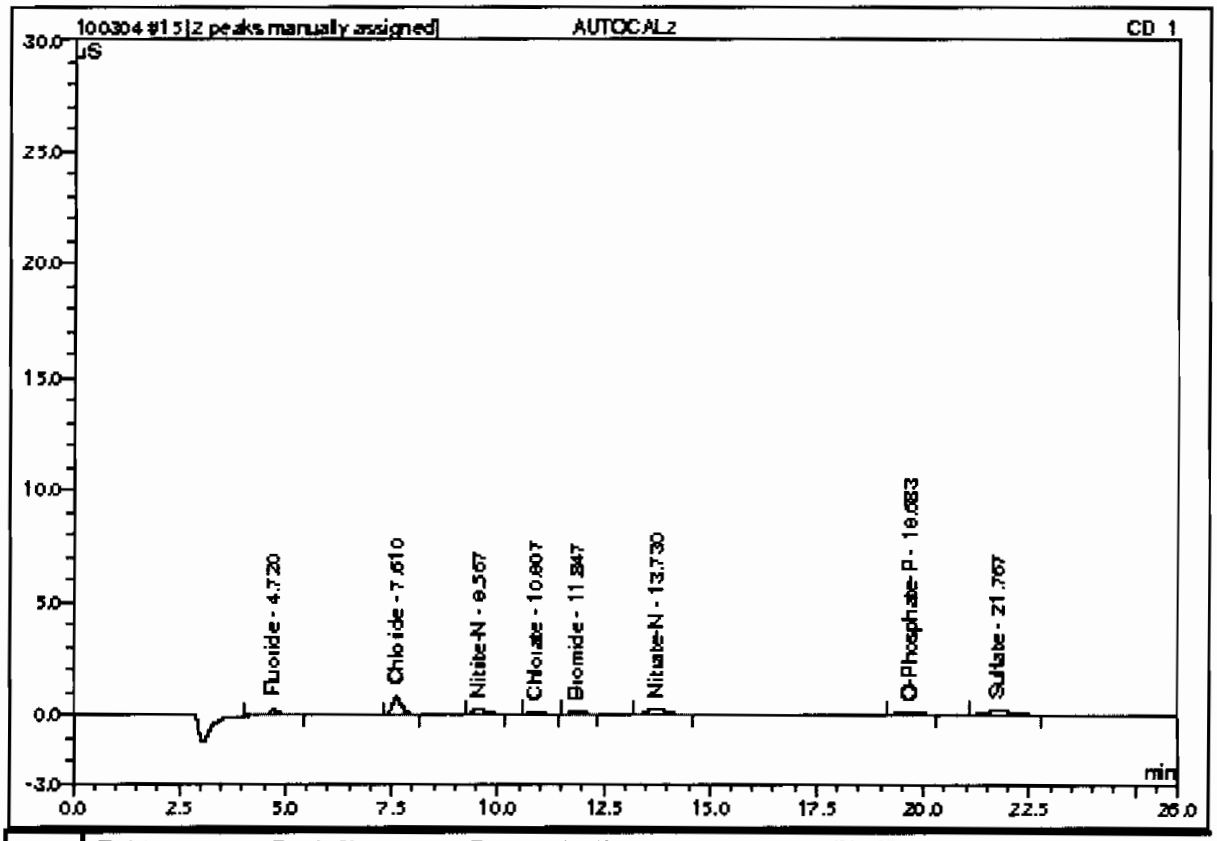
Sample Name:	AUTOCAL2	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 16:34	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.72	Fluoride	0.1000	0.1654		0.06456	10.19
2	7.61	Chloride	0.2000	0.4597		0.18356	28.97
3	9.57	Nitrite-N	0.1000	0.1521		0.07789	12.29
4	10.91	Chlorate	0.2000	0.2355		0.02800	4.42
5	11.85	Bromide	0.2000	0.2220		0.03177	5.01
6	13.73	Nitrate-N	0.1000	0.1867		0.10276	16.22
7	19.68	O-Phosphate-P	0.2000	0.1748		0.02392	3.78
8	21.77	Sulfate	0.4000	0.6623		0.12115	19.12
Total:				2.2585	0.000	0.634	100.00

15 AUTOCAL2

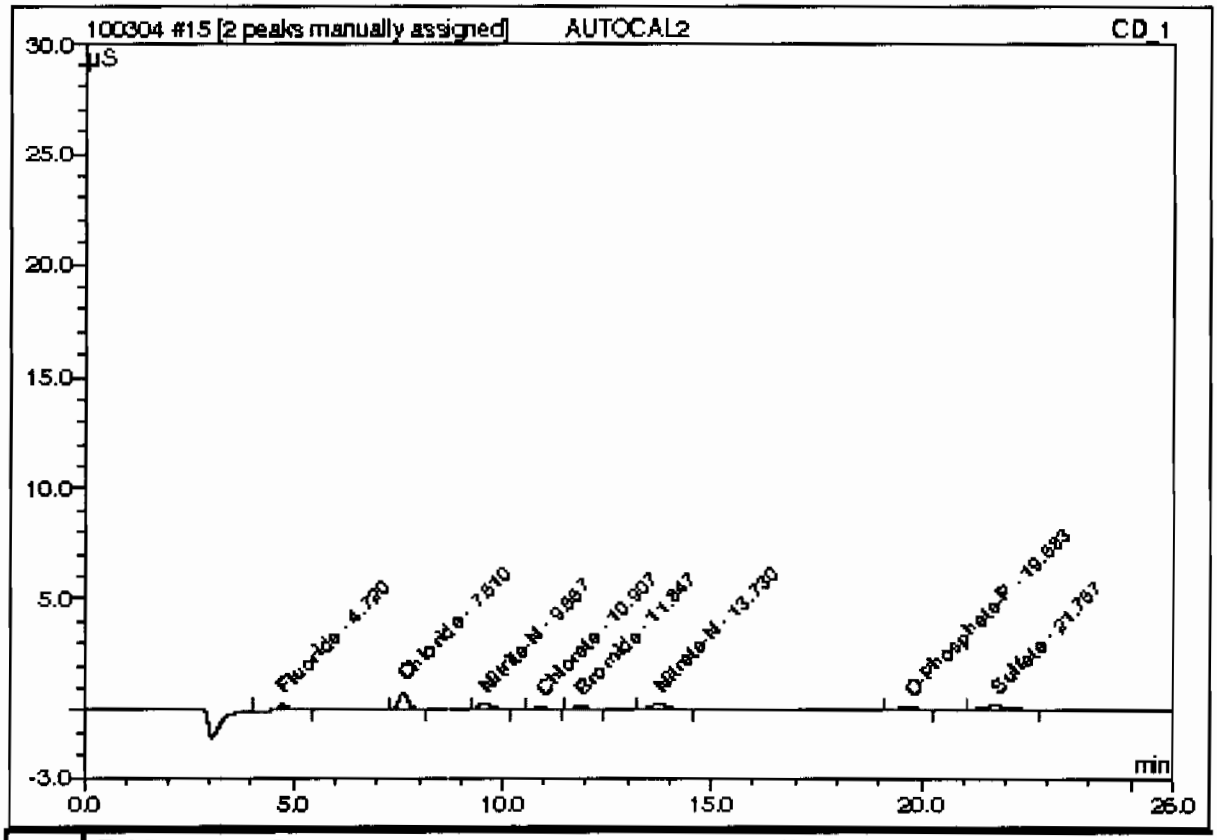
Sample Name:	AUTOCAL2	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 16:34	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.72	Fluoride	0.1000	0.1654		0.06456	10.19
2	7.61	Chloride	0.2000	0.4597		0.18356	28.97
3	9.57	Nitrite-N	0.1000	0.1521		0.07789	12.29
4	10.91	Chlorate	0.2000	0.2355		0.02800	4.42
5	11.85	Bromide	0.2000	0.2220		0.03177	5.01
6	13.73	Nitrate-N	0.1000	0.1867		0.10276	16.22
7	19.68	O-Phosphate-P	0.2000	0.1748		0.02392	3.78
8	21.77	Sulfate	0.4000	0.6623		0.12115	19.12
Total:				2.2585	0.000	0.634	100.00

15 AUTOCAL2

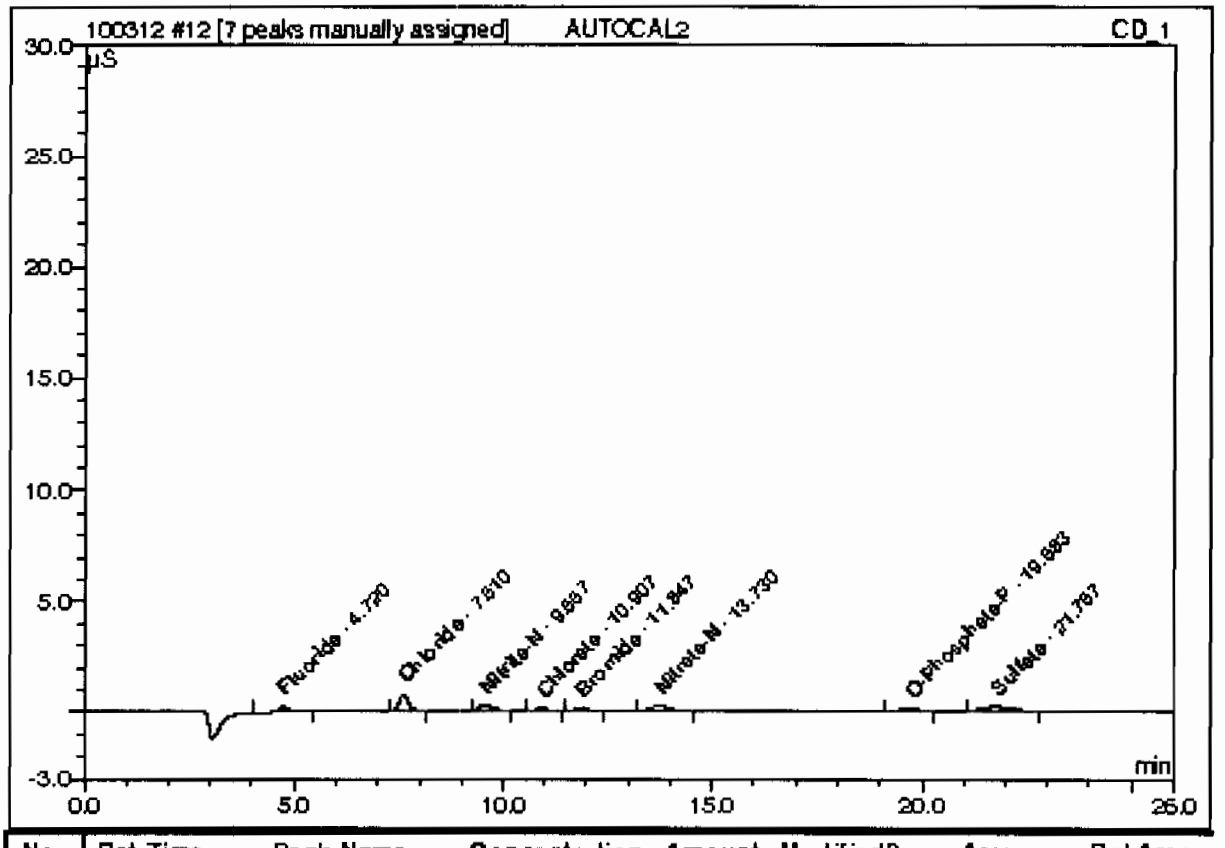
Sample Name:	AUTOCAL2	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 16:34	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.72	Fluoride	0.1000	0.1654		0.06456	10.19
2	7.61	Chloride	0.2000	0.4597		0.18356	28.97
3	9.57	Nitrite-N	0.1000	0.1521		0.07789	12.29
4	10.91	Chlorate	0.2000	0.2355		0.02800	4.42
5	11.85	Bromide	0.2000	0.2220		0.03177	5.01
6	13.73	Nitrate-N	0.1000	0.1867		0.10276	16.22
7	19.68	O-Phosphate-P	0.2000	0.1748		0.02392	3.78
8	21.77	Sulfate	0.4000	0.6623		0.12115	19.12
Total:				2.2585	0.000	0.634	100.00

12 AUTOCAL2

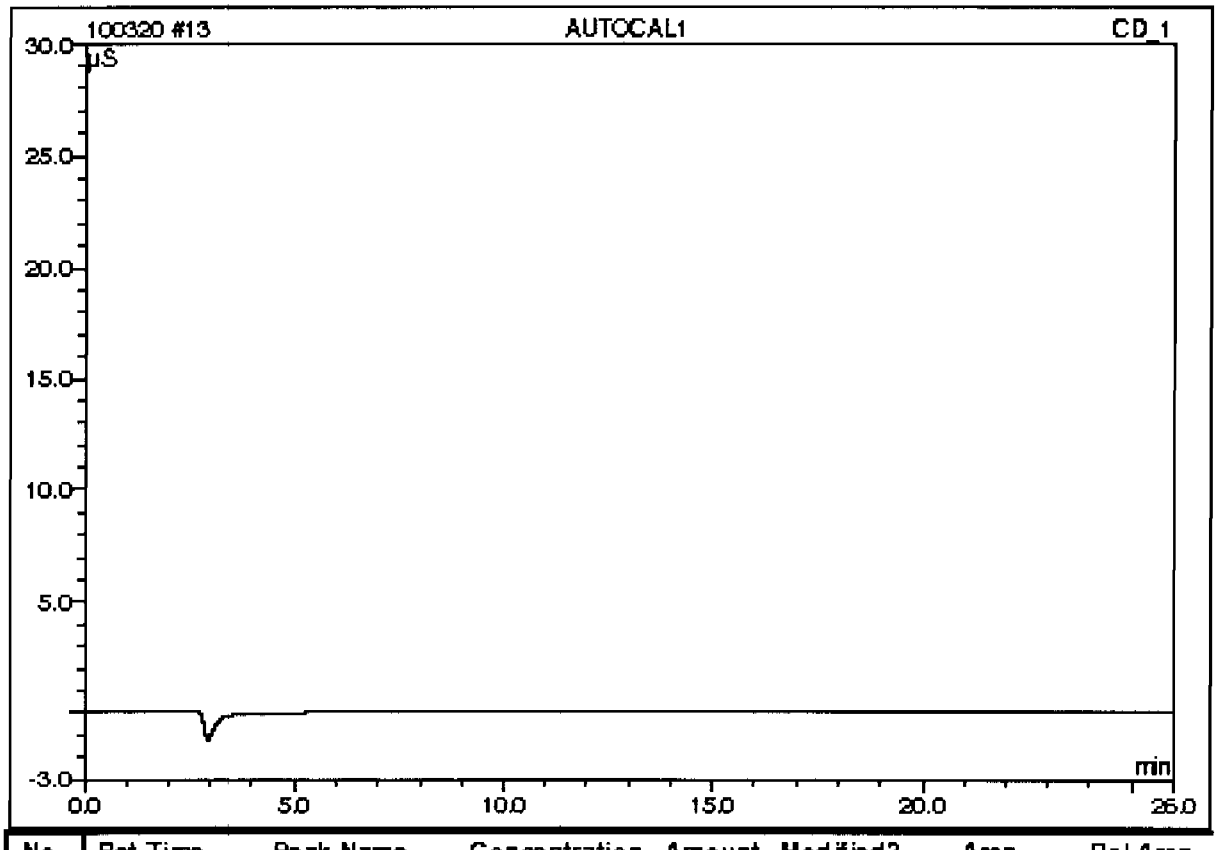
Sample Name:	AUTOCAL2	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 16:34	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.72	Fluoride	0.1000	0.1654		0.06456	10.19
2	7.61	Chloride	0.2000	0.4597		0.18356	28.97
3	9.57	Nitrite-N	0.1000	0.1521		0.07789	12.29
4	10.91	Chlorate	0.2000	0.2355		0.02800	4.42
5	11.85	Bromide	0.2000	0.2220		0.03177	5.01
6	13.73	Nitrate-N	0.1000	0.1867		0.10276	16.22
7	19.68	O-Phosphate-P	0.2000	0.1748		0.02392	3.78
8	21.77	Sulfate	0.4000	0.6623		0.12115	19.12
Total:				2.2585	0.000	0.634	100.00

13 AUTOCAL1

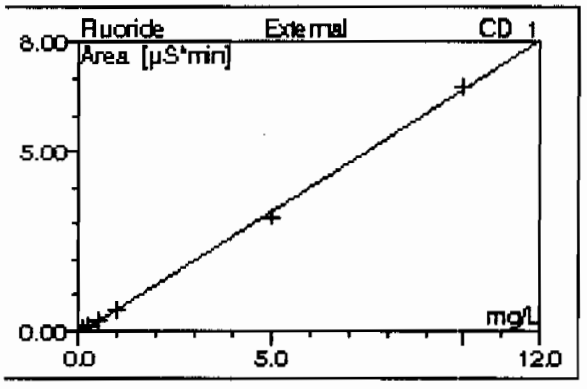
Sample Name:	AUTOCAL1	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 17:00	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

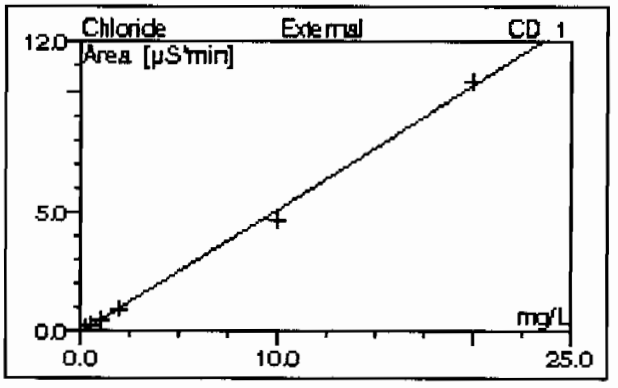


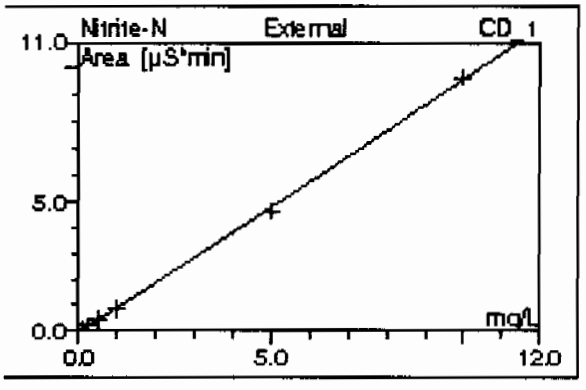
No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	0.0000	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

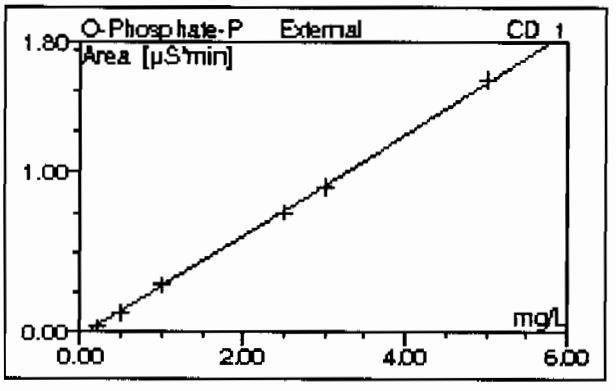
13 AUTOCAL1

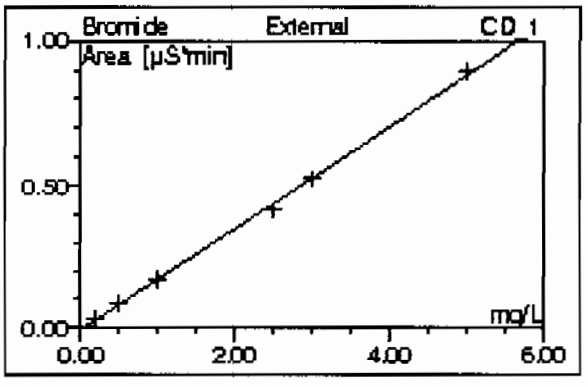
Sample Name:	AUTOCAL1	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 17:00	*Analyst:*	VH1
Run Time (min):	26.00	Column:	AS23-002588; GL GC B086;300;9056

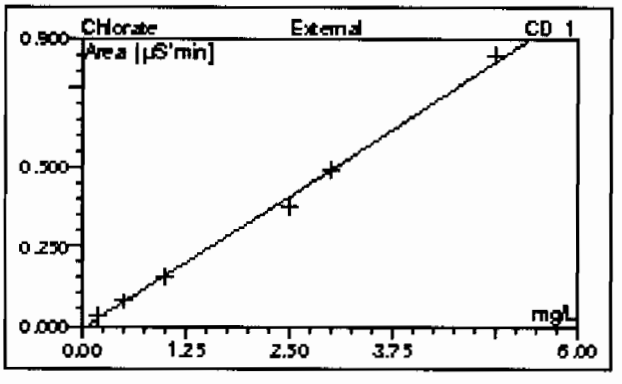


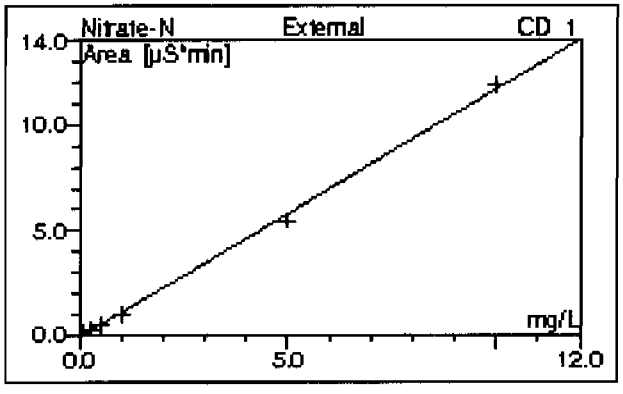


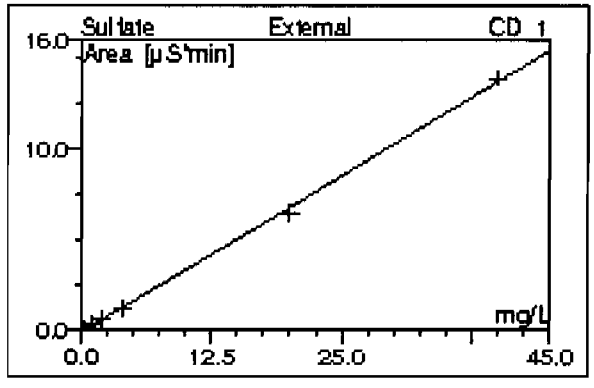








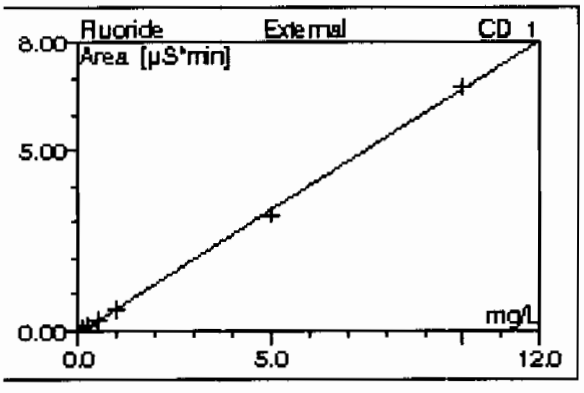


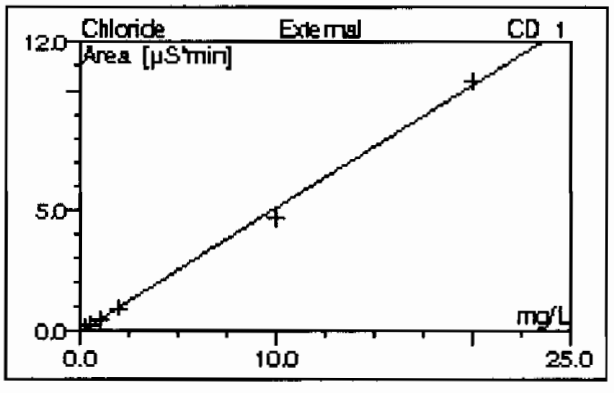


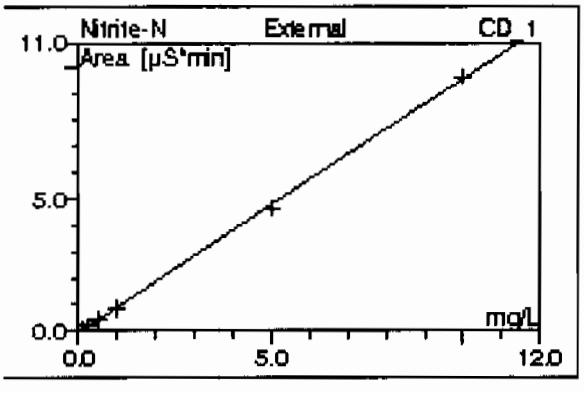
No. CD_1	Ret.Time CD_1 min	Peak Name CD_1	Cal.Type CD_1	Coeff.Det. CD_1 %	Offset CD_1	Slope CD_1	Curve CD_1
n.a.	n.a.	Fluoride	OLOff	99.9227	-0.0473	0.6766	0.0000
n.a.	n.a.	Chloride	OLOff	99.7042	-0.0519	0.5122	0.0000
n.a.	n.a.	Nitrite-N	OLOff	99.9562	-0.0694	0.9682	0.0000
n.a.	n.a.	Chlorate	OLOff	99.7341	-0.0116	0.1683	0.0000
n.a.	n.a.	Bromide	OLOff	99.8472	-0.0078	0.1782	0.0000
n.a.	n.a.	Nitrate-N	OLOff	99.8383	-0.1179	1.1818	0.0000
n.a.	n.a.	O-Phosphate-P	OLOff	99.9487	-0.0314	0.3166	0.0000
n.a.	n.a.	Sulfate	OLOff	99.9034	-0.1083	0.3464	0.0000
Average:				99.8569	-0.0557	0.5435	0.0000

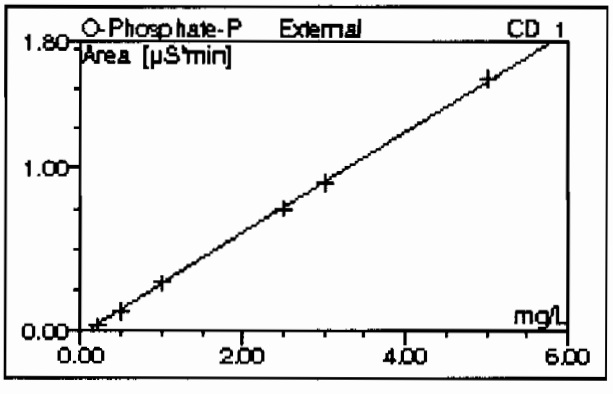
13 AUTOCAL1

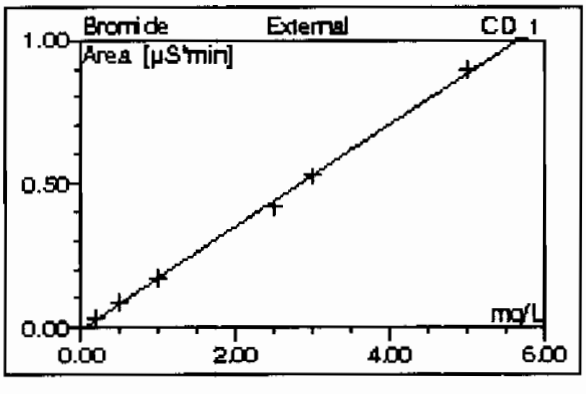
Sample Name:	AUTOCAL1	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 17:00	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588; GL GCE086;300;9056

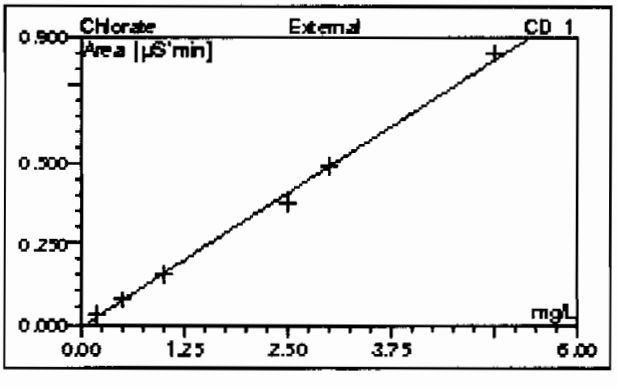


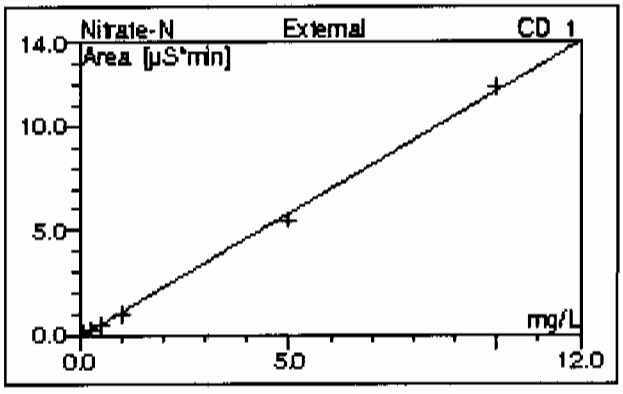


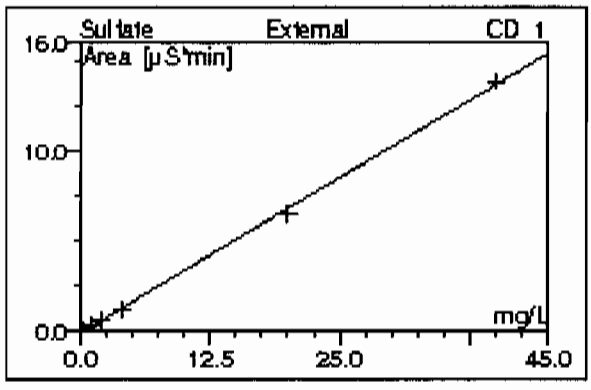








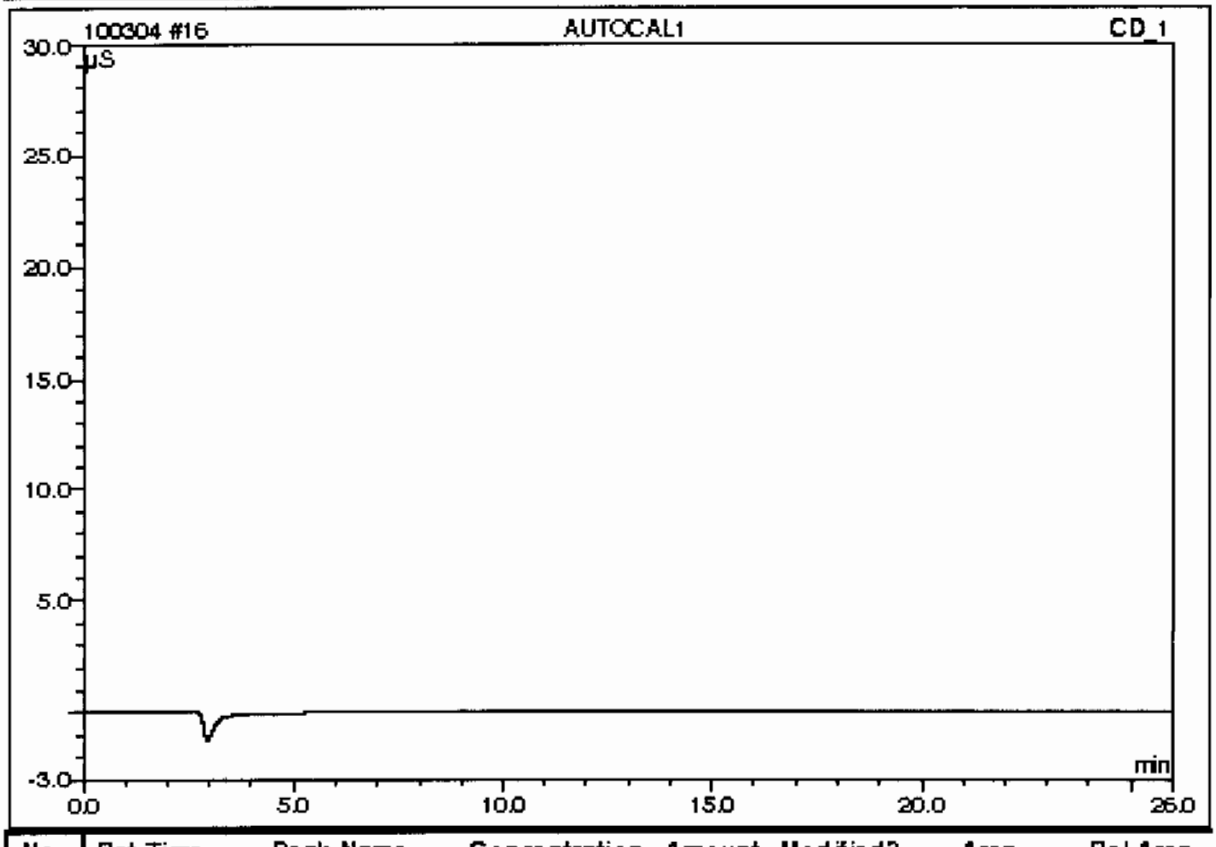




No. CD_1	Ret.Time CD_1 min	Peak Name CD_1	Cal.Type CD_1	Coeff.Det. CD_1 %	Offset CD_1	Slope CD_1	Curve CD_1
n.a.	n.a.	Fluoride	OLOff	99.9227	-0.0473	0.6766	0.0000
n.a.	n.a.	Chloride	OLOff	99.7042	-0.0519	0.5122	0.0000
n.a.	n.a.	Nitrite-N	OLOff	99.9562	-0.0694	0.9682	0.0000
n.a.	n.a.	Chlorate	OLOff	99.7341	-0.0116	0.1683	0.0000
n.a.	n.a.	Bromide	OLOff	99.8472	-0.0078	0.1782	0.0000
n.a.	n.a.	Nitrate-N	OLOff	99.8383	-0.1179	1.1818	0.0000
n.a.	n.a.	O-Phosphate-P	OLOff	99.9487	-0.0314	0.3166	0.0000
n.a.	n.a.	Sulfate	OLOff	99.9034	-0.1083	0.3464	0.0000
Average:				99.8569	-0.0557	0.5435	0.0000

16 AUTOCAL1

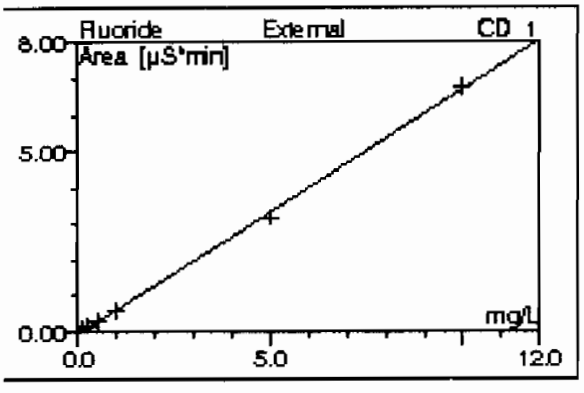
Sample Name:	AUTOCAL1	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 17:00	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

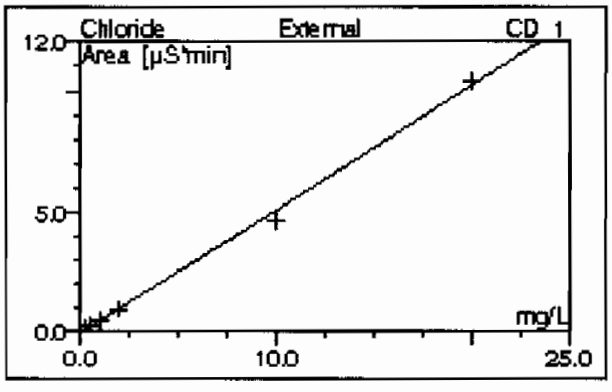


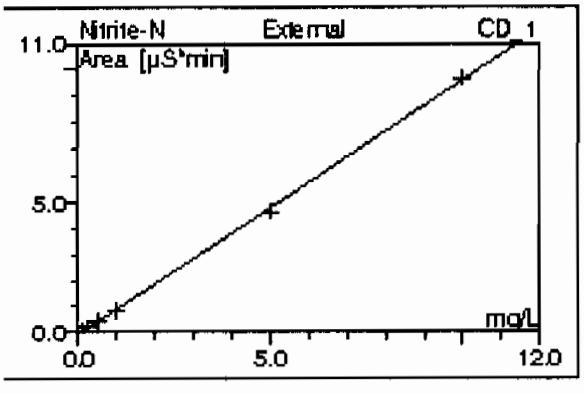
No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.0000	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

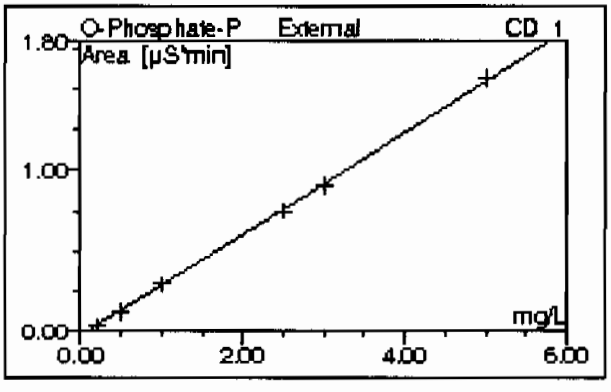
16 AUTOCAL1

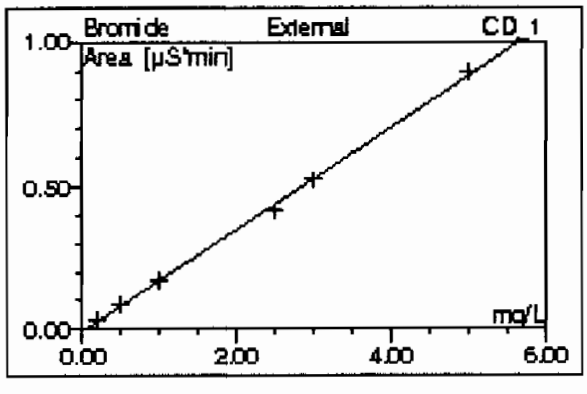
Sample Name:	AUTOCAL1	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantit. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 17:00	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588; GLGCE086;300;9056

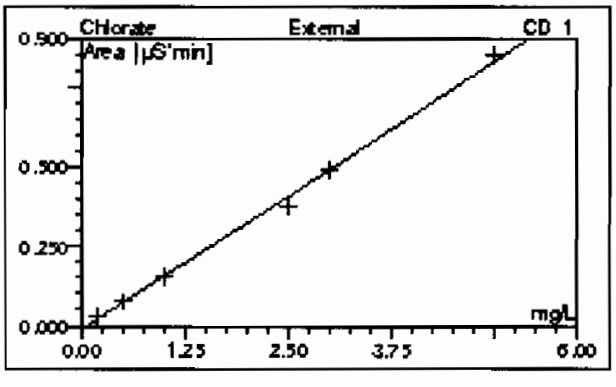


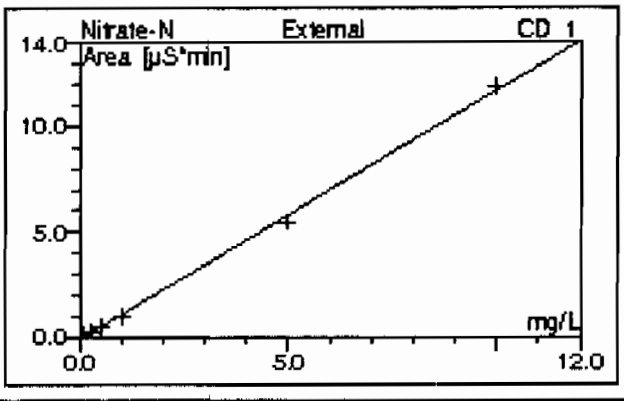


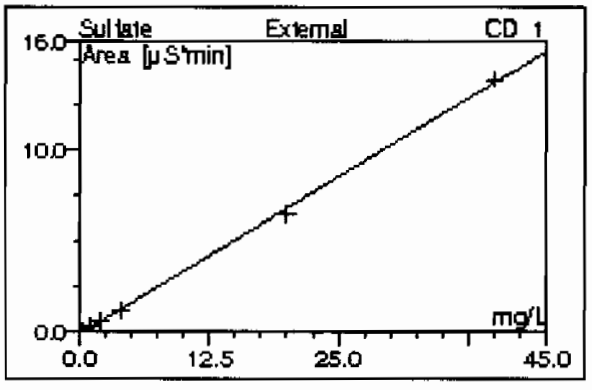








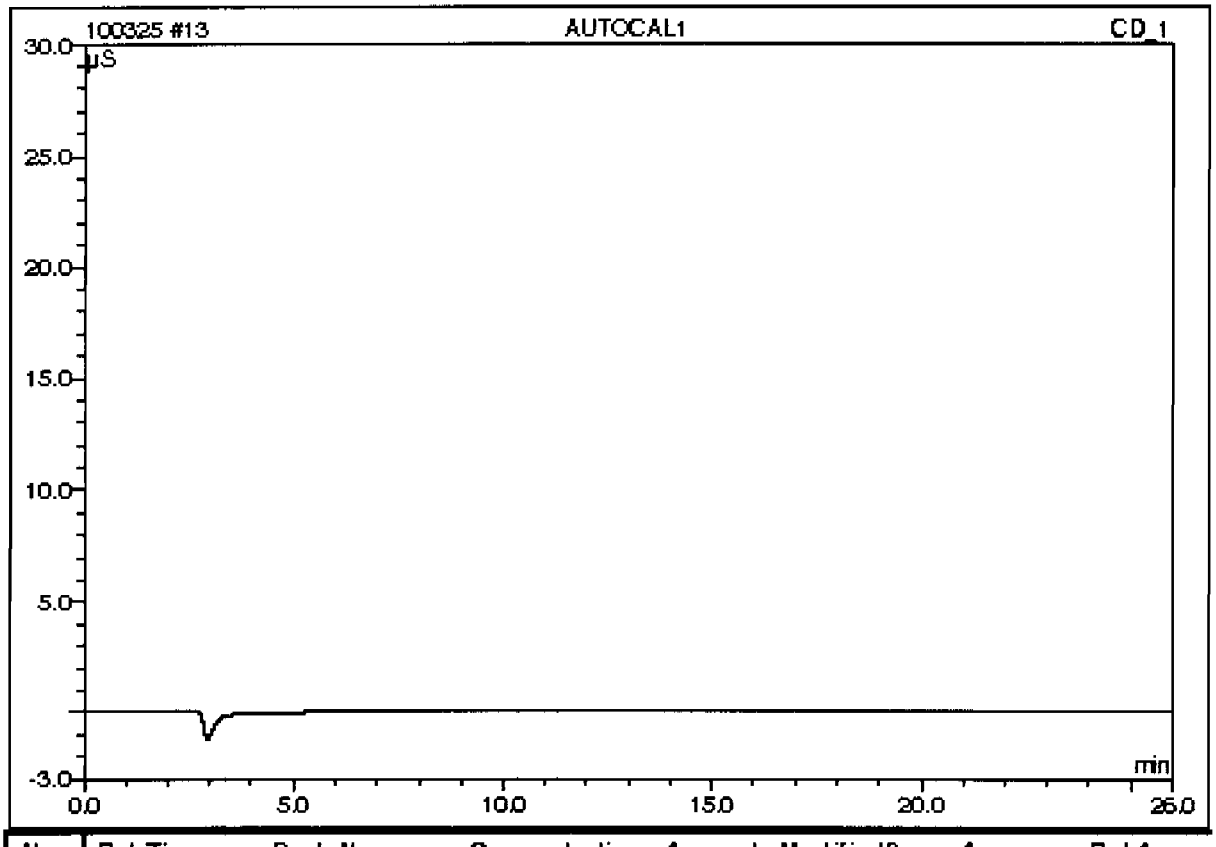




No. CD_1	Ret.Time CD_1 min	Peak Name CD_1	Cal.Type CD_1	Coeff.Det. CD_1 %	Offset CD_1	Slope CD_1	Curve CD_1
n.a.	n.a.	Fluoride	0LOtl	99.9227	-0.0473	0.6766	0.0000
n.a.	n.a.	Chloride	0LOtl	99.7042	-0.0519	0.5122	0.0000
n.a.	n.a.	Nitrite-N	0LOtl	99.9562	-0.0694	0.9682	0.0000
n.a.	n.a.	Chlorate	0LOtl	99.7341	-0.0116	0.1683	0.0000
n.a.	n.a.	Bromide	0LOtl	99.8472	-0.0078	0.1782	0.0000
n.a.	n.a.	Nitrate-N	0LOtl	99.8383	-0.1179	1.1818	0.0000
n.a.	n.a.	O-Phosphate-P	0LOtl	99.9487	-0.0314	0.3166	0.0000
n.a.	n.a.	Sulfate	0LOtl	99.9034	-0.1083	0.3464	0.0000
Average:				99.8569	-0.0557	0.5435	0.0000

13 AUTOCAL1

Sample Name:	AUTOCAL1	*Injection Volume:*	50.0
Vial Number:	54	*Channel:*	CD_1
Sample Type:	standard	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 17:00	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



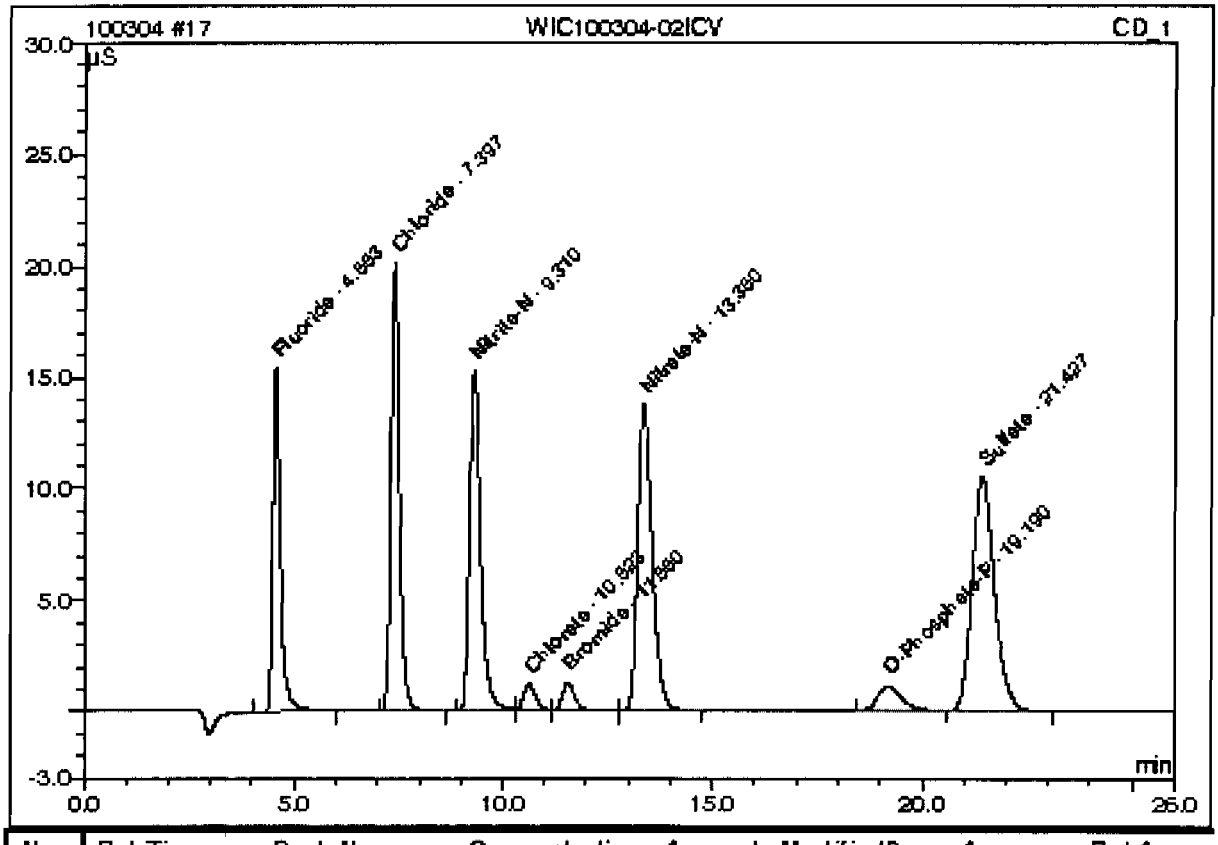
No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	0.0000	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

This is runlog for Sequence 100304.seq for IC5

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	03/04/10 13:05		1	100304	VH1
BLK	03/04/10 13:31		1	100304	VH1
BLK	03/04/10 13:57		1	100304	VH1
ICAL-07	03/04/10 14:23		1	100304	VH1
ICAL-06	03/04/10 14:50		1	100304	VH1
ICAL-05	03/04/10 15:16		1	100304	VH1
ICAL-04	03/04/10 15:42		1	100304	VH1
ICAL-03	03/04/10 16:08		1	100304	VH1
ICAL-02	03/04/10 16:34		1	100304	VH1
ICAL-01	03/04/10 17:00		1	100304	VH1
ICV	03/04/10 17:26		1	100304	VH1
ICB	03/04/10 17:52		1	100304	VH1
1202059074	03/04/10 18:18	960003	1	100304	VH1
1202059078	03/04/10 18:44	960003	1	100304	VH1
248337001	03/04/10 19:10	960003	1	100304	VH1
1202059075	03/04/10 19:37	960003	1	100304	VH1
1202059076	03/04/10 20:03	960003	1	100304	VH1
1202059077	03/04/10 20:29	960003	1	100304	VH1
CVH	03/04/10 20:55		1	100304	VH1
CCB	03/04/10 21:21		1	100304	VH1
248478006	03/04/10 21:47	960447	1	100304	VH1
248478007	03/04/10 22:13	960447	1	100304	VH1
248478008	03/04/10 22:39	960447	1	100304	VH1
248478009	03/04/10 23:05	960447	1	100304	VH1
248478010	03/04/10 23:31	960447	1	100304	VH1
248478011	03/04/10 23:57	960447	1	100304	VH1

17 WIC100304-02ICV

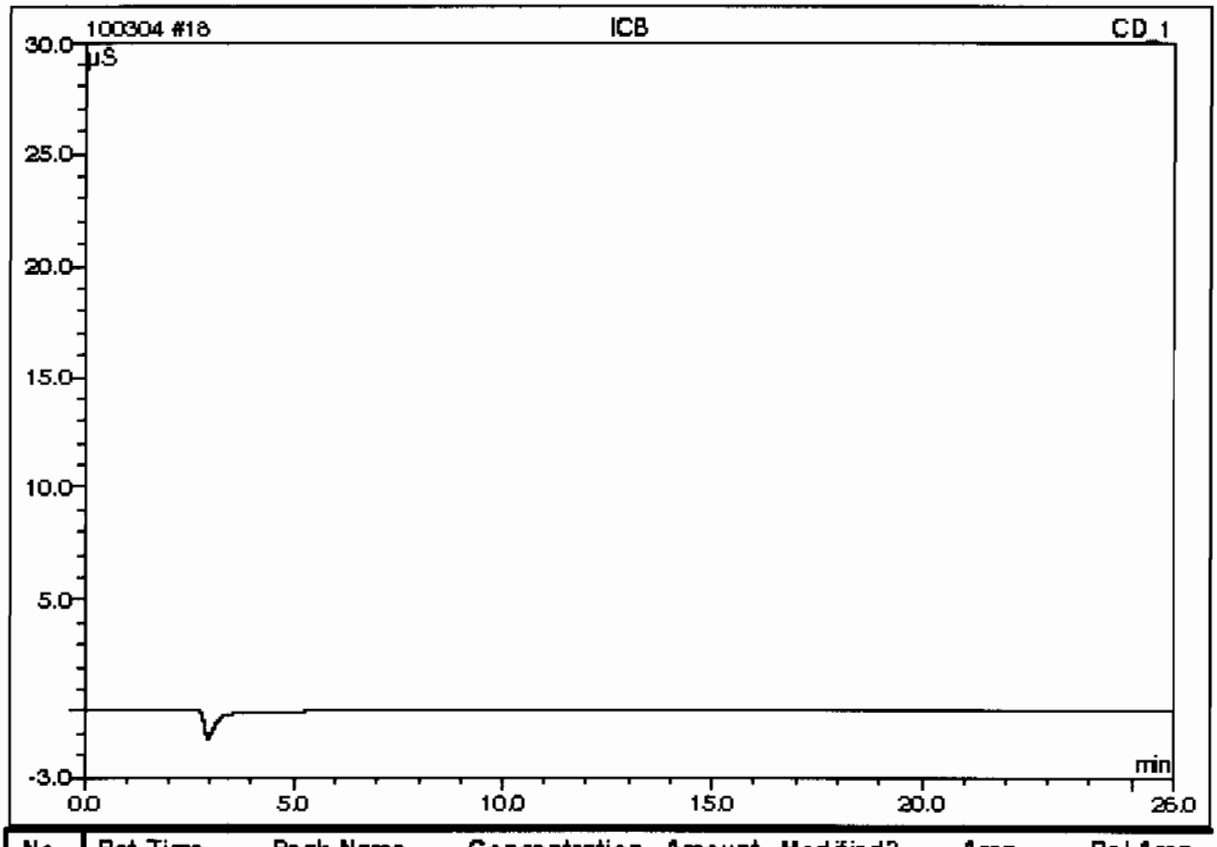
Sample Name:	WIC100304-02ICV	*Injection Volume:*	50.0
Vial Number:	92	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 17:26	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.55	Fluoride	n.a.	4.8322		3.22206	12.29
2	7.40	Chloride	n.a.	9.1730		4.64616	17.72
3	9.31	Nitrite-N	n.a.	4.9007		4.67562	17.83
4	10.62	Chlorate	n.a.	2.5303		0.41419	1.58
5	11.55	Bromide	n.a.	2.5575		0.44789	1.71
6	13.35	Nitrate-N	n.a.	4.7464		5.49149	20.94
7	19.19	O-Phosphate-P	n.a.	2.5093		0.76301	2.91
8	21.43	Sulfate	n.a.	19.2478		6.55943	25.02
Total:				50.4972	0.000	26.220	100.00

18 ICB

Sample Name:	ICB	*Injection Volume:*	50.0
Vial Number:	90	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/4/2010 17:52	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



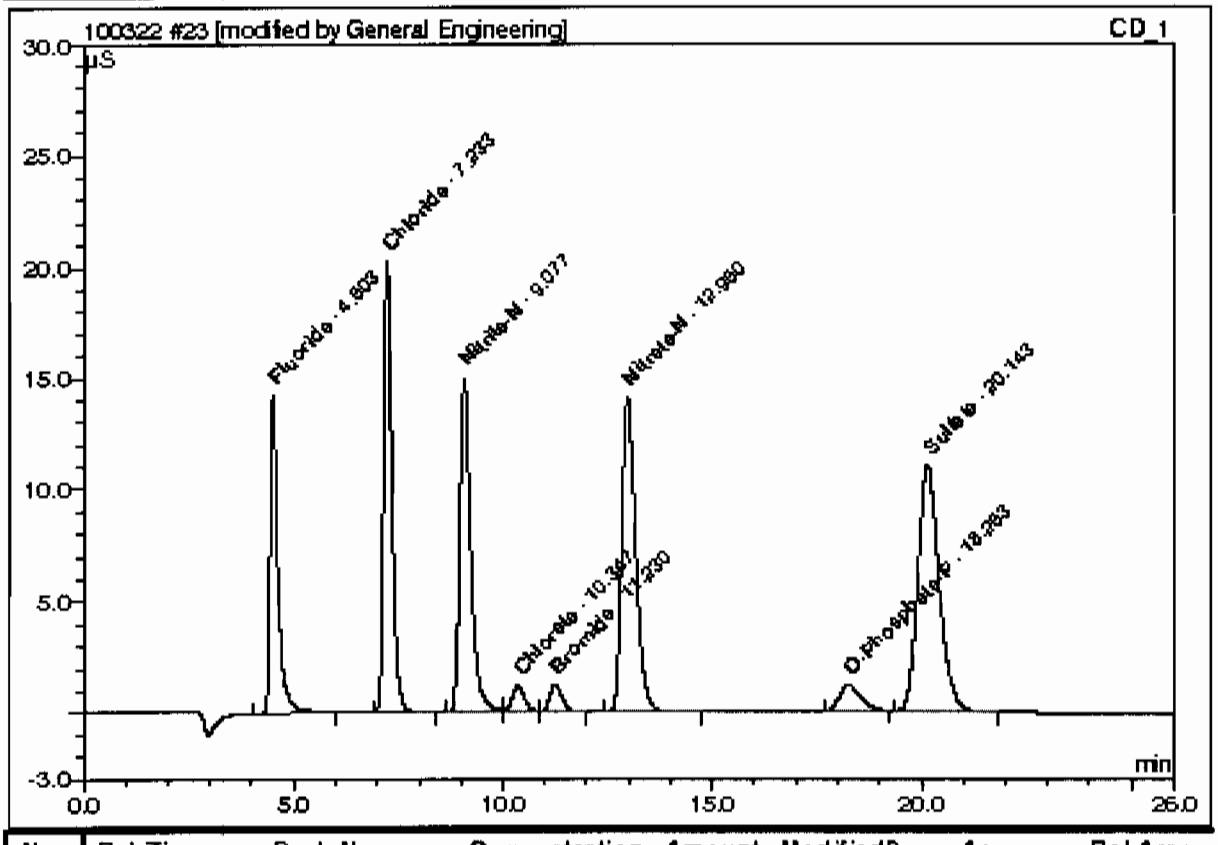
No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	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 100322.seq for IC5

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	03/22/10 13:39		1	100322	VH1
BLK	03/22/10 14:05		1	100322	VH1
ICV	03/22/10 14:31		1	100322	VH1
ICB	03/22/10 14:57		1	100322	VH1
247862001	03/22/10 15:23	964437	2000000	100322	VH1
1202069067	03/22/10 15:49	964437	2000000	100322	VH1
1202069068	03/22/10 16:15	964437	2000000	100322	VH1
CVH	03/22/10 16:41		1	100322	VH1
CCB	03/22/10 17:07		1	100322	VH1
248097006	03/22/10 17:34	964919	1	100322	VH1
1202077366	03/22/10 18:00	964919	1	100322	VH1
1202077367	03/22/10 18:26	964919	1	100322	VH1
CCV	03/22/10 18:52		1	100322	VH1
CCB	03/22/10 19:18		1	100322	VH1
248044001	03/22/10 19:44	966823	5	100322	VH1
CVH	03/22/10 20:10		1	100322	VH1
CCB	03/22/10 20:36		1	100322	VH1
1202075482	03/22/10 21:02	967051	1	100322	VH1
1202075489	03/22/10 21:28	967051	1	100322	VH1
248250001	03/22/10 21:54	967051	1	100322	VH1
1202075483	03/22/10 22:21	967051	1	100322	VH1
1202075485	03/22/10 22:47	967051	1	100322	VH1
1202075487	03/22/10 23:13	967051	1	100322	VH1
248250002	03/22/10 23:39	967051	1	100322	VH1

23 WIC100322-02ICV

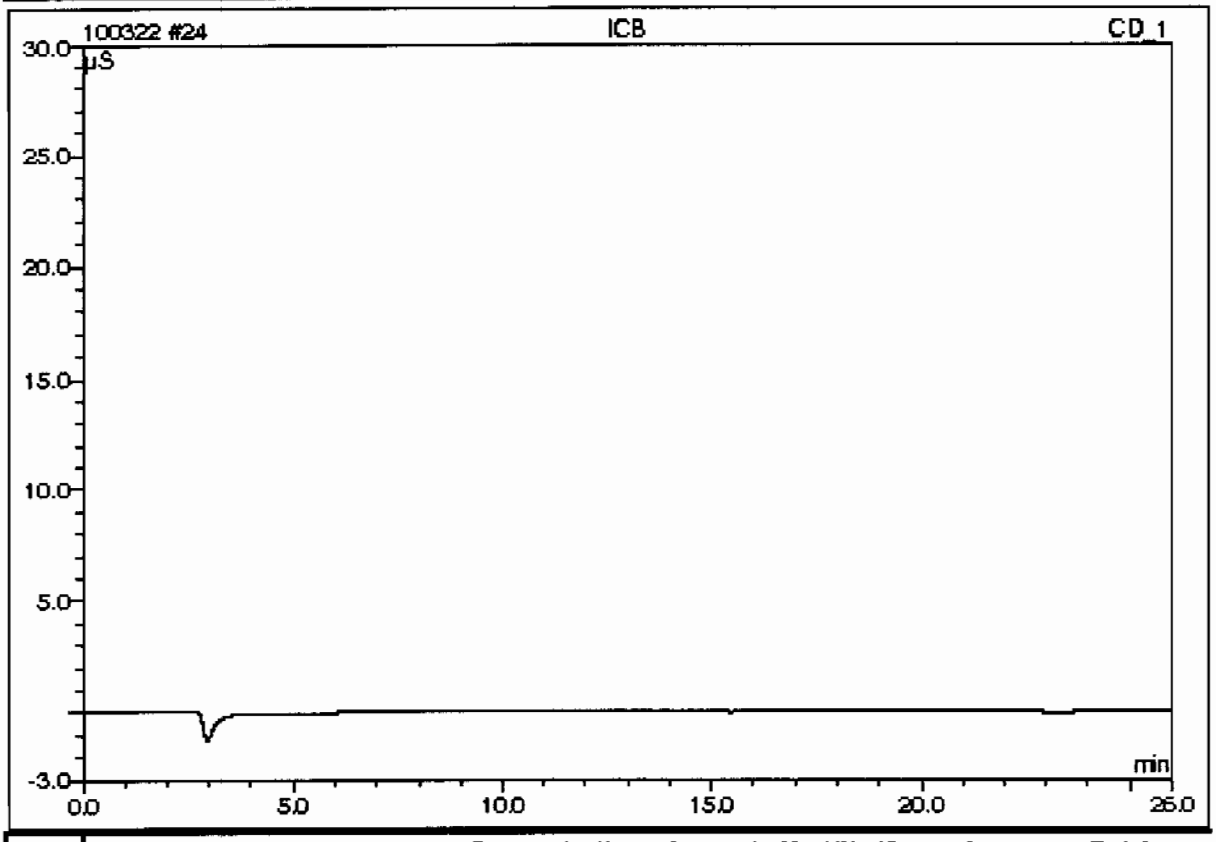
Sample Name:	WIC100322-02ICV	*Injection Volume:*	50.0
Vial Number:	93	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/22/2010 14:31	Analyst:	VH1
Run Time (min):	22.92	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.50	Fluoride	n.a.	4.7008		3.13314	12.09
2	7.23	Chloride	n.a.	9.1357		4.62706	17.86
3	9.08	Nitrite-N	n.a.	4.8029		4.58094	17.68
4	10.35	Chlorate	n.a.	2.4369		0.39847	1.54
5	11.23	Bromide	n.a.	2.4053		0.42078	1.62
6	12.96	Nitrate-N	n.a.	4.7703		5.51966	21.31
7	18.26	O-Phosphate-P	n.a.	2.4055		0.73014	2.82
8	20.14	Sulfate	n.a.	19.0630		6.49540	25.07
Total:				49.7203	0.000	25.906	100.00

24 ICB

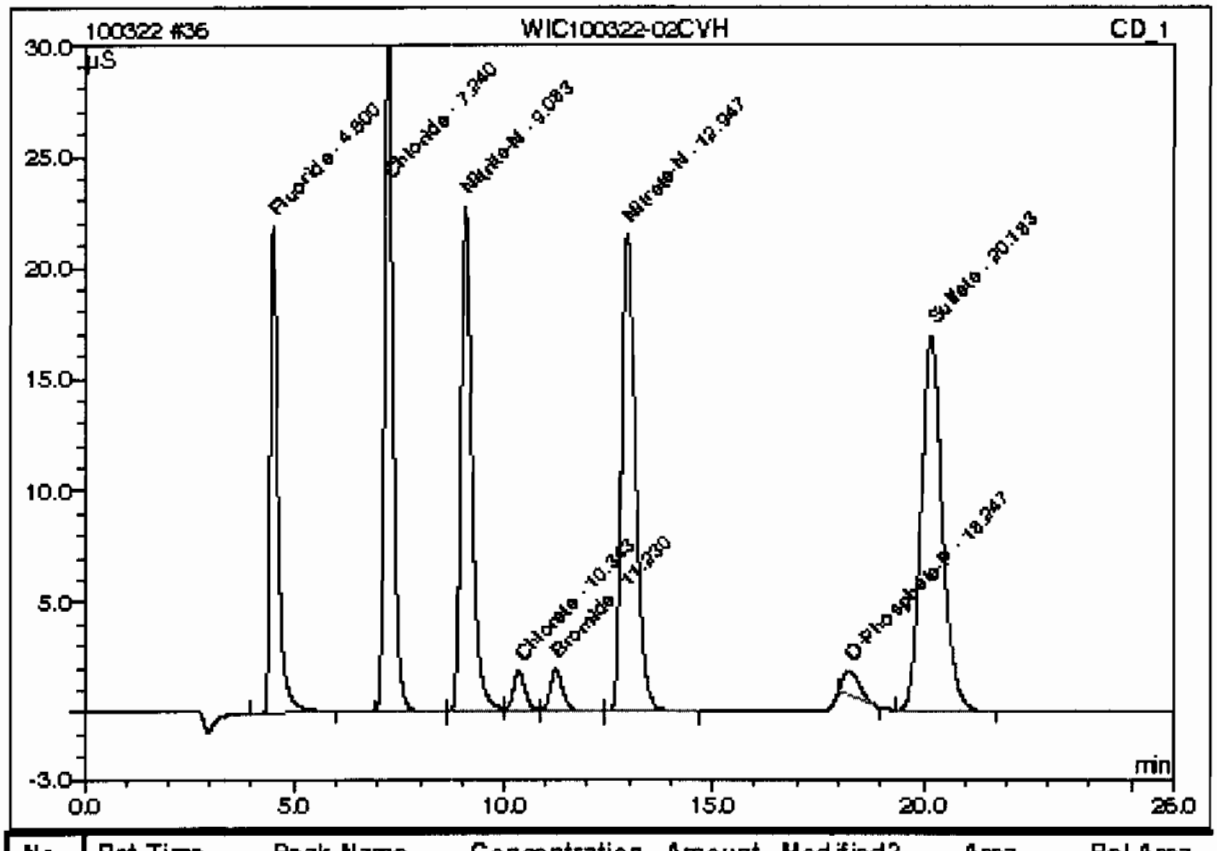
Sample Name:	ICB	*Injection Volume:*	50.0
Vial Number:	90	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/22/2010 14:57	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



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

36 WIC100322-02CVH

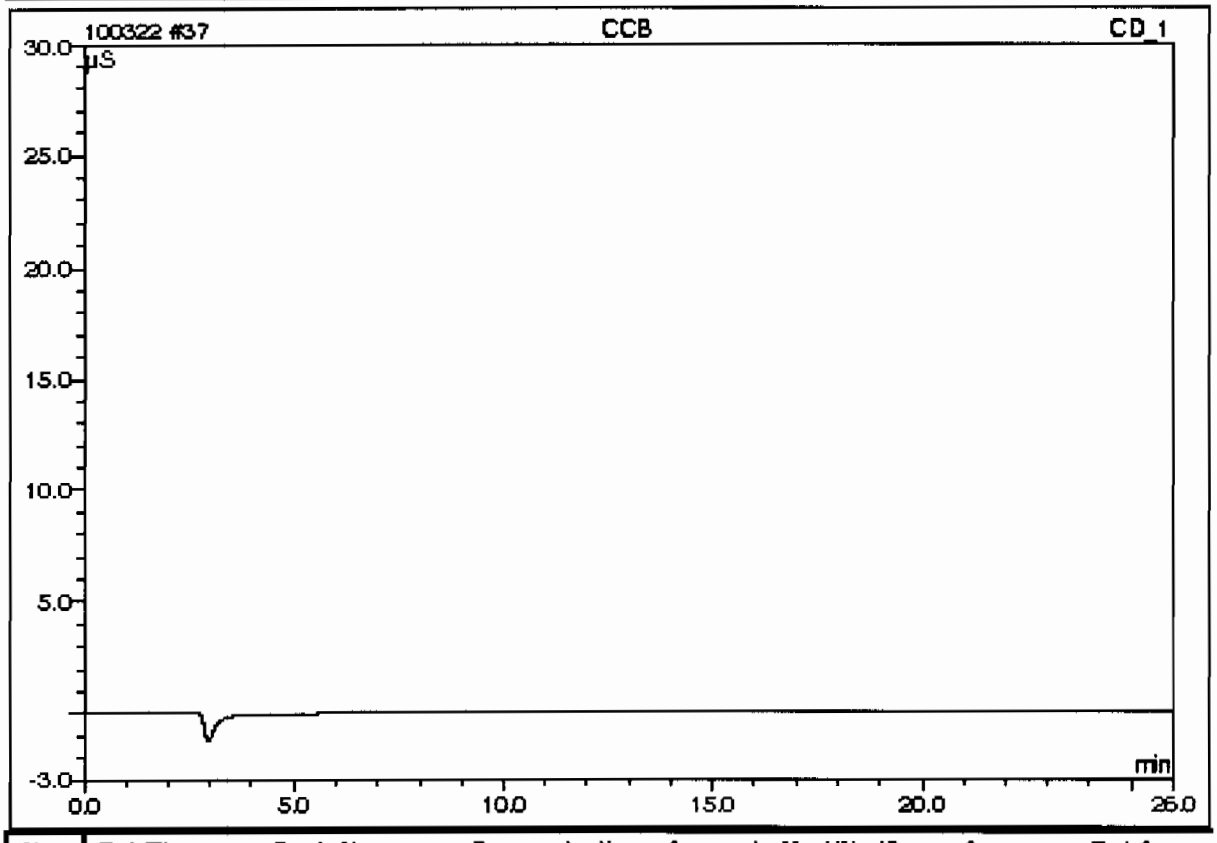
Sample Name:	WIC100322-02CVH	*Injection Volume:*	50.0
Vial Number:	93	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/22/2010 20:10	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.50	Fluoride	n.a.	7.0751		4.73961	12.18
2	7.24	Chloride	n.a.	14.0000		7.11835	18.29
3	9.08	Nitrite-N	n.a.	7.2575		6.95765	17.87
4	10.34	Chlorate	n.a.	3.7633		0.62169	1.60
5	11.23	Bromide	n.a.	3.7577		0.66173	1.70
6	12.95	Nitrate-N	n.a.	7.2466		8.44615	21.70
7	18.25	O-Phosphate-P	n.a.	1.6351		0.48623	1.25
8	20.18	Sulfate	n.a.	28.8842		9.89761	25.42
Total:				73.6195	0.000	38.929	100.00

37 CCB

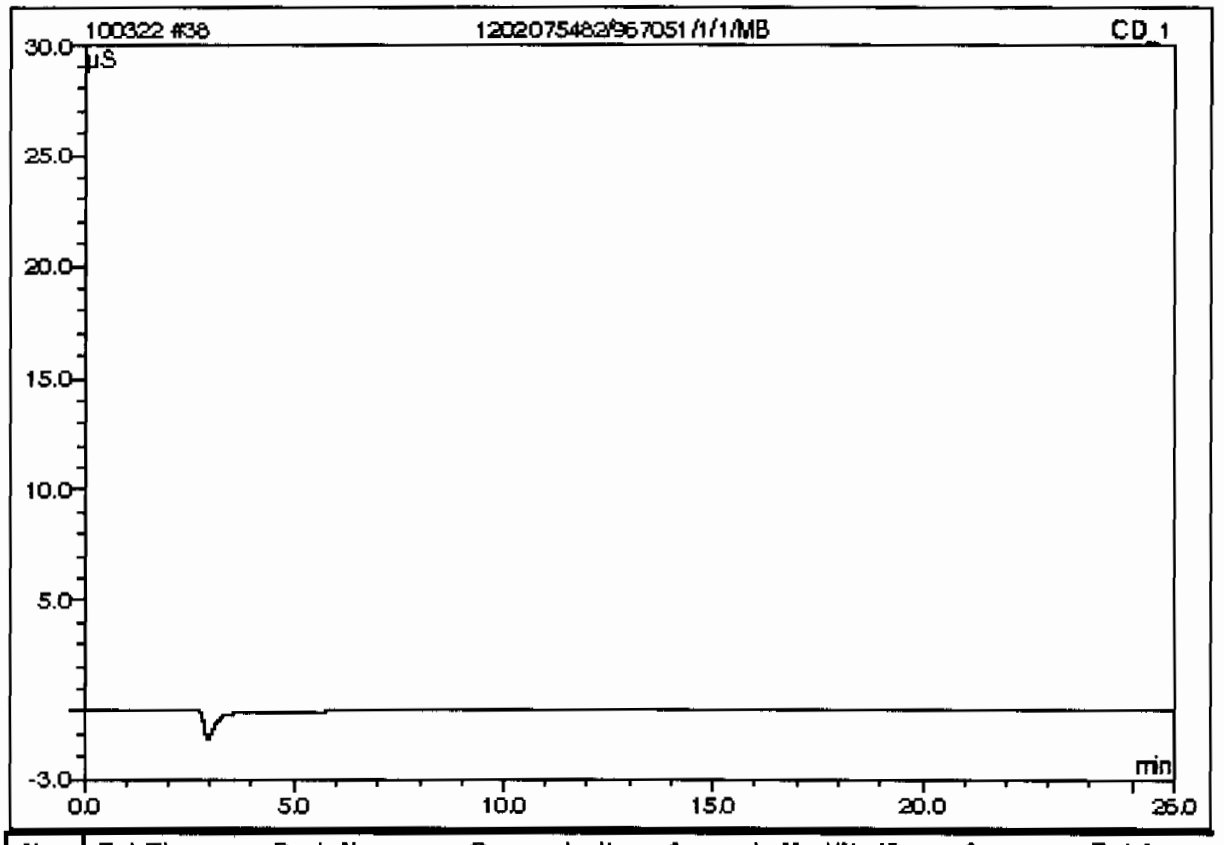
Sample Name:	CCB	*Injection Volume:*	50.0
Vial Number:	94	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/22/2010 20:36	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



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

38 1202075482/967051/1/1/MB

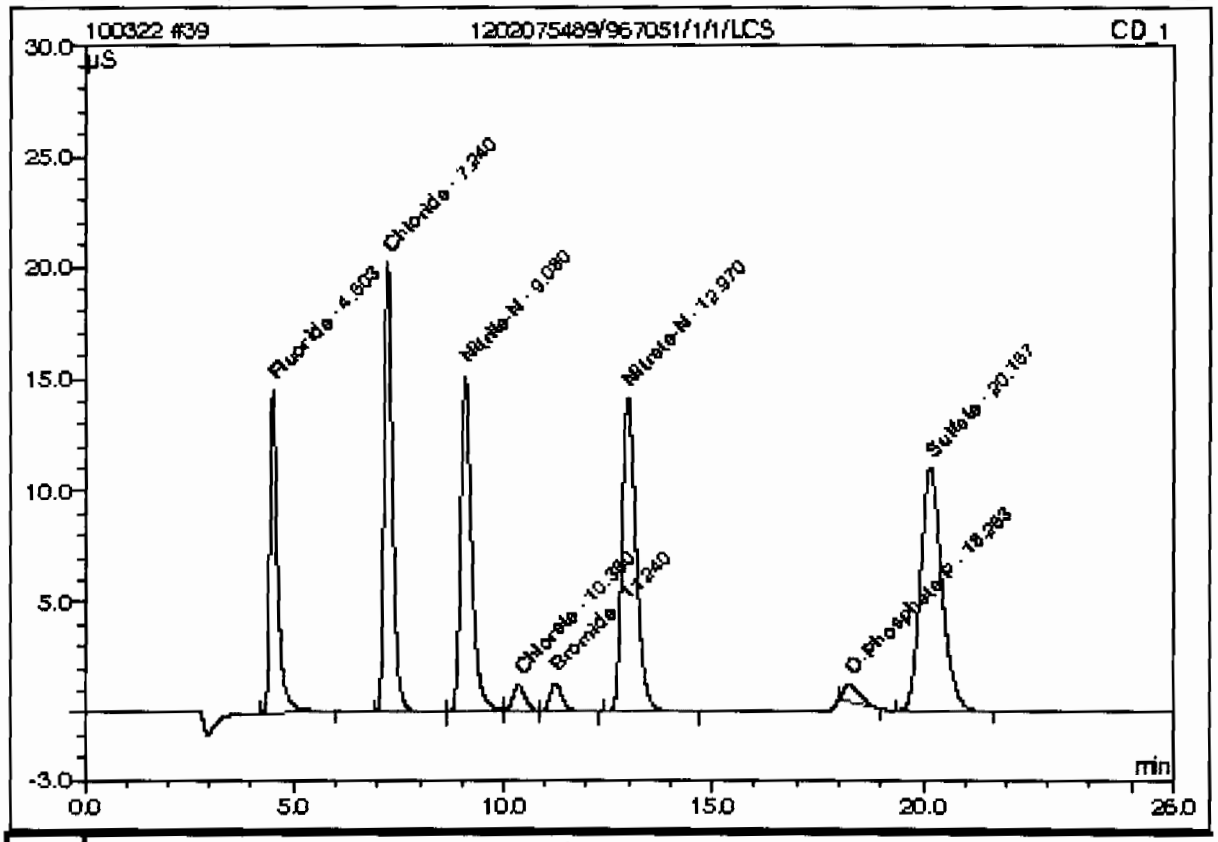
Sample Name:	1202075482/967051/1/1/MB	*Injection Volume:*	50.0
Vial Number:	92	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/22/2010 21:02	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;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

39 1202075489/967051/1/1/LCS

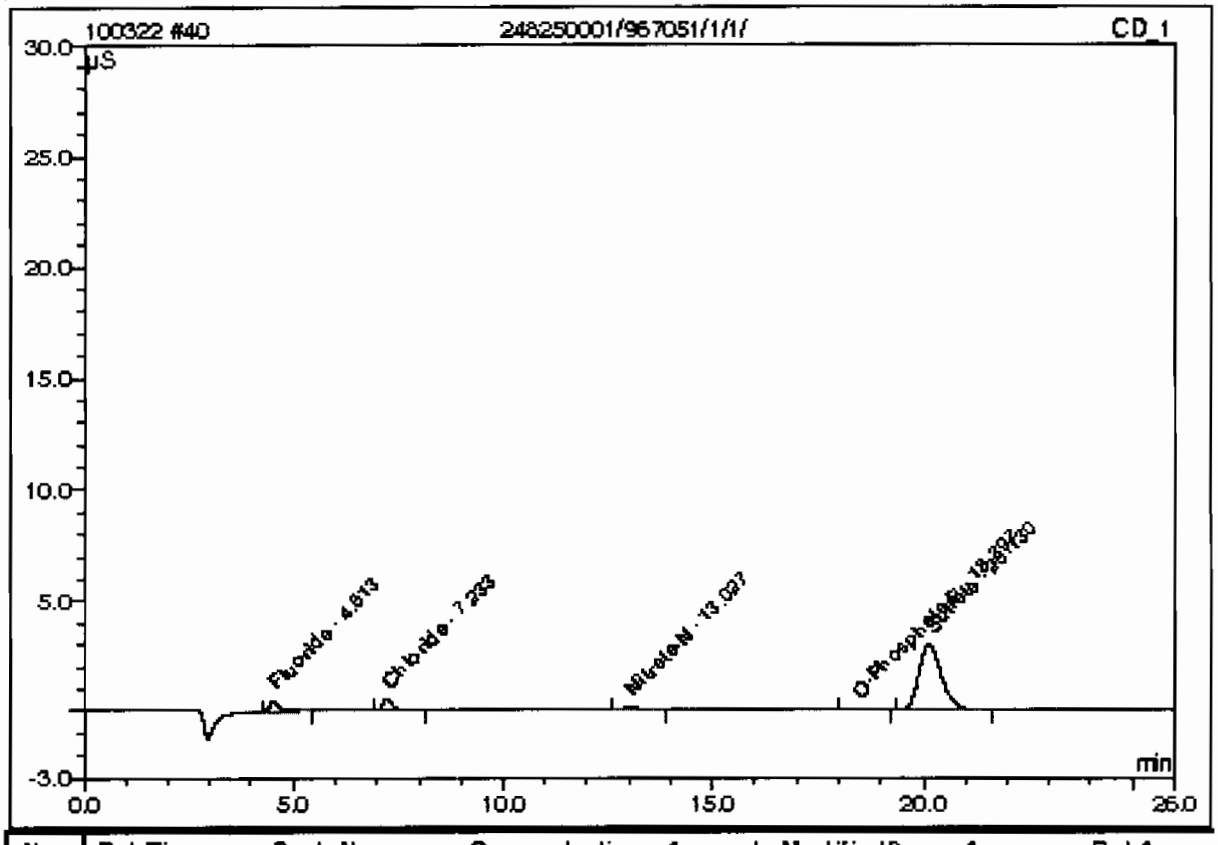
Sample Name:	1202075489/967051/1/1/LCS	*Injection Volume:*	50.0
Vial Number:	93	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/22/2010 21:28	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.50	Fluoride	n.a.	4.7228		3.14806	12.28
2	7.24	Chloride	n.a.	9.1495		4.63415	18.07
3	9.08	Nitrite-N	n.a.	4.8528		4.62933	18.05
4	10.35	Chlorate	n.a.	2.5950		0.42507	1.66
5	11.24	Bromide	n.a.	2.5569		0.44779	1.75
6	12.97	Nitrate-N	n.a.	4.7636		5.51178	21.49
7	18.26	O-Phosphate-P	n.a.	1.1934		0.34640	1.35
8	20.17	Sulfate	n.a.	19.0768		6.50019	25.35
Total:				48.9109	0.000	25.643	100.00

40 248250001/967051/1/1/

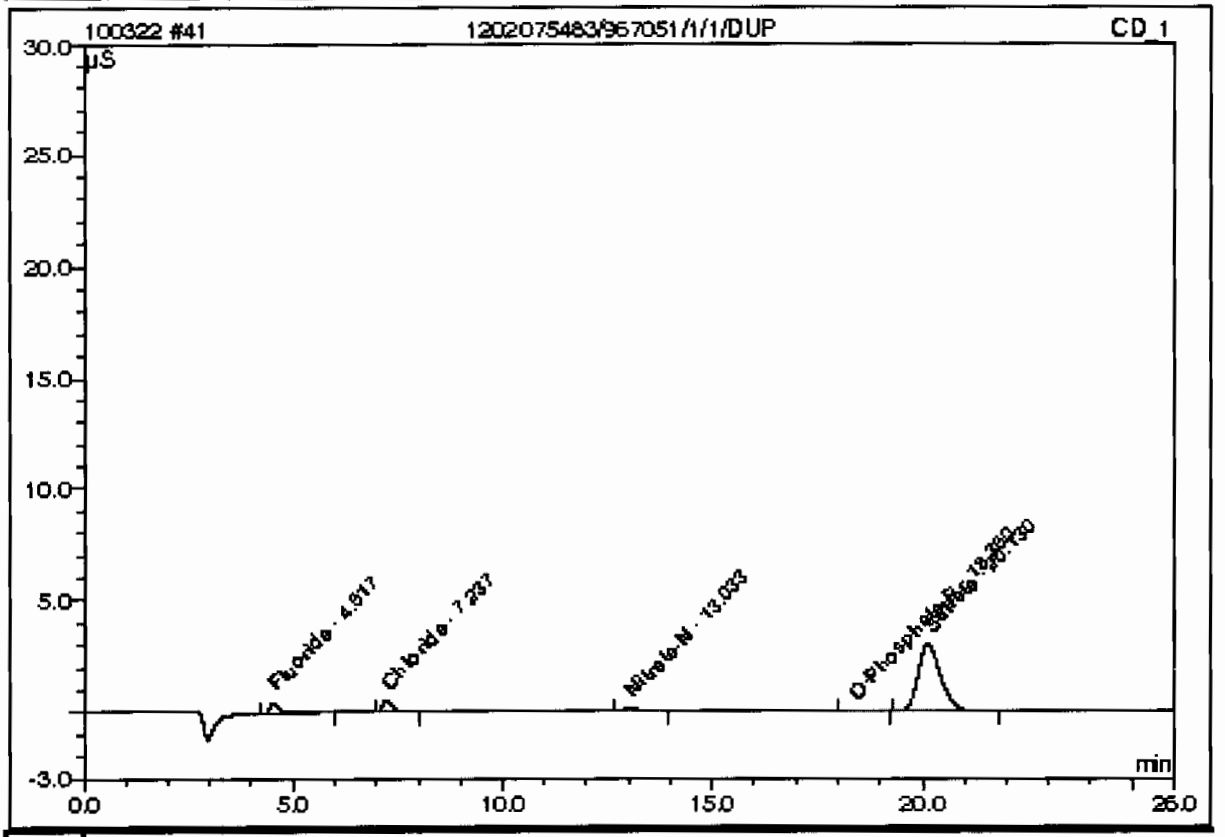
Sample Name:	248250001/967051/1/1/	*Injection Volume:*	50.0
Vial Number:	94	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/22/2010 21:54	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.51	Fluoride	n.a.	0.2585		0.12754	5.76
2	7.23	Chloride	n.a.	0.3786		0.14204	6.41
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	13.03	Nitrate-N	n.a.	0.1514		0.06100	2.75
4	18.40	O-Phosphate-P	n.a.	0.1914		0.02918	1.32
5	20.13	Sulfate	n.a.	5.6709		1.85620	83.77
Total:				6.6508	0.000	2.216	100.00

41 1202075483/967051/1/1/DUP

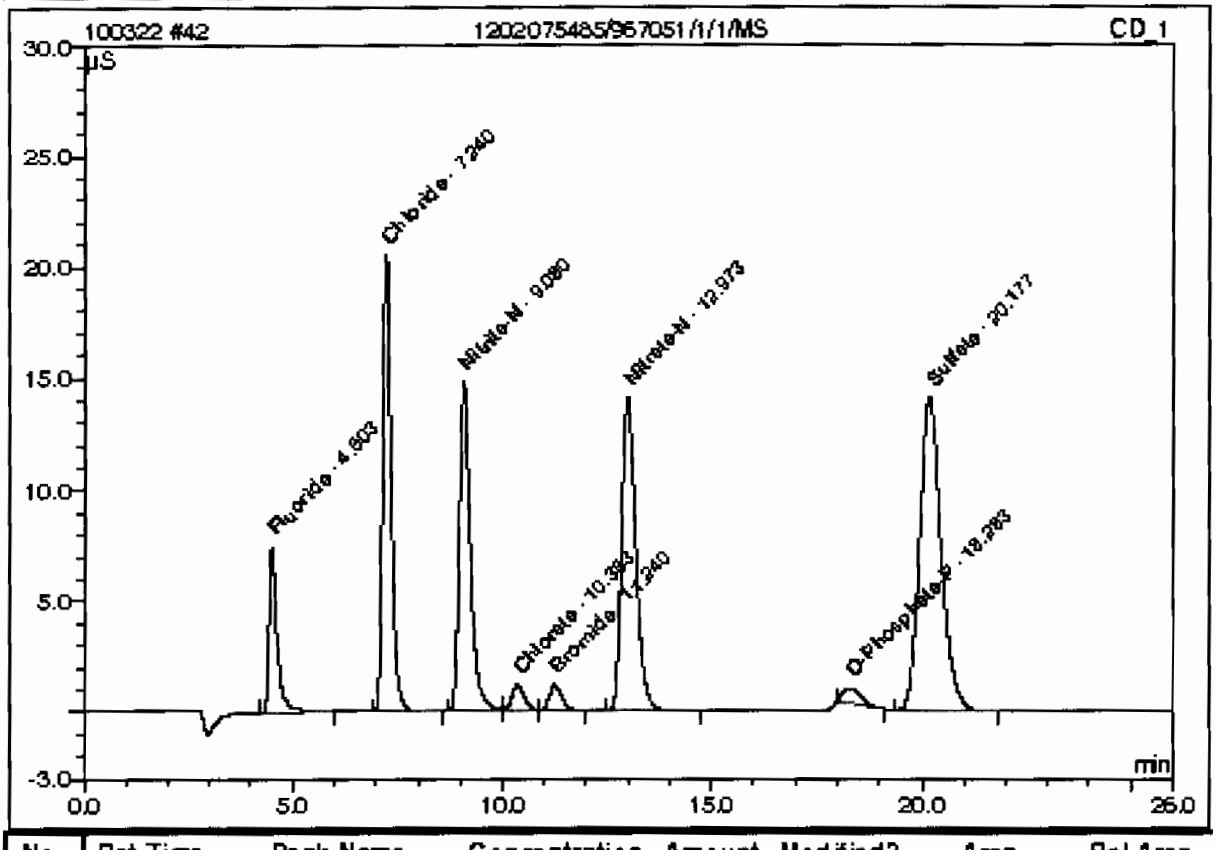
Sample Name:	1202075483/967051/1/1/DUP	*Injection Volume:*	50.0
Vial Number:	95	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/22/2010 22:21	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.52	Fluoride	n.a.	0.2786		0.14113	6.34
2	7.24	Chloride	n.a.	0.3731		0.13923	6.26
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	13.03	Nitrate-N	n.a.	0.1488		0.05795	2.61
4	18.35	O-Phosphate-P	n.a.	0.1849		0.02714	1.22
5	20.13	Sulfate	n.a.	5.6792		1.85905	83.57
Total:				6.6646	0.000	2.225	100.00

42 1202075485/967051/1/1/MS

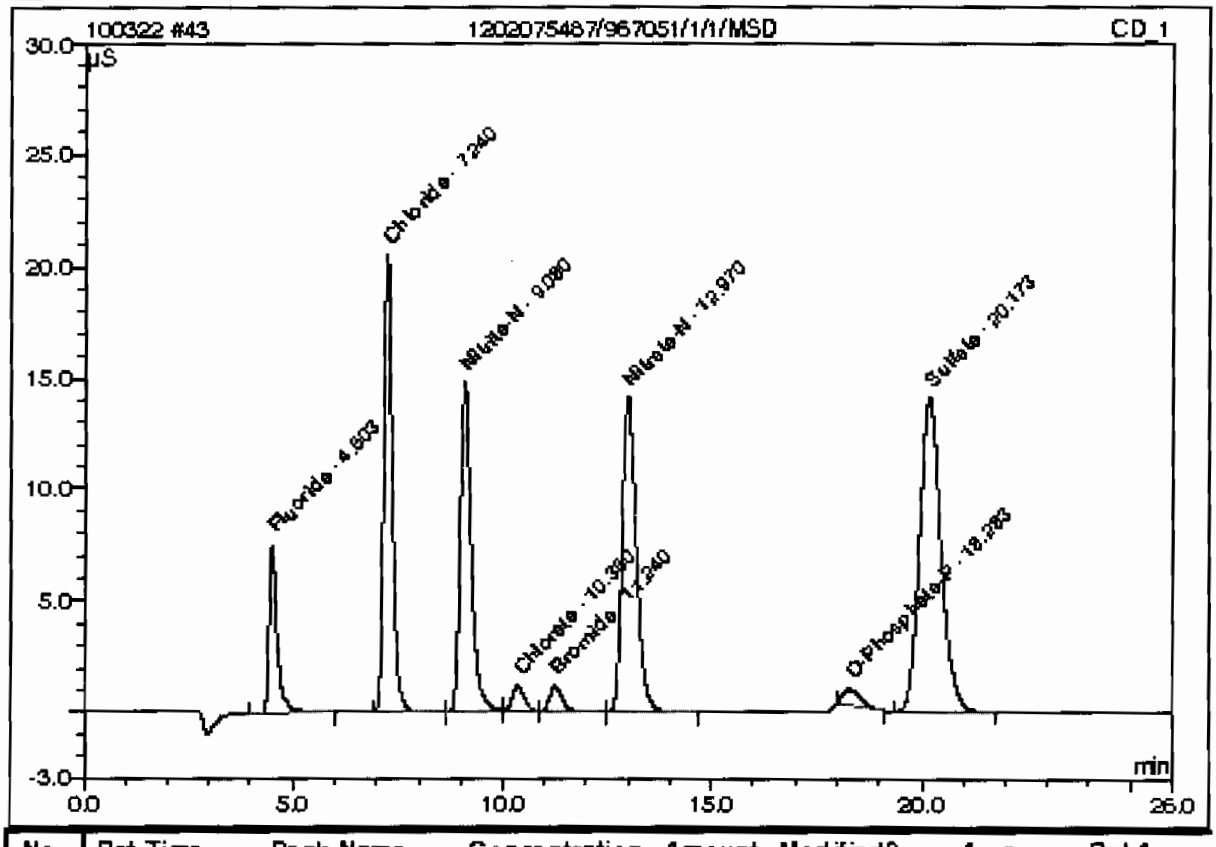
Sample Name:	1202075485/967051/1/1/MS	*Injection Volume:*	50.0
Vial Number:	96	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/22/2010 22:47	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.50	Fluoride	n.a.	2.6001		1.71189	6.60
2	7.24	Chloride	n.a.	9.3263		4.72471	18.23
3	9.08	Nitrite-N	n.a.	4.7428		4.52280	17.45
4	10.35	Chlorate	n.a.	2.3883		0.39029	1.51
5	11.24	Bromide	n.a.	2.1889		0.38221	1.47
6	12.97	Nitrate-N	n.a.	4.7655		5.51405	21.27
7	18.28	O-Phosphate-P	n.a.	1.1777		0.34143	1.32
8	20.18	Sulfate	n.a.	24.3652		8.33216	32.15
Total:				51.5549	0.000	25.920	100.00

43 1202075487/967051/1/1/MSD

Sample Name:	1202075487/967051/1/1/MSD	*Injection Volume:*	50.0
Vial Number:	97	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/22/2010 23:13	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



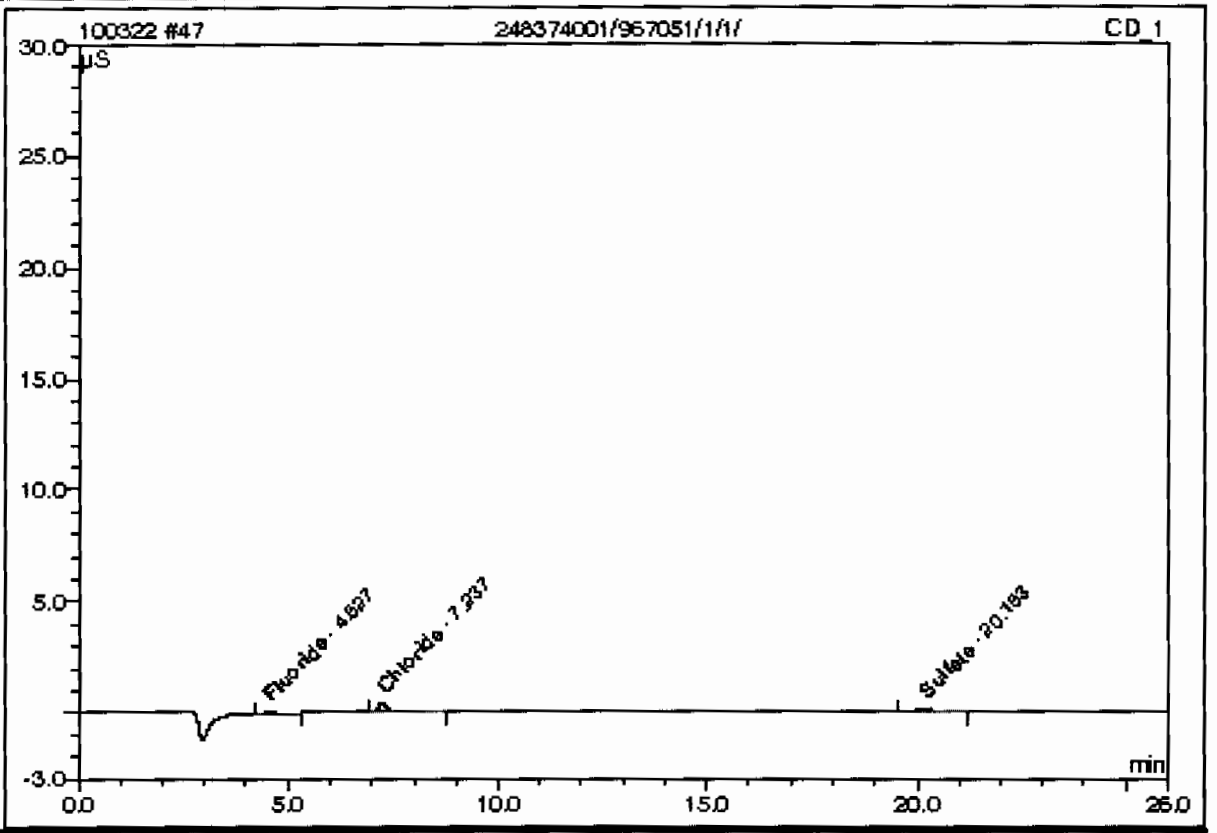
No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.50	Fluoride	n.a.	2.6012		1.71261	6.59
2	7.24	Chloride	n.a.	9.3277		4.72540	18.20
3	9.08	Nitrite-N	n.a.	4.7598		4.53920	17.48
4	10.35	Chlorate	n.a.	2.5489		0.41732	1.61
5	11.24	Bromide	n.a.	2.3306		0.40747	1.57
6	12.97	Nitrate-N	n.a.	4.7593		5.50666	21.20
7	18.28	O-Phosphate-P	n.a.	1.1662		0.33781	1.30
8	20.17	Sulfate	n.a.	24.3378		8.32265	32.05
Total:				51.8315	0.000	25.969	100.00

This is runlog for Sequence 100322.seq for IC5

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
248250003	03/23/10 00:05	967051	1	100322	VH1
248250004	03/23/10 00:31	967051	1	100322	VH1
248374001	03/23/10 00:57	967051	1	100322	VH1
CCV	03/23/10 01:23		1	100322	VH1
CCB	03/23/10 01:49		1	100322	VH1
248374002	03/23/10 02:15	967051	1	100322	VH1
248374003	03/23/10 02:41	967051	1	100322	VH1
248374004	03/23/10 03:08	967051	1	100322	VH1
248374005	03/23/10 03:34	967051	1	100322	VH1
248374006	03/23/10 04:00	967051	1	100322	VH1
248374007	03/23/10 04:26	967051	1	100322	VH1
248374008	03/23/10 04:52	967051	1	100322	VH1
248374009	03/23/10 05:18	967051	1	100322	VH1
248374010	03/23/10 05:44	967051	1	100322	VH1
248374011	03/23/10 06:10	967051	1	100322	VH1
CVH	03/23/10 06:36		1	100322	VH1
CCB	03/23/10 07:02		1	100322	VH1
248374012	03/23/10 07:28	967051	1	100322	VH1
248374013	03/23/10 07:55	967051	1	100322	VH1
1202075484	03/23/10 08:21	967051	1	100322	VH1
1202075486	03/23/10 08:47	967051	1	100322	VH1
1202075488	03/23/10 09:13	967051	1	100322	VH1
CCV	03/23/10 09:39		1	100322	VH1
CCB	03/23/10 10:05		1	100322	VH1

47 248374001/967051/1/1/

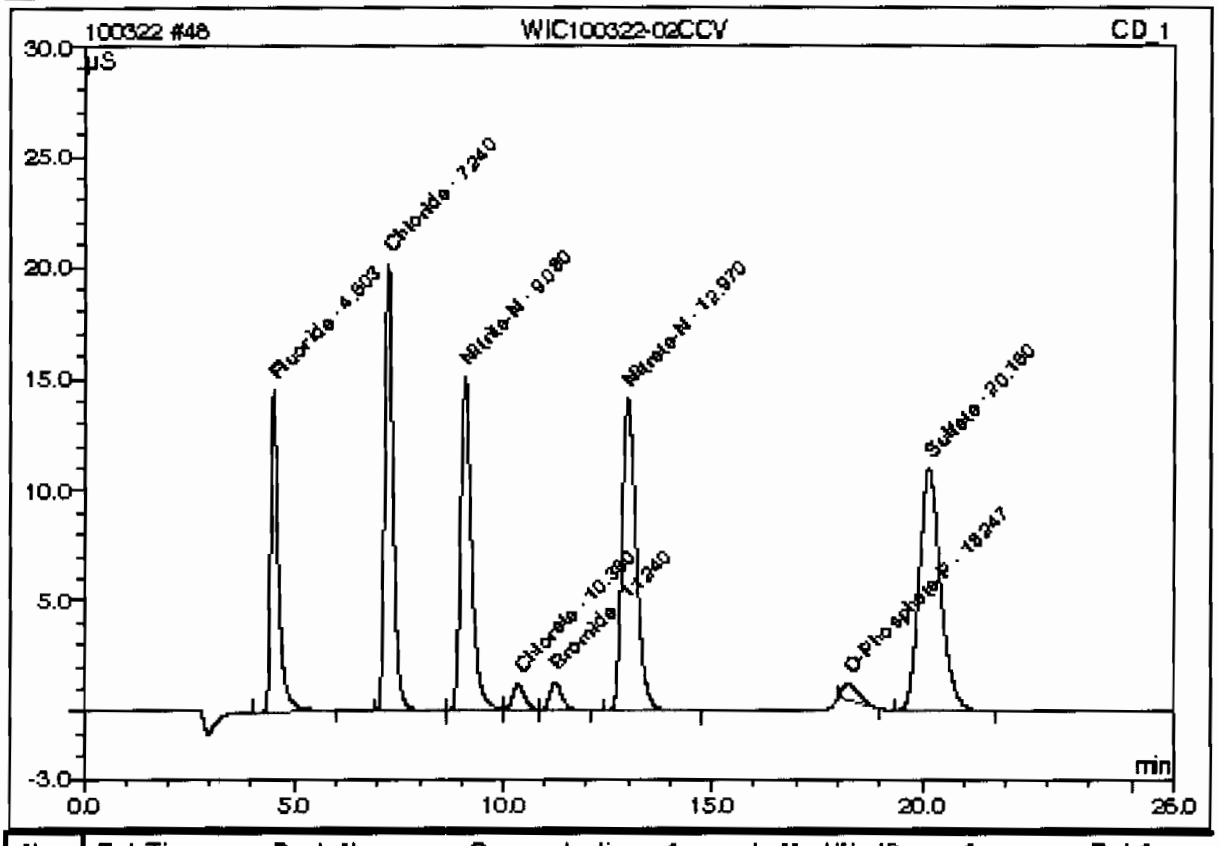
Sample Name:	248374001/967051/1/1/	*Injection Volume:*	50.0
Vial Number:	101	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 0:57	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.53	Fluoride	n.a.	0.0995		0.01997	9.40
2	7.24	Chloride	n.a.	0.3192		0.11161	52.53
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	20.16	Sulfate	n.a.	0.5461		0.08089	38.07
Total:				0.9648	0.000	0.212	100.00

48 WIC100322-02CCV

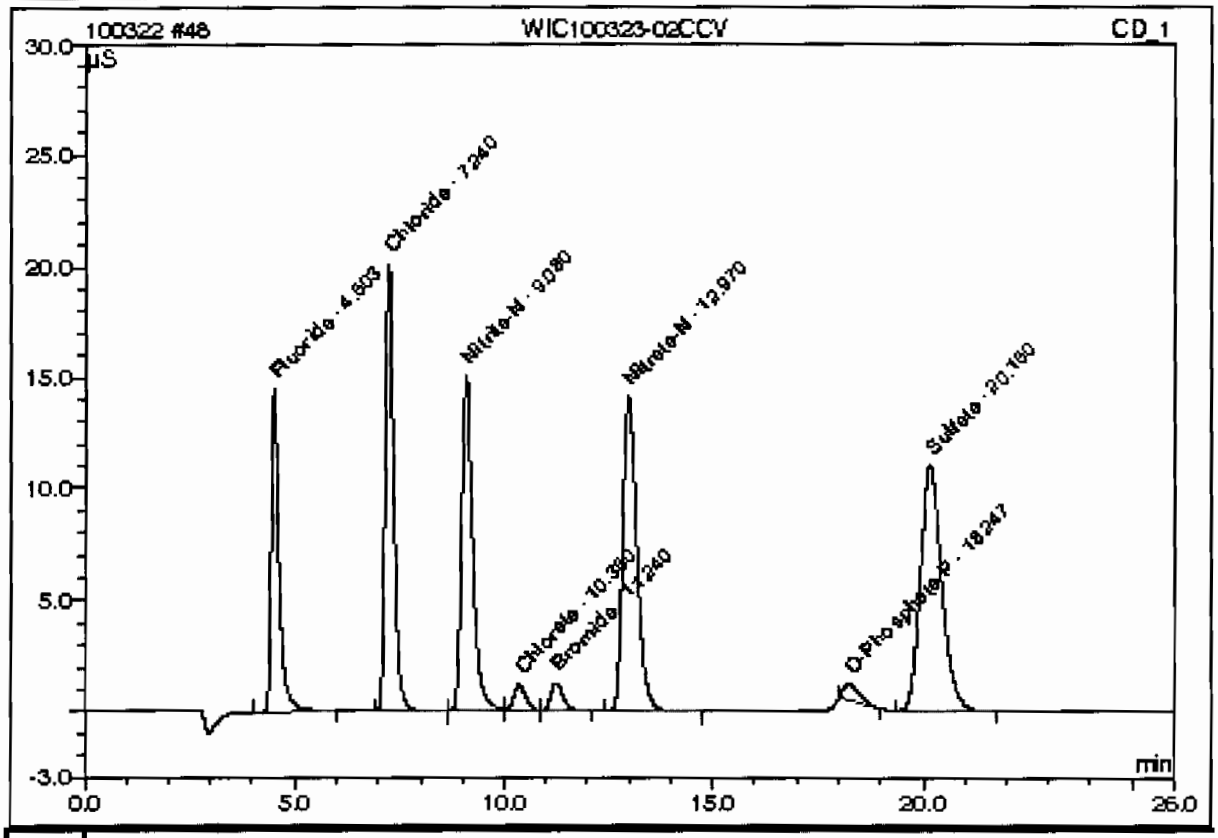
Sample Name:	WIC100322-02CCV	*Injection Volume:*	50.0
Vial Number:	102	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 1:23	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.50	Fluoride	n.a.	4.7237		3.14868	12.31
2	7.24	Chloride	n.a.	9.1492		4.63400	18.11
3	9.08	Nitrite-N	n.a.	4.8490		4.62563	18.08
4	10.35	Chlorate	n.a.	2.5749		0.42170	1.65
5	11.24	Bromide	n.a.	2.5327		0.44347	1.73
6	12.97	Nitrate-N	n.a.	4.7583		5.50548	21.52
7	18.25	O-Phosphate-P	n.a.	1.1063		0.31883	1.25
8	20.16	Sulfate	n.a.	19.0451		6.48921	25.36
Total:				48.7393	0.000	25.587	100.00

48 WIC100323-02CCV

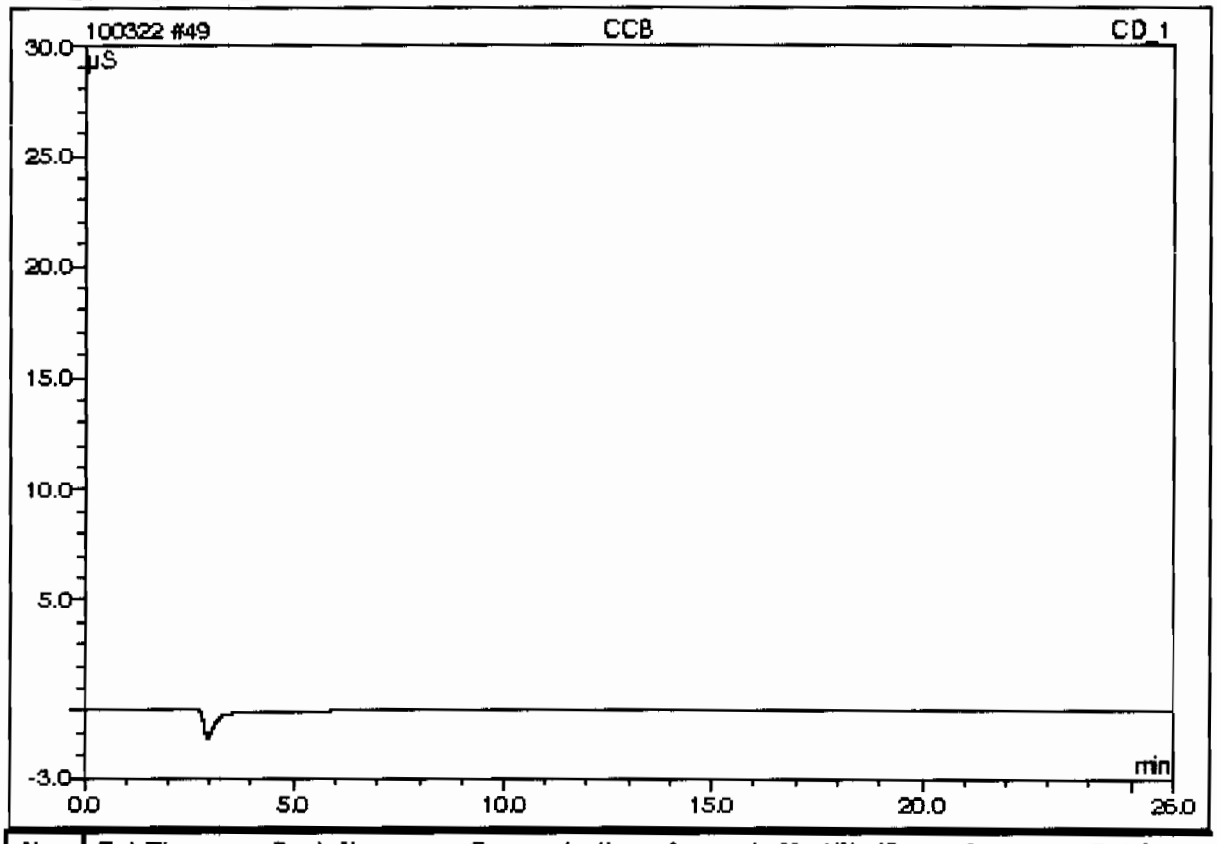
Sample Name:	WIC100323-02CCV	*Injection Volume:*	50.0
Vial Number:	102	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 1:23	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.50	Fluoride	n.a.	4.7237		3.14868	12.31
2	7.24	Chloride	n.a.	9.1492		4.63400	18.11
3	9.08	Nitrite-N	n.a.	4.8490		4.62563	18.08
4	10.35	Chlorate	n.a.	2.5749		0.42170	1.65
5	11.24	Bromide	n.a.	2.5327		0.44347	1.73
6	12.97	Nitrate-N	n.a.	4.7583		5.50548	21.52
7	18.25	O-Phosphate-P	n.a.	1.1063		0.31883	1.25
8	20.16	Sulfate	n.a.	19.0451		6.48921	25.36
Total:				48.7393	0.000	25.587	100.00

49 CCB

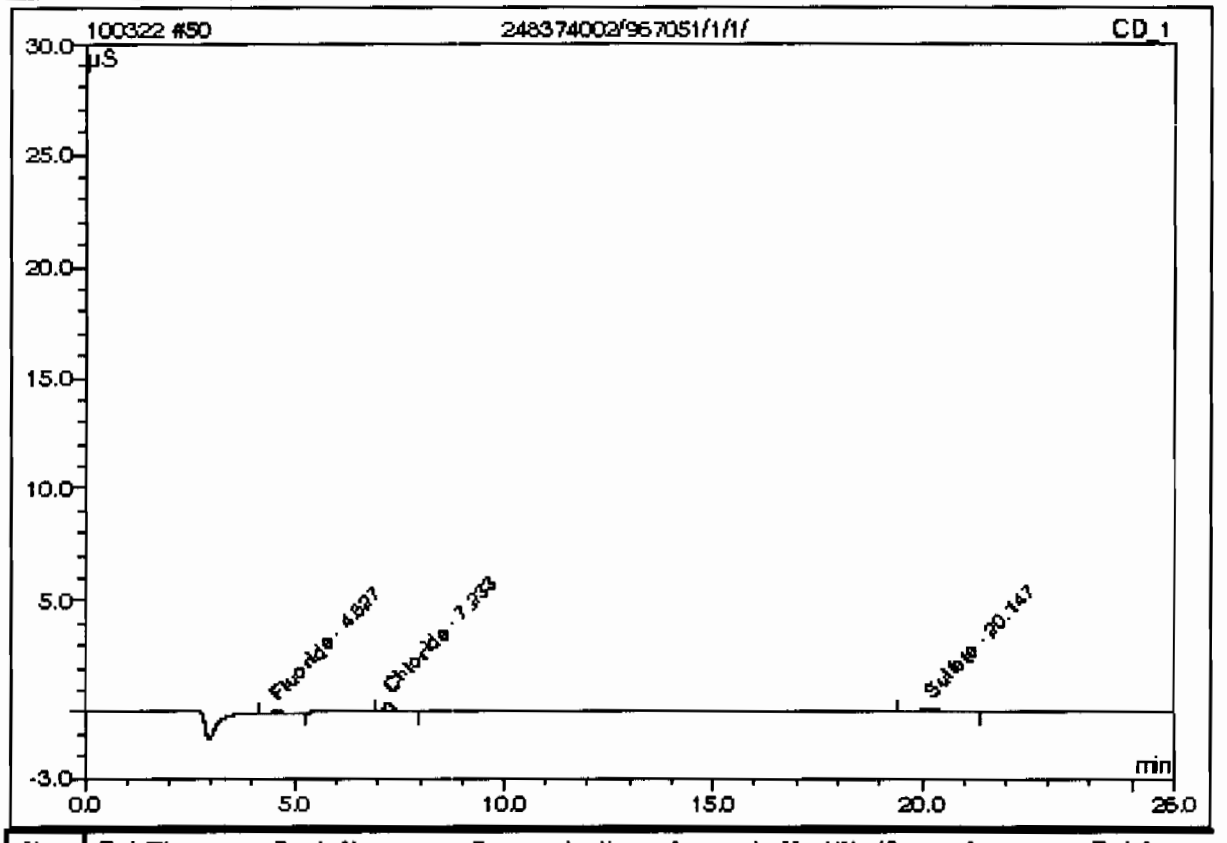
Sample Name:	CCB	*Injection Volume:*	50.0
Vial Number:	103	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 1:49	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



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

50 248374002/967051/1/1/

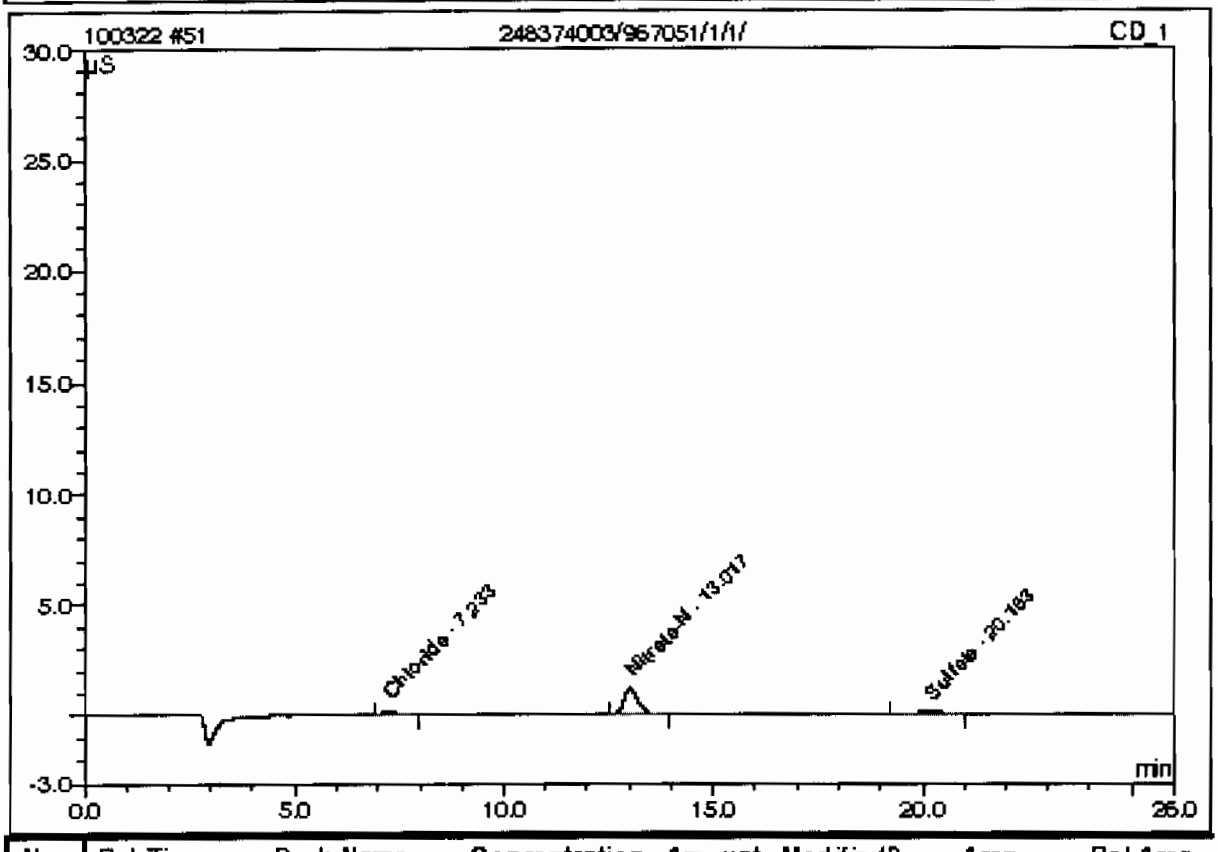
Sample Name:	248374002/967051/1/1/	*Injection Volume:*	50.0
Vial Number:	104	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 2:15	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.53	Fluoride	n.a.	0.0995		0.01995	9.76
2	7.23	Chloride	n.a.	0.2945		0.09895	48.39
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	20.15	Sulfate	n.a.	0.5596		0.08558	41.85
Total:				0.9536	0.000	0.204	100.00

51 248374003/967051/1/1/

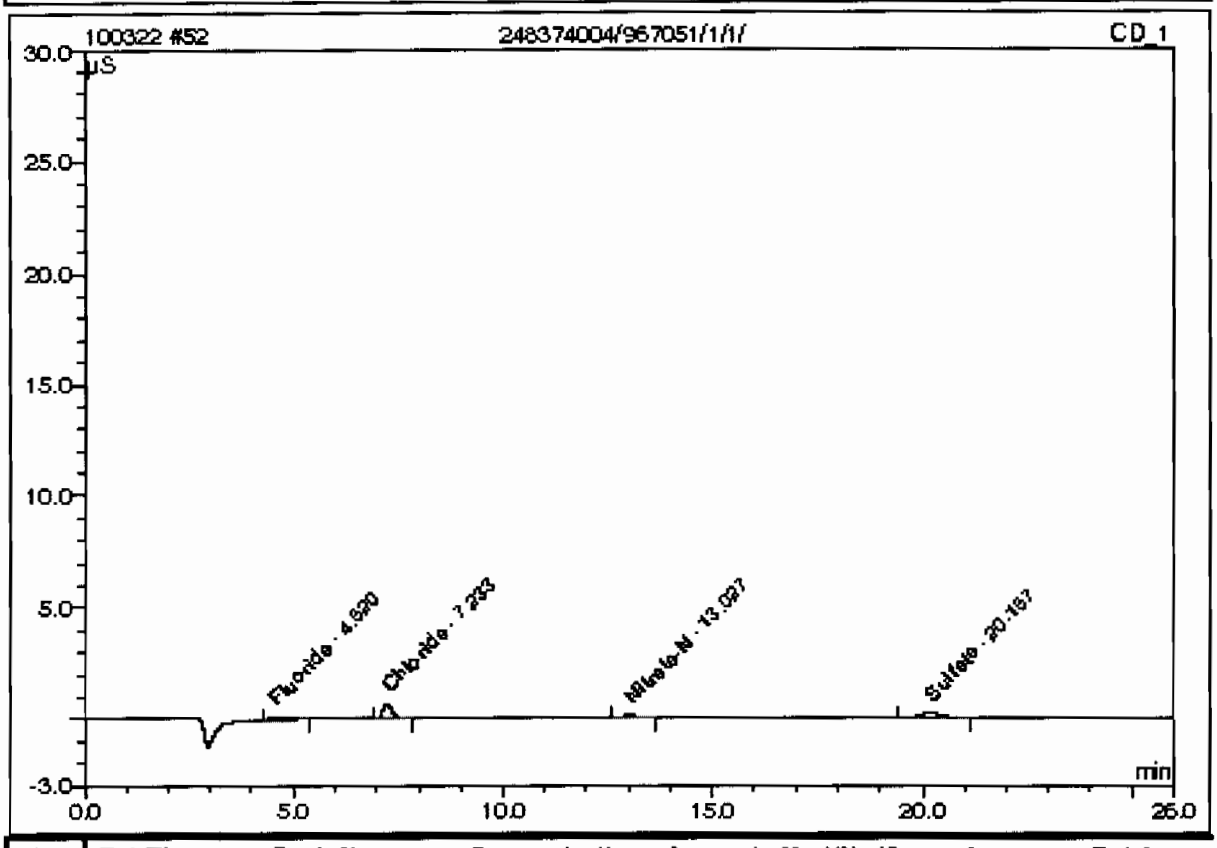
Sample Name:	248374003/967051/1/1/	*Injection Volume:*	50.0
Vial Number:	105	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 2:41	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;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.
1	7.23	Chloride	n.a.	0.2108		0.05609	9.13
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.
2	13.02	Nitrate-N	n.a.	0.4937		0.46558	75.82
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	20.15	Sulfate	n.a.	0.5794		0.09242	15.05
Total:				1.2839	0.000	0.614	100.00

52 248374004/967051/1/1/

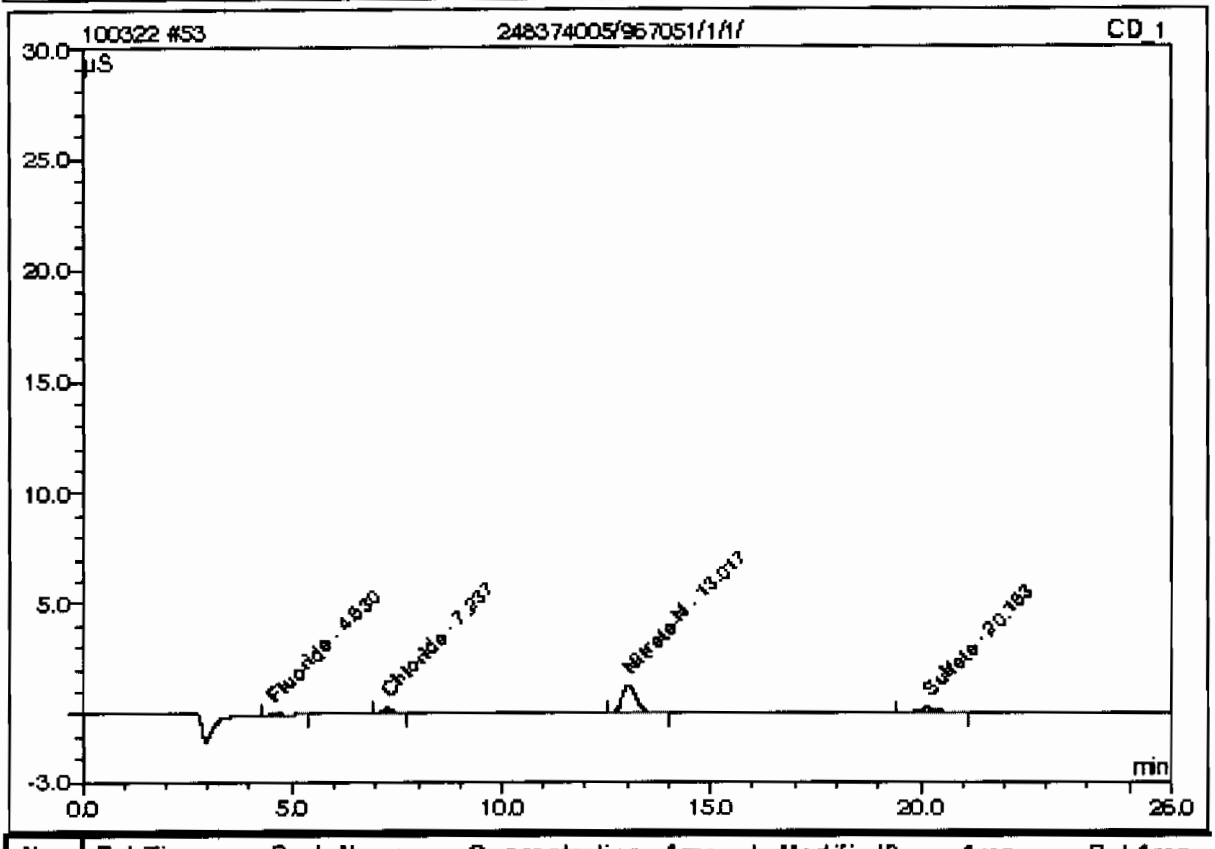
Sample Name:	248374004/967051/1/1/	*Injection Volume:*	50.0
Vial Number:	106	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 3:08	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.52	Fluoride	n.a.	0.1238		0.03640	8.59
2	7.23	Chloride	n.a.	0.4326		0.16969	40.06
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	13.03	Nitrate-N	n.a.	0.1417		0.04954	11.70
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	20.16	Sulfate	n.a.	0.7974		0.16793	39.65
Total:				1.4954	0.000	0.424	100.00

53 248374005/967051/1/1/

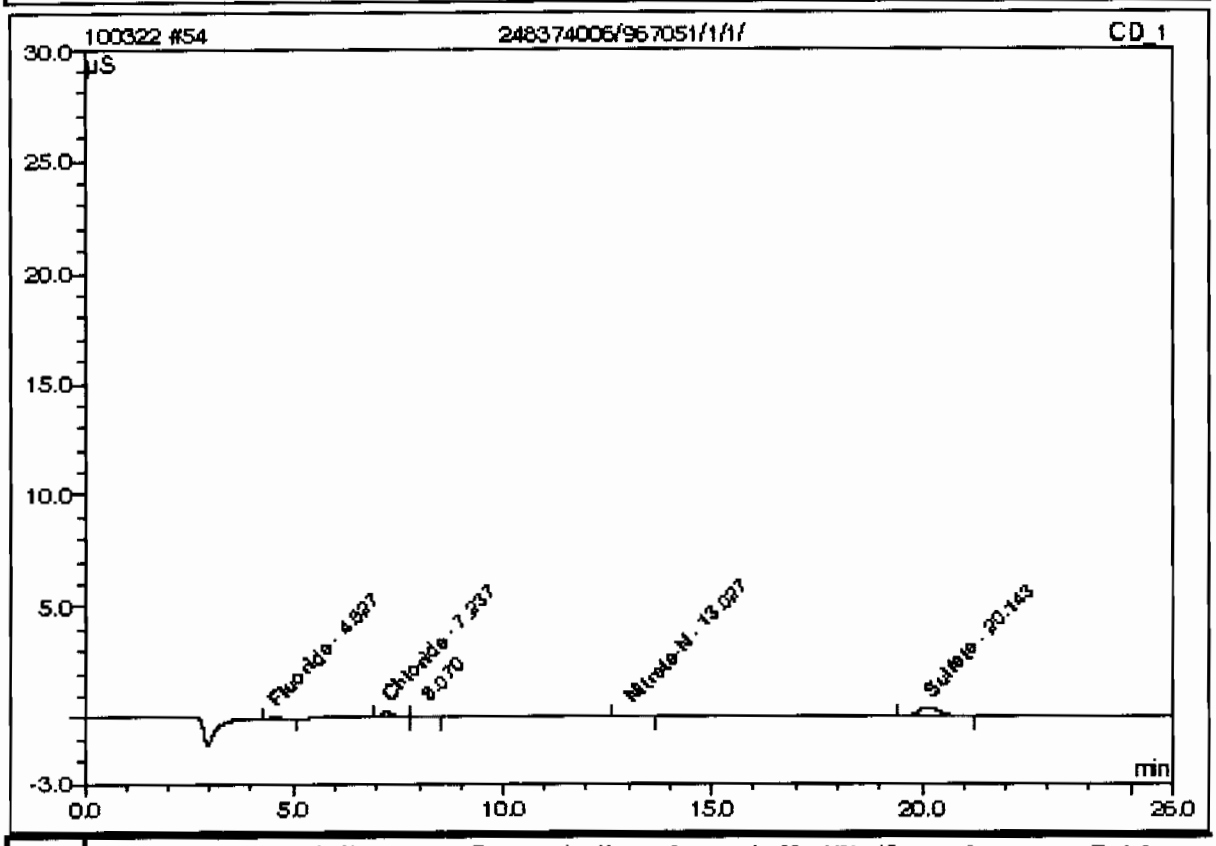
Sample Name:	248374005/967051/1/1/	*Injection Volume:*	50.0
Vial Number:	107	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 3:34	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.53	Fluoride	n.a.	0.0959		0.01751	2.43
2	7.24	Chloride	n.a.	0.2137		0.05755	7.97
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	13.02	Nitrate-N	n.a.	0.5265		0.50434	69.85
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	20.16	Sulfate	n.a.	0.7242		0.14258	19.75
Total:				1.5602	0.000	0.722	100.00

54 248374006/967051/1/1/

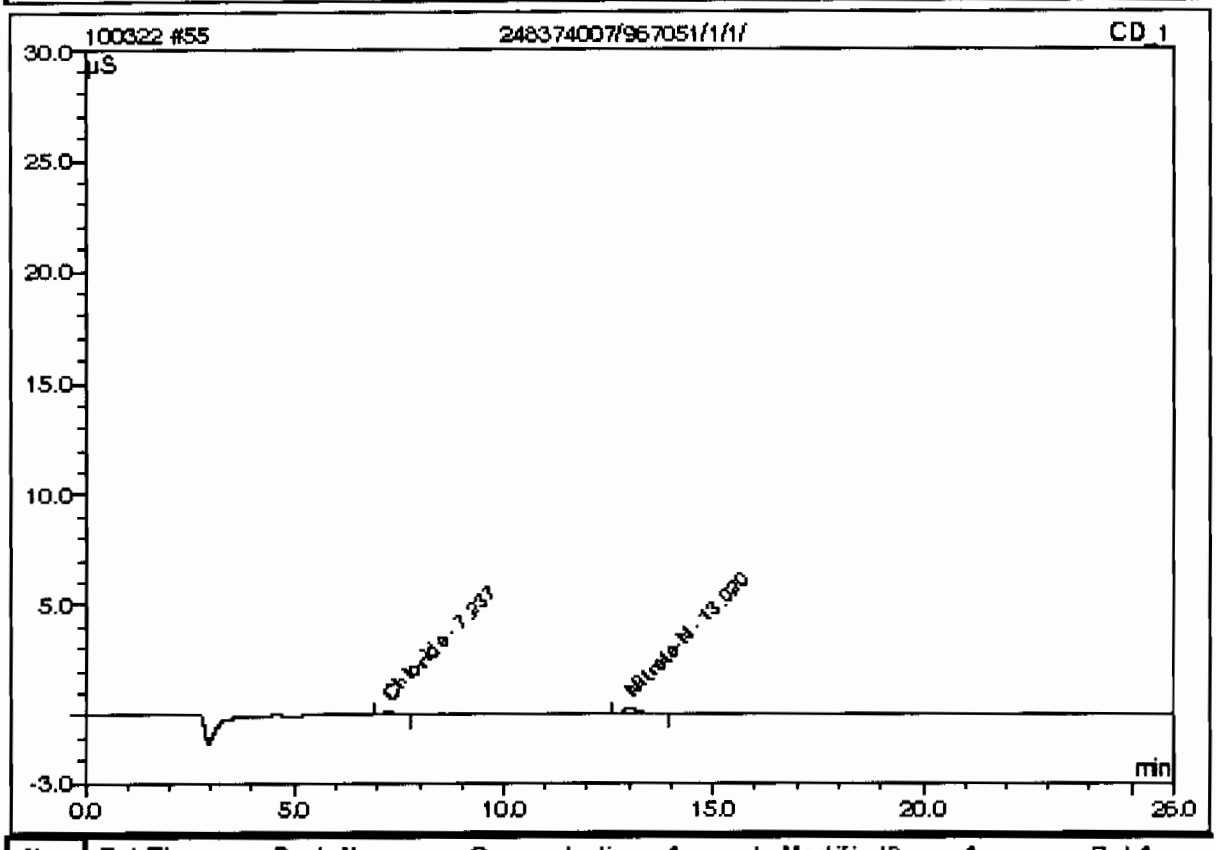
Sample Name:	248374006/967051/1/1/	*Injection Volume:*	50.0
Vial Number:	108	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 4:00	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.53	Fluoride	n.a.	0.0943		0.01648	4.13
2	7.24	Chloride	n.a.	0.2282		0.06500	16.27
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.
4	13.03	Nitrate-N	n.a.	0.1263		0.03140	7.86
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
5	20.14	Sulfate	n.a.	1.0868		0.26820	67.15
Total:				1.5357	0.000	0.381	95.42

55 248374007/967051/1/1/

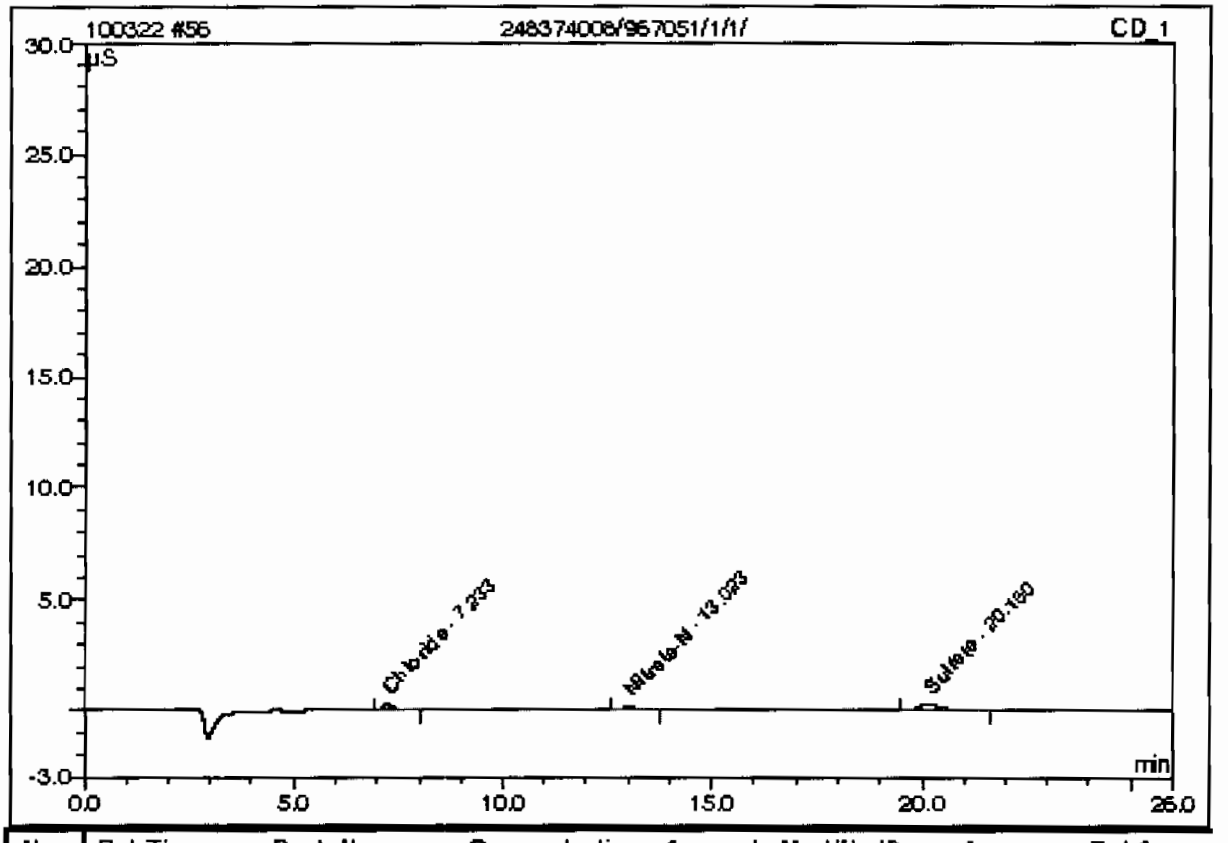
Sample Name:	248374007/967051/1/1/	*Injection Volume:*	50.0
Vial Number:	109	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 4:26	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;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.
1	7.24	Chloride	n.a.	0.1794		0.04000	25.12
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.
2	13.02	Nitrate-N	n.a.	0.2006		0.11922	74.88
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:				0.3800	0.000	0.159	100.00

56 248374008/967051/1/1/

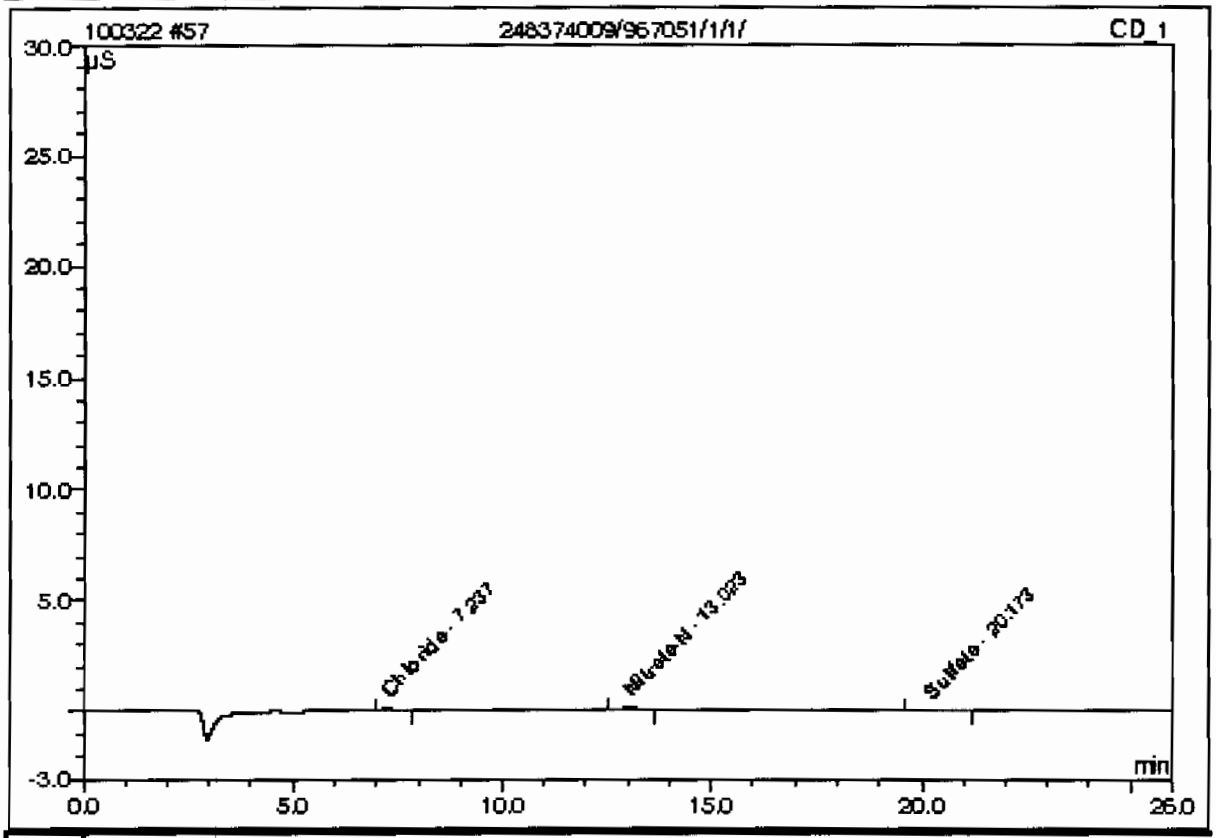
Sample Name:	248374008/967051/1/1/	*Injection Volume:*	50.0
Vial Number:	110	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 4:52	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;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.
1	7.23	Chloride	n.a.	0.2508		0.07656	23.88
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.
2	13.02	Nitrate-N	n.a.	0.1436		0.05184	16.17
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	20.15	Sulfate	n.a.	0.8673		0.19218	59.95
Total:				1.2617	0.000	0.321	100.00

57 248374009/967051/1/1/

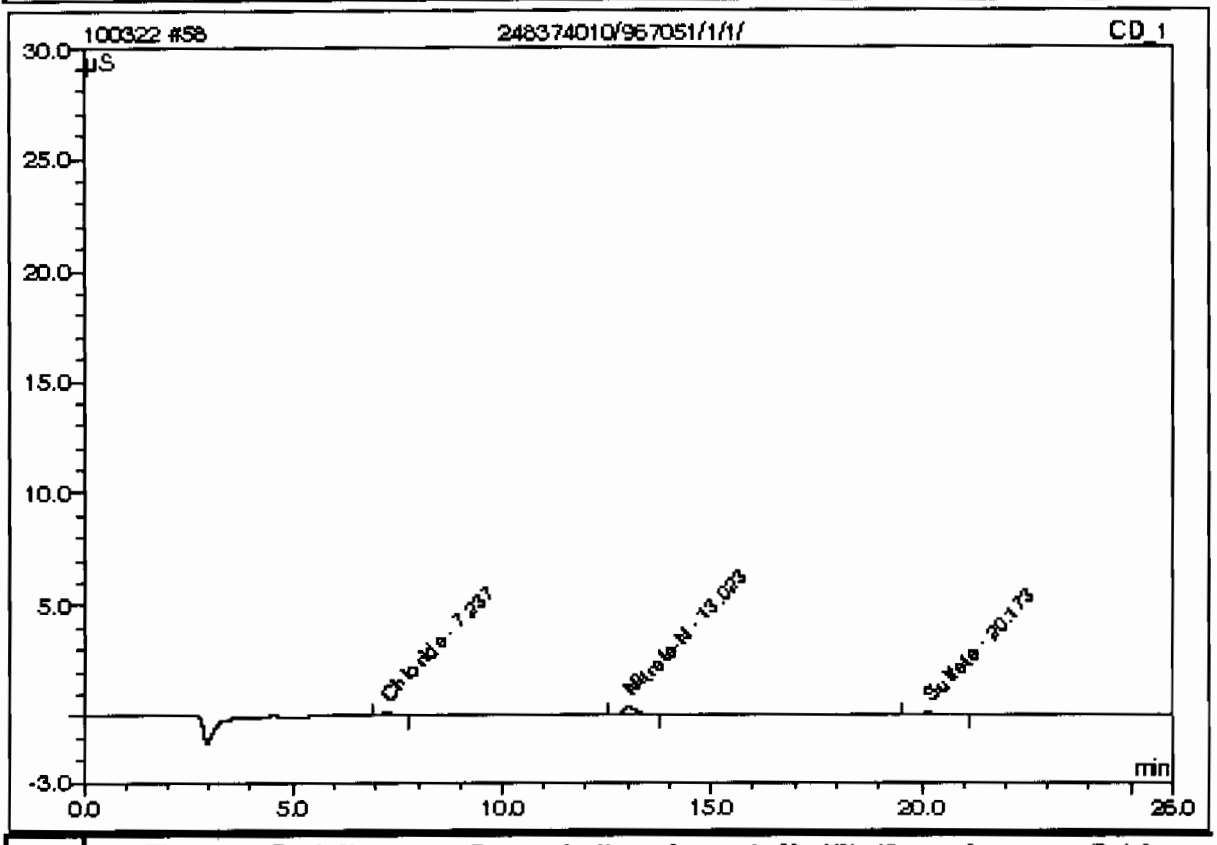
Sample Name:	248374009/967051/1/1/	*Injection Volume:*	50.0
Vial Number:	111	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 5:18	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;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.
1	7.24	Chloride	n.a.	0.1926		0.04674	34.59
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.
2	13.02	Nitrate-N	n.a.	0.1475		0.05640	41.74
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	20.17	Sulfate	n.a.	0.4049		0.03197	23.66
Total:				0.7449	0.000	0.135	100.00

58 248374010/967051/1/1/

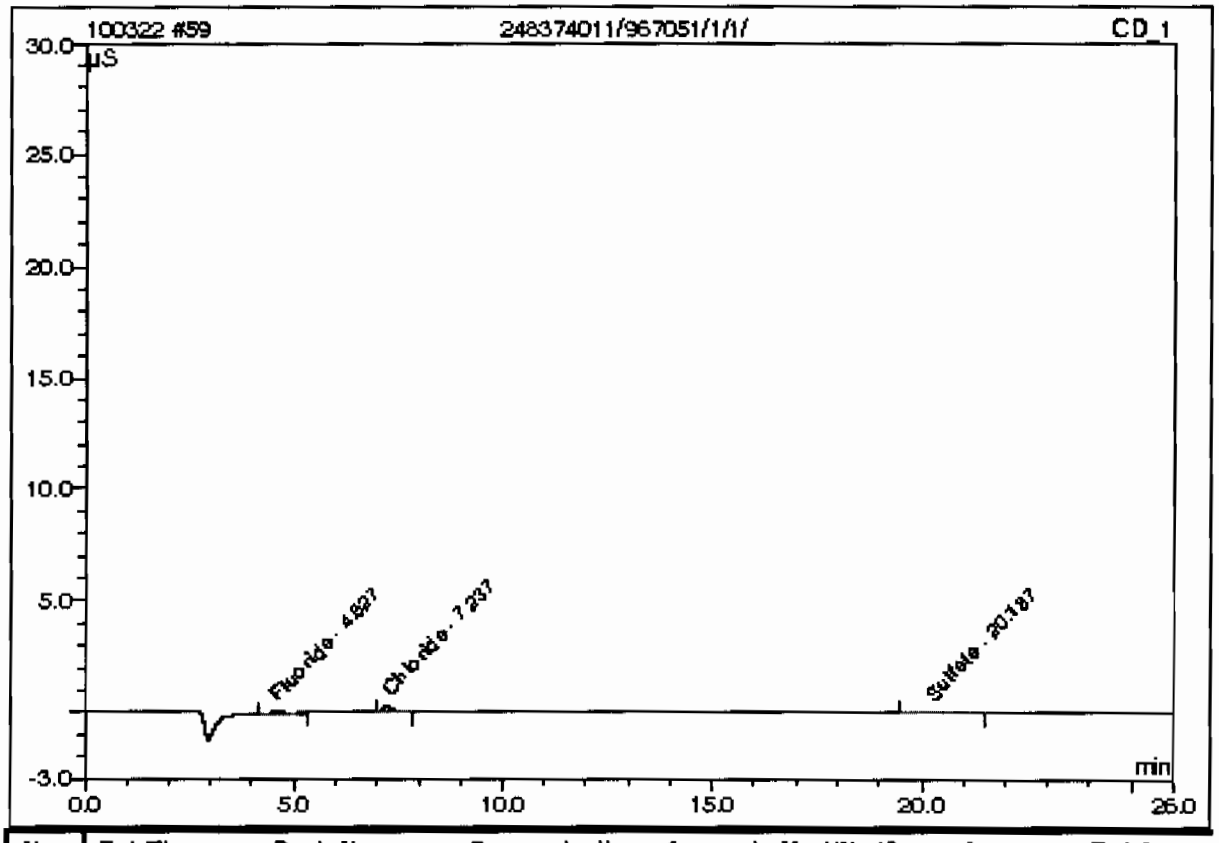
Sample Name:	248374010/967051/1/1/	*Injection Volume:*	50.0
Vial Number:	112	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 5:44	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;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.
1	7.24	Chloride	n.a.	0.1929		0.04690	18.43
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.
2	13.02	Nitrate-N	n.a.	0.2238		0.14663	57.61
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	20.17	Sulfate	n.a.	0.4886		0.06099	23.96
Total:				0.9053	0.000	0.255	100.00

59 248374011/967051/1/1/

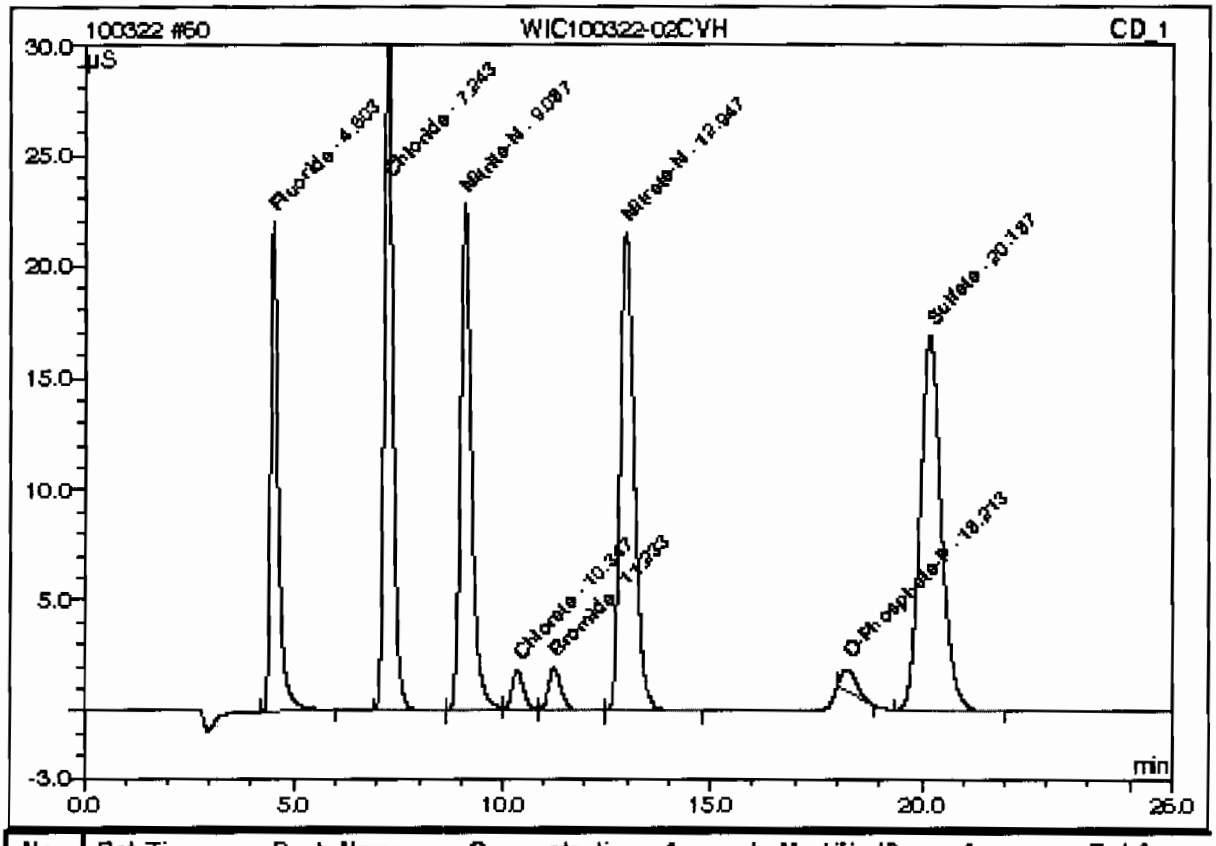
Sample Name:	248374011/967051/1/1/	*Injection Volume:*	50.0
Vial Number:	113	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 6:10	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.53	Fluoride	n.a.	0.0962		0.01776	13.56
2	7.24	Chloride	n.a.	0.2469		0.07456	56.91
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	20.19	Sulfate	n.a.	0.4242		0.03868	29.52
Total:				0.7673	0.000	0.131	100.00

60 WIC100322-02CVH

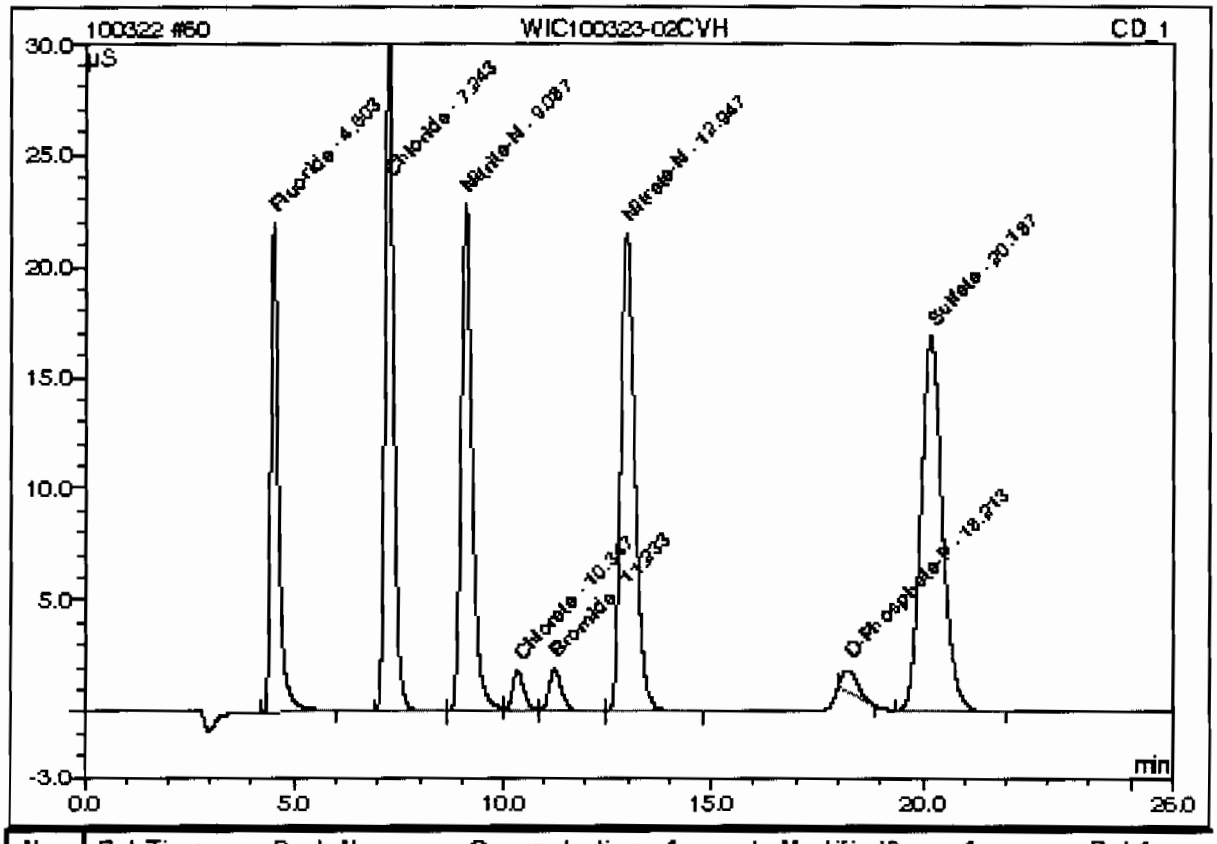
Sample Name:	WIC100322-02CVH	*Injection Volume:*	50.0
Vial Number:	114	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 6:36	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.50	Fluoride	n.a.	7.0760		4.74017	12.21
2	7.24	Chloride	n.a.	13.9980		7.11733	18.33
3	9.09	Nitrite-N	n.a.	7.2573		6.95739	17.92
4	10.35	Chlorate	n.a.	3.7663		0.62220	1.60
5	11.23	Bromide	n.a.	3.7378		0.65819	1.69
6	12.95	Nitrate-N	n.a.	7.2521		8.45270	21.77
7	18.21	O-Phosphate-P	n.a.	1.3434		0.39390	1.01
8	20.19	Sulfate	n.a.	28.8654		9.89110	25.47
Total:				73.2963	0.000	38.833	100.00

60 WIC100323-02CVH

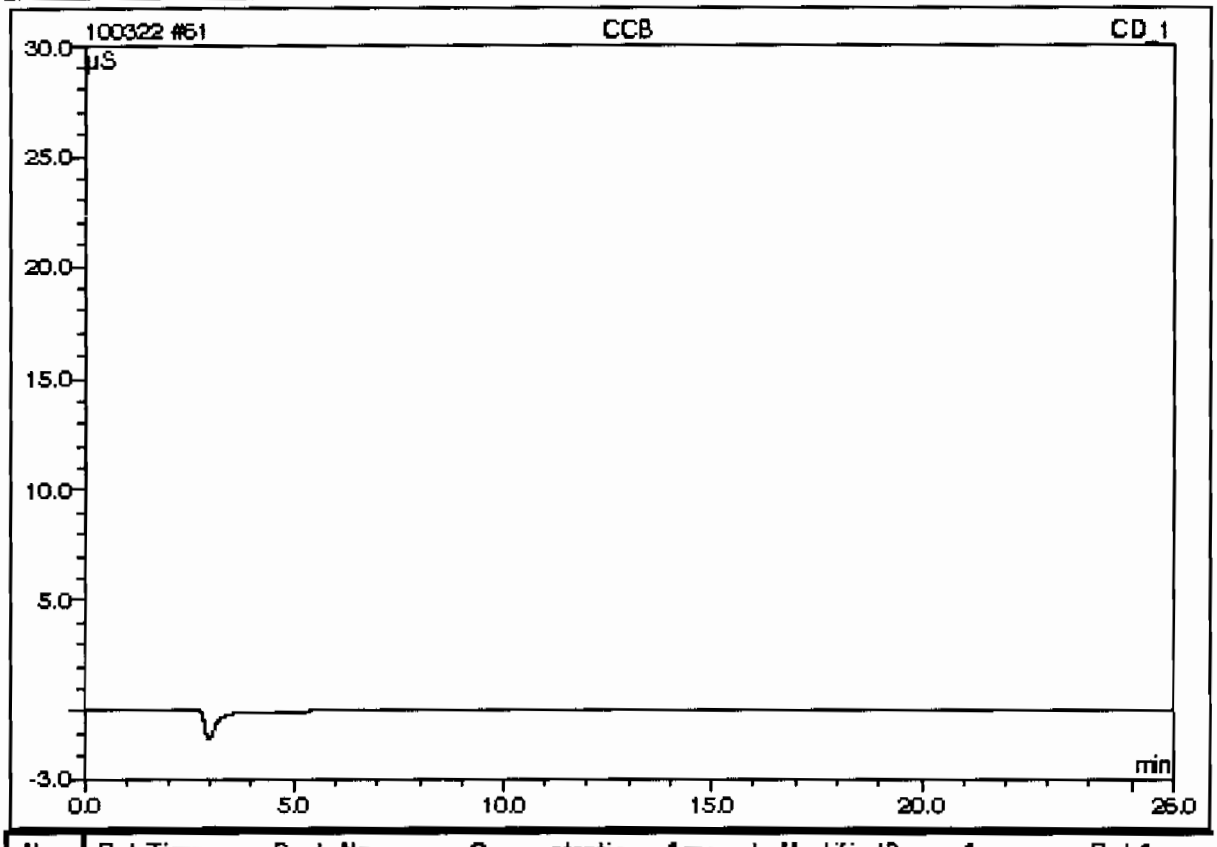
Sample Name:	WIC100323-02CVH	*Injection Volume:*	50.0
Vial Number:	114	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 6:36	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.50	Fluoride	n.a.	7.0760		4.74017	12.21
2	7.24	Chloride	n.a.	13.9980		7.11733	18.33
3	9.09	Nitrite-N	n.a.	7.2573		6.95739	17.92
4	10.35	Chlorate	n.a.	3.7663		0.62220	1.60
5	11.23	Bromide	n.a.	3.7378		0.65819	1.69
6	12.95	Nitrate-N	n.a.	7.2521		8.45270	21.77
7	18.21	O-Phosphate-P	n.a.	1.3434		0.39390	1.01
8	20.19	Sulfate	n.a.	28.8654		9.89110	25.47
Total:				73.2963	0.000	38.833	100.00

61 CCB

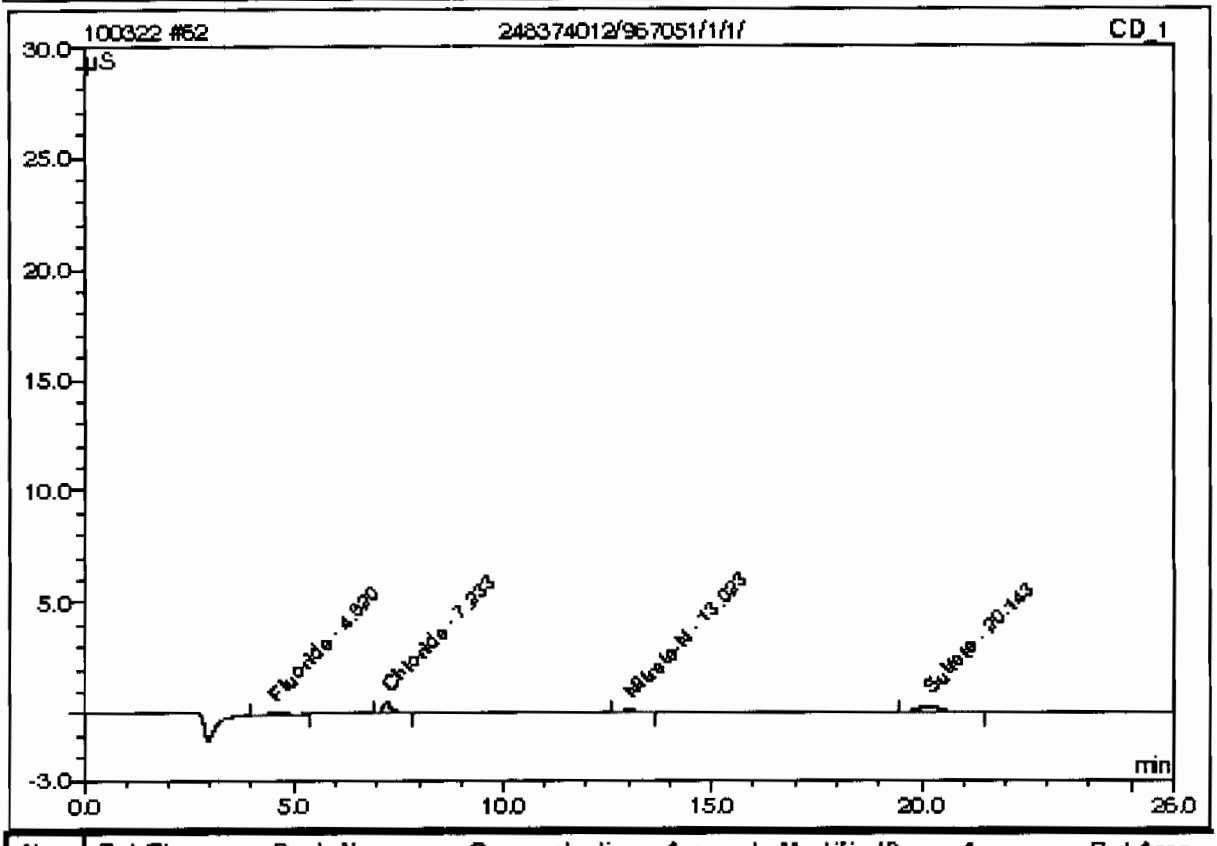
Sample Name:	CCB	*Injection Volume:*	50.0
Vial Number:	115	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 7:02	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



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

62 248374012/967051/1/1/

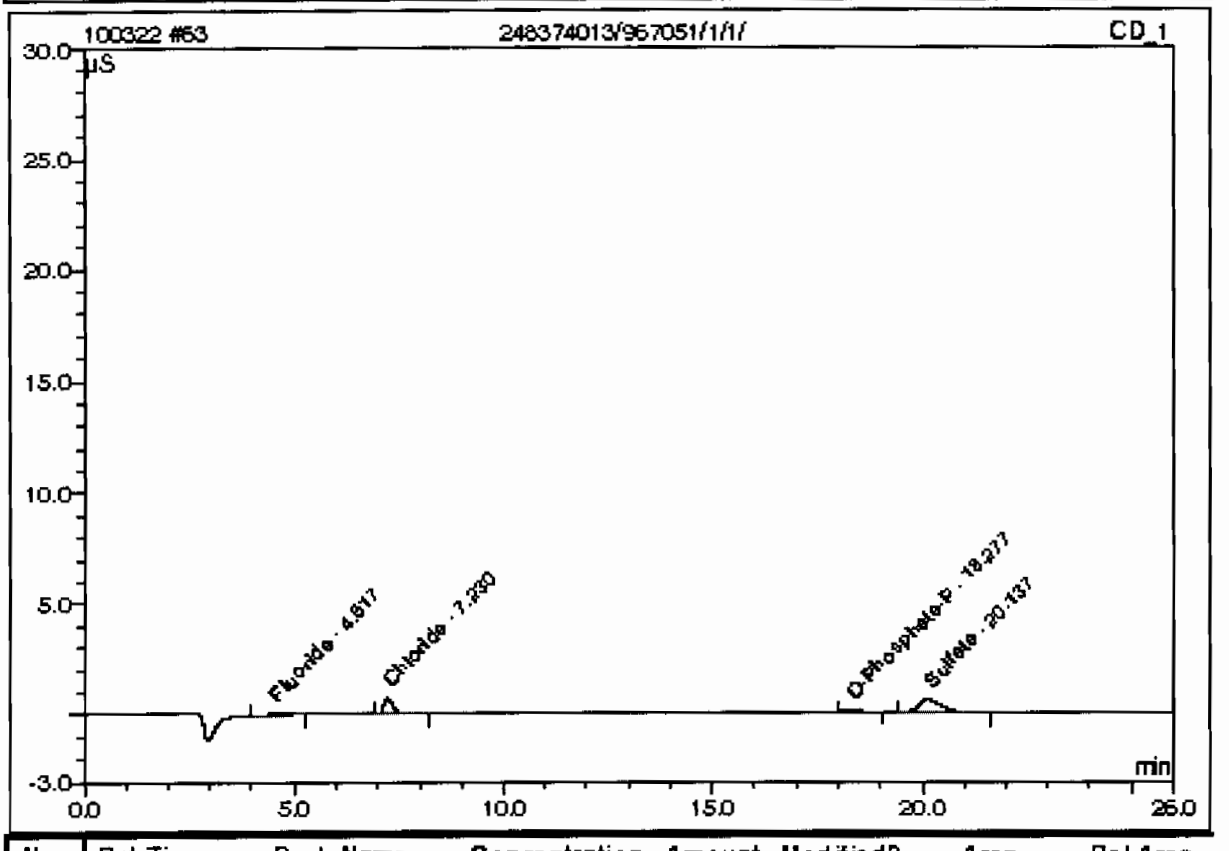
Sample Name:	248374012/967051/1/1/	*Injection Volume:*	50.0
Vial Number:	116	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 7:28	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.52	Fluoride	n.a.	0.1247		0.03705	8.98
2	7.23	Chloride	n.a.	0.3377		0.12106	29.33
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	13.02	Nitrate-N	n.a.	0.1439		0.05215	12.64
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	20.14	Sulfate	n.a.	0.8970		0.20245	49.05
Total:				1.5033	0.000	0.413	100.00

63 248374013/967051/1/1/

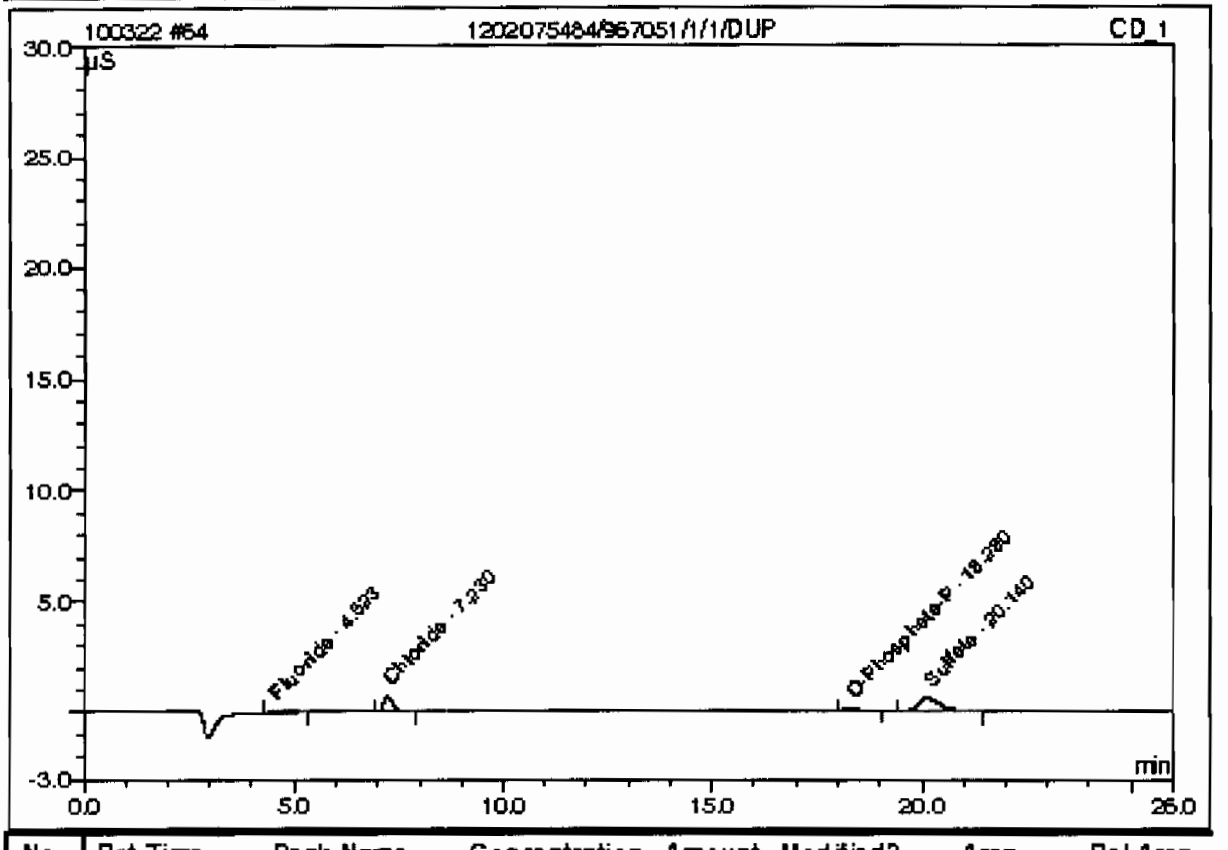
Sample Name:	248374013/967051/1/1/	*Injection Volume:*	50.0
Vial Number:	117	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 7:55	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.52	Fluoride	n.a.	0.1193		0.03341	5.16
2	7.23	Chloride	n.a.	0.4497		0.17843	27.55
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.
3	18.28	O-Phosphate-P	n.a.	0.2148		0.03660	5.65
4	20.14	Sulfate	n.a.	1.4653		0.39932	61.65
Total:				2.2492	0.000	0.648	100.00

64 1202075484/967051/1/1/DUP

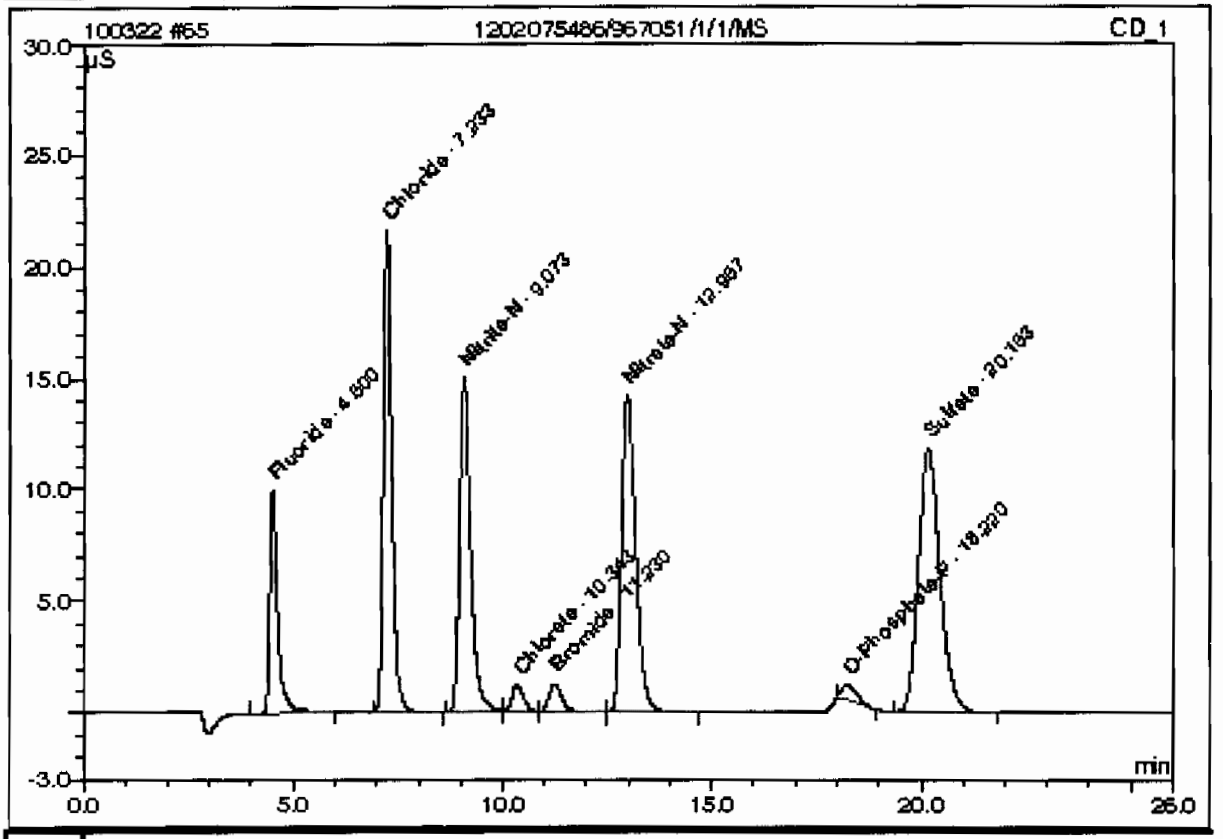
Sample Name:	1202075484/967051/1/1/DUP	*Injection Volume:*	50.0
Vial Number:	118	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 8:21	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.52	Fluoride	n.a.	0.1167		0.03163	4.97
2	7.23	Chloride	n.a.	0.4421		0.17453	27.43
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.
3	18.28	O-Phosphate-P	n.a.	0.2196		0.03811	5.99
4	20.14	Sulfate	n.a.	1.4445		0.39209	61.62
Total:				2.2228	0.000	0.636	100.00

65 1202075486/967051/1/1/MS

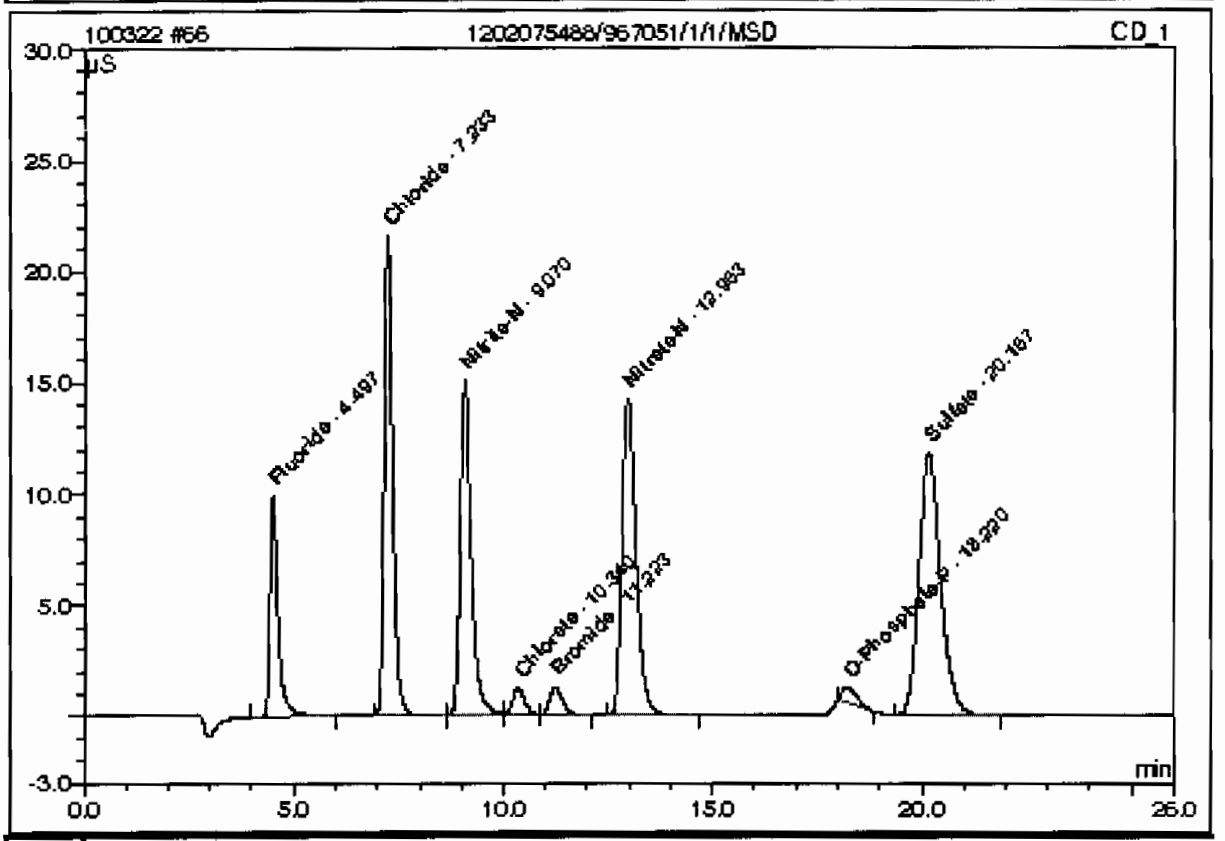
Sample Name:	1202075486/967051/1/1/MS	*Injection Volume:*	50.0
Vial Number:	119	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 8:47	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.50	Fluoride	n.a.	3.3698		2.23259	8.76
2	7.23	Chloride	n.a.	9.7913		4.96282	19.47
3	9.07	Nitrite-N	n.a.	4.8303		4.60747	18.08
4	10.34	Chlorate	n.a.	2.5914		0.42446	1.67
5	11.23	Bromide	n.a.	2.5884		0.45339	1.78
6	12.98	Nitrate-N	n.a.	4.8084		5.56476	21.83
7	18.22	O-Phosphate-P	n.a.	0.9603		0.27261	1.07
8	20.16	Sulfate	n.a.	20.4381		6.97175	27.35
Total:				49.3779	0.000	25.490	100.00

66 1202075488/967051/1/1/MSD

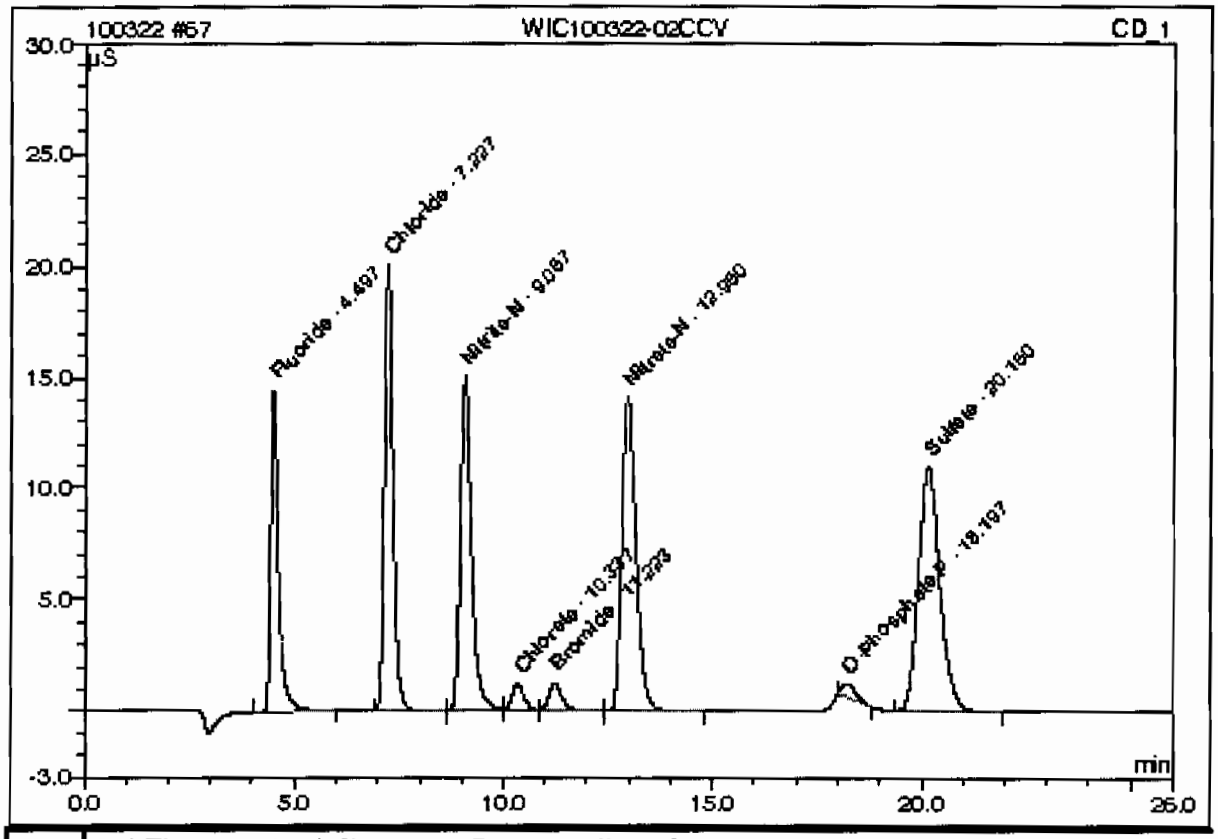
Sample Name:	1202075488/967051/1/1/MSD	*Injection Volume:*	50.0
Vial Number:	120	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 9:13	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.50	Fluoride	n.a.	3.3818		2.24076	8.77
2	7.23	Chloride	n.a.	9.8180		4.97651	19.47
3	9.07	Nitrite-N	n.a.	4.8522		4.62867	18.11
4	10.34	Chlorate	n.a.	2.6094		0.42749	1.67
5	11.22	Bromide	n.a.	2.5647		0.44917	1.76
6	12.95	Nitrate-N	n.a.	4.8201		5.57858	21.83
7	18.22	O-Phosphate-P	n.a.	0.9258		0.26169	1.02
8	20.16	Sulfate	n.a.	20.5008		6.99346	27.36
Total:				49.4727	0.000	25.556	100.00

67 WIC100322-02CCV

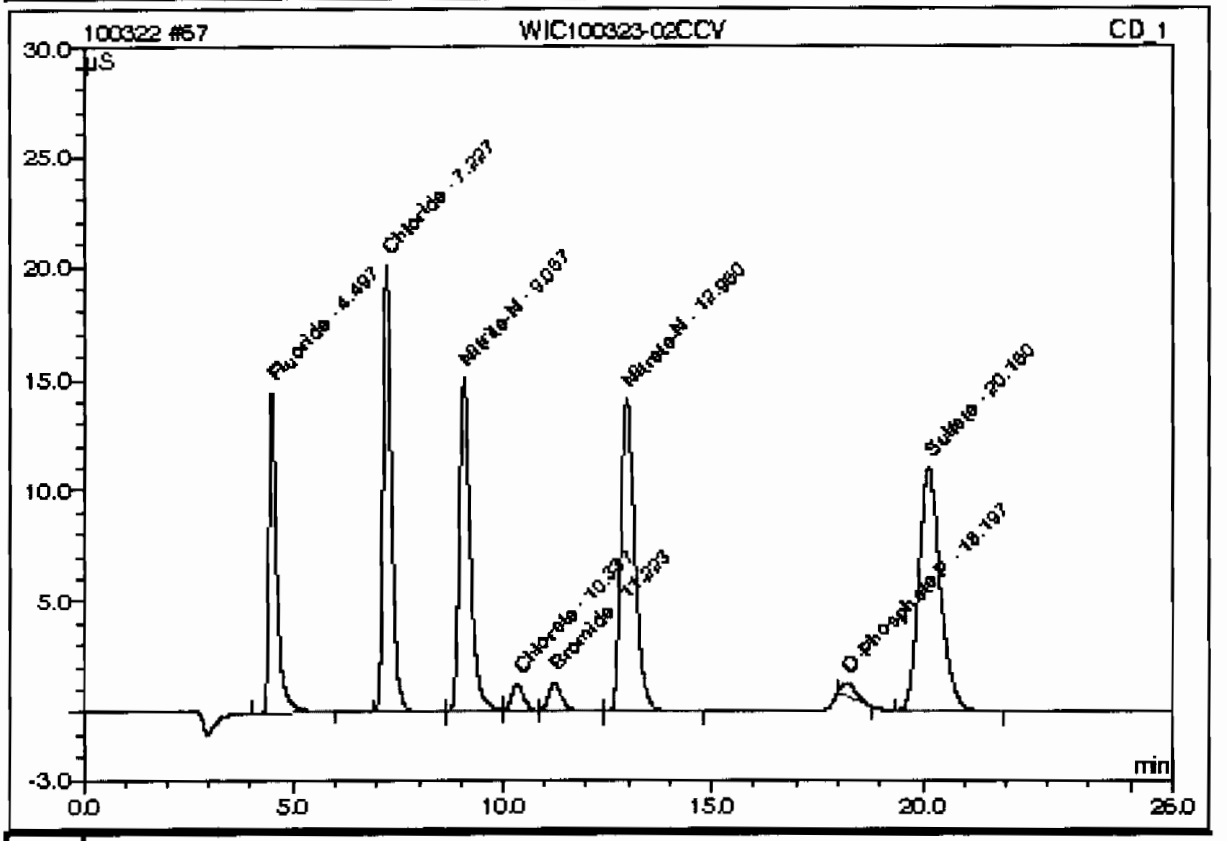
Sample Name:	WIC100322-02CCV	*Injection Volume:*	50.0
Vial Number:	121	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 9:39	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.50	Fluoride	n.a.	4.7300		3.15294	12.34
2	7.23	Chloride	n.a.	9.1423		4.63045	18.13
3	9.07	Nitrite-N	n.a.	4.8547		4.63114	18.13
4	10.34	Chlorate	n.a.	2.6053		0.42681	1.67
5	11.22	Bromide	n.a.	2.6036		0.45611	1.79
6	12.95	Nitrate-N	n.a.	4.7662		5.51483	21.59
7	18.20	O-Phosphate-P	n.a.	0.8153		0.22669	0.89
8	20.15	Sulfate	n.a.	19.0864		6.50352	25.46
Total:				48.6039	0.000	25.542	100.00

67 WIC100323-02CCV

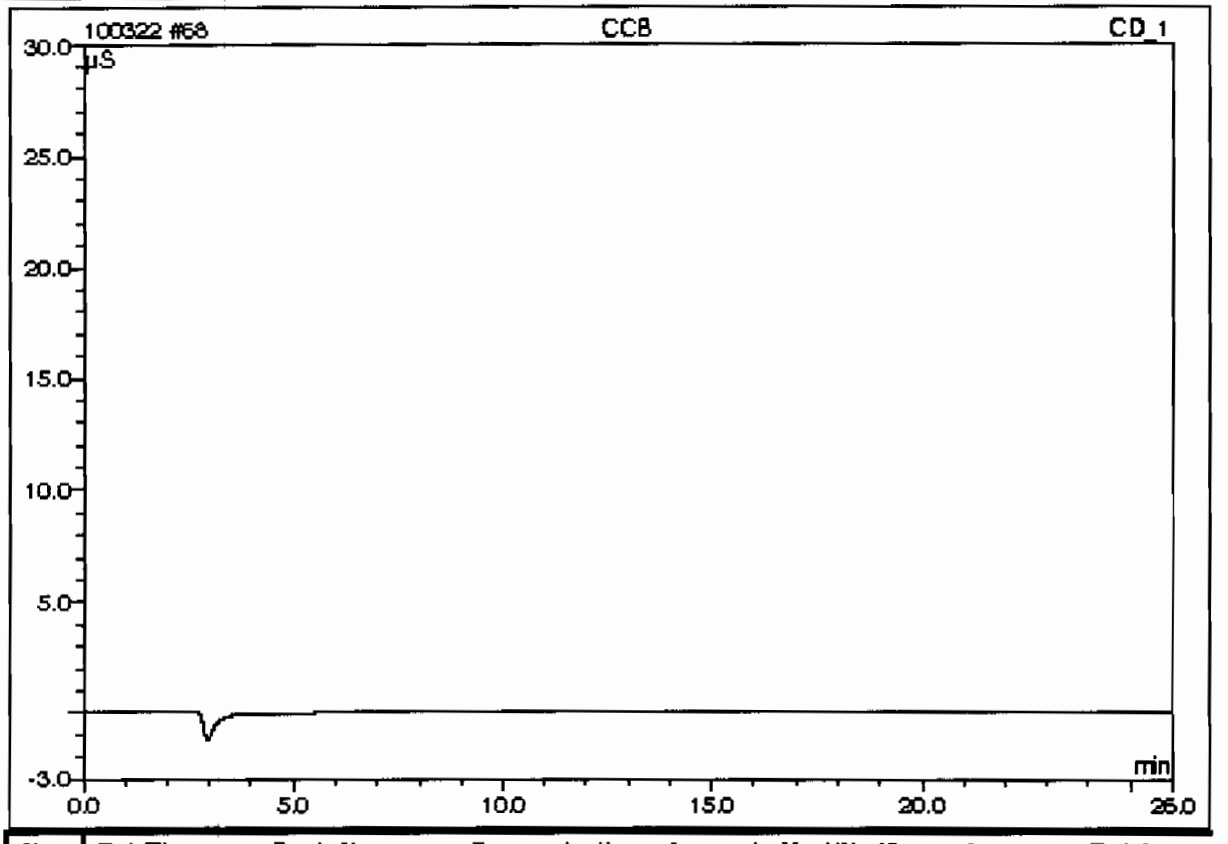
Sample Name:	WIC100323-02CCV	*Injection Volume:*	50.0
Vial Number:	121	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 9:39	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.50	Fluoride	n.a.	4.7300		3.15294	12.34
2	7.23	Chloride	n.a.	9.1423		4.63045	18.13
3	9.07	Nitrite-N	n.a.	4.8547		4.63114	18.13
4	10.34	Chlorate	n.a.	2.6053		0.42681	1.67
5	11.22	Bromide	n.a.	2.6036		0.45611	1.79
6	12.95	Nitrate-N	n.a.	4.7662		5.51483	21.59
7	18.20	O-Phosphate-P	n.a.	0.8153		0.22669	0.89
8	20.15	Sulfate	n.a.	19.0864		6.50352	25.46
Total:				48.6039	0.000	25.542	100.00

68 CCB

Sample Name:	CCB	*Injection Volume:*	50.0
Vial Number:	122	*Channel:*	CD_1
Sample Type:	unknown	*Dilution Factor:*	1.0000
Control Program:	AS23	*Sample Weight:*	1.0000
Quantif. Method:	030410an	*Sample Amount:*	1.0000
Recording Time:	3/23/2010 10:05	Analyst:	VH1
Run Time (min):	26.00	Column:	AS23-002588;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

pH

pH / Corrosivity LogBook

Analyst: EXF1
Batch: 961559
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	1202062453	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(%)
1202062453 LCS		Soil	12:00	12:05	05-MAR-10 14:24	pH	20	20	7.03	20.0'C	7	100.429	
1202062453 LCS		Soil	12:00	12:05	05-MAR-10 14:24	pH 2	20	20	7.01	20.2'C	7	100.143	
248374001		Soil	12:00	12:05	05-MAR-10 14:26	pH	20	20	6.28	18.1'C			
248374001		Soil	12:00	12:05	05-MAR-10 14:26	pH 2	20	20	6.3	18.3'C			
1202062451 DUP	248374001	Soil	12:00	12:05	05-MAR-10 14:30	pH	20	20	6.3	18.1'C			.318
1202062451 DUP	248374001	Soil	12:00	12:05	05-MAR-10 14:30	pH 2	20	20	6.32	18.1'C			.317
248374002		Soil	12:00	12:05	05-MAR-10 14:31	pH	20	20	6.34	17.7'C			
248374002		Soil	12:00	12:05	05-MAR-10 14:31	pH 2	20	20	6.36	18.1'C			
1202062452 DUP	248374002	Soil	12:00	12:05	05-MAR-10 14:33	pH	20	20	6.41	18.9'C			1.098
1202062452 DUP	248374002	Soil	12:00	12:05	05-MAR-10 14:33	pH 2	20	20	6.42	19.0'C			.939
CCV			12:00	12:05	05-MAR-10 14:33	pH	20	20	7.03	18.0'C	7	100.429	
CCV			12:00	12:05	05-MAR-10 14:33	pH 2	20	20	7.03	18.0'C	7	100.429	
248374003		Soil	12:00	12:05	05-MAR-10 14:37	pH	20	20	6.28	18.1'C			
248374003		Soil	12:00	12:05	05-MAR-10 14:37	pH 2	20	20	6.31	18.7'C			
248374004		Soil	12:00	12:05	05-MAR-10 14:40	pH	20	20	6.71	19.0'C			
248374004		Soil	12:00	12:05	05-MAR-10 14:40	pH 2	20	20	6.74	19.0'C			
248374005		Soil	12:00	12:05	05-MAR-10 14:43	pH	20	20	6.07	18.1'C			
248374005		Soil	12:00	12:05	05-MAR-10 14:43	pH 2	20	20	6.07	18.3'C			
248374006		Soil	12:00	12:05	05-MAR-10 14:44	pH	20	20	6.76	18.4'C			
248374006		Soil	12:00	12:05	05-MAR-10 14:44	pH 2	20	20	6.78	18.4'C			
248374007		Soil	12:00	12:05	05-MAR-10 14:46	pH	20	20	6.44	18.7'C			
248374007		Soil	12:00	12:05	05-MAR-10 14:46	pH 2	20	20	6.45	18.7'C			
CCV			12:00	12:05	05-MAR-10 14:48	pH	20	20	7.03	18.3'C	7	100.429	
CCV			12:00	12:05	05-MAR-10 14:48	pH 2	20	20	7.02	18.3'C	7	100.286	
248374008		Soil	12:00	12:05	05-MAR-10 14:51	pH	20	20	6.17	18.1'C			
248374008		Soil	12:00	12:05	05-MAR-10 14:51	pH 2	20	20	6.19	18.5'C			
248374009		Soil	12:00	12:05	05-MAR-10 14:55	pH	20	20	6.49	18.8'C			
248374009		Soil	12:00	12:05	05-MAR-10 14:55	pH 2	20	20	6.5	18.7'C			

pH / Corrosivity LogBook

Analyst: EXF1
Batch: 961559
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	1202062453	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(%)
248374010		Soil	12:00	12:05	05-MAR-10 14:56	pH	20	20	6.85	18.2'C			
248374010		Soil	12:00	12:05	05-MAR-10 14:56	pH 2	20	20	6.86	18.1'C			
248374011		Soil	12:00	12:05	05-MAR-10 14:58	pH	20	20	6.14	19.0'C			
248374011		Soil	12:00	12:05	05-MAR-10 14:58	pH 2	20	20	6.19	19.1'C			
248374012		Soil	12:00	12:05	05-MAR-10 15:01	pH	20	20	6.7	18.5'C			
248374012		Soil	12:00	12:05	05-MAR-10 15:01	pH 2	20	20	6.72	18.4'C			
CCV			12:00	12:05	05-MAR-10 15:02	pH	20	20	7.01	18.6'C	7	100.143	
CCV			12:00	12:05	05-MAR-10 15:02	pH 2	20	20	7.01	18.6'C	7	100.143	
248374013		Soil	12:00	12:05	05-MAR-10 15:06	pH	20	20	6.85	18.7'C			
248374013		Soil	12:00	12:05	05-MAR-10 15:06	pH 2	20	20	6.85	19.2'C			
248511001		Soil	12:00	12:05	05-MAR-10 15:12	pH	20	20	7.05	18.4'C			
248511001		Soil	12:00	12:05	05-MAR-10 15:12	pH 2	20	20	7.07	18.5'C			
248511002		Soil	12:00	12:05	05-MAR-10 15:13	pH	20	20	5.95	18.0'C			
248511002		Soil	12:00	12:05	05-MAR-10 15:13	pH 2	20	20	5.94	17.6'C			
248511003		Soil	12:00	12:05	05-MAR-10 15:15	pH	20	20	5.8	18.4'C			
248511003		Soil	12:00	12:05	05-MAR-10 15:15	pH 2	20	20	5.79	18.2'C			
248511004		Soil	12:00	12:05	05-MAR-10 15:16	pH	20	20	6.55	18.7'C			
248511004		Soil	12:00	12:05	05-MAR-10 15:16	pH 2	20	20	6.56	18.6'C			
CCV			12:00	12:05	05-MAR-10 15:17	pH	20	20	7.03	18.8'C	7	100.429	
CCV			12:00	12:05	05-MAR-10 15:17	pH 2	20	20	7.02	18.9'C	7	100.286	
248511005		Soil	12:00	12:05	05-MAR-10 15:19	pH	20	20	6.46	19.7'C			
248511005		Soil	12:00	12:05	05-MAR-10 15:19	pH 2	20	20	6.51	19.8'C			
248511006		Soil	12:00	12:05	05-MAR-10 15:23	pH	20	20	6.4	19.4'C			
248511006		Soil	12:00	12:05	05-MAR-10 15:23	pH 2	20	20	6.4	19.3'C			
248511007		Soil	12:00	12:05	05-MAR-10 15:24	pH	20	20	6.45	19.3'C			
248511007		Soil	12:00	12:05	05-MAR-10 15:24	pH 2	20	20	6.46	19.3'C			
CCV			12:00	12:05	05-MAR-10 15:25	pH	20	20	7.03	18.9'C	7	100.429	
CCV			12:00	12:05	05-MAR-10 15:25	pH 2	20	20	7.02	18.9'C	7	100.286	

pH / Corrosivity LogBook

Calibration Information:

Run Date: 05-MAR-10 08:08
Instrument: PHX742
Analyst: LXA1

Comments:

	Standard	Observed	Theoretical		C	%Recovery
08:08	IMM100305-PH1	4.01	4	SU	21.5	100.25
08:08	IMM100305-PH2	7.03	7	SU	21.5	100.43
08:08	UPH100305-PH3	10.03	10	SU	21.5	100.3
08:08	UPH100305-PH4	2.04	2	SU	21.5	102
08:08	UPH100305-PH5	11.98	12	SU	21.5	99.833
08:08	IMM100305-PH6	7.01	7	SU	21.5	100.14

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2155-1

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	960271	**Method:**	SW9012A Cyanide and Total
Prep Batch :	960269	**Method:**	SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
248375001	RE36-10-7535
248375002	RE36-10-7533
1202059721	Method Blank (MB)
1202059723	248407001(RE11-10-1721) Sample Duplicate (DUP)
1202059726	248407001(RE11-10-1721) Matrix Spike (MS)
1202059729	248407001(RE11-10-1721) Matrix Spike Duplicate (MSD)
1202059731	Laboratory Control Sample (LCS)

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

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within

acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

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

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

Quality Control (QC) Designation
The following sample was selected for QC analysis: 248407001 (RE11-10-1721).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recovery for this sample set was within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery for this sample set was within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) between the Spike and Spike Duplicate was outside of the required acceptance limits. However, both the Spike and Spike Duplicate recoveries were within the required acceptance limits; therefore, the data is deemed acceptable. 1202059726 (RE11-10-1721) and 1202059729 (RE11-10-1721).

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. 1202059723 (RE11-10-1721).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

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

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Data Exception (DER) Documentation

The following DER was generated for this SDG: 800824 1202059726 (RE11-10-1721) and 1202059729 (RE11-10-1721).

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: Nikki Edel Elmore **Date:** 3.27.10

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: 10-2155-1 GEL Work Order: 248375

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 Nikki Edel Amore 3-27-10

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: March 24, 2010

Client SDG: 10-2155-1

Client Sample ID: RE36-10-7535
Sample ID: 248375001
Matrix: W
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-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	1133	960271	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/05/10	1552	960269

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: March 24, 2010

Client SDG: 10-2155-1

Client Sample ID: RE36-10-7533
Sample ID: 248375002
Matrix: W
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-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	1134	960271	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/05/10	1552	960269

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

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

QC Summary

Report Date: March 24, 2010

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

Contact: Ms. Joylene Valdez

Workorder: 248375

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis										
Batch 960271										
QC1202059723 248407001 DUP										
Cyanide, Total		U	ND	U	ND	ug/L	N/A		AXC2	03/08/10 11:41
QC1202059731 LCS										
Cyanide, Total	50.0				49.0	ug/L		98	(90%-110%)	03/08/10 11:09
QC1202059721 MB										
Cyanide, Total				U	5.00	ug/L				03/08/10 11:08
QC1202059726 248407001 MS										
Cyanide, Total	100	U	ND		104	ug/L		104	(60%-144%)	03/08/10 11:42
QC1202059729 248407001 MSD										
Cyanide, Total	100	U	ND		82.4	ug/L	23.2*	82.4	(0%-20%)	03/08/10 11:43

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E 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.

QC Summary

Workorder: 248375

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

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: 24-MAR-2010 18:49

GEL Laboratories LLC

Contract: **LANL01004**

SDG #: **10-2155-1**

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 10:59:36	OM_3-8-2010_10-24-48	107	100	107	(90%-110%)	Yes
CCV	08-MAR-2010 11:11:59	OM_3-8-2010_10-24-48	105	100	105	(90%-110%)	Yes
CCV	08-MAR-2010 11:24:31	OM_3-8-2010_10-24-48	106	100	106	(90%-110%)	Yes
CCV	08-MAR-2010 11:37:00	OM_3-8-2010_10-24-48	106	100	106	(90%-110%)	Yes
CCV	08-MAR-2010 11:49:26	OM_3-8-2010_10-24-48	107	100	107	(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 11:01:27	OM_3-8-2010_10-24-48	-1.82	10	Yes
CCB	08-MAR-2010 11:13:49	OM_3-8-2010_10-24-48	-1.72	10	Yes
CCB	08-MAR-2010 11:26:21	OM_3-8-2010_10-24-48	-1.68	10	Yes
CCB	08-MAR-2010 11:38:51	OM_3-8-2010_10-24-48	-2.34	10	Yes
CCB	08-MAR-2010 11:51:15	OM_3-8-2010_10-24-48	-1.71	10	Yes

Cyanide, Total

Prep Logbook

Cyanide Sample Distillation

Batch ID: **960269.0** Verified by:

Analyst: Alan Stanley

Method: SW846 9010C Distillation SW846 9010B Prep EPA 335.4

Lab SOP: GL-GC-E-067 REV# 13

Instrument: Sartorius Balance B-007

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202059731	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.0125	mL
MS	1202059725	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202059726	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202059727	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202059728	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202059729	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202059730	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
1202059721 MB	05-MAR-2010 15:52:00	Ground Water	25	25	1	>12
1202059731 LCS	05-MAR-2010 15:52:00	Ground Water	25	25	1	>12
248072001	05-MAR-2010 15:52:00	Ground Water	25	25	1	>12
1202059722 DUP (248072001)	05-MAR-2010 15:52:00	Ground Water	25	25	1	>12
1202059725 MS (248072001)	05-MAR-2010 15:52:00	Ground Water	25	25	1	>12
1202059728 MSD (248072001)	05-MAR-2010 15:52:00	Ground Water	25	25	1	>12
248072002	05-MAR-2010 15:52:00	Ground Water	25	25	1	>12
248072003	05-MAR-2010 15:52:00	Ground Water	25	25	1	>12
248097001	05-MAR-2010 15:52:00	Waste Water	25	25	1	>12
1202059724 DUP (248097001)	05-MAR-2010 15:52:00	Waste Water	25	25	1	>12
1202059727 MS (248097001)	05-MAR-2010 15:52:00	Waste Water	25	25	1	>12
1202059730 MSD (248097001)	05-MAR-2010 15:52:00	Waste Water	25	25	1	>12
248097002	05-MAR-2010 15:52:00	Waste Water	25	25	1	>12
248097003	05-MAR-2010 15:52:00	Waste Water	25	25	1	>12
248097004	05-MAR-2010 15:52:00	Waste Water	25	25	1	>12
248298001	05-MAR-2010 15:52:00	Ground Water	25	25	1	>12

Prep Logbook

Batch ID: **960269.0** Verified by: _____

Analyst: Alan Stanley

Method: SW846 9010C Distillation SW846 9010B Prep EPA 335.4

Lab SOP: GL-GC-E-067 REV# 13

Instrument: Sartorius Balance B-007

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202059731	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.0125	mL
MS	1202059725	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202059726	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202059727	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202059728	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202059729	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202059730	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
248298002	05-MAR-2010 15:52:00	Ground Water	25	25	1	>12
248298003	05-MAR-2010 15:52:00	Ground Water	25	25	1	>12
248303001	05-MAR-2010 15:52:00	Waste Water	25	25	1	>12
248337001	05-MAR-2010 15:52:00	Waste Water	25	25	1	>12
248375001	05-MAR-2010 15:52:00	Water	25	25	1	>12
248375002	05-MAR-2010 15:52:00	Water	25	25	1	>12
248397001	05-MAR-2010 15:52:00	Water	25	25	1	>12
248397002	05-MAR-2010 15:52:00	Water	25	25	1	>12
248407001	05-MAR-2010 15:52:00	Water	25	25	1	>12
1202059723 DUP (248407001)	05-MAR-2010 15:52:00	Water	25	25	1	>12
1202059726 MS (248407001)	05-MAR-2010 15:52:00	Water	25	25	1	>12
1202059729 MSD (248407001)	05-MAR-2010 15:52:00	Water	25	25	1	>12
248419001	05-MAR-2010 15:52:00	Water	25	25	1	>12
248419002	05-MAR-2010 15:52:00	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

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

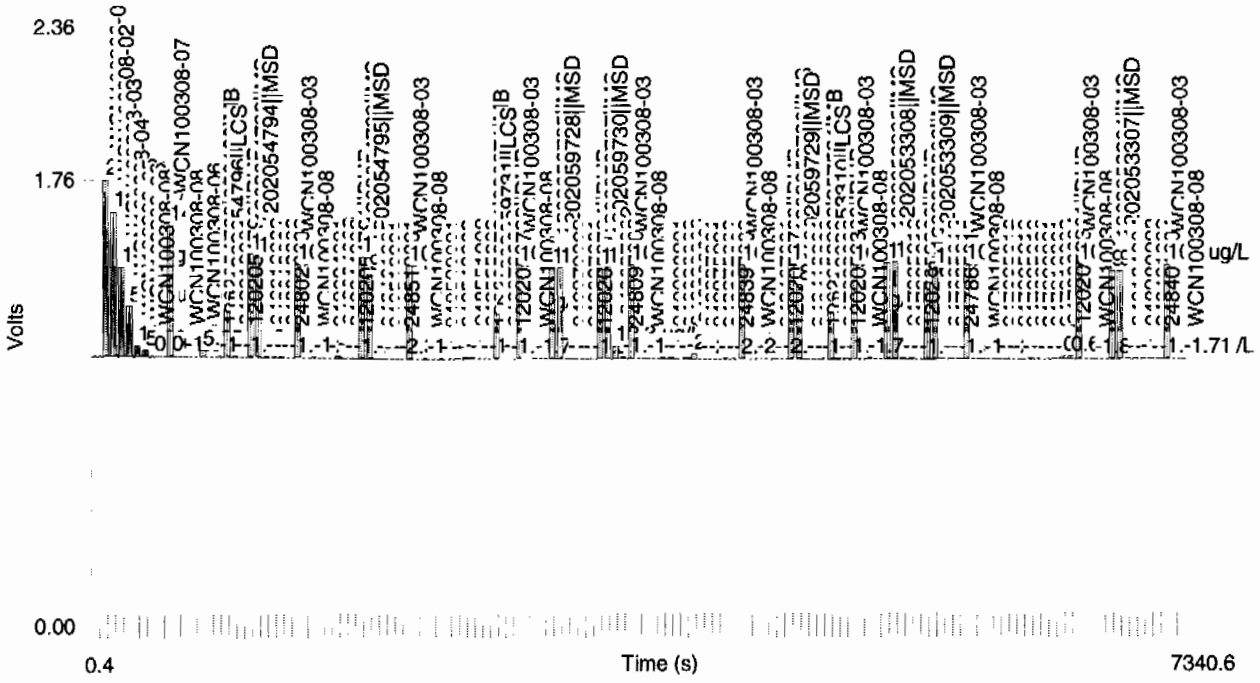
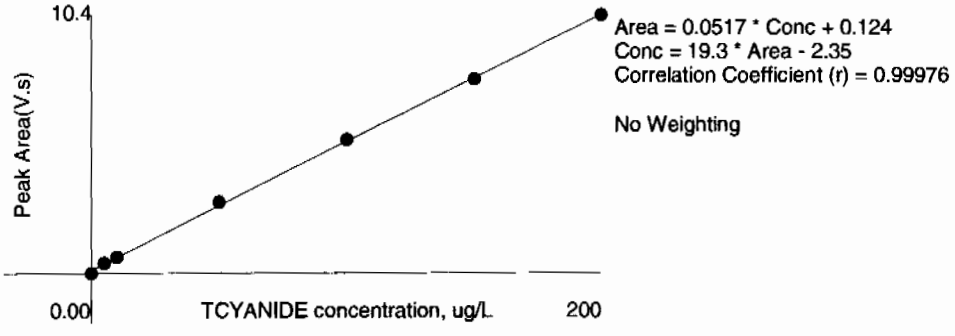


Table 1: TCYANIDE

	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



Miscellaneous

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
08-MAR-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LACHAT Flow Injection Analyzer	EPA 335.4	Liquid	IMHD, LANL, LLNL, SNLS,
Batch ID:	**Sample Numbers:**		
960271	See Below		

Potentially affected work order(s)(SDG): 248072,248097,248298,248303,248337,248375(10-2155-1),248397(10-2170-1),248407(10-2188),248419(10-2191-1)

Application Issues:

Failed RPD for MS/MSD, or PS/PSD

Specification and Requirements Exception Description:	DER Disposition:
1. Failed RPD for MS/MSD: QC 1202025926MS 1202059729MSD	1. The relative percent difference (RPD) between the Spike and Spike Duplicate was outside of the required acceptance limits. However, both the Spike and Spike Duplicate recoveries were within the required acceptance limits; therefore, the data is deemed acceptable.

Originator's Name:
Ashley Earl 08-MAR-10

Data Validator/Group Leader:
Elzbieta Szulc 08-MAR-10